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Pioneer MAP - High Income Municipal Fund

Tickersymbol

HIMUX

Summary Prospectus | December 28, 2023
(as revised February 28, 2024)

Before you invest, you may want to review the fund's prospectus, which contains more information about the fund and its risks. You can find the fund's prospectus, statement of additional information, reports to shareholders, and other information about the fund online at <https://www.amundi.com/usinvestors/Resources/Download-Literature>. You also can obtain this information at no cost by calling 1-800-225-6292 or by sending an email request to US.AskAmundiUS@amundi.com. The fund's current prospectus and statement of additional information, dated December 28, 2023, and the independent registered public accounting firm's report and financial statements in the fund's annual report to shareholders dated August 31, 2023, are incorporated by reference into this summary prospectus.

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Investment objective

Maximize total return through a combination of income that is exempt from regular federal income tax, and capital appreciation.

Fees and expenses of the fund

This table describes the fees and expenses that you may pay if you buy, hold and sell shares of the fund. **You may pay other fees, such as brokerage commissions and other fees to financial intermediaries, which are not reflected in the tables and examples below.**

Shareholders should be aware that, as shown under “Management Fees” in the table below, the fund pays no fees under its management agreement to the fund’s investment adviser. However, fund shares are only offered to participants in separately managed account programs who pay fees to program sponsors for the costs and expenses of the programs, including fees for investment advice, custody and portfolio execution. When a program participant, alone or with his or her program sponsor, elects to allocate assets to an investment strategy managed or advised by the fund’s adviser or an affiliate of the adviser, the adviser or that affiliate typically receives a fee from the program sponsor for providing such management or advisory services to the managed account, including with respect to assets that may be invested in the fund. In certain cases, a program participant will pay a fee for investment advice directly to the adviser or an affiliate in its capacity as manager, adviser or subadviser to the participant’s managed account.

Shareowner fees

(fees paid directly from your investment)

Maximum sales charge (load) when you buy shares (as a percentage of offering price)	None
Maximum deferred sales charge (load) (as a percentage of offering price or the amount you receive when you sell shares, whichever is less)	None

Annual fund operating expenses¹

(expenses that you pay each year as a percentage of the value of your investment)

Management Fees ²	0.00%
Distribution and Service (12b-1) Fees	0.00%
Other Expenses ³	1542.00%
Total Annual Fund Operating Expenses	1542.00%
Less: Fee Waiver and Expense Reimbursement ³	-1542.00%
Net Expenses ³	0.00%

- 1 The fund is a feeder fund that invests in securities through an underlying mutual fund, Pioneer High Income Municipal Portfolio. The information in this table and in the Example below reflects the direct fees and expenses of the fund and its allocated share of fees and expenses of Pioneer High Income Municipal Portfolio.
- 2 The fund's investment adviser does not charge a management fee to the fund. Shareholders should be aware, however, that the fund is an integral part of separately managed account programs, and the fund's adviser or an affiliate will be compensated directly or indirectly by separately managed account program sponsors.
- 3 The fund's investment adviser has contractually agreed to waive or reimburse all ordinary operating expenses, including the fund's allocated share of the fees and expenses of the underlying fund in which it invests (ordinary operating expenses means all expenses of the fund and the underlying fund other than taxes, brokerage commissions, acquired fund fees and expenses, and extraordinary expenses, such as litigation). This expense limitation is in effect through January 1, 2033. There can be no assurance that the adviser will extend the expense limitation beyond such time. Net expenses may exceed the expense limitation to the extent that the fund incurs excluded expenses. While in effect, the arrangement may be terminated only by agreement of the adviser and the Board of Trustees.

Example

This example is intended to help you compare the cost of investing in the fund with the cost of investing in other mutual funds. The example assumes that you invest \$10,000 in the fund for the time periods shown and then, except as indicated, redeem all of your shares at the end of those periods. It also assumes that (a) your investment has a 5% return each year and (b) the fund's total annual operating expenses remain the same except for year one (and considers the effect of the expense limitation for all periods shown). Although your actual costs may be higher or lower, based on these assumptions your costs would be:

<u>If you redeem your shares</u>				<u>If you do not redeem your shares</u>			
<u>Number of years you own your shares</u>							
<u>1</u>	<u>3</u>	<u>5</u>	<u>10</u>	<u>1</u>	<u>3</u>	<u>5</u>	<u>10</u>
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

The fund is a “feeder” fund that invests in securities through an underlying fund, Pioneer High Income Municipal Portfolio, which has the same investment objective and substantially the same strategies as the fund. This structure is sometimes known as a “master-feeder” structure.

Portfolio turnover

The fund pays transaction costs, such as commissions, when it buys and sells securities (or “turns over” its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when fund shares are held in a taxable account. These costs, which are not reflected in annual fund

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operating expenses or in the example, affect the fund's performance. During the most recent fiscal year, the fund's portfolio turnover rate was 37% of the average value of its portfolio.

Principal investment strategies

Normally, the fund invests at least 80% of its net assets (plus the amount of borrowings, if any, for investment purposes) in debt securities and other obligations issued by or on behalf of states, counties, municipalities, territories and possessions of the United States and the District of Columbia and their authorities, political subdivisions, agencies and instrumentalities, the interest on which is exempt from regular federal income tax ("municipal securities"). Derivative instruments that provide exposure to municipal securities or have similar economic characteristics may be used to satisfy the fund's 80% policy.

Municipal securities are generally issued to finance public works such as airports, bridges, highways, housing, hospitals, mass transportation projects, schools and water and sewer works. Municipal securities may be issued to repay outstanding obligations, to raise funds for general operating expenses, or to make loans to other institutions and facilities. They also may be issued by or on behalf of public authorities to finance various privately operated facilities which are expected to benefit the municipality and its residents, such as business, manufacturing, housing, sports and pollution control, as well as public facilities such as airports, mass transit systems, ports and parking.

The fund may invest in municipal securities of any maturity. Municipal securities with longer maturities are generally more volatile than other fixed income securities with shorter maturities. The fund may invest 25% or more of its assets in issuers in any one or more states or in the same economic sector or similar project type (such as projects relating to health care, education, transportation, and utilities).

The fund primarily invests in "high yield" municipal obligations. "High yield" municipal obligations are commonly referred to as "junk bonds" and are considered speculative. For this purpose, "high yield" municipal obligations are municipal obligations rated at the time of purchase Ba or lower by Moody's Investors Service, Inc. or BB or lower by Standard and Poor's Ratings Group or unrated securities determined by the adviser to be of comparable credit quality. The fund may invest in securities in any rating category, including those in default, and in debtor-in-possession financings.

Interest income from certain types of municipal obligations in which the fund may invest generally may be subject to the federal alternative minimum tax (the “AMT”). The fund may not be suitable for investors subject to the AMT. The rate of interest paid on municipal securities normally is lower than the rate of interest paid on taxable securities.

The fund's investments may have fixed or variable principal payments and all types of interest rate payment and reset terms, including fixed and floating rates, inverse floating rate, zero coupon, contingent, deferred and payment in kind and auction rate features.

The fund may, but is not required to, use derivatives, such as synthetic municipal securities, inverse floating rate obligations and credit default swaps. The fund may use derivatives for a variety of purposes, including: in an attempt to hedge against adverse changes in the market price of securities, interest rates or currency exchange rates; as a substitute for purchasing or selling securities; to attempt to increase the fund's return as a non-hedging strategy that may be considered speculative; to manage portfolio characteristics; and as a cash flow management technique. The fund may choose not to make use of derivatives for a variety of reasons, and any use may be limited by applicable law and regulations.

The fund also may invest in subordinated securities, asset-backed securities of any rating, including collateralized debt obligations, and may hold cash or other short-term investments. The fund's investments may include mortgage-backed instruments, the underlying assets of which allow for balloon payments (where a substantial portion of a mortgage loan balance is paid at maturity, which can shorten the average life of the mortgage-backed instrument) or negative amortization payments (where as a result of a payment cap, payments on a mortgage loan are less than the amount of principal and interest owed, with excess amounts added to the outstanding principal balance, which can extend the average life of the mortgage-backed instrument).

The fund may invest up to 20% of its net assets in inverse floating rate obligations.

The fund may invest up to 20% of its net assets in taxable investments, including securities of other investment companies (including mutual funds, exchange-traded funds and closed-end funds), commercial paper, U.S. government securities, U.S. or foreign bank instruments and repurchase agreements.

The adviser considers both broad economic factors and issuer specific factors in selecting investments. In assessing the appropriate maturity and rating weighting of the fund's portfolio, the adviser considers a variety of factors that are expected

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to influence economic activity and interest rates. The adviser selects individual securities to buy and sell based upon such factors as a security's yield, liquidity and rating, an assessment of credit quality, and issuer diversification.

Principal risks of investing in the fund

You could lose money on your investment in the fund. As with any mutual fund, there is no guarantee that the fund will achieve its objective. The fund is intended to be used as part of a managed account program. The performance and objective of the fund should be evaluated in the context of the investor's managed account program. The fund is not designed to be used as a stand-alone investment.

Market risk. The market prices of securities or other assets held by the fund may go up or down, sometimes rapidly or unpredictably, due to general market conditions, such as real or perceived adverse economic, political, or regulatory conditions, political instability, recessions, inflation, changes in interest or currency rates, lack of liquidity in the bond markets, the spread of infectious illness or other public health issues, weather or climate events, armed conflict, market disruptions caused by tariffs, trade disputes, sanctions or other government actions, or other factors or adverse investor sentiment. If the market prices of the fund's securities and assets fall, the value of your investment will go down. A change in financial condition or other event affecting a single issuer or market may adversely impact securities markets as a whole.

In the past decade, financial markets throughout the world have experienced increased volatility, depressed valuations, decreased liquidity and heightened uncertainty. Governmental and non-governmental issuers have defaulted on, or been forced to restructure, their debts. These conditions may continue, recur, worsen or spread. Events that have contributed to these market conditions include, but are not limited to, major cybersecurity events; geopolitical events (including wars, terror attacks and economic sanctions); measures to address budget deficits; downgrading of sovereign debt; changes in oil and commodity prices; dramatic changes in currency exchange rates; global pandemics; and public sentiment. The long-term impact of the COVID-19 pandemic and its subsequent variants on economies, markets, industries and individual issuers, are not known. Some sectors of the economy and individual issuers have experienced or may experience particularly large losses. Periods of extreme volatility in the financial markets, reduced liquidity of many instruments, increased government debt, inflation, and disruptions to supply chains, consumer demand and employee availability, may continue for some time.

Raising the ceiling on U.S. government debt has become increasingly politicized. Any failure to increase the total amount that the U.S. government is authorized to borrow could lead to a default on U.S. government obligations, with unpredictable consequences for economies and markets in the U.S. and elsewhere. Inflation and interest rates have increased and may rise further. These circumstances could adversely affect the value and liquidity of the fund's investments, impair the fund's ability to satisfy redemption requests, and negatively impact the fund's performance. In addition, inflation, rising interest rates, global supply chain disruptions and other market events could adversely affect the companies or issuers in which the fund invests. Following Russia's invasion of Ukraine, Russian securities lost all, or nearly all, their market value. Other securities or markets could be similarly affected by past or future political, geopolitical or other events or conditions.

Governments and central banks, including the U.S. Federal Reserve, have taken extraordinary and unprecedented actions to support local and global economies and the financial markets. These actions have resulted in significant expansion of public debt, including in the U.S. The consequences of high public debt, including its future impact on the economy and securities markets, may not be known for some time. U.S. Federal Reserve or other U.S. or non-U.S. governmental or central bank actions, including increases or decreases in interest rates, or contrary actions by different governments, could negatively affect financial markets generally, increase market volatility and reduce the value and liquidity of securities in which the fund invests. Policy and legislative changes in the U.S. and in other countries are affecting many aspects of financial regulation, and these and other events affecting global markets, such as the United Kingdom's exit from the European Union (or Brexit), potential trade imbalances with China or other countries or sanctions or other government actions against Russia, other nations or individuals or companies (or their countermeasures), may contribute to decreased liquidity and increased volatility in the financial markets. The impact of these changes on the markets, and the implications for market participants, may not be fully known for some time.

The U.S. and other countries are periodically involved in disputes over trade and other matters, which may result in tariffs, investment restrictions and adverse impacts on affected companies and securities. For example, the U.S. has imposed tariffs and other trade barriers on Chinese exports, has restricted sales of certain categories of goods to China, and has established barriers to investments in China. Trade disputes may adversely affect the economies of the U.S. and its trading partners, as well as companies directly or indirectly affected and financial markets generally. The U.S. government has prohibited U.S. persons, such as the fund, from investing in Chinese companies designated as related to the Chinese military.

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These and possible future restrictions could limit the fund's opportunities for investment and require the sale of securities at a loss or make them illiquid. Moreover, the Chinese government is involved in a longstanding dispute with Taiwan that has included threats of invasion. If the political climate between the U.S. and China does not improve or continues to deteriorate, if China were to attempt unification of Taiwan by force, or if other geopolitical conflicts develop or get worse, economies, markets and individual securities may be severely affected both regionally and globally, and the value of the fund's assets may go down.

Economies and financial markets throughout the world are increasingly interconnected. Economic, financial or political events, trading and tariff arrangements, armed conflict such as between Russia and Ukraine or in the Middle East, terrorism, natural disasters, infectious illness or public health issues, cybersecurity events, supply chain disruptions, sanctions against Russia, other nations or individuals or companies and possible countermeasures, and other circumstances in one country or region could have profound impacts on other countries or regions and on global economies or markets. As a result, whether or not the fund invests in securities of issuers located in or with significant exposure to the countries or regions directly affected, the value and liquidity of the fund's investments may be negatively affected. The fund may experience a substantial or complete loss on any security or derivative position.

Interest rate risk. The market prices of the fund's fixed income securities may fluctuate significantly when interest rates change. The value of your investment will generally go down when interest rates rise. A rise in rates tends to have a greater impact on the prices of longer term or duration securities. For example, if interest rates increase by 1%, the value of a fund's portfolio with a portfolio duration of ten years would be expected to decrease by 10%, all other things being equal. In recent years, interest rates and credit spreads in the U.S. have been at historic lows. The U.S. Federal Reserve has raised certain interest rates, and interest rates may continue to go up. A general rise in interest rates could adversely affect the price and liquidity of fixed income securities and could also result in increased redemptions from the fund. The maturity of a security may be significantly longer than its effective duration. A security's maturity and other features may be more relevant than its effective duration in determining the security's sensitivity to other factors affecting the issuer or markets generally, such as changes in credit quality or in the yield premium that the market may establish for certain types of securities (sometimes called "credit spread"). In general, the longer its maturity the more a security may be susceptible to these factors. When the credit spread for a fixed income security goes up or "widens," the value of the security will generally go down.

Credit risk. If an issuer or guarantor of a security held by the fund or a counterparty to a financial contract with the fund defaults on its obligation to pay principal and/or interest, has its credit rating downgraded or is perceived to be less creditworthy, or the credit quality or value of any underlying assets declines, the value of your investment will typically decline. Changes in actual or perceived creditworthiness may occur quickly. The fund could be delayed or hindered in its enforcement of rights against an issuer, guarantor or counterparty.

Prepayment or call risk. Many issuers have a right to prepay their securities. If interest rates fall, an issuer may exercise this right. If this happens, the fund will not benefit from the rise in market price that normally accompanies a decline in interest rates, and will be forced to reinvest prepayment proceeds at a time when yields on securities available in the market are lower than the yield on the prepaid security. The fund also may lose any premium it paid on the security.

Extension risk. During periods of rising interest rates, the average life of certain types of securities may be extended because of slower than expected principal payments. This may lock in a below market interest rate, increase the security's duration and reduce the value of the security.

Liquidity risk. Some securities and derivatives held by the fund may be or become impossible or difficult to purchase, sell or unwind, particularly during times of market turmoil. An instrument's liquidity may be affected by reduced trading volume, a relative lack of market makers or legal restrictions, and illiquid securities and derivatives also may be difficult to value. Markets may become illiquid quickly. Liquidity risk may be magnified in an environment of rising interest rates or widening credit spreads. During times of market turmoil, there have been, and may be, no buyers or sellers for securities in entire asset classes. If the fund is forced to sell an illiquid asset or unwind a derivative position to meet redemption requests or other cash needs, or to try to limit losses, the fund may be forced to sell at a substantial loss or may not be able to sell at all. The fund may not receive its proceeds from the sale of certain securities for an extended period (for example, several weeks or even longer). In extreme cases, this may constrain the fund's ability to meet its obligations (including obligations to redeeming shareholders).

High yield or "junk" bond risk. Debt securities that are below investment grade, called "junk bonds," are speculative, have a higher risk of default or are already in default, tend to be less liquid and are more difficult to value than higher grade securities. Junk bonds tend to be volatile and more susceptible to adverse events and negative sentiments. These risks are more pronounced for securities that are already in default.

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Portfolio selection risk. The adviser's judgment about the quality, relative yield, relative value or market trends affecting a particular sector or region, market segment, security, industry or about interest rates or other market factors may prove to be incorrect or may not produce the desired results, or there may be imperfections, errors or limitations in the models, tools and information used by the adviser.

Municipal securities risk. The municipal bond market can be susceptible to unusual volatility, particularly for lower-rated and unrated securities. Liquidity can be reduced unpredictably in response to overall economic conditions or credit tightening. Municipal issuers may be adversely affected by rising health care costs, increasing unfunded pension liabilities, and by the phasing out of federal programs providing financial support. Unfavorable conditions and developments relating to projects financed with municipal securities can result in lower revenues to issuers of municipal securities, potentially resulting in defaults. Issuers often depend on revenues from these projects to make principal and interest payments. The value of municipal securities can also be adversely affected by changes in the financial condition of one or more individual municipal issuers or insurers of municipal issuers, regulatory and political developments, tax law changes or other legislative actions, and by uncertainties and public perceptions concerning these and other factors. Municipal securities may be more susceptible to downgrades or defaults during recessions or similar periods of economic stress. Financial difficulties of municipal issuers may continue or get worse, particularly in the event of political, economic or market turmoil or a recession. To the extent the fund invests significantly in a single state (including California and New York), city, territory (including Puerto Rico), or region, or in securities the payments on which are dependent upon a single project or source of revenues, or that relate to a sector or industry, including health care facilities, education, tobacco settlement revenue and industrial development, the fund will be more susceptible to associated risks and developments.

Debtor-in-possession financings risk. Debtor-in-possession financings are loans to a debtor-in-possession in a proceeding under the U.S. Bankruptcy Code that have been approved by the bankruptcy court. These financings allow the entity to continue its business operations while reorganizing under Chapter 11 of the U.S. Bankruptcy Code. Debtor-in-possession financings can provide creditors with varying levels of protection, as they may carry super-priority repayment status, be secured by a lien on the borrower's otherwise unencumbered assets, or be secured by a junior lien on the borrower's encumbered assets. These financings are subject to the risk that the borrower will not emerge successfully from the bankruptcy/reorganization proceedings and will be forced to liquidate its assets.

In the event of liquidation, the fund's only recourse will be against the property securing the debtor-in-possession loan and any remaining unencumbered assets, which might be insufficient to repay the debtor-in-possession loan in full.

Taxable investment risk. Although distributions of interest income from the fund's tax-exempt 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. In addition, the interest on the fund's municipal securities could become subject to regular federal income tax or the AMT due to noncompliant conduct by issuers, unfavorable legislation or litigation, or adverse interpretations by regulatory authorities. You should consult a tax adviser about whether the AMT applies to you and about state and local taxes on your fund distributions.

Mortgage-related and asset-backed securities risk. The value of mortgage-related and asset-backed securities will be influenced by factors affecting the assets underlying such securities. As a result, during periods of declining asset value, difficult or frozen credit markets, swings in interest rates, or deteriorating economic conditions, mortgage-related and asset-backed securities may decline in value, face valuation difficulties, become more volatile and/or become illiquid. Mortgage-backed securities tend to be more sensitive to changes in interest rates than other types of debt securities. These securities are also subject to interest rate, prepayment and extension risks. Some of these securities may receive little or no collateral protection from the underlying assets and are thus subject to the risk of default. The risk of such defaults is generally higher in the case of mortgage-backed investments offered by non-governmental issuers and those that include so-called "sub-prime" mortgages. The structure of some of these securities may be complex and there may be less available information than for other types of debt securities. Upon the occurrence of certain triggering events or defaults, the fund may become the holder of underlying assets at a time when those assets may be difficult to sell or may be sold only at a loss.

Risks of investing in collateralized debt obligations. Investment in a collateralized debt obligation (CDO) is subject to the credit, subordination, interest rate, valuation, prepayment, extension and other risks of the obligations underlying the CDO and the tranche of the CDO in which the fund invests. CDOs are subject to liquidity risk. Synthetic CDOs are also subject to the risks of investing in derivatives, such as credit default swaps, and leverage risk.

Risks of instruments that allow for balloon payments or negative amortization payments. Certain debt instruments allow for balloon payments or negative amortization payments. Such instruments permit the borrower to

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avoid paying currently a portion of the interest accruing on the instrument. While these features make the debt instrument more affordable to the borrower in the near term, they increase the risk that the borrower will be unable to make the resulting higher payment or payments that become due at the maturity of the loan.

Risks of subordinated securities. A holder of securities that are subordinated or “junior” to more senior securities of an issuer is entitled to payment after holders of more senior securities of the issuer. Subordinated securities are more likely to suffer a credit loss than non-subordinated securities of the same issuer, any loss incurred by the subordinated securities is likely to be proportionately greater, and any recovery of interest or principal may take more time. As a result, even a perceived decline in creditworthiness of the issuer is likely to have a greater impact on subordinated securities than more senior securities.

Risks of zero coupon bonds, payment in kind, deferred and contingent payment securities. These securities may be more speculative and may fluctuate more in value than securities which pay income periodically and in cash. In addition, although the fund receives no periodic cash payments on such securities, the fund is deemed for tax purposes to receive income from such securities, which applicable tax rules require the fund to distribute to shareholders. Such distributions may be taxable when distributed to shareholders.

U.S. Treasury obligations risk. The market value of direct obligations of the U.S. Treasury may vary due to changes in interest rates. In addition, changes to the financial condition or credit rating of the U.S. government may cause the value of the fund’s investments in obligations issued by the U.S. Treasury to decline.

U.S. government agency obligations risk. The fund invests in obligations issued by agencies and instrumentalities of the U.S. government. Government-sponsored entities such as the Federal National Mortgage Association (FNMA), the Federal Home Loan Mortgage Corporation (FHLMC) and the Federal Home Loan Banks (FHLBs), although chartered or sponsored by Congress, are not funded by congressional appropriations and the debt and mortgage-backed securities issued by them are neither guaranteed nor issued by the U.S. government. The maximum potential liability of the issuers of some U.S. government obligations may greatly exceed their current resources, including any legal right to support from the U.S. government. Such debt and mortgage-backed securities are subject to the risk of default on the payment of interest and/or principal, similar to debt of private issuers. Although the U.S. government has provided financial support to FNMA and FHLMC in the past, there can be no assurance that it will support these or other government-sponsored entities in the future.

Risks of investment in other funds. Investing in other investment companies, including exchange-traded funds (ETFs) and closed-end funds, subjects the fund to the risks of investing in the underlying securities or assets held by those funds. When investing in another fund, the fund will bear a pro rata portion of the underlying fund's expenses, including management fees, in addition to its own expenses. ETFs and closed-end funds are bought and sold based on market prices and can trade at a premium or a discount to the ETF's or closed-end fund's net asset value. Such funds may trade at a discount for an extended period and may not ever realize their net asset value.

Derivatives risk. Using synthetic municipal securities, inverse floating rate obligations, credit default swaps and other derivatives can increase fund losses and reduce opportunities for gains when market prices, interest rates, or the derivative instruments themselves behave in a way not anticipated by the fund. Using derivatives may increase the volatility of the fund's net asset value and may not provide the result intended. Derivatives may have a leveraging effect on the fund. Some derivatives have the potential for unlimited loss, regardless of the size of the fund's initial investment. Derivatives are generally subject to the risks applicable to the assets, rates, indices or other indicators underlying the derivative. Changes in a derivative's value may not correlate well with the referenced asset or metric. The fund also may have to sell assets at inopportune times to satisfy its obligations. Derivatives may be difficult to sell, unwind or value, and the counterparty may default on its obligations to the fund. Use of derivatives may have different tax consequences for the fund than an investment in the underlying security, and such differences may affect the amount, timing and character of income distributed to shareholders. The U.S. government and foreign governments have adopted and implemented or are in the process of adopting and implementing regulations governing derivatives markets, including mandatory clearing of certain derivatives, margin and reporting requirements. The ultimate impact of the regulations remains unclear. Additional regulation of derivatives may make them more costly, limit their availability or utility, otherwise adversely affect their performance or disrupt markets.

Synthetic municipal securities risk. The tax-exempt character of the interest paid on tender option bonds, bond receipts and similar synthetic municipal securities, a type of derivative instrument, is based on the tax-exempt income stream from the collateral. In addition to the risks of investing in municipal securities and in derivatives generally, investments in synthetic municipal securities are subject to the risk that income derived from such securities is deemed to be taxable.

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Risks of investing in inverse floating rate obligations. The interest rate on inverse floating rate obligations will generally decrease as short-term interest rates increase, and increase as short-term rates decrease. Due to their leveraged structure, the sensitivity of the market value of an inverse floating rate obligation to changes in interest rates is generally greater than a comparable long-term bond issued by the same issuer and with similar credit quality, redemption and maturity provisions. Inverse floating rate obligations may be volatile and involve leverage risk.

Credit default swap risk. Credit default swap contracts, a type of derivative instrument, involve special risks and may result in losses to the fund. Credit default swaps may in some cases be illiquid, and they increase credit risk since the fund has exposure to the issuer of the referenced obligation and either the counterparty to the credit default swap or, if it is a cleared transaction, the brokerage firm through which the trade was cleared and the clearing organization that is the counterparty to that trade.

Leveraging risk. The value of your investment may be more volatile and other risks tend to be compounded if the fund borrows or uses derivatives or other investments, such as ETFs, that have embedded leverage. Leverage generally magnifies the effect of any increase or decrease in the value of the fund's underlying assets and creates a risk of loss of value on a larger pool of assets than the fund would otherwise have, potentially resulting in the loss of all assets. Engaging in such transactions may cause the fund to liquidate positions when it may not be advantageous to do so to satisfy its obligations. New derivatives regulations require the fund, to the extent it uses derivatives to a material extent, to, among other things, comply with certain overall limits on leverage. These regulations may limit the ability of the fund to pursue its investment strategies and may not be effective to mitigate the fund's risk of loss from derivatives.

Repurchase agreement risk. In the event that the other party to a repurchase agreement defaults on its obligations, the fund 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. In addition, if the fund is characterized by a court as an unsecured creditor, it would be at risk of losing some or all of the principal and interest involved in the transaction.

Market segment risk. To the extent the fund emphasizes, from time to time, investments in a market segment, the fund will be subject to a greater degree to the risks particular to that segment, and may experience greater market fluctuation than a fund without the same focus.

To the extent the fund invests in issuers of securities the payments on which are derived from tobacco settlement revenue, education, industrial development and health care segments of the municipal bond market, the fund may be subject to risks associated with such segments.

Certain revenue bonds are backed by settlements with tobacco companies. The settlement payments are based on factors, including, but not limited to, annual domestic cigarette shipments, cigarette consumption, inflation and the financial capability of participating tobacco companies. Payments could be reduced if consumption decreases or due to other factors.

The education segment can be significantly affected by declining applicant pools, changes in student enrollment, decreases in state and federal financial aid to students, declines in endowment contributions and decreases in endowment portfolio values.

Industrial development bonds are normally secured by the revenues from the project and not by state or local government tax payments. Consequently, the credit quality of these securities depends upon the ability of the user of the facilities financed by the bonds and any guarantor to meet its financial obligations. If the user of the facilities financed by the bonds defaults on its payments, the fund may not receive any income or get its money back from the investment.

Industries in the health care segment, such as health care supplies, health care services, biotechnology and pharmaceuticals, may be significantly affected by government regulation and reimbursement rates, approval of products by government agencies, increases or decreases in the cost of medical products, services and patient care, shortages of skilled personnel and increased personnel costs, and product liability claims, among other factors. Many health care companies are heavily dependent on patent protection, and the expiration of a company's patent may adversely affect that company's profitability. Health care companies are subject to competitive forces that may result in price discounting, and may be thinly capitalized and susceptible to product obsolescence.

Valuation risk. Nearly all of the fund's investments are valued using a fair value methodology. The sales price the fund could receive for any particular portfolio investment may differ from the fund's valuation of the investment, particularly for illiquid securities and securities that trade in thin or volatile markets. These differences may increase significantly and affect fund investments more broadly during periods of market volatility. Investors who purchase or redeem fund shares may receive fewer or more shares or lower or higher redemption proceeds than they would have received if the securities had not been fair-valued or if a different valuation

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methodology had been used. The ability to value the fund's investments may also be impacted by technological issues and/or errors by pricing services or other third party service providers.

Redemption risk. The fund may experience heavy redemptions that could cause the fund to liquidate its assets at inopportune times or at a loss or depressed value, or accelerate taxable gains or transaction costs, which could cause the value of your investment to decline.

Cybersecurity risk. Cybersecurity failures by and breaches of the fund's adviser, transfer agent, distributor, custodian, fund accounting agent or other service providers may disrupt fund operations, interfere with the fund's ability to calculate its NAV, prevent fund shareholders from purchasing, redeeming or exchanging shares or receiving distributions or receiving timely information regarding the fund or their investment in the fund, cause loss of or unauthorized access to private shareholder information, and result in financial losses to the fund and its shareholders, regulatory fines, penalties, reputational damage, or additional compliance costs. New ways to carry out cyber attacks continue to develop. Therefore, there is a chance that some risks have not been identified or prepared for, or that an attack may not be detected, which puts limitations on the fund's ability to plan for or respond to a cyber attack.

Expense risk. Your actual costs of investing in the fund may be higher than the expenses shown in "Annual fund operating expenses" for a variety of reasons. For example, expense ratios may be higher than those shown if overall net assets decrease. Net assets are more likely to decrease and fund expense ratios are more likely to increase when markets are volatile.

Please note that there are many other factors that could adversely affect your investment and that could prevent the fund from achieving its goals.

An investment in the fund is not a bank deposit and is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency.

The fund's past performance

The bar chart and table indicate the risks and volatility of an investment in the fund by showing how the fund has performed in the past. The bar chart shows changes in the performance of the fund from calendar year to calendar year. The table shows the average annual total returns for the fund over time and compares these returns to the returns of the Bloomberg U.S. Municipal High Yield Bond Index a broad-based measure of market performance that has characteristics relevant to the fund's investment strategies.

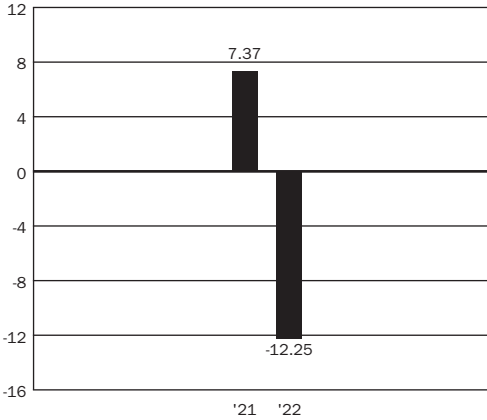
You can obtain updated performance information by visiting <https://www.amundi.com/usinvestors/Products/Mutual-Funds> or by calling 1-800-225-6292.

Sales charges are not reflected in the accompanying bar chart, and if those charges were included, returns would be less than those shown. Sales charges do not apply to purchases of fund shares by managed account program participants, but (as discussed above), managed account program participants pay fees to program sponsors for the costs and expenses of such programs.

The fund's past performance (before and after taxes) does not necessarily indicate how it will perform in the future.

Annual return for single class of shares (%)

(Year ended December 31)



For the period covered by the bar chart:

	Returns	Period Beginning	Period Ending
Highest Calendar Quarter	4.41%	10/01/2022 to	12/31/2022
Lowest Calendar Quarter	-6.49%	01/01/2022 to	03/31/2022
Year-to-Date	-3.42%		September 30, 2023

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Average annual total return (%)

(for periods ended December 31, 2022)

	1 Year	Since Inception	Inception Date
Pioneer MAP-High Income Municipal Fund			12/21/20
Return before taxes	-12.25	-2.81	
Return after taxes on distributions	-12.25	-2.81	
Return after taxes on distributions and sale of shares	-5.40	-1.00	
Bloomberg U.S. Municipal High Yield Bond Index (reflects no deduction for fees, expenses or taxes)	-13.10	-3.07	12/21/20

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. Returns after taxes on distributions and sale of fund shares are higher than returns before taxes for certain periods shown because they reflect the tax benefit of capital losses realized on the sale of fund shares.

Management

Investment adviser

Amundi Asset Management US, Inc. (“Amundi US”)

Portfolio management

John (Jake) Crosby van Roden III, Managing Director and Director of Municipals, US of Amundi US and Portfolio Manager (lead portfolio manager of the fund since February 2024); and Prakash Vadlamani, Senior Vice President, Associate Portfolio Manager and Senior Credit Analyst at Amundi US (portfolio manager of the fund since February 2024)

Purchase and sale of fund shares

Shares of the fund may be purchased only by or on behalf of separately managed account clients where the fund's investment adviser or an affiliate (each a “Managed Account Adviser”) has an agreement with the managed account program sponsor (the “Program Sponsor”), or directly with the client, to provide management or advisory services to the managed account.

There are no maximum or minimum investment requirements in the fund (although your Program Sponsor may have certain investment requirements for separately managed accounts).

Redemption orders are made based on instructions from your Managed Account Adviser or Program Sponsor to the broker-dealer who executes trades for the account. Shares of the fund can be redeemed through the broker-dealer on any day the New York Stock Exchange is open.

Tax information

Distributions reported by the fund as “exempt-interest dividends” are exempt from regular federal income tax but may be subject to state or local income taxes and may be tax preference items for purposes of the AMT. Distributions of the fund’s capital gains are generally subject to tax.

Payments to broker-dealers and other financial intermediaries

If you purchase the fund through a broker-dealer or other financial intermediary (such as a bank), the fund and its related companies may pay the intermediary for the sale of fund shares and related services. These payments create a conflict of interest by influencing the broker-dealer or other intermediary and your salesperson or investment professional to recommend the fund over another investment. Ask your salesperson or investment professional or visit your financial intermediary’s website for more information.

[Click here to view the Fund's Prospectus](#)

[Click here to view the Fund's Statement of Additional Information](#)