



nuveen

A TIAA Company



Understanding municipal bonds

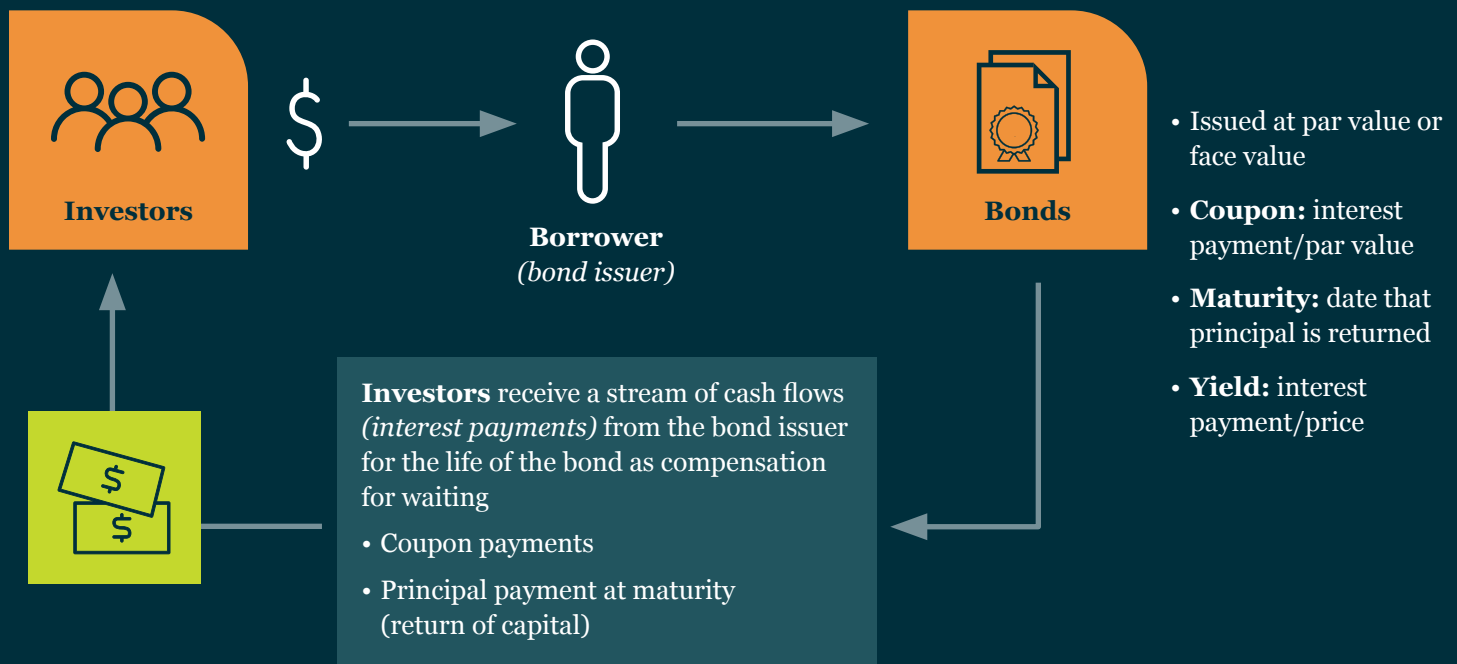
Unlock the power of tax-exempt income



NOT FDIC INSURED | NO BANK GUARANTEE | MAY LOSE VALUE

What are bonds?

A bond is a loan



What are municipal bonds?

Municipal bond issuers are government entities that borrow money from investors by issuing bonds to fund public projects and services, promising to repay the debt with interest over time.

Common municipal issuers:

- State and local governments
- Quasi-government entities
- Non-government entities (i.e., hospitals, schools, libraries, etc.)

Borrowed money is generally used for:

- Financing new infrastructure
- Improving existing assets
- Refinancing existing debt

Bonds are repaid by:

- Property taxes
- Local sales tax
- Usage fees
- Income tax
- Tolls

Bond types: What's the difference?

	Federal tax exemption	State tax exemption	Local tax exemption	Lower default risk*	Tax-exempt interest
Municipal	✓	✓	✓	✓	✓
Corporate	✗	✗	✗	✗	✗
U.S. Government	✗	✗	✗	✓	✗

* U.S. government bonds are backed by the full faith and credit of the federal government and are generally regarded as having negligible default risk, while municipal bonds are issued by state and local governments with more limited revenue sources and carry measurably higher, though still relatively low, default risk.

Common types of municipal bonds



General obligation bonds (GOs)

Typically issued to support general operating purposes of states, cities, and other local governments.

GO bond Examples

City Capital Projects Bonds:

Issued by cities to finance improvements like roads, municipal buildings, fire stations, and public works facilities.

School District Bonds :

Frequently issued by local school districts for building new schools, renovating existing facilities, and purchasing equipment



Revenue bonds

Typically issued to finance specific infrastructure projects and support operations.

Revenue bond Examples

Toll Road Bonds:

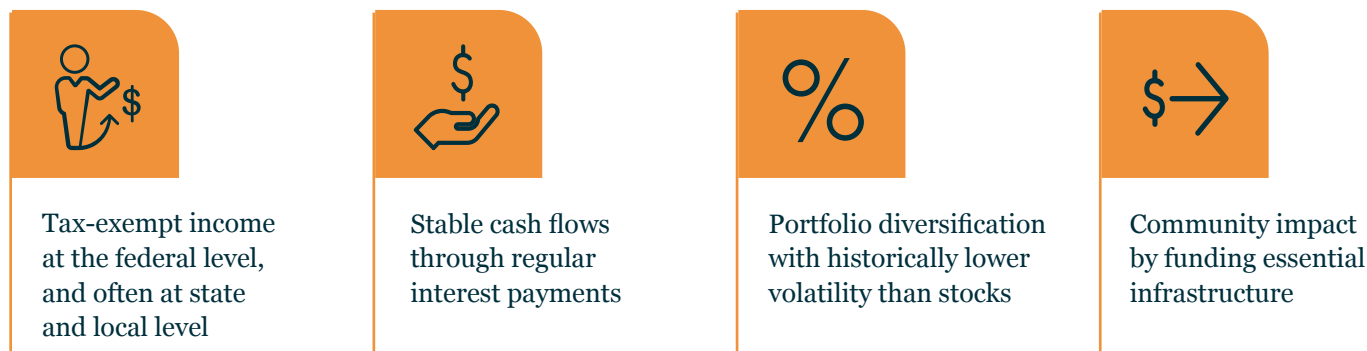
Issued to finance highway construction or improvements

Electric Utility Bonds:

Used to build power generation facilities, transmission lines, and distribution networks.

Why are municipal bonds so attractive?

The appeal of municipal bonds can be summarized with four essential benefits:

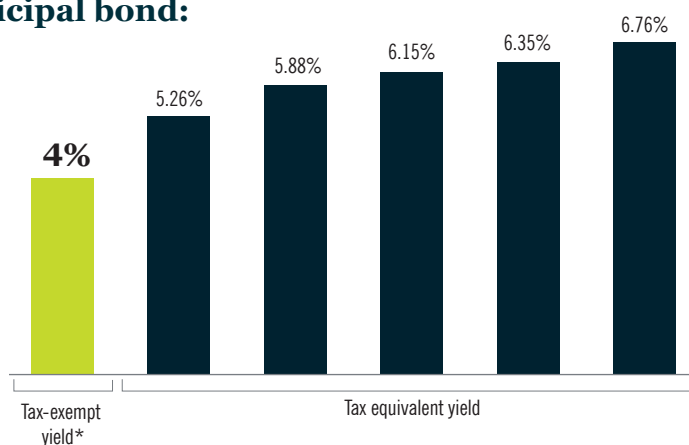


The tax advantage: where municipals bond shine

The tax-exempt nature of municipal bond income means a lower-yielding municipal bond can provide equivalent after-tax returns to higher-yielding taxable investments. Here's what this means for you:

If you're earning 4% from a tax-exempt municipal bond:

- **24% tax bracket:**
Equivalent to earning 5.26% from a taxable investment
- **32% tax bracket:**
Equivalent to earning 5.88% from a taxable investment
- **37% tax bracket:**
Equivalent to earning 6.35% from a taxable investment
- **40.8% tax bracket:**
Equivalent to earning 6.76% from a taxable investment



*Tax-exempt yield = (Tax-free Yield)/(1 - Federal Tax Bracket). The **taxable-equivalent yield** represents the yield that must be earned on a fully taxable investment to equal the yield on a municipal investment on an after-tax basis. With respect to investments that generate qualified dividend income that is taxable at a maximum rate of 20%, the taxable equivalent yield is lower. Tax-exempt yields are for illustration only and do not take into account certain items such as the effects of state and/or local income taxes, the federal alternative minimum tax (AMT) or capital gains taxes. Income from municipal bonds could be declared taxable because of unfavorable changes in tax laws, adverse interpretations by the Internal Revenue Service or state tax authorities, or noncompliance conduct of a bond issuer. **Chart does not represent the yield or past performance of any Nuveen fund.**

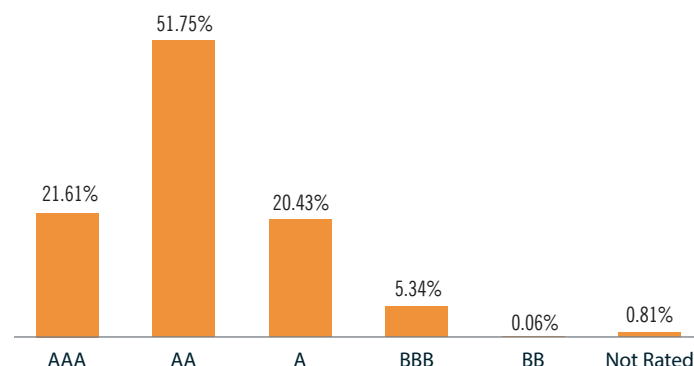
Low default risk equals stable income for investors

Credit quality matters:

High credit quality is crucial when investing in municipal bonds because it significantly reduces the risk of default, ensuring more reliable interest payments and principal repayment at maturity. Strong credit ratings also provide better liquidity and price stability, as higher-quality municipal bonds are more easily traded and less susceptible to dramatic price swings during market volatility.

Broad municipal bond market¹

Bonds rated by Moody's Investor Service



Default performance compared to corporate bonds:

Municipal bonds have historically demonstrated significantly lower default rates compared to corporate bonds, with studies showing that municipal defaults occur at a fraction of the rate seen in the corporate bond market over comparable time periods. This superior credit performance stems from municipalities' essential public service role, diversified revenue sources including taxation authority, and the political and economic incentives for local governments to maintain their creditworthiness and access to capital markets.

Moody's average cumulative default rates of municipals vs. global corporates, 1970-2023²

	Rating	Aaa	Aa	A	Baa	Ba	B	Caa-C	Investment Grade ³	Below Investment Grade ³
5-YEAR	Municipal	0.00%	0.01%	0.03%	0.46%	1.93%	11.90%	20.62%	0.04%	4.81%
	Corporate	0.08%	0.29%	0.71%	1.43%	7.63%	20.56%	35.25%	0.87%	18.98%
10-YEAR	Municipal	0.00%	0.02%	0.10%	1.09%	3.49%	17.07%	25.59%	0.10%	7.14%
	Corporate	0.36%	0.77%	2.03%	3.61%	15.25%	34.31%	51.44%	2.24%	29.74%
INVESTMENT GRADE					BELOW INVESTMENT GRADE					

¹ Data source: Bloomberg Municipal Bond Index, as of 30 Jun 2025.

² Data source: Moody's Investors Service, U.S. Municipal Bond Defaults and Recoveries, 1970 – 2023, 24 Oct 2024, with data as of 31 Dec 2023; updated annually. Performance data shown represents past performance and does not predict or guarantee future results. The universe for the study represents approximately 12,500 fundamental U.S. public finance ratings from Moody's.

³ Average default rates are calculated based off the total amount of CUSIPs that defaulted for both investment grade and below investment grade bonds.

Accessing municipal bonds: Your investment options

You can invest in municipal bonds through various vehicles, each with distinct advantages:

	Exchange-Traded Fund*	Mutual Fund*	Closed-End Fund	Separately Managed Account	Interval Fund
Actively managed ¹	●	●	●	●	●
Tax planning opportunities	○	○	○	●	○
Portfolio holdings published to the public	●	●	●	○	●
Low minimum investment requirement	●	●	●	○	●
Exchange-traded with intra-day pricing ²	●	○	●	○	○
Opportunity for portfolio tailoring or customization	○	○	○	●	○
Transparency of portfolio transactions	○	○	○	●	○
Direct ownership of underlying securities	○	○	○	●	○
Concentrated positions	○	○	○	●	○
Can employ leverage	○	●	●	○	●

*Exchange-traded funds and mutual funds can be either passively or actively managed.

Exchange-traded funds, mutual funds, closed-end funds, separately managed accounts and interval funds are different types of investment vehicles with different expense structures and different inflows/outflows and distribution requirements. Shares of exchange-traded funds are bought and sold at market price as opposed to net asset value. As a result, an investor may pay more than net asset value when buying and receive less than net asset value when selling. In addition, brokerage commissions will reduce returns. Fund shares are not individually redeemable directly with the Fund, but blocks of shares may be acquired from the Fund and tendered for redemption to the Fund by certain institutional investors in creation units. A closed-end fund's use of leverage creates the possibility of higher volatility for the fund's per share NAV, market price, distributions and returns. There is no assurance that a fund's leveraging strategy will be successful. Closed-end funds historical distribution sources have included net investment income, realized gains and return of capital. Closed-end fund shares may frequently trade at a discount or premium to their net asset value.

1 Please review the prospectus or other current information provided by the fund or plan sponsor for details on management fees and other expenses.

2 Closed-end funds bought during the initial public offering are purchased at the original/IPO NAV plus a sales charge. Closed-end funds frequently trade at a discount from net asset value. When sold, shares may be worth more or less than the purchase price or the net asset value. A closed-end fund's use of leverage creates the possibility of higher volatility for the fund's per share NAV, market price, distributions and returns.

Leading the way in municipal bonds

Since 1898, Nuveen has been financing essential municipal bond projects and building lasting value for investors. This municipal bond heritage is reflected in the way portfolios are managed today.



125+

YEARS OF EXPERIENCE

A rich heritage spanning 126 years remains focused on relative value, principal growth and tax-aware investing.



25

CREDIT RESEARCH ANALYSTS

As one of the industry's largest credit research teams, 25 analysts averaging 18 years of experience are dedicated to municipal investing.



\$191B⁵

MUNICIPAL PRESENCE

Market power and institutional pricing provide an advantage when evaluating and purchasing bonds.

Milestones

1986

Offers Municipal Bond Trust, the first open-end municipal fund with each issue individually insured

1995

Introduces Nuveen Private Investment Management, pioneering municipal separately managed accounts

2005

Crosses \$60 billion threshold for municipal bond assets managed

2010

Nuveen purchases asset business of U.S. Bancorp's FAF Advisors, adding fixed income, real assets, equities and asset allocation capabilities

2014

Nuveen is acquired by TIAA, creating one of the industry's largest and most diversified investment organizations

2018 – Today

Introduces ESG municipal capabilities, and expands into municipal limited partnerships and interval funds

Investment professionals and assets under management as of 30 Sep 2025.

¹ As of 30 Sep 2025. Nuveen assets under management (AUM) is inclusive of underlying investment specialists.

For more information, please consult with your financial professional and visit nuveen.com.

Important information on risk

This material is not intended to be a recommendation or investment advice, does not constitute a solicitation to buy, sell or hold a security or an investment strategy, and is not provided in a fiduciary capacity. The information provided does not take into account the specific objectives or circumstances of any particular investor, or suggest any specific course of action. Investment decisions should be made based on an investor's objectives and circumstances and in consultation with his or her financial professional. Investing in municipal bonds involves risks such as interest rate risk, credit risk and market risk. As the interest rates increase, the price of bonds decrease.

Additional information

Income exempt from federal income tax may be subject to state and local taxes and the alternative minimum tax. Capital gains, if any, will be subject to capital gains tax.

Glossary

Responsible investing incorporates Environmental Social Governance (ESG) factors that may affect exposure to issuers, sectors, industries, limiting the type and number of investment opportunities available, which could result in excluding investments that perform well. **Average effective maturity** is the weighted average of the effective maturity dates of the fixed-income securities in the Fund's holdings. A bond's effective maturity takes into account the possibility that it may be called by the issuer before its stated maturity date. In this case, the bond trades as though it had a shorter maturity than its stated maturity. **Income subject to AMT:** a portion of the federally exempt interest dividends paid by the Fund was from private activity municipal bonds, which are generally higher yielding than comparable bonds. The private activity municipal bond interest portion of these dividends may be subject to the federal Alternative Minimum Tax for some investors. **Inverse floating rate securities** are derivative securities designed to produce high levels of tax-exempt income representing the difference between interest paid on an underlying municipal bond and short-term interest rates, less certain expenses, times a leverage ratio. This income varies inversely with the short-term rates based on the leverage ratio. Inverse floating rate securities also result in the Fund experiencing leveraged exposure to both upward and downward changes in the value of the underlying bonds. Leverage is created whenever a fund has investment exposure (both reward and/or risk) equivalent to more than 100% of the investment capital. S&P Municipal Yield Index is structured so that 70% of the market value of the index consists of bonds that are either not rated or are rated below investment grade, 20% are rated BBB/ Baa, and 10% are rated single A. **It is not possible to invest directly in an index.**

Before investing, carefully consider fund investment objectives, risks, charges and expenses. For this and other information that should be read carefully, please request a prospectus, and if available, a summary prospectus, from your financial professional or Nuveen at 800.257.8787 or visit nuveen.com.

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