

September 2025

Understanding land-secured municipal bonds

INSIGHTS FROM NUVEEN'S MUNICIPAL RESEARCH TEAM

Land-secured municipal bonds primarily finance basic public infrastructure projects such as roads, water and sewage lines, lighting, traffic lights and other essential components of real estate development. This financing tool generally supplements the overall capital funding plan of a development project. These bonds are referred to as “land-secured” because the obligation to pay taxes and assessments that ultimately pay debt service on the bonds typically attaches to the land itself.

LAND-SECURED BONDS HAVE SPECIFIC FINANCING STRUCTURES

Land-secured bonds are usually issued through special taxing districts, which are independent governmental units that exist with varying degrees of administrative and fiscal independence from local governments.

The laws governing the structure and sale of land-secured bonds differ by state. However, the structures, debt security features and

issuance procedures share many similarities. Fundamentally, a land-secured bond works like this:

- Within the taxing district, a tax lien is placed on property benefiting from the public infrastructure constructed with proceeds from the bond issue. This lien is paid off over time via periodic assessments or taxes.
- The revenues generated from the special assessments or taxes are used to pay debt service on the bonds. The tax or assessment lien is senior to any mortgage on the property.

The basic types of land-secured municipal bond structures include:

Special tax districts. Bonds are secured and payable by a tax levied annually on the property within the district. The amount of the tax levied on property owners to help pay for the debt service must be reasonable but may change based on higher or lower project costs, tax collections and other variables.

Special assessment districts. Bonds are secured by a special assessment lien on property within the district. The amount of

OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES.

NOT FDIC INSURED | NO BANK GUARANTEE | MAY LOSE VALUE

each assessment lien is based on mathematical formulas that consider how much each property will benefit from the infrastructure improvement funded by the bonds. The assessment lien is usually a fixed amount.

Limited tax districts. Bonds are secured and paid from an annual limited ad valorem tax levied within the district. The amount of the tax lien is determined by the amount of reimbursable public infrastructure costs within the district, along with underwriting standards that evidence the district's ability to pay debt service as vertical development occurs. The tax rate is capped at a not-to-exceed tax rate, meaning the assessed value of the district must reach a certain level in order for the district to generate sufficient revenues to pay debt service.

SECTOR STATUS IS MIXED

While land-secured bonds are generally viewed as a higher-risk sector at issuance, these risks may decline as additional vertical development occurs and taxpayer diversity increases.

Sector risks

Development risk. Until a project is fully built-out, all land-secured bonds bear some degree of development risk. In troubled real estate markets, projects can struggle and may be abandoned by developers and homebuilders, potentially leading to defaults in certain issues.

Potentially high leverage. Some bonds may come with high leverage, such as a value-to-lien ratio of only 2:1 at issuance. This means that the appraised value of the land in the district was valued at two times the amount of land-secured debt issued. In certain cases, especially where a portion of the property securing the bonds remains undeveloped, the value of the undeveloped property may fall below the amount of the land-secured debt allocated to that property. In these situations, the property owner or other interested party (such as the bank lender) is not economically motivated to pay their special tax obligations.

Taxpayer concentration. A land-secured municipal bond can mean that investors have long-term exposure to a single developer or group of developers. This characteristic is lengthened when project development slows.

Sector strengths

Projects with significant absorption. In many cases, the real estate development benefiting from the bond-financed infrastructure is either complete or substantially complete. These bond issues generally feature diversified tax bases that reduce the risk of large-scale delinquencies, as well as strong collateral coverage given the degree of completion of improvements and construction. Bonds with these characteristics are generally viewed as investment grade quality.

Potential credit improvement. Land-secured bonds typically come nonrated at the time of bond issuance due in large part to the risks noted above. However, these risks may decline over time as vertical development occurs and property ownership within the district diversifies. Once the tax or assessment burden shifts from a concentrated taxpayer base to a more diverse ownership base, such bonds can garner an investment grade rating.

CALIFORNIA: THE MARKET REMAINS STABLE

The land-secured municipal bond market in California has remained relatively stable over the past decade. According to Bloomberg, the state currently has \$14.4 billion in land-secured bonds outstanding, with only 2.0% classified as distressed.

The vast majority of land-secured bonds in California are issued by special tax districts known as Community Facilities Districts, or CFDs, pursuant to the Mello-Roos Community Facilities Act of 1982. Due to the long history of this financing mechanism and the relatively strict underwriting requirements, CFD bonds issued in California have historically experienced minimal distress as compared with structures in other states. A key strength of the CFD structure in California is the 3:1

value-to-lien requirement on all new bonds, which stipulates that the appraised value of all property within the specific CFD meets or exceeds the attached debt by at least three times.

Throughout 2024, land-secured municipal bond issuance in California was solid, with aggregate issuance across the state of roughly \$2.2 billion. This is up approximately \$200 million year-over-year. Through the first eight months of 2025, land-secured municipal bond issuance was \$1.5 billion, which implies that 2025 should conclude on par with levels from 2024.

Moving into 2025, California's housing market remains competitive as demand for single-family homes continues to outpace the supply of newly constructed homes, contributing to increasing housing costs. In April, the median price for a single-family home in California rose to an all-time high of \$910,000, a 0.7% year-over-year increase with a 50.1% increase demonstrated over the past five years.

Given the persistent housing shortage in the state, Governor Newsom recently signed into law various measures and reforms to remove constraints and barriers and better streamline the construction of new affordable housing. Homebuilders are expected to continue to capitalize on these dynamics to narrow the gap between the ever-increasing demand for affordable single-family homes and the shortage of existing homes.

The continued strength of California's economy and the limited supply of developable land in the state's more coastal locations has led to a significant increase in homebuilding activity throughout the more inland communities in recent years. Large-scale projects such as "The Great Park" in Irvine and "Westpark" in Roseville continue to be met with strong demand. Furthermore, land developers are continuing to work with state and local governments to alleviate California's housing affordability crisis by sourcing opportunities in many of California's less populated areas, such as those located in the Central Valley.



Land developers are working with state and local governments to alleviate California's housing affordability crisis.

COLORADO: GROWTH IS SLOWING BUT STEADY

Most land-secured bonds in Colorado are issued through special taxing districts called Metropolitan Districts (MDs) and are usually paid from a limited ad valorem tax pledge levied within the district. Most districts consist of residential communities, so their credit quality – especially that of districts in the early development stage – is highly correlated with the strength of the housing market. This is because new home construction and valuation establishes the tax base in the district to support the repayment of the bonds.

The housing market experienced robust price appreciation nationally and in Colorado, particularly during the pandemic when lower interest rates and remote work needs drove demand for more space. According to the S&P CoreLogic Case-Shiller Index, Denver home prices surged 54% from January 2019 through June 2022, slightly outpacing the 50% increase in the 20-city national index during the same period.

Since this peak, Denver's housing market has stabilized, with prices decreasing by 3% from June 2022 through April 2025, though still showing a modest 0.7% year-over-year increase through April 2025. In contrast, the 20-city national index has continued upward momentum, rising 7.1% from June 2022 through April 2025, with 3.4% of that growth occurring in the most recent year through April 2025.

Land-secured issuance in the state increased significantly in recent years but declined in 2023 amid the housing market slowdown and higher interest rates. Total new issue volume grew from less than \$100 million annually post the Great Recession to more than \$1 billion in 2018, a record high \$2 billion in 2021 and \$1.7 billion in 2022. Issuance dropped to \$558 million in MD bonds issued in 2023 and rebounded to \$1.8 billion in

2024. Based on issuance totals of \$834 million through 30 June, 2025 will likely finish near 2024 levels. As bonds come up on their five-year call dates, refunding issues are driving a good portion of the 2024 and 2025 issuance.

Ongoing population growth, particularly along the Front Range, is the main driver of home construction and supports the credit quality of MD bonds. From 2003 through 2019, the state's population increased by over 1% annually. While the population growth rate has slowed to a pace below 1% annual growth since 2020 (0.95% estimated in 2024), growth remains positive and impactful.

Overall, favorable demographic trends support the Colorado housing market and the credit quality of Colorado land-secured credits. The biggest concern surrounds affordability and persistently high mortgage rates. Building permits hit a recent high in the Denver metropolitan area during the building boom in 2021 (per the St. Louis Fed) but have trended down toward pre-pandemic levels. Through May 2025, building permits have increased less than 1% year-over-year.

Existing home sales remain low versus historical averages, as homeowners with low interest mortgages are reluctant to move. This continues to push buyers into the new home market, thereby supporting the credit quality of MD bonds, particularly those in the early development stage.

FLORIDA: DEMOGRAPHICS SUPPORT CONTINUED ACTIVITY

Land-secured bonds in Florida, known as Community Development Districts (CDDs), are secured by annual assessment levies on each planned lot/land parcel through bond maturity. Developers leverage these bonds to finance infrastructure and create developed lots for new home construction.

Florida's robust new home demand is driven by the state's population growth, which consistently ranks among the highest in the nation. In 2024, Ocala and Panama City-Panama City Beach emerged as the country's fastest-growing metropolitan areas, expanding by 4% and 3.8%, respectively.

Meanwhile, Florida's largest numeric population gains occurred in Miami-Fort Lauderdale-West Palm Beach and Orlando-Kissimmee-Sanford, which increased by approximately 123,000 and 76,000 residents year-over-year, respectively.

The Florida housing market has undergone significant changes over the past year, resulting in price adjustments across various metropolitan statistical areas (MSAs) throughout 2025. Both supply dynamics and affordability challenges are exerting downward pressure on prices. Supply-side factors show inventory has increased substantially, rising 28.8% year-over-year for both existing single-family homes and condo-townhouse properties. As of May 2025, single-family existing homes reached a 5.6-months' supply, while condo-townhouse units climbed to a 10.3-months' supply.

Simultaneously, elevated mortgage rates combined with high home prices continue to create affordability barriers in high-demand markets. In response to the growing inventory, builders have implemented discounts and incentives to maintain sales momentum for newly constructed homes. These incentives include builder credits and mortgage rate buydowns to attract potential buyers, while builders reportedly continue developing inventory in anticipation of increased buyer activity when interest rates eventually decline.

Larger homebuilders are leveraging their robust balance sheets and superior financial resources to maintain construction activity, implement strategic pricing adjustments and provide buyer incentives. We anticipate these well-capitalized builders will continue gaining market share over the intermediate term. This trend should positively impact construction pace and sales velocity within master-planned residential communities where we maintain exposure. According to RCLCO, Florida's dominance in this sector is evident, with 14 of the nation's top 50 master-planned communities located within the state during 2024.

Florida Community Development District (CDD) bonds continue to demonstrate remarkable strength. New money volume topped \$2.0 billion in 2024, setting a historical record, with total new money volume from 2020 to 2024 exceeding \$6.8 billion. The market saw impressive year-over-year

growth of 35% in new money issuance, with 157 new money transactions completed in 2024 at an average deal size of approximately \$13.4 million. When including both new money and refunding transactions, total 2024 volume surpassed \$2.2 billion. This marks the ninth consecutive year that Florida CDD tax-exempt bond volume has exceeded \$1 billion annually.

TEXAS: NET MIGRATION IS DRIVING HOME SALES

Texas land-secured bonds, known as Public Improvement Districts (PIDs), are secured by annual assessments levied on each planned lot or land parcel through bond maturity. This relatively new segment of the municipal land-secured sector has experienced significant growth, with bond issuances exceeding \$2.45 billion over the past five years (2020-2024), including \$655.9 million in 2024 alone. The market's expansion continues in 2025, with 49 issuances totaling \$792.8 million in bond principal already recorded. We anticipate continued market growth driven by Texas' steady population increases.

The Dallas-Fort Worth Metroplex dominates this market, accounting for 71% of issuances in 2024 and 80% in 2023. The Austin area is gaining momentum, representing 15% of issuances in 2024 and 19% in 2023. We expect the Houston area and San Antonio to become more significant market participants in coming years.

Texas' robust population growth remains the primary driver of housing demand. The state led all others in domestic migration inflow with approximately 191,000 new residents in 2023 (July 2022-July 2023) and 85,000 in 2024 (July 2023-July 2024). International migration has further bolstered these numbers, contributing an estimated 320,000 people in 2024. With limited but increasing resale inventory, the new home market continues to benefit from steady demand. Homebuilders are employing various incentives, including upgrades and mortgage rate buy-downs, to enhance affordability and attract buyers to new homes rather than resale properties.

Nuveen continues to monitor key market indicators including housing inventory levels, available

supply and vacant developed lots, all of which have increased in recent years. Active housing inventory for sale in the DFW Metroplex reached nearly 31,000 units in June 2025, representing a 55% year-over-year increase and significantly exceeding June 2019's 20,500 active listings. The Case-Shiller Dallas Home Price NSA Index shows a slight 0.25% decline over the past year, minimal growth of 0.06% over three years, but substantial appreciation of 97% over 10 years.

Austin's inventory has remained relatively stable over the past 12 months, with 13,105 active listings in June 2025 compared to 13,227 in June 2024, though this represents more than double the 6,282 active listings in 2019. Austin home prices peaked in late spring and early summer of 2022, with various sources indicating a 15%-20% decline from peak values. Nevertheless, prices remain 46% higher from Q1-2020 to Q1-2025 according to the All-Transactions House Price Index for the Austin-Round Rock-Georgetown MSA.

LAND-SECURED DEALS DESERVE CONSIDERATION

Well-structured land-secured deals offer potential strong collateral to investors and warrant investment consideration on a case-by-case basis.

California's "dirt bond" market presents several positive attributes due to the solid security structure of popular Mello-Roos bonds. Despite repayment concerns, only 2% of the \$14.4 billion in outstanding land-secured bonds are classified as distressed.

Colorado's land-secured credits maintain a risk profile similar to Florida credits, with affordability remaining a concern. Nevertheless, favorable demographic trends and underlying fundamentals continue supporting this market.

The Florida market maintains a higher risk profile compared to California. However, recent issuances have been characterized by smaller sizes, fewer planned lots and generally lower leverage. These more conservative structures suggest better resilience than pre-housing crisis issues from the mid-2000s.

In Texas, Nuveen anticipates total issuance approaching or exceeding \$1 billion this year. While Texas PID deals present a higher risk profile than California issues, Nuveen considers them less risky than Colorado and Florida counterparts due to enhanced local government oversight and assessments that exceed debt service requirements.

Analyzing land-secured municipal bonds demands seasoned knowledge of individual credits and comprehensive understanding of local markets. The three critical factors for investment evaluation are location, development group strength and collateralization (the land value relative to issued debt). Analysts must employ disciplined assessment approaches while maintaining thorough awareness of macroeconomic factors affecting the sector.

For more information, please visit nuveen.com.

Endnotes

Sources

New Construction Data and New Household Formation statistics: FRED; California: Bloomberg and California Association of Realtors; Florida: MBS Capital Markets for new issuance data; Colorado: S&P Case-Shiller for the home price appreciation, Bloomberg for the issuance data, and <https://worldpopulationreview.com/states> for the population data.

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 professionals.

The views and opinions expressed are for informational and educational purposes only as of the date of production/writing and may change without notice at any time based on numerous factors, such as market or other conditions, legal and regulatory developments, additional risks and uncertainties and may not come to pass. This material may contain "forward-looking" information that is not purely historical in nature. Such information may include, among other things, projections, forecasts, estimates of market returns, and proposed or expected portfolio composition. Any changes to assumptions that may have been made in preparing this material could have a material impact on the information presented herein by way of example. **Performance data shown represents past performance and does not predict or guarantee future results.** Investing involves risk; principal loss is possible.

All information has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information and it should not be relied on as such. For term definitions and index descriptions, please access the glossary on nuveen.com. **Please note, it is not possible to invest directly in an index.**

Important information on risk

Investing involves risk; principal loss is possible. All investments carry a certain degree of risk and there is no assurance that an investment will provide positive performance over any period of time. Investing in municipal bonds involves risks such as interest rate risk, credit risk and market risk. The value of the portfolio will fluctuate based on the value of the underlying securities. There are special risks associated with investments in high yield bonds, hedging activities and the potential use of leverage. Portfolios that include lower rated municipal bonds, commonly referred to as "high yield" or "junk" bonds, which are considered to be speculative, the credit and investment risk is heightened for the portfolio. Bond insurance guarantees only the payment of principal and interest on the bond when due, and not the value of the bonds themselves, which will fluctuate with the bond market and the financial success of the issuer and the insurer. No representation is made as to an insurer's ability to meet their commitments.

This information should not replace an investor's consultation with a financial professional regarding their tax situation. Nuveen is not a tax advisor. Investors should contact a tax professional regarding the appropriateness of tax-exempt investments in their portfolio. If sold prior to maturity, municipal securities are subject to gain/losses based on the level of interest rates, market conditions and the credit quality of the issuer. Income may be subject to the alternative minimum tax (AMT) and/or state and local taxes, based on the state of residence. Income from municipal bonds held by a portfolio could be declared taxable because of unfavorable changes in tax laws, adverse interpretations by the Internal Revenue Service or state tax authorities, or noncompliant conduct of a bond issuer. It is important to review your investment objectives, risk tolerance and liquidity needs before choosing an investment style or manager.

Nuveen, LLC provides investment solutions through its investment specialists.

This information does not constitute investment research as defined under MiFID.

NOT FDIC INSURED | NO BANK GUARANTEE | MAY LOSE VALUE

nuveen

A TIAA Company