Article Title: Criteria | Governments | U.S. Public Finance: Methodology And Assumptions: Rating Unlimited Property Tax Basic Infrastructure Districts Data: (EDITOR'S NOTE: —On July 29, 2021, we republished this criteria article to make nonmaterial changes. See the "Revisions And Updates" section for details.) Criteria Summary This article focuses on rating criteria for special districts whose primary purpose is utility service or infrastructure provision, for example Texas municipal utility districts (MUDs) or Colorado metropolitan districts. These districts are usually created at the request of real estate developers seeking to benefit from tax-exempt financing of infrastructure improvements to serve future development. All of these districts have the ability to levy an ad valorem property tax with an unlimited rate and issue tax-secured bonds. This article describes our methodology and assumptions for rating the municipal utility districts and emphasizes the following factors: A district's relative level of development; and A district's financial stability, as evidenced by the maintenance of strong financial reserves over several years. These criteria address the fundamentals set out in "Principles Of Credit Ratings," published Feb. 16, 2011. Unlimited Tax Basic Infrastructure Districts S&P; Global Ratings' current rating portfolio is primarily concentrated in Texas special-purpose water districts and metropolitan districts in Colorado. In Texas, the term "water district" encompasses many different types of districts, such as MUDs, water control and improvement districts (WCIDs), fresh water supply districts (FSWDs), and levy improvement districts (LIDs), among others. In Colorado, metropolitan districts may be created for several purposes, but most are primarily responsible for water, sanitation, street, and public safety improvements. Historically, relative to municipal governments, factors such as size, lack of a dedicated management team, and what we consider very high debt burdens have in our view weighed heavily in our debt ratings on the majority of these districts. We believe the absence of a dedicated full-time management team and the reliance on an elected board of directors have presented concerns and will remain a factor in assigning a rating. However, the limited responsibilities of these districts, coupled with the districts' operating track record (as evidenced by their financial position and approach to debt issuance), are factors that we believe may offset some limiting credit characteristics related to the lack of formal management policies. Also, compared to municipal governments, these districts, by their very nature, have historically exhibited very high debt service carrying charges, direct and overlapping debt burdens, and property tax rates. The pressure these ratios place on the tax base will remain one of our prominent rating considerations; however, in our view, other stabilizing factors may offset many of these concerns. Convergence Of Ratings Is Likely We believe that as a district reaches an advanced level of development, it exhibits an increasing number of credit characteristics commonly found in other municipal governments. As a result, we anticipate a growing convergence between our ratings on highly developed water districts and our ratings on municipal governments with similar credit characteristics (for more information, see "GO Debt," published Oct. 12, 2006). As with other rated smaller or rural governments, we are reducing our emphasis on size as a limiting rating factor, although the limited depth of the economic base will remain one of our credit considerations (for more information, see the article "Does Bigger Always Mean Better? Sizing Up The Impact Of Size On Municipal Ratings," published April 22, 2008). Conversely, largely undeveloped districts exhibit, in our opinion, a significantly higher degree of exposure to real estate volatility despite their ability to levy an ad-valorem tax with an unlimited rate. While we believe that state regulations and oversight have mitigated the degree of real estate speculation that led to several district failures in the late 1980s and early 1990s, our methodology and assumptions attempt to incorporate the real estate volatility and taxpayer concentration risk associated with undeveloped districts. We believe that largely undeveloped districts share many of the credit characteristics observed in special purpose districts such as tax increment districts and special assessment districts (for more information, see "Special-Purpose Districts," published June 14, 2007, and "Special Assessment Debt," published April 2, 2018). Rating Methodology S&P; Global Ratings assigns credit ratings to unlimited property tax basic infrastructure districts based on the qualitative and quantitative analysis of a range of financial and economic factors. While the majority of these districts issue general obligation (GO) tax-secured debt, there are factors that distinguish our rating methodology for them from that of municipal governments, for instance, our view of their development process, a frequently observed lack of a management team in the unlimited property tax basic infrastructure districts, and limited service responsibilities (for more information, see "GO Debt," published Oct. 12, 2006). Our quantitative analysis of these districts incorporates a number

of measures of financial and economic performance. Our analysis is also qualitative as we take into account several management factors. Many of these districts do not maintain full-time administrative staff to oversee their day-to-day operations. Decisions regarding the rate and direction of development, debt issuance, and overall financial practices are often determined by an elected board of directors. We believe that, in some instances, the absence of a dedicated administrative staff may present concerns regarding the district's ability to detect deteriorating financial trends early on and apply timely corrective measures. However, the governing board's approach to the pace and direction of development, debt issuance related to developer reimbursements, and the maintenance of financial reserves, represent in our view important qualitative factors for the assessment of medium-term financial trends. As such, our overall analytical framework for unlimited property tax basic infrastructure districts includes an analysis of the following factors: Economic indicators, including status of development; Financial position and property tax rate; Direct and overall net debt levels; and State regulation and oversight. Economic Indicators Overall health of the local economy As is the case for all rated governments, economic indicators are an important part of our analysis for unlimited property tax basic infrastructure districts. However, the proximity of these districts to major metropolitan areas, limits, in our opinion, the specific relevance of some broader economic indicators considered in other municipalities, such as median household income or unemployment rates. The overall economic health of the general area where the district is located remains in our view a significant factor insofar as it has an impact on real estate development. In our opinion, credit risks related to taxpayer concentration are often present due to the relatively small tax base and geographic area. A largely commercial tax base or a district in its early development stages, where a single developer has title to a majority of the land, frequently has a higher degree of taxpayer concentration. Similarly, we believe that a high concentration of multifamily residential development can also present a credit concern. Other district-specific economic factors that we consider in our analysis that we believe provide a relative measure of wealth include: average and median home values, and assessed valuation (AV) per acre. In addition, our criteria reflect consideration of factors that we believe may affect the competitive position of the district, such as: Its location relative to employment centers within the metropolitan area; The school district serving the development; and Number of homes, overall density of the development, and the extent to which the presence of amenities typically available in a master-planned community offer a more deliberate development plan. Status of development Under our revised criteria, a district's relative level of development remains a key distinguishing credit factor. S&P; Global Ratings analyzes the relative level of development both in terms of the percent of land with basic infrastructure (utilities, streets, etc.), and the percent of total acreage that has been built upon (see table 1). We believe that a district's status of development serves as a good predictor of its future bonding capacity and capital needs, as well as an indicator of management's overall approach to development of the district. In our opinion, it would be difficult for a district to achieve an investment-grade rating in its early stages of development due to a very high debt burden and a highly concentrated tax base, with land generally held by only a handful of developers. In many of these cases, we believe the district's economic viability is unproven and subject to certain factors, including housing market competitiveness and the local school district's reputation. Local politics can also affect development, in our opinion; the initial bond authorization -- sometimes by a single voter living in a nonpermanent residence in the district -- often exceeds the identified capital plan. One of the common characteristics of an investment-grade district is a relatively high percent of land development, which, based on our experience, we define as 50% or more of land improved with basic infrastructure. We have observed that once the district matures and demonstrates success with its planned development timetable, it will increasingly share many of the credit characteristics of rated municipal governments. Property tax rates may eventually decrease, and the debt burden, while initially rising due to bond issuance to finance development, tends to moderate as development occurs. The stability that we consider necessary to sustain the district then becomes apparent. Since many of these districts are created within the extraterritorial jurisdiction of a nearby city, the annexation of the district could occur. We have observed that cities typically annex these districts once they achieve a comparable tax rate and a mature status of development. In cases of annexed utility districts where the annexing entity assumes the district's debt, S&P; Global Ratings will adjust the rating on the district's debt outstanding to the annexing city's rating. Because in many cases annexing cities have zoning

power within their extraterritorial jurisdictions, candidates for annexation usually consist of fully developed utility districts with significantly moderated debt and a basic infrastructure that already meets or exceeds city standards. A select number of districts are classified as "in-city' districts. These districts are located within a city's limits, but levy a separate tax rate solely within the district. Usually, the infrastructure improvements have been ceded to the city, which is responsible for maintenance. Often, the district is a recipient of a property tax rebate from the city. In some cases, the city has a certain level of control over the district regarding debt issuance. In our view, this layer of oversight and the reduced operational responsibility may serve as a credit strength for these types of districts. Table 1 Issue Credit Characteristics Of Unlimited Property Tax Basic Infrastructure Districts RATING CATEGORY AA This is typically a fully developed district with a substantial tax base and strong transportation access to a major metropolitan region, supported by a stable history of property tax base growth and tax collections. It will have a moderate, albeit declining, debt level and tax rate. The operating history and reserves are strong. All infrastructure needs have been addressed, with minimal, if any, additional debt plans. These districts are often part of a multidistrict community. A This is a mostly developed district, usually located within a master-planned community that will eventually provide all necessary water and wastewater services. Its financial history and reserves are sound. While debt levels and additional debt needs may be high, management opens new sections in a deliberate fashion and promptly makes developer reimbursements. It could also be a largely developed district, with a sound record of good property tax collections. Management will devote any additional debt issuances to fund plant upgrades, and infrastructure replacement. The tax rate and debt levels are moderate, and the tax base does not exhibit a significant level of concentration. BBB This is typically a developing district with significant capital expenses ahead, perhaps including overlapping drainage districts. Debt levels and tax rates are high, but the district has maintained a strong financial position. Or, it is a largely commercial district, concentrated in a few taxpayers. While operating performance and debt levels might be good, it faces significant competition within the region. Even a moderate district tax rate could put it at a disadvantage. BB or below This is typically a district in the early stages of development with large capital expenses ahead. Debt levels and tax rates are very high and are likely to remain high in the next 10 years, based on anticipated growth patterns and future issuance of debt. Its financial history is limited. The tax base and, therefore, electorate remain concentrated in a few leading taxpayers. Financial Position And Property Tax Rate Given their relatively small operating budgets and limited powers and responsibilities, a district's general fund balances as a percent of operating expenditures are usually higher than those of most municipal governments. We have observed that a large number of mature districts exhibit ending general fund balance ratios approaching 100% of operating expenses. and many have balances well in excess of a year's operations. As table 2 shows, our analytical characterization of what constitutes a strong general fund balance for a district differs from that of rated municipal governments. While these districts have more limited service responsibilities than a municipality, the relative small size of their budgets and the rapidly changing nature of their tax bases in our view present a set of challenges not faced by most governments. We believe the maintenance of higher reserves, effectively serving as tax stabilization funds, provides these districts with a significant source of flexibility to manage their development. We have observed that typically these districts have very limited service responsibilities, with few or no full-time administrative staff and a well-defined set of operating expenditures. Consequently, a district's options to address budgetary and capital pressures are primarily raising taxes or the use of accumulated reserves, in our opinion. In our experience, given the competitive nature of the sector, where housing affordability is an important consideration in the pace of development, district officials often strive to maintain tax rate stability. In our view, the maintenance of high general fund reserve levels, often approaching or exceeding 100% of operating expenditures, provides districts with an important tax rate management tool as well as flexibility to manage the pace and direction of development. Many of these districts also maintain a separate debt service fund. We have observed that in many cases, the debt service fund also has a high balance compared to next year's required debt service payment. Districts are not required to maintain a debt service fund balance, nor are such excess revenues usually pledged to the bondholder. Such reserves, however, are generally limited to early debt retirement or defeasance, debt service tax rate mitigation, or capital outlays in lieu of debt financings. Due to the competitive natures of residential property

developments, property tax rates are another important credit rating factor, in our opinion. In some cases, district taxpayers might also pay a city tax rate due to taxing agreements between the municipality and district, as well as overlapping special district taxes from other districts. Like other municipal governments, districts typically have a dual-tax structure with separate rates for operating and maintenance and debt service. If the combined tax rate is high compared with rates of other surrounding developments, prospective residential buyers or commercial tenants could opt to locate in another district. In many instances, districts subsidize the operating costs of their water and sewer systems with property tax collections. In some cases, accumulated operating reserves also serve as a water and sewer rate stabilization fund, allowing management to utilize accumulated property tax reserves to supplement a district's water and sewer replacement costs. Direct And Overall Net Debt Levels Overall debt to market value is another key ratio in our methodology for rating unlimited property tax basic infrastructure districts. Given these districts' developing nature and their relatively small tax base, debt to market value ratios are typically higher than other GO bond issuers' ratios (see table 2). For investment-grade utility district ratings, the ratios range from less than 2% to more than 20% of market value. While investment-grade districts with higher debt to market value ratios are typically experiencing rapid development, in our view, they also have other strengths that sufficiently offset their elevated debt ratios. As property values rise, overall debt ratios tend to decline. Exceptions can include mature districts with aging infrastructure that have substantial replacement or rehabilitation capital needs. If tax-secured bonds are paid from an enterprise fund, S&P; Global Ratings will give credit to partial self-support, and will factor that level of support into the overall debt burden. For example, if an issuer's GO-backed water and sewer debt service coverage was below 1x, but managed to be 0.7x for the last three fiscal years, then S&P; Global Ratings would give self-support to 70% of the GO water and sewer debt. If the coverage tends to change yearly for instance, from 0.7x in fiscal 2003 to 0.5x in fiscal 2004, and to 0.6x in fiscal 2005, S&P; Global Ratings will use the lowest percentage of the last three years. In this case, S&P; Global Ratings would assume that 50% of the GO-backed revenue bonds is self-supporting. Partial self-support does not apply to revenue bonds because they would be in covenant default. S&P; Global Ratings analyzes the system to make sure that system revenues are able to cover both revenue and GO-backed revenue debt. According to our criteria, coverage from the enterprise fund revenues must provide at least 1x support for the last three fiscal years to be considered fully self-supporting and to be factored out of the direct debt of the district (for more information, see "Debt Statement Analysis," published Aug. 22, 2006). State Regulation And Oversight How Texas does it State regulation and oversight is a factor that can provide overall sector stability. As part of our criteria, S&P; Global Ratings analyzes the extent to which state regulations and oversight offer systemic stability by providing a framework for a deliberate development and issuance of debt. We believe that Texas offers a good example on how state regulations and oversight can provide a framework that fosters systemic stability. In Texas, the creation of a water district begins with authorization from the Texas Commission on Environmental Quality (TCEQ), as well as the city and county with extraterritorial jurisdiction over the area in which the proposed district is to be located. Other types of water districts within Texas are created either by general law or special law. General law districts may also be created by the county commissioners' court or by the TCEQ. Special law districts can be authorized only by an act of the state legislature. Our rating approach for all of these districts is the same. Water districts first proliferated in Texas during the 1970s and 1980s in the rapidly growing suburbs of Houston, Austin, and Dallas. Inactive districts are those that are financially dormant, defined as having less than \$500 in either revenues or disbursements and no bonds outstanding. Historically, the issuance of GO debt by water districts assumed future growth in the tax base to support high debt service costs. Developer contributions to the financed projects were optional. As property values fell dramatically during the real estate and banking crash of the late 1980s, many district property owners and developers found themselves with negative property equity and, thus, increased property taxes to service the debt. As a result, a great deal of property was foreclosed and sold at distressed prices. The Texas legislature enacted reform legislation in 1989 in response to these financial and credit problems. We believe that the resulting oversight provided for a more deliberate development process and ultimately a framework that provides overall sector stability. In our opinion, state regulation also provides a strong incentive for developers to manage the rate and direction of growth, including the

pace of bond issuance. TCEQ must approve all applications before bond issuance. This includes TCEQ tax rate impact analyses for the planned bonds and a zero-growth scenario, as well as full disclosure of those analyses. The Texas Water Code mandates that, in general, developers are responsible for 30% of district construction costs. In our view, this can be a very significant equity contribution, especially given that most developers are shouldering the entire start-up costs. For a developer to fully recoup eligible costs, including that last 30% of upfront capital investment, the district must: Have a direct debt burden of 10% of certified taxable AV or lower, including the planned bond issuance; or Have at least a 'BBB-' underlying rating; or Qualify for bond insurance from a 'AA' rated or higher insurer; or Enter into a strategic partnership agreement or some other interlocal agreement that will provide additional or alternate revenues to support district development. Strategic partnership agreement A strategic partnership agreement between a municipality and a district, authorized in 2001 by the state legislature, allows for a type of limited annexation by the municipality. In return for a promise not to formally annex the district for the term of the agreement, the city can capture the utility district's commercial property to levy a 1% sales tax. The district receives a 0.5% rebate of those revenues, after administrative and other costs, in what is, in essence, a windfall income. In our opinion, this source of alternative income is especially important for older, established districts that might have significant rehabilitation and replacement needs in the coming years and may choose to limit the amount of financing. As is the case with Texas water districts, our criteria reflects consideration of the extent to which existing regulation and oversight provide overall sector stability in other states where S&P; Global Ratings maintains ratings on unlimited property tax basic infrastructure districts. Table 2 Analytical Characterization Of Ratios For Unlimited Property Tax Basic Infrastructure Districts ECONOMIC TAXPAYER CONCENTRATION Very diverse Less than 15% Diverse 15%-25% Moderately concentrated 25%-40% Concentrated Greater than 40% STATUS OF DEVELOPMENT --PERCENT OF INFRASTRUCTURE IN PLACE Early Less than 50% Growing 50%-80% Mature Greater than 80% STATUS OF DEVELOPMENT -- PERCENT OF ACREAGE BUILT UPON Early Less than 50% Growing 50%-80% Mature Greater than 80% AV PER ACRE -- TOTAL AV COMPARED TO THE DISTRICT'S SIZE Low Less than \$200,000 Moderate \$200,000-\$400,000 High Greater than \$400,000 FINANCIAL ENDING GENERAL FUND BALANCE AS % OF EXPENDITURES Low Less than 30% Adequate 30%-60% Good 60%-80% Strong 80-100% Very strong Greater than 100% ENDING DEBT SERVICE FUND BALANCE AS A % OF MAXIMUM FUTURE YEARS' DEBT SERVICE Low Less than 30% Adequate 30%-60% Good 60%-80% Strong 80-100% Very strong Greater than 100% DISTRICT DIRECT PROPERTY TAX RATE (PER \$100 OF AV) Very low Less than 60 cents Low 60 cents to 80 cents Moderate 80 cents to \$1 High Greater than \$1 DEBT TOTAL PROPERTY TAX RATE (PER \$100 OF AV), INCLUDING THE DISTRICT AND ANY AND ALL OVERLAPPING TAXING ENTITIES Very low less than \$2.75 Low \$2.75 - \$3.25 Moderate \$3.25 -\$3.50 High Greater than \$3.50 DEBT TO MARKET VALUE -- OVERALL NET DEBT, INCLUDING OVERLAPPING DEBT, AS A % OF DISTRICT AV Low Less than 3% Moderate 3%-6% Moderately high 6%-10% High Greater than 10% Note: Ranges for taxpayer concentration and overall net debt to market value ratios are aligned with the same ratios in "Key General Obligation Ratio Credit Ranges" criteria, published April 2, 2008. AV--assessed valuation. Revisions And Updates This article was originally published on March 17, 2009. Changes introduced after original publication: Following our periodic review completed in 2015, we updated the contact list and criteria references in the article and added the "Related Criteria And Research" section. Following our periodic review completed on Oct. 21, 2016, we clarified the text of the criteria and updated the contact list. Following our periodic review completed on Oct. 17, 2017, we deleted some outdated information and clarified some text. On Dec. 10, 2018, we republished this criteria article to make nonmaterial changes. We updated the contact information and references to related criteria and research articles. On Dec. 11, 2019, we republished this criteria article to make nonmaterial changes. We added a footnote to table 2 to clarify that the ranges of two ratios are aligned with the same ranges presented in our "Key General Obligation Ratio Credit Ranges" criteria. We also added a reference to those criteria in the "Related Criteria And Research" section to clarify a link between these two methodologies. Separately, we deleted one sentence that contained noncriteria text commenting on the default history of MUDs. On July 29, 2021, we republished this criteria to make nonmaterial changes to update contact information. Related

Criteria And Research Related Criteria Special Assessment Debt, April 2, 2018 Principles Of Credit Ratings, Feb. 16, 2011 Key General Obligation Ratio Credit Ranges, April 2, 2008 Special-Purpose Districts, June 14, 2007 GO Debt, Oct. 12, 2006 Debt Statement Analysis, Aug. 22, 2006 Related Research Texas MUD Sector Stability Is Buoyed By Strong Economic Growth And Finances, Dec. 18, 2017 Does Bigger Always Mean Better? Sizing Up The Impact Of Size On Municipal Ratings, April 22, 2008