

Article Title: ARCHIVE | Criteria | Governments | General: Airport Revenue Bonds In The U.S. And Canada Data: (EDITOR'S NOTE: — We're republishing this criteria article following our periodic criteria review completed on July 14, 2017. As a result of this review, we've updated the contact list.)

1. Standard & Poor's Ratings Services' approach to rating U.S. and Canadian public finance airports and their revenue bonds reflects the growing maturity of the national and international airport network with a focus on passenger demand--both local and connecting--that drives aeronautical and nonaeronautical revenue, as well as an airport's role in the overall aviation system. Standard & Poor's historically has treated general airport revenue bonds as a special type of utility debt, instead of as lease obligations of various carriers. The strong business position of most airports, public-sector ownership, and essentially closed flow of funds, along with the existing regulatory environment that restricts the use of airport revenues to airport purposes, have allowed strong investment-grade ratings, relative to those of the airlines.

2. Service Area Characteristics And Air Traffic Demand

2. Standard & Poor's analysis begins with understanding the foundation of air passenger service and the underpinnings of the regional economy that produce the existing and future demand for aviation infrastructure. The definition of a service or catchment area of each airport varies, depending on regional characteristics. An airport's reach frequently extends beyond its city's limits or entire metropolitan area, adding diversity to its user base while also exposing the airport to competition. Factors Standard & Poor's examines include historical and projected population growth, employment expansion and mix, as well as wealth and income levels. These are important in the evaluation of an airport's service area economy. We review historical airport utilization trends versus those of the nation. An airport facility demonstrating stable passenger trends during a recession is generally stronger than one that grows spectacularly in good times but experiences greater traffic losses during a downturn.

3. The importance of local economic factors to a rating depends, in part, on the nature of the airport's traffic. If most passengers are of the origination and destination (O&D;) nature, the local economy dictates the level of service demand. Conversely, an airport used heavily for connecting traffic depends less on service area economics. Substantial transfer traffic is usually a vulnerability because the passenger does not make the choice of connecting facility, but rather that's dictated by the airline and, thus, related more to a carrier's viability and route decisions.

4. However, each airport has mitigating factors that could, in some cases, effectively offset this concern. These include: The importance of the facility to the overall national system of airports; Favorable geographic situation, evidenced by a "natural" hub location and the absence of viable transfer alternatives; The level of connecting traffic; A balanced and growing economy that may need additional O&D; airport capacity currently used for transfers; Airfield capacity and attractive facilities into which other carriers would expand service; Manageable debt burden and carrying costs; The financial strength of carriers accounting for the greatest amount of connecting traffic, and their commitment to the airport or city including their level of infrastructure investment in the region; The role of the facility in the carriers' route network; and Legal provisions that allow maximum flexibility in charging rates to carriers on an as-needed basis.

5. In general, Standard & Poor's has viewed the debt issued by most transfer airports as slightly riskier than a similarly secured debt of an O&D; facility. This is because the passenger traffic performance of O&D; airports has historically tended to be relatively more resilient to economic shocks and routing preferences of airlines. However, hubs that have demonstrated sufficient strength in the aforementioned conditions have received ratings comparable to an O&D; facility.

6. Competitive facilities within or near a service area are a concern, especially if they offer better service. Passengers are often quite willing to travel further on the ground for less expensive fares, more frequent air service, or larger aircraft. Increasingly, however, due to the rising need for facilities and the slow pace that new or improved facilities are provided to meet demand, even those airports in proximity with one another can serve separate and distinct segments of the market.

7. The carrier mix becomes increasingly important as any single airline's share grows. At an O&D; facility, dependence on one or two carriers creates short-term vulnerability because a strike can cripple an airport temporarily and have a significant impact on financial operations. This problem can be partially mitigated by legal provisions that provide ample reserve funds and coverage levels, flexibility to raise rates, and the ability to recover deficiencies occurring in the prior year. One or two dominant carriers may expose an airport to temporary problems, but Standard & Poor's believes that the critical rating factor is still air traffic demand.

8. If demand exists and the routes prove relatively profitable, other

carriers have historically filled the void over time to replace an airline that has reduced or ceased operating out of an airport, diminishing the likelihood of prolonged loss of airport activity. However, in certain economic climates that affect the airline industry as whole, other carriers' ability to take all or even a large portion of a failed carrier's traffic may be significantly limited--especially if much of the activity related to connecting passengers or serviced routes is considered marginally profitable by the remaining or new airlines. Use And Lease Agreements In The U.S. And Ground Leases In Canada 9. The intent of use agreements between an airport and its carriers in the U.S. is twofold: To ensure a revenue stream providing for operating costs and debt service payments; and To establish certain procedures for rate setting and revenue collections. 10. In Canada, ground lease agreements between Transport Canada and the airport determine rate setting and revenue collections. 11. There are two general categories, residual and compensatory, which differ primarily in terms of which party bears financial responsibility for revenue shortfalls and, conversely, who benefits from any surplus. Standard & Poor's does not explicitly favor one methodology over another but evaluates whether the specific agreement terms are appropriate for an airport's operating conditions. 12. Attitudes toward lease agreements have changed considerably since deregulation in the U.S. Three trends are clear: For both carrier and airport, the desire to commit to long-term agreements has decreased; The traditional distinction between residual and compensatory rate-setting methodologies no longer exists; and Airport operators have the desire to have more control over revenues, particularly nonairline revenues. 13. The greater degree of competition under deregulation and the risk of airline (tenant) bankruptcy are largely responsible for the shorter terms common in many of today's use agreements. Air carriers may not want to maintain service in an area generating intense interline competition or low yield. Conversely, airport operators want to avoid being saddled with unused terminal space resulting from tenant bankruptcy or routing changes. As a result, airports have gradually transitioned away from exclusive-use facilities, such as gates and terminal space, to common-use facilities to increase the utilization of such facilities. 14. Many agreements have been structured to combine the revenue protection offered by a residual approach with some sharing of excess revenues, as in a compensatory agreement. This latter provision allows for the build-up of discretionary reserves, which can be used to fund capital projects on a pay-as-you-go basis. Airports with agreements that generate annual debt service coverage, as opposed to rolling coverage, can provide more of a cushion above minimum coverage levels and be viewed as a credit strength. Similarly, the presence of a sophisticated concession program that results in significant nonairline revenue supporting capital development--and offsetting debt needs--will be viewed positively. Airports with compensatory ratemaking methodologies generally demonstrate coverage levels in excess of typical rate covenant requirements of 1.25x debt service. 15. However, the presence of one type of rate-setting methodology does not necessarily result in a rating distinction. It is important to note that the presence of use agreements does not produce any specific level of airline usage at an airport. An air carrier's financial obligations under a use agreement are very small, compared with potential operating losses incurred by serving an airport with poor demand. Federal law restricts the application of airport-generated revenues to airport purposes generally. For instance, airport revenues cannot subsidize other public services unrelated to operating the airport. Therefore, in many respects, even compensatory airports can be viewed as residual-like enterprises with no outflows of cash to governments or investors. 16. In most instances, an airline's decision about which airports to serve is based more on fare levels, load factors, and overall yields it expects in that market relative to other markets, rather than airport charges. 17. The primary value of use and lease agreements in the U.S. and ground lease agreements in Canada lies in establishing procedures for operating the airport and methods for charging rates and fees. Once this framework is established, even if such agreements expire, the same procedures of revenue collection and management likely will be used to run the facility, and most airport operators retain the authority to impose fees by local ordinance if necessary. 18. Although these agreements may provide an additional level of comfort if a particular airline ceases to operate or alters its routing structure, the inherent demand in the air traffic market remains the ultimate security for the bondholder. A strong market will continue to attract carriers to serve that demand, while even the strictest use agreement will not, in and of itself, ensure timely payment of debt service. Legal Provisions 19. The legal protections afforded bondholders by the indenture, resolution, or other supporting security documents and the specific legal

provisions pertaining to the business operations of the airport enterprise are important components of the rating analysis. We evaluate these provisions in the context of the issuer's credit strengths and weaknesses. 20. Legal provisions alone cannot prevent operating and financial performance declines, interruptions of debt service payments, and the overall risk of credit deterioration. It is an issuer's underlying credit quality that determines the degree of influence that legal provisions will bear on the rating on a bond. For airport operators with weak business and financial profiles, more liberal legal provisions will often result in assigning a lower rating than if they had been more stringent. For an issuer with a strong business and financial profile, the presence of the very same more liberal legal provisions may not have an influence on the rating at that point in time. If the issuer's credit quality starts to deteriorate, however, it is likely that more liberal legal provisions will increase the potential for a downgrade. 21. The rate covenant and how it is calculated is reviewed to determine the degree to which cash flow from operations is needed to cover fixed charges. Most senior lien airport revenue bonds have a rate covenant with a defined 1.25x minimum level of debt service coverage. However, how that 1.25x minimum coverage requirement is met can vary significantly. The strongest means of meeting this requirement is from operating cash flow with no addition to revenues from other sources (such as a coverage account as described below) or offsets to the debt service requirement from other revenue sources. Cash balances, other nonoperating revenues (such as nonrecurring grant revenues), and reserve funds are sometimes included in the definition of revenues or otherwise allowed in the use of calculating the rate covenant, but these sources can be depleted and are not reliable ongoing revenue streams. 22. It is important that the definition of revenues providing coverage is limited to revenues from operations and that they are sufficient, 1.0x, to meet operating and debt service requirements ("sufficiency"). Other sources of revenues, such as passenger facility charges used in the U.S. and airport improvement fees used in Canada, are given greater credit in the calculation of debt service to the extent that they are pledged to bondholders. 23. Many airport credits meet their rate covenant requirement through the use of coverage accounts used in the U.S. or standby credit facilities used in Canada. While "rolling coverage" helps to keep user costs low, it is also important that the issuer limits the amount of reliance on coverage accounts and demonstrates sufficiency. The actual or forecasted use of these other sources to meet the debt service requirements could have negative ratings consequences. Other factors that weaken the rate covenant are legal provisions that give the issuer the ability to net debt service requirements. A frequent example is the provision that allows for the netting of passenger facility charges or grant revenues from debt service. This results in a more generous calculation of debt service coverage. 24. Standard & Poor's calculates debt service coverage and the issuer's ability to meet the rate covenant from an indenture perspective and from an operating cash flow perspective, which places greater emphasis on the ability to meet operating requirements from operating cash flow alone. While generating real coverage of debt service obligations from annual reoccurring cash flow provides for a stronger rate covenant, Standard & Poor's does not make a rating distinction based on the presence or absence of this provision alone. More dominant operators of transportation infrastructure with strong business positions and rate flexibility can have weaker rate covenants that allow for coverage accounts with no credit implications, all things being equal. The opposite is true of weaker operators. 25. The additional bonds test (ABT) usually is based on the rate covenant multiple and the calculation of the ABT's coverage requirements shares the inherent strengths and weaknesses of the rate covenant. Most ABTs in the airport sector allow for the use of projected revenues in meeting the typical 1.25x existing and future debt service obligations. This use of projected revenues is inherently weaker than a requirement to demonstrate coverage from existing cash flow. 26. In our view, meeting the ABT requirement through the use of nonrecurring cash flow items, such as fund balances, coverage accounts, and reserves, is a credit weakness. Sometimes, the issuer may have the standard legal provisions with respect to the ABT and rate covenant, but operates at a much higher level and has committed to doing so by adopting a board policy to maintain the rate covenant and ABT at a higher multiple than required under the indenture or bond resolution. In these cases, the issuer's board policy may have a direct impact on the rating outcome and can help bolster otherwise weak or adequate indenture provisions. 27. The flow of funds is always closely reviewed in rating airport debt because it specifies the order and timing in which system revenues are used to meet the obligations created under the indenture or bond resolution. This establishes the relative lien position

of the debt service payments in relation to other issuer obligations. Standard & Poor's also looks to see what reserve funds are established and the required reserve funding levels. Finally, a critical component to the flow of funds is an evaluation of the disposition of surplus funds. With a few exceptions, U.S. and Canadian airports are restricted by federal law or regulations with regard to how airport-generated revenues may be applied, specifically prohibiting their use for non-airport purposes. Thus, taking airport-generated surpluses to support the general fund of a city or to make distributions to shareholders is not allowed. This allows U.S. and Canadian airports to be viewed as having essentially a closed flow of funds. 28. The presence of reserve funds for debt service, operations and maintenance, or a capital improvement fund can be beneficial to an issuer. In particular, additional reserve funds that can be used to meet debt service requirements can also be viewed as an additional source of liquidity. Most airport bonds have a debt service reserve established at bond closing. Some bond resolutions or indentures give flexibility as to the timing of the debt service reserve fund, giving issuers the ability to issue debt and fund the reserve from net pledged revenues over time--usually no more than five years. However, the extent to which this ability is exercised could result in an incrementally lower rating depending on the inherent liquidity of the issuer and its overall credit quality. Funding of the debt service reserve requirement in an amount less than U.S. IRS regulations or that required under Canadian regulations could also have credit implications, especially for weaker credits or those that have experienced erosion in liquidity. 29. Other, more liberal debt service reserve requirements call for a "springing reserve," whereby net revenues are required to fund a reserve over a period of time if coverage drops below a predefined multiple. While this allows the issuer flexibility in funding the reserve requirement, it also is of limited value given that at the precise time when liquidity is a potential problem or is deteriorating, the issuer is also under pressure to fund a reserve fund. A fully funded debt service reserve fund provides the most financial cushion to bondholders. Anything less than this requirement could have rating implications depending on the issuer's business and financial profile. 30. The goal of the legal provisions is to provide adequate protection to bondholders while allowing management sufficient flexibility to respond to changing business conditions. Where the indenture or bond resolution varies from the standard security and covenant provisions--either providing significant latitude or restrictions on the issuer--these provisions can potentially affect the rating outcome. 31. The analysis of airport financial operations varies, depending on its rate-setting approach. At a residual airport, the airlines collectively assume financial risk by ensuring payment of all airport costs not offset by nonairline revenue sources. This obligation effectively guarantees certain revenues, but is only sufficient to satisfy rate covenant coverage requirements. Therefore, unlike a compensatory airport, the total revenues collected in any given year do not represent an accurate measure of the airport's true earnings capacity. In general, a residual airport will have lower, but more stable, debt service coverage than a compensatory airport, but the coverage level is less meaningful in a residual setting. In addition, the ability of the airport to generate significant levels of nonairline revenues can, in a residual agreement environment, reduce airline costs, or, under a compensatory agreement, create discretionary funds to finance facility improvements, thereby reducing overall debt requirements. 32. Standard & Poor's analysis of other financial conditions is similar regardless of rate-setting methodology. Among important factors are historical and projected revenue diversity, debt burden, and airline costs per enplanement. Analyzed on a pro forma basis, this last measure is particularly useful because it incorporates future debt service costs and indicates the degree to which concessions can offset airline costs. Truly discretionary sources of cash and overall cash position are also important as well as access to other sources of liquidity. 33. The presence of a fully funded debt service reserve is also significant, since pledged revenues may be affected by factors beyond management's control, such as construction delays, litigation, and weather. The need for other reserves varies with the project's nature and construction schedule. 34. In addition, the role played by other sources of financing for airport purposes must be noted. While it is uncommon, GO or excise-tax-supported debt paid from airport revenues on a subordinate basis provides a cushion to revenue bonds; GO debt paid from general tax sources is viewed as an equity contribution to an airport and strengthens the overall financial position. For instances that involve subordinated GO or excise-tax-supported debt paid from airport revenues, Standard & Poor's includes this debt when evaluating an airport's debt burden and all-in debt service coverage. 35. An independent feasibility

study is useful in estimating future airport utilization and financial prospects. A consultant typically projects future enplanements and aircraft operations and derives a financial forecast loading in anticipated capital requirements. Standard & Poor's evaluates the consultant's assumptions and methodologies to arrive at its own estimates. Standard & Poor's may not always agree with such reports, though they usually play an important role in the rating process. Other Considerations 36. Despite their relative importance, demand, legal, and financial factors are not the only elements examined in rating airport revenue bonds. The size, structure, and purpose of the financing program and need for additional debt financing are also important. Considerations such as the influence of local politics, management's experience with large construction projects, and the presence of budget controls play significant roles. 37. Airport revenue bonds are different from other revenue bonds because of the presence of a private intermediary—the airlines—between the users of the service and the entity that pays debt service. However, strong airport demand, solid legal provisions, and prudent management of the airport's financial operations can alleviate some of the problems introduced by airline intermediaries and their volatile industry. 38. These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Ratings Services' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment. Revisions And Updates We originally published this criteria article on Nov. 15, 2013. We republished it following our periodic review completed on July 20, 2016. As a result of our review, we updated the author contact information and added the Related Criteria And Research list. This criteria article fully supersedes "Airport Revenue Bonds," published June 13, 2007. Related Criteria And Research Related Criteria Assigning Issue Credit Ratings Of Operating Entities, May 20, 2015 Definitions And Related Analytic Practices For Covenant And Payment Provisions In U.S. Public Finance Revenue Obligations, Nov. 29, 2011 Principles Of Credit Ratings, Feb. 16, 2011