

Article Title: ARCHIVE | Criteria | Governments | General: Port Facilities Revenue Bonds In The U.S. And Canada Data: (EDITOR'S NOTE: — We originally published this criteria article on March 19, 2014. We've republished it following our periodic review completed on April 24, 2017. As a result of our review, we updated the contact list and updated paragraph 21 to amend text that has been superseded by related criteria "Assigning Issue Credit Ratings Of Operating Entities," May 20, 2015. This article has been superseded by "U.S. And Canadian Not-For-Profit Transportation Infrastructure Enterprises: Methodologies And Assumptions," published March 12, 2018.) Rating Methodology 1. In evaluating port revenue bonds for publicly operated maritime facilities, Standard & Poor's Ratings Services considers several key variables such as competition and industry factors, including regulation, financial performance, operations, management, and legal protections afforded bondholders. Ultimately, ports derive their financial strength from their overall business position as providers of maritime infrastructure. 2. Operationally, port cargo and container volumes are generally correlated to economic growth and move with broader economic variables and trade trends. Competition is generally limited, as most port operators do not face new competition due to the tremendous capital investment and transportation infrastructure requirements as well as environmental and regulatory restrictions. Their competitive risk, however, stems from loss of cargo due to the potential departure of shipping lines or incremental growth in other markets. However, through sound planning, budgeting, and marketing, a port can effectively mitigate some of these competitive risks. 3. Ports are generally affected by factors that remain largely outside management's control. Beyond the economics of goods movement, political and competitive risks as well as the unpredictable character of uninsurable natural hazards are all variables that can negatively affect a port's competitive position and financial outlook. Concentration in the tenant mix contributing to port revenues and the credit risk exposure to the financial condition of major tenants is also an exogenous factor that can directly influence port finances. However, this can be mitigated by the use of long-term tenant leases (as is the case in Canadian ports). 4. We expect more highly rated entities typically will have more diversified sources of demand, a very strong competitive position, sound finances and oversight, and strong legal covenants, combined with steadily growing volumes. Entities with reliance on a very few products, tenants or a few trading partners, combined with a volatile volume trend, would generally not be expected to have ratings above the 'BBB' rating category. Competition And Industry Factors 5. To evaluate a port's credit strengths, Standard & Poor's analyzes its competitive position and the broader maritime industry and regulatory factors that will likely influence financial performance. Competition is examined both in the context of other ports (regionally or globally) as well as other modes of transport that provide competition for certain high-value cargo imports or exports. The port's relative position to competitors is reviewed based on data pertaining to commodity volumes, value, and the relative importance of each commodity type to total port revenues. Heavy dependence on a few revenue sources or products to generate port revenues exposes a facility more to the vagaries of supply and demand. 6. Standard & Poor's also generally reviews the terms of contractual agreements with shipping lines, port tenants, and shippers, or consignees. While tariff structures and other port charges, including dockage and wharfage, may not be significantly different (or governed by maritime associations), the overall port rate structure is examined, again with an eye toward an overall competitive position. Feasibility analyses and market studies, particularly those prepared when the authority or port operator is undertaking capital improvements and incurring debt to provide facilities or related infrastructure, can be an important source of operational data, in addition to pro forma information they may provide. All ports are exposed to the broader industry trends affecting the shipping industry as well as regulatory and environmental issues affecting operations. 7. The globalization of trade and manufacturing commensurate with the growth in the shipping and handling of maritime cargo containers continues to profoundly affect the way port operators conduct their business. Transportation economics, just-in-time inventory, outsourcing, growth in consumer products and other factors have all fed the increase in containerization. This, along with the increasing size of ocean-going vessels and the efforts of major shipping lines to develop a seamless intermodal movement of goods through cooperation with railroads and trucking companies, has worked to diminish the influence of ports' pricing of services as a determinant in the routing of cargo. Instead, the increased focus on supply chain logistics and time-to-market has accentuated the importance of ports to provide efficient movement of goods from vessels to the dock to intermodal

facilities to rail and truck lines. Thus access to transportation infrastructure and the capital investments required to improve the flow of goods at the lowest cost is integral to the success of ports. 8. Shipping lines, with their substantial investment in ever-larger vessels, and the higher costs associated with deployment and idling of these ships, have as a main priority making as few ports of call as possible, with rapid cargo loading and unloading. To this end, increasingly, they are drawn to large, modern facilities with naturally deep harbors, state-of-the-art loading and storage capabilities, and efficient rail and trucking links, capable of processing and transporting rapidly growing cargo volumes to distant markets. As major shipping lines demand these services, port authorities and operators are challenged to decide whether to provide such costly facilities or risk losing an important part of this lucrative trade. 9. Generally, the larger ports, servicing a sizable local or regional market, have been the major beneficiaries of these trends. Their size better enables them or their tenants to finance costly facilities and dockside equipment and extensive marshaling yards. The coalition of shipping lines and railroads has produced a greater concentration of cargo handling among a handful of these larger ports. Regional load centers provide a single destination—to or from—which containers can be transported overland to major internal markets. Because of the importance of their own primary markets, the larger ports usually have served historically as the first or last ports of call. This has become an increasingly important factor as shipping lines try to reduce the number of calls. 10. Many smaller to midsize ports are often the beneficiaries of growth in the overall trade, capturing commodities or general categories of cargo crowded out of larger ports. However, many smaller ports are dominated by a few larger tenants or types of cargo and remain relatively static, serving local or regional economies. 11. Port activity is affected by political and economic policies, natural hazards, and the exposure to cargo interruptions from terrorist-related incidents. For some external factors, the risks to port operations are mitigated by diversity. Government policies concerning foreign trade, currency, and agriculture can have a significant impact on the amount of cargo flowing through a specific port. Those ports that have developed a broad array of trading partners, commodities handled, and a stable relationship with major shipping lines should be well positioned to ride out any temporary or cyclical disruption in the flow of one or two products. 12. Since 2001, port security and the financing of improvements related to perimeter boundaries and monitoring systems have become more important. Port operating expenses and personnel costs have grown and government funding sources have been generally inadequate relative to the needs. The potential for additional security improvements represents a potential drain on port finances to the extent they are not accompanied by additional revenue sources either levied by port operators or in the form of government assistance. Management 13. The organizational structures of ports range from independent authorities to city departments and state agencies. Organization is important because it identifies the amount of managerial authority entrusted to a port's staff. Complete authority or autonomy permits senior management to make business decisions based on port operations rather than political sensitivities. Every port management, even an autonomous one, is constantly challenged by the often conflicting goals of spurring economic development within its region, while attempting to achieve self-support or profitability. The composition of the boards of directors and executives can illustrate the amount of local support for the facility and its importance to the local economy. Since a port's board and executives normally face a number of complex challenges, their method of selection and their experience are ascertained. Financial Operations 14. In assessing a port's financial position, Standard & Poor's typically analyzes at least five years of audited financial statements, as well as revenue, expense, debt, and liquidity forecasts. Year-to-year revenue, operating, and capital expenditure trends are examined. Issues of interest include the volatility and relative growth rates of each. Following 2001, many ports experienced significant increases in security costs, both voluntary and federally mandated. As funding was not provided to ports for many security requirements, ports reduced expenses in other areas. Costs of insurance and employee benefits have also increased significantly in recent years. Maintaining a sustainable cost structure in the face of rapidly increasing expenses has proven a significant test for management at most ports. In addition to current expenses, Standard & Poor's also generally examines the extent to which future employee pension and health care benefit liabilities are funded. 15. Coverage of annual debt service is examined, typically on a historic and projected basis. Because ports face exposure to such short-term risks as economic fluctuations, competition, tenant credit risk, labor, operating and event risk, and natural

hazards, healthy coverage of annual debt service is a very important rating consideration. Minimum historic or projected coverage levels are carefully considered. A commitment by port management to maintain a certain minimum level of coverage can be an important credit strength. Leverage measures, such as EBITDA interest coverage and debt/EBITDA are also important considerations. 16. Like annual debt service coverage, liquidity also provides ports with a cushion against short-term volatility in revenue. Unrestricted cash and investments are considered, often measured in days' cash relative to annual operating expenses, and as a percentage of outstanding debt. Restricted operating reserves are also considered. As with debt service coverage, a commitment by port management to maintain a certain minimum level of liquidity or an explicit liquidity policy can be as important credit strength. A port's exposure to swaps and variable-rate debt is also considered. 17. Operator ports typically sign contracts with shipping companies and receive income based on cargo throughput. Landlord ports typically lease property to shipping companies and receive fixed lease income. Although both models provide tradeoffs between risk and operating flexibility, operator ports face more volume risk in the short term than do landlord ports. For both types of port, Standard & Poor's considers customer and tenant concentration, the length of contracts and leases, and any minimum annual guarantees. Capital Budget 18. An important part of the analysis involves examination of planned capital expenditures. The types of facilities required, their costs, and planned financing are all important considerations. An independent feasibility study by an experienced consultant is helpful. Some ports may not be able to attract additional business without first building competitive facilities. However, prior commitments from users are more likely to ensure financial stability than building on speculation. 19. The amount of debt a port plans to issue is an important rating factor, since a heavy reliance on new debt can weaken an issuer's financial position. Although most rated ports have moderate debt burdens, the possibility of substantial future borrowing exists. The ability of a port to finance a significant portion of the capital budget with surplus earnings is a very positive rating factor. Regardless of how facilities are financed, a port's tariffs are examined to determine whether facilities will be competitive after project completion. Legal Provisions And Regulatory Structure U.S. ports 20. Most port revenue bond issues are secured by a pledge of net revenues. Standard & Poor's does not give added weight to a gross revenue pledge since a port that cannot pay debt service and operating expenses is not likely to remain an ongoing entity. In addition to net port revenues, some issuers pledge net airport revenues or excise taxes. To the extent that such diversions significantly enhance coverage levels, they could lead to a higher rating. Issuance of port general obligation debt, where lawful, also may enhance the revenue bond rating by reducing the amount of revenue bonds needed. The use of property taxes to pay operation and maintenance, or capital expenses, is a favorable development, since it frees an equivalent amount of port revenues to cover debt service. 21. The lien position of pledged revenues is important. Issues with a first lien on the pledged security can receive higher ratings than subordinate-lien debt since they are not as exposed to coverage dilution. Combined coverage levels and the relative proportion of senior- and subordinate-lien debt are rating factors. Legal covenants vary in strength and are appraised within the context of each port. Rate covenants typically are about 1.2x annual debt service. The debt service reserve requirements of issues generally call for a reserve equal to maximum annual or average annual debt service, or 10% of bond proceeds. The strongest provision requires a reserve equal to maximum annual debt service, and fully funded from bond proceeds. Most additional bonds tests call for coverage of debt service on outstanding and proposed debt of 1.2x-1.5x. Tests that include only historical revenues are stronger than those that permit the inclusion of future earnings. Canadian Port Authorities (CPAs) Regulatory structure 22. Canadian port authorities are structured slightly differently from their U.S. counterparts. Unlike U.S. ports, which are frequently owned by municipalities or political councils, CPAs are designed to be independent of local governments and free from political considerations. Under the Canada Marine Act, which was enacted on March 1, 1999, Canadian port authorities are required to be self-sufficient and fund their operations, including debt repayment, through the revenues that they generate. Canadian ports do not benefit from guarantees from the federal government and are not eligible for federal funding, other than grants of general application or in case of emergencies. In contrast to their U.S. counterparts, Canadian port authorities cannot issue secured debt with liens on revenue. Under the Canada Marine Act, each port's debt borrowing limits are outlined in their letters patent. Under the letters patent, Article 6 specifies the rent payable to the federal government for the

lease of the port lands. On Aug. 1, 2008, Bill C-23 came into effect amending the Canada Marine Act. The bill modified the current borrowing regime, allowing access to contribution funding from the federal government, and clarifying some aspects of governance. Under the amendment, Canadian Port Authorities can elect to be subject to a borrowing code that will govern borrowing under a capital markets platform rather than have a fixed borrowing limit. Although Canadian port authorities have the option to adopt the borrowing code, to date they have opted for the fixed borrowing limit. 23. In our view, the regulatory structure outlined in the Canada Marine Act is a positive credit factor because of the framework it provides for governance, powers to borrow and invest, setting of fees, and financial management. Revision History This article fully supersedes "Port Facilities Revenue Bonds," published June 13, 2007. We republished it following our periodic review completed on April 29, 2016. As a result of our review, we updated the contact list, added the Related Criteria And Research list, and deleted noncriteria text. Related Criteria And Research Related Criteria Assigning Issue Credit Ratings Of Operating Entities, May 20, 2015 Methodology: 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 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.