Article Title: Criteria | Governments | U.S. Public Finance: Public Housing Authority Debt Data: (EDITOR'S NOTE: —On June 28, 2021, we republished this criteria article to make nonmaterial changes. See the "Revisions And Updates" section for details.) 1. Public housing authorities (PHAs) can use future annually appropriated modernization funding to secure long-term debt due to legislative changes put into effect in 1998 that permit PHAs to borrow the funds sufficient to accelerate the modernization and repair of the aging and deteriorated housing stock in their portfolio. 2. The U.S. Department of Housing and Urban Development (HUD) administers the Capital Fund Financing Program (CFFP). 3. The greatest risk to bondholders investing in PHA debt secured by capital funds is that this money would not be appropriated by the federal government in amounts sufficient to pay debt service. This risk cannot be eliminated by the federal government except through direct support of debt service through some form of full-faith-and-credit pledge, which has not been part of CFFP transactions to date. However, this risk can be offset, as discussed below, through reserves and debt service coverage that anticipate funding cuts. 4. S&P; Global Ratings rates PHA debt backed solely by the annually appropriated HUD Capital Fund program in the investment grade category based on the following critical factors: Strong and extensive history of the federal government's support for public housing programs; Significant ongoing need for affordable rental housing for the lowest income segment of the rental population; Predictable mechanisms for allocating Capital Funds to individual housing authorities; Potential for strong support by HUD; and Bond structures that provide adequate reserves, additional bonds tests, and segregation of Capital Funds needed to support bond debt service. 5. The main factors that affect the rating are: The level of debt service coverage on the bonds, evidenced both by appropriation trend stresses, revenue projections and the coverage provided by the additional bonds test. Investment grade structures typically include at least a six-month debt service reserve fund based on maximum annual debt service; PHA's track record of HUD funding and creation of mechanisms to enhance predictability of funding levels; Evaluation of PHA's past performance in its modernization activity, including its obligation and expenditure history; Evaluation of the PHA's capital improvement plan, including ongoing Capital Fund leveraging as well as management's ability to undertake the scope of work; and Strength of legal structure, including how the financing insulates bondholders from recapture or withholding of the Capital Funds (to the extent that the law permits) for any reasons, including HUD sanctions due to performance, prior liens which may be placed on the funding, or flow of funds problems at the PHA level. Essentiality, Longevity, And Predictability 6. In evaluating the history of public housing, three elements are clear contributors to the creditworthiness of capital funding: The essentiality of housing for low and very low-income people; The long track record of funding for public housing by the federal government; and, Predictability of funding levels for individual public housing authorities. Essentiality 7. The need for the public housing program is at the heart of gauging the federal government's continuing commitment to the program. A review of the demand for public housing, the general dearth of affordable rental housing, and the likely continuation of the undersupply indicates a high degree of likelihood that public housing will continue to be the centerpiece of the nation's supply of housing for those in greatest need. While the federal government is no longer in the business of developing deeply subsidized publicly and privately owned housing, it continues to fund operating and capital needs of public housing authorities, albeit with some volatility in funding levels. Predictability Of PHA Funding Levels 8. As part of analyzing appropriation risk, S&P; Global Ratings carefully considered the methodology for allocation of Capital Funds to the individual housing authority. Further changes in the Capital Fund allocations effected under the Quality Housing and Work Responsibility Act of 1998 (QHWRA) greatly enhance the predictability and stability of allocations to the individual PHAs by: Establishing a formula for the Capital Fund arrived at through negotiating rulemaking, which helps to ensure consistency of methodology over the years; Increasing predictability of the formula through clarification of factors that can affect funding; and Allowing for a replacement housing factor, under which PHAs may receive funds over a period of time for units that have been demolished. 9. Although there are many factors that could change a PHA's funding level, such as ongoing and backlogged needs, impact of unit reduction, and performance reward factors, projecting increases in PHA funding would not be consistent with investment grade ratings. What is consistent with investment grade ratings is the development of a worst case funding level. 10. Another significant factor that can affect PHA funding levels are sanctions that HUD is within its right to employ

based upon PHA performance, discussed later under "The Importance of HUD Approvals", 11. For each PHA transaction, S&P; Global Ratings develops assumptions for funding levels based upon the PHA's actual Capital Fund allocation over time. HUD approvals clearly state that sanctions in relation to performance issues could not affect the level of funding below what is needed to make annual debt service payments while bonds are still outstanding. Assessing The PHA Managerial Capacity 12. As part of the rating process, S&P; Global Ratings generally reviews managerial capacity of the PHA as well as elements of the organization's structure and overall mission that can affect the credit quality of the CFFP bonds. S&P; Global Ratings reviews the PHA's redevelopment plan including scope of work, financial plan, and strategy to ensure completion of work in a timely fashion. In addition, S&P; Global Ratings typically assesses the PHAs capacity to complete the redevelopment plan, based on its past construction and modernization performance, existence of institutionalized modernization procedures with checks and balances, and any changes in the procedures designed to address any needs for additional resources based on the scope of the work planned. Communication with HUD and timely submission of one- and five-year plans are critical, as is the PHAs history of timely obligating and expending annually allocated modernization funds. Finally, S&P; Global Ratings looks at program and financial oversight practices of the PHA, the board's background and role in overseeing the PHA and the project, and the experience, depth and capacity of the PHA's senior staff members, including the modernization and construction team. Overall, these elements can generally be described as four main areas of the managerial capacity analysis: the strategic planning process, the consistency of strategy with organizational capabilities and marketplace conditions, management expertise and experience, and comprehensiveness of risk management standards and tolerances. The analysis of these elements is the same as that performed in assigning the issuer credit rating to the PHA (if rated) and is based in all cases (for both rated and unrated PHAs) on the management and governance assessment framework as specified in "Methodology For Rating Public And Nonprofit Social Housing Providers." Debt Service Coverage 13. Although there is a long and positive track record overall for public housing authority funding, there is the potential for reductions in program funding, especially on a year-to-year basis. There are two levels of appropriation risk that must be considered. The first level is that the federal government will reduce the amount of capital funding to PHAs as a whole. The second level is that the individual PHA will suffer reduced funding as a result of issues directly associated with PHA performance or the method of allocating funds to the PHA. The key ingredient to offsetting these risks is to provide for adequate debt service coverage in the transaction to take into account these potential decreases. In this instance, debt service coverage means the amount of annual Capital Funds available to cover annual debt service on the bonds. In determining the appropriate stresses for rated debt, S&P; Global Ratings considers the following factors: Historical federal funding levels, taking into account largest decreases in funding; Method of allocating PHA share, accounting for key aspects of the formula funding such as the impact of unit reduction; and, PHA risk and performance issues as well as track record in funding receipt. 14. To help analyze the potential effect of appropriation risk, S&P; Global Ratings tests coverage levels, assuming an annual reduction of appropriations consistent with the current trends to determine if bonds can sustain at least one times coverage over the term of the financing. 15. In addition, coverage levels assume that Capital Funds go directly to the bond trustee and that HUD has provided legal covenants that funding will not be withheld due to poor PHA performance. In analyzing the appropriate coverage level for individual transactions, S&P; Global Ratings analyzes the actual coverage in conjunction with the level of capital needs and likely leveraging. The higher the coverage levels, the greater stress the revenue stream can withstand without jeopardizing debt service. The Importance Of HUD Approvals 16. HUD is the administrator of PHA funding. For that reason alone, HUD approvals play a very important role in PHA transactions and may account for rating differences depending on HUD approvals each PHA is able to secure. In all investment grade transactions, S&P; Global Ratings expects that the PHA will secure HUD approval of the development plan and the bond transaction upfront. HUD does have the right to apply sanctions for poor PHA performance that could affect funding levels. Therefore, reducing the risk of sanctions or other actions that could interrupt funds flow is a critical component of investment grade transactions. In these transactions, HUD has included in its approval documents clear statements that it will not sanction PHA funds below the amount needed to pay debt service, albeit, subject to appropriations and

to the extent permitted by law. Although this has been viewed positively, there are still provisions in the housing law that direct HUD to sanction poor performing PHAs. If a PHA does not obligate its allocation in a timely manner, then HUD's withholding of funds may jeopardize the PHA's ability to pay bond debt service on schedule. 17. In addition, the proportional reduction of funds to account for the period of time that the PHA is out of compliance serves to erode the debt service coverage in the transaction for the year in question, and may also impact their ability to pay debt service. In contrast, the recapture of funds that have not been timely expended is not a threat to debt service. This is because recapture occurs four years after funds are allocated to the PHA. Because debt service payments are segregated in each allocation year, the debt service for the recaptured year would have already been paid. Therefore, it is the penalty associated with an obligation violation (withholding) that is more of a rating concern than the penalty associated with expenditure violations (recapture). 18. In order to analyze the likelihood of Capital Fund allocations being withheld by HUD, S&P; Global Ratings typically requests detailed information in relation to Capital Fund obligation histories from PHAs requesting a rating on a bond issue. At a minimum, this information includes data, presented through HUD close out certificate reports and reports from the HUD LOCCS system, from at least the prior ten fiscal years that demonstrates when the PHA "fully obligated" its modernization funding. While not as important in relation to debt service payments, expenditure histories also provide useful information to help determine the PHA's management competency in adhering to HUD deadlines. 19. By reviewing this information, S&P; Global Ratings is better able to assess the potential for sanctions that would have a negative impact on a PHA's ability to pay bond debt service. If a PHA has violated these deadlines in the recent past, adjustments to the transaction's structure may be needed (either in the form of higher debt service coverage or larger debt service reserve funds or both) to mitigate credit concerns, or a lower credit rating may be in order for the transaction. 20. To minimize the effect of this legal directive, HUD agrees in its approval documents to permit PHAs to use unobligated funds from allocation years to make debt service payments, and said payments are a permitted use to cure the obligations violations. While this does provide some comfort that some funds are available to pay debt service in a withholding scenario, there is no way of knowing how much money will be available for debt service; if the unobligated funds are sufficient to make the debt service payment that would be missed due to allocations withholding. Therefore, the PHAs past modernization funds obligation performance becomes paramount in determining the likelihood that funds will be withheld due to a HUD sanction against the PHA. The Role Of Reserves 21. Reserves are necessary to ensure that no bond payments are missed due to government shutdowns, resulting late appropriations, and/or temporary severe reductions in appropriations. S&P; Global Ratings looks for investment grade transactions to include a debt service reserve fund (DSRF) sized at least six months debt service based on maximum annual debt service on the bonds. The reserve fund can be funded from bond proceeds, funded upfront, and, if invaded, should be replenished in the flow of flows before any Capital Funds can be released to the PHA, and replenished prior to the next interest payment date, if funds are available. 22. The DSRF also serves to protect against any administrative delays in the receipts of Capital Funds by PHAs. Typically, the funds appropriated by Congress for Capital Fund become available in the October/November of the year following the beginning of the federal fiscal year (Oct. 1). The careful timing of debt service payment dates, coupled with the DSRF, can provide a significant cushion to bondholders and insulate them against the risk of late budgets or other delays impacting debt service. 23. Also viewed favorably are representations from HUD that protect debt service against any delays caused by the process whereby PHAs requisition and receive approval for their allocation of Capital Fund. This occurs as part of the PHA's annual plan submission to HUD, which could be subject to delays either at HUD or the PHA. Key Legal Features 24. Investment grade transactions include certain legal provisions. To achieve an investment-grade rating, issuers and their advisors should consider incorporating the following features in their transaction documents: The PHA grants the indenture trustee or collateral agent on behalf of the bondholders a perfected security interest in the Capital Fund program moneys to be received by the PHA; Debt service payments are legally separate from all other Capital Funds received from HUD. Debt service payments and any replenishment of reserve funds are clearly delineated and have a priority of payment only to bondholders, if possible before any remaining funds are released to the PHA; Capital Fund monies flow directly from HUD to the indenture trustee or

collateral agent to pay debt service without passing through the PHA; Capital Fund monies to be used for debt service are held under the indenture or deed of trust and are not to be commingled with any other funds of the PHA; The pledge to bondholders includes not only Capital Fund monies but also the PHA's contract rights pursuant to which the Capital Fund monies are paid as well as the PHA's rights under any successor program; An "additional bonds" test demonstrating that the lesser of (i) the prior fiscal year's allocation of Capital Fund; or (ii) the average Capital Fund receipts for the prior three years, will provide coverage of maximum annual debt service (including the proposed bonds) at a coverage level determined by S&P; Global Ratings at the time of the rating for any additional bonds to be issued that will be on parity with the existing debt; and, HUD stipulates in its approval documentation that (1) use of Capital Funds for debt service payments is a permissible use of funds, (2) no subsequent change in the permitted use of Capital Fund monies will affect HUD's obligation to pay the Capital Fund monies, (3) amounts pledged to the payment of debt service shall not be available for any other purpose, and (4) amounts payable to the indenture trustee or collateral agent are not subject to recapture for any reason whatsoever. 25. S&P; Global Ratings also reviews the legal covenants made by the PHA and indenture trustee or collateral agent to ensure compliance with the letter and spirit of the Capital Fund program. For example, the PHA should notify the indenture trustee or collateral agent immediately upon being notified by HUD of the availability of the annual Capital Fund allocation. The indenture trustee or collateral agent should then, in turn, proceed to requisition the Capital Funds immediately from HUD and hold these funds in appropriately rated investments until paid to bondholders. 26. S&P; Global Ratings generally requests legal comfort as to the perfection and priority of the security interest granted by the PHA in (or as to the nature of absolute assignment by the PHA) of all collateral held by the indenture trustee or collateral agent, the status under the U.S. Bankruptcy Code of the PHA, and the effectiveness of the grant by HUD of all representations, warranties, covenants, approvals, permits, and waivers necessary to effect the transaction. Pooled Transactions 27. S&P; Global Ratings rates pooled transactions, which allow multiple PHAs access to the capital markets through one financing. Two elements of these transactions are noteworthy from a credit perspective--first, what pledge is being made by PHA pool participants, and secondly, the level of oversight required to ensure that a financing consisting of multiple authorities remains a strong credit. 28. The pooled transactions completed to date have had multiple authorities participate, but the obligation to pay debt service on the bonds is proportional—that is, each authority is legally obligated to pay only its proportional share of bond debt service. In Capital Fund transactions, the benefit of pooling lies more with the PHA's ability to gain access to the capital markets (due to shared issuance costs) rather than bondholder security. Therefore, in a pooled transaction each authority's debt service is structured individually without reliance on another authority's funds to meet the targeted coverage level. In addition, each authority must have all the other components in place individually (approvals, reserves, among others) for the entire pooled financing to receive a rating. Generally, the rating level for which the pool transaction is eligible is based on the creditworthiness of the weakest PHA participating in the pool. 29. The need to monitor the proportional feature of these transactions make it necessary to have oversight performed by a competent entity to preserve the credit quality of the bonds. The oversight entity assists in monitoring both the programmatic and financing aspects of the transaction over the life of the bonds. Programmatic oversight involves monitoring the manner in which a PHA expends bond proceeds to ensure it will not result in a reduction of future capital fund receipts. Financing oversight involves ensuring that all bond covenants are met and that the information required by PHAs in these financings is provided to HUD, S&P; Global Ratings, and other entities as required in a timely manner 30. Acceptable oversight entities are familiar with affordable housing involving government regulation. As part of the rating process, S&P; Global Ratings generally evaluates the oversight entity's past track record with the capital markets and housing finance, as well as its association with public housing. The entity's competency should extend to the geographic area covered by the pool's participants. State HFAs, for example, typically have long involvement with affordable housing and successful track records, and are natural candidates for this role, although other entities perform oversight on rated transactions. With a strong and competent oversight entity in place, the credit quality of pooled transactions can be as strong as single authority transactions. Federal Funding History 31. While overall commitment of the federal government to the public housing program is

important, examination of modernization funding is the main focus in understanding Capital Fund transactions. Because development funding for public housing did not include ongoing reserves for improvements, by 1968 Congress needed to address the severe deterioration in the housing stock through a modernization funding program. Because of the severe modernization needs of public housing, the long history of funding, and the importance of the program to the federal government, it is reasonable to assume that some funding will continue for many years. Nevertheless, prudent leveraging and reserve sufficiency are very critical components of all investment grade PHA Capital Fund transactions. Frequently Asked Questions What is the interplay between the "Public Housing" Authority Debt" criteria and the "U.S. Federal Future Flow Securitization Methodology"? 32. We take a two-step approach to analyze public housing authority debt. First, we apply the "U.S. Federal Future Flow Securitization" (FFF) criteria in order to set the maximum rating. Second, we apply the "Public Housing Authority Debt" criteria to address transaction-specific issues. For public housing authority bonds, the first step (i.e., the application of the FFF criteria) establishes a cap, or the highest rating that the issue can receive (see table 1 of the FFF criteria). As a result, the rating determined through the application of the second step of the analysis can be the same or lower than that indicated by the FFF criteria. Revisions And Updates This article was originally published on June 22, 2007. Changes introduced after original publication: Following our periodic review completed on Aug. 4, 2016, we added the section "Related Criteria And Research." On Aug. 19, 2016, we added the section "Frequently Asked Questions." Following our periodic review completed on July 28, 2017, we added a new analytical contact and made minor clarifying revisions. Following our periodic review completed on July 27, 2018, we updated the contact information. On June 3, 2020, we republished this criteria article to make nonmaterial changes. We clarified in paragraph 12 that the analysis of PHA management capacity is aligned with the strategy and management assessment in "Methodology For Rating Public And Nonprofit Social Housing Providers," published Dec. 17, 2014. We also added a reference to those criteria to the "Related Criteria" list. On June 28, 2021, we republished this criteria article to make nonmaterial changes. We removed outdated, non-criteria language in paragraphs 7 and 31. Additionally, we updated criteria references and contact information. Related Criteria And Research Related Criteria Methodology For Rating Public And Nonprofit Social Housing Providers, June 1, 2021 U.S. Federal Future Flow Securitization, March 12, 2012 Principles Of Credit Ratings, Feb. 16, 2011