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RATING METHODOLOGY

Lease, Appropriation, Moral Obligation and Comparable Debt of US Local Governments Methodology

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This rating methodology replaces the *Lease, Appropriation, Moral Obligation and Comparable Debt of US State and Local Governments Methodology* published in November 2021. We have updated the Scope section and certain text throughout the methodology to remove references to US states, whose lease, appropriation, moral obligation and comparable debt is now rated under the *US States and Territories Methodology*. We have removed the appendix titled "General Government Contingent Obligations in Bankruptcy" because it contained non-methodological content. We have also removed the "US State Lottery Prize Receivables" appendix from this methodology and added it to the *US States and Territories Methodology*. These updates do not change our methodological approach.

Introduction

In this rating methodology, we explain our general approach to assessing credit risk of lease-backed obligations, annual appropriation obligations and moral obligations issued by US local governments, other than public school districts. We refer to these obligations collectively as general government contingent obligations. This rating methodology also explains our general approach to rating other local government obligations that, although non-contingent, are fundamentally similar in that the ratings are also notched from the obligor's general obligation (GO) or GO-equivalent rating. Additionally, this methodology describes our approach to rating obligations secured by lease and other, similar types of payments made by the US federal government.

This methodology provides general guidance to explain the fundamental credit factors that are generally most important in assigning ratings to issuers of these types of debt. We also discuss other rating considerations, which are factors that may be meaningful for differentiating credit profiles, but only in some cases. In addition, some of the methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings in this sector.¹ Furthermore, since ratings are forward-looking, we often incorporate directional views of risks and mitigants in a qualitative way.

¹ A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

This methodology includes a notching guide (please see Exhibit 5) that explains the criteria that are typically most relevant in determining the differential between the ratings of lease, appropriation and moral obligation debt and the general obligation debt of a US local government.² The notching guide can be used in most cases to approximate this rating differential. However, in some cases outcomes indicated by the notching guide may not map closely to actual ratings, because the notching guide is a summary that does not include every rating consideration.

As a result, actual ratings of lease, appropriation and moral obligation debt may not match the outcome indicated by the notching guide.

Our presentation of this rating methodology proceeds with (i) the scope of this methodology; (ii) a discussion of the rated universe; (iii) a discussion of the main rating factors; (iv) other rating considerations; (v) methodology assumptions; and (vi) limitations. In Appendix A, we discuss federal lease financings with and without renewal risk. In Appendix B, we discuss California pension obligation bonds.

Scope of This Methodology

This methodology applies to lease-backed obligations, annual appropriation obligations and moral obligations issued by US local governments (other than US K-12 public school districts),³ which we refer to collectively as general government contingent obligations. After GO debt, general government contingent obligation debt⁴ is the most common form of borrowing by US local governments. Many local governments use this financing frequently; some use it exclusively.

In addition to the contingent obligations described above, this methodology also applies to several types of non-contingent general government obligations issued by US local governments. These include non-contingent lease obligations backed by a local government's unlimited or limited GO pledge and non-contingent obligations that do not benefit from a GO pledge. Non-contingent obligations that do not have a GO pledge include those that are paid from general operating revenues, such as obligations secured by non-ad valorem tax pledges, or paid from available revenues, such as pension obligation bonds (POBs). This methodology describes our approach to rating certain federal lease financings and other obligations secured by similar types of payments made by the US federal government (see Appendix A)⁵.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

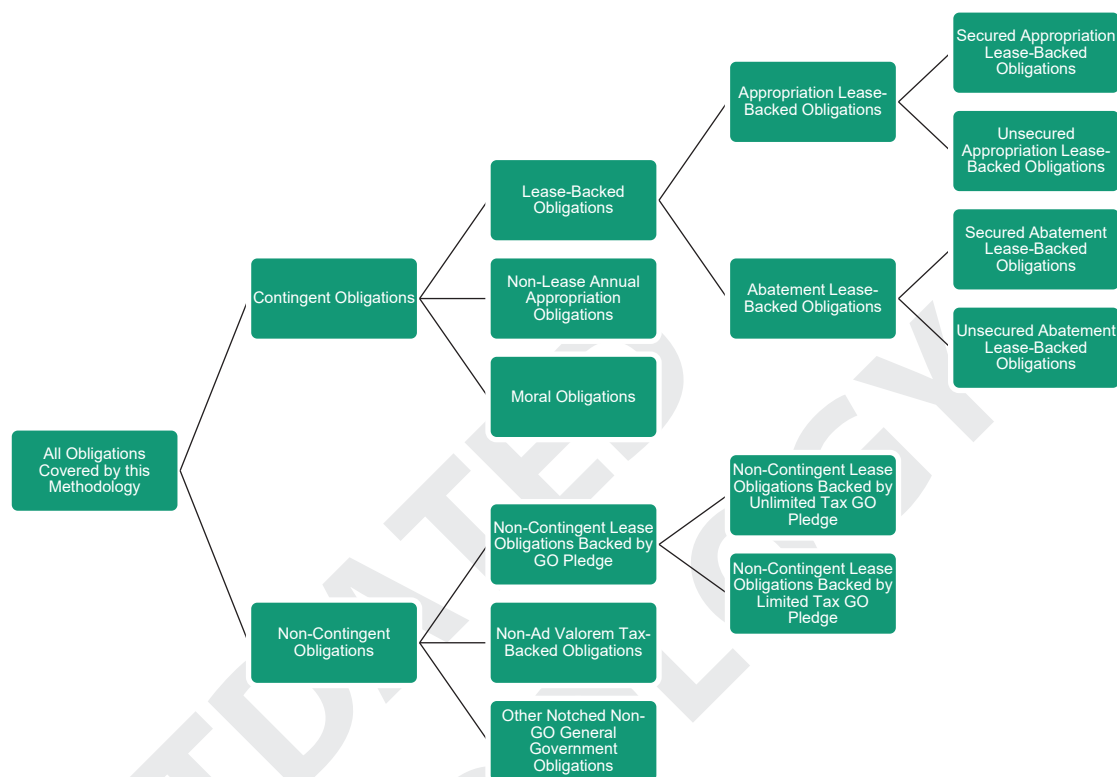
² A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section of this report.

³ Our methodology for US public K-12 schools describes how we rate lease and other contingent obligations in that sector. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section of this report.

⁴ Although general government contingent obligations are not legally considered debt due to their contingent nature, we view them as such analytically and use the phrase "debt service payment" when referring to payments on lease-backed obligations, annual appropriation obligations and moral obligations.

⁵ As discussed in Appendix A, we assess the cash flows during the term of the federal lease and use this methodology only for financings whose cash flows are reliable (for federal lease financings without renewal risk, this means we are able to score them as Highly Reliable or Reliable). A transaction could include different structural features or a combination of features, and we review the structure and assess its ratable under this methodology. Structural weaknesses can add risks that may not be addressed by the rating factors in this methodology and may introduce risk scenarios that are difficult to predict. As an example, we may assess that the structural complexity regarding the disbursement of funds could result in prolonged payment delays, the likelihood of which we cannot predict.

EXHIBIT 1

US Local Government Obligations Covered by this Methodology⁶

Source: Moody's Investors Service

About the Rated Universe

Lease-Backed Obligations

A **lease-backed obligation** typically takes the form of a lease revenue bond or certificates of participation (COPs). The lease-backed obligation is secured by a lessor's or certificate issuer's pledge of the revenue stream created by a long-term capital lease between a governmental lessee and, typically, a financing shell lessor created and controlled by the lessee. The governmental lessee generally has the annual, legal right to choose to not appropriate (appropriation leases), or the lease payment is otherwise contingent upon the continued use and occupancy of the leased asset (abatement leases). Based on these contingencies, such obligations are not legally defined as debt and are usually exempt from statutory and constitutional restrictions on debt issuance that apply to local governments.

In a typical transaction, the government does not pledge any specific revenues to the lease, in part because doing so would violate the foundational concept that the governmental lessee has a right to not appropriate for the lease payments. Absent that lease payment contingency, the obligation would be debt and subject to all of the legal restrictions on debt issuance. Since the source of payment is typically the governmental lessee's discretionary revenues, which are accounted for in its general fund,

⁶ In addition to the types of obligations listed in the exhibit, this methodology also covers federal lease financings based on linkages to the US government. Please see the appendices for details about our approach to these types of obligations.

such obligations are sometimes termed “general fund leases” despite the absence of any explicit general fund revenue pledge.

In a local government lease financing, the lessor is usually a joint powers authority (JPA) or limited liability corporation (LLC) that is created by and wholly controlled by the local governmental lessee. In many cases, the JPA or LLC is created exclusively for the purpose of facilitating the government obligor's lease financings and has no financial resources or credit quality of its own. Typically, the local government obligor enters into a long-term lease with the JPA/LLC, and the JPA/LLC, or the trustee for the transaction, issues the lease-backed obligation in the form of lease revenue bonds or COPs. Debt service for the bonds or COPs is secured by the lessor's or trustee's pledge of lease payments to be received according to the lease payment schedule. Generally the lessor also assigns all rights, title and interest in the lease revenue stream to the trustee. While the lessor is technically the obligor for the debt, the local governmental lessee is the ultimate obligor, since the lessee is the sole source of payment of the pledged lease revenues.

Appropriation Leases and Abatement Leases

We rate two types of lease-backed, contingent obligations: appropriation leases and abatement leases. In an **appropriation lease-backed obligation** structure, the government generally covenants to take proactive steps to make the annual lease payment, though always with the explicit recognition that it is legally entitled to choose to not appropriate for the annual lease payment. Covenants typically include the initial inclusion of the lease payment in the government's operating budget. This inclusion requires the governing body to take an affirmative action to exclude the lease payment from the budget should it choose to not appropriate. Once the appropriation is made, the obligation to pay is absolute and unconditional for the time period to which the appropriation applies (typically one year).

Under an appropriation lease-backed obligation structure, failure to make the lease payment once it has been appropriated constitutes a legal default by the governmental lessee.⁷ This possibility often gives rise to the seemingly contradictory description of a rated, lease-backed obligation as an “absolute and unconditional obligation subject to annual appropriation.”

The decision to not appropriate itself is an explicit legal right of the governmental lessee and would not be a default on the lease under the terms of the lease. Non-appropriation generally leads to a monetary default on the rated, lease-backed obligation in a matter of weeks or months. If an obligor chooses to not appropriate, default typically occurs when a debt service payment on the security is not paid to creditors. In the rare circumstance that an appropriation lease-backed obligation has a fully funded debt service reserve held by a trustee, the payment default could occur more than a year after the government's decision not to appropriate.

In an abatement lease-backed obligation structure, lease payments are not contingent upon an annual right to not appropriate. Rather, they are contingent upon the continued availability of the leased asset for use by the lessee. In the event that continued use is compromised, the governmental lessee must “abate” (reduce) the lease payment in proportion to the reduction in use. However, the abatement process has not been fully tested and defined by the courts, so payment abatement may not be required in the event that the remaining, compromised-use value of the leased asset still exceeds the amount of outstanding debt. As a result, many abatement leases are “over-collateralized,” with the value of the leased asset exceeding the principal amount of the related debt at issuance. California

⁷ Please see *Rating Symbols and Definitions* for our definition of default. A link can be found in the “Moody's Related Publications” section of this report.

local governments exclusively use abatement type leases. Local governments in Indiana also use abatement leases.

For an abatement lease financing, the government typically covenants to procure property insurance covering insurable risks in an amount sufficient to fully repair the property or to call the remaining debt. It also typically covenants to procure rental interruption insurance sufficient to cover lease payments while the property is being repaired and is unavailable for use or occupancy. Notably, coverage for seismic events is typically only required if commercially available at reasonable expense. These conditions are often not met. For example, in California, creditors typically take seismic risk, even if the debtor has property and rental interruption insurance. Losses in the event of abatement due to a seismic event would likely be mitigated by federal disaster assistance for rebuilding certain government facilities. Lease payments during the rebuilding period, however, would not likely be reimbursed.

Creditor recourse in the event of non-payment of a lease-backed obligation (either an appropriation lease or an abatement lease) is relatively limited compared to recourse for traditional local government debt, since the latter typically includes a full faith and credit pledge or a lien on specific property tax revenues. In the event of non-payment of a lease-backed obligation, creditors typically only have the right to repossess or re-let the leased asset, which we refer to as a "secured lease" arrangement. We refer to financing arrangements that do not provide the creditor with recourse to the leased asset or other collateral in the event of non-payment as "unsecured leases." Unsecured lease-backed obligations are analytically equivalent to non-lease annual appropriation obligations, which are described in the next section.

Both the contingent nature of appropriation and abatement lease-backed obligations and the more limited creditor recourse in the event of default make such obligations significantly weaker—from a purely legal perspective—than debt secured by a GO pledge. However, by securitizing a lease rental stream in the public capital markets, the governmental lessee is signaling its long-term financial support to investors in such instruments, notwithstanding its legal outs.

The failure of a government to honor a lease-backed obligation that it sold in the public capital markets would typically indicate strained resources and could have a material impact on the government's ability to access markets. Failure to honor a lease-backed obligation could also lead to a negative rating action on the government's GO rating. Non-appropriation would call into question the entity's general willingness to honor commitments made to investors. This fundamental connection to the government's GO credit quality normally creates a strong incentive for rated issuers to appropriate for lease payments even though they are not legally obligated to do so.

In choosing whether to appropriate for lease payments, most rated governments are mindful of the potential market penalty that a non-appropriation decision would create. Even though they are not legally obligated to appropriate for the lease payments, financial, economic and political incentives have generally compelled them to do so.

Annual Appropriation Obligations (Non-Lease)

In this methodology, "annual appropriation obligation" refers to non-lease general government obligations that have an annual appropriation contingency.⁸ Such non-lease annual appropriation

⁸ The decision to appropriate for payments on general government contingent obligations most commonly occurs during governments' annual budget cycle. We therefore describe appropriations as "annual appropriations" in this methodology. In some cases, the appropriation decision occurs at a different interval, for example every two years as part of a biennial budget process.

obligations lack an integrated lease structure and do not include recourse to an asset among the remedies in the event of a default. They also do not include a pledge of special taxes, although in some cases the government may use special tax revenues to pay debt service. Special tax obligations with annual appropriation features are specifically addressed in our methodology that discusses how we assess special tax bonds issued in the US public sector.⁹

Non-lease general government annual appropriation obligations are backed solely by the issuing government's covenant to take certain administrative steps to consider appropriating for debt service in each budget cycle. Creditor recourse is very limited in the event of non-payment.

Public finance professionals often generically refer to lease-backed obligations as simply "annual appropriation obligations." Sometimes the reverse occurs: non-lease annual appropriation obligations are referred to as "leases." This flexible terminology reflects the explicit right in most states of the local government obligor to annually choose to not make the annual appropriation for a lease payment. In this methodology, the terms "lease-backed obligation" and "annual appropriation obligation" are used with a more specific meaning. The term "lease-backed obligation" refers only to financing structures with underlying lease agreements, whether they are abatement leases or annual appropriation leases. The term "annual appropriation obligation" is reserved for non-lease, general government obligations that have an annual appropriation payment contingency.

This distinction between lease-backed obligations and non-lease annual appropriation obligations is important because most lease-backed obligations include a pledged asset while non-lease annual appropriation obligations typically do not include a pledged asset. Furthermore, the term "annual appropriation obligation" is a misnomer when applied to abatement leases, since an abatement lease does not have an annual appropriation out. An abatement lease's contingency is solely based on continued use and occupancy of the leased asset rather than on an annual appropriation decision. If the asset is available, per the terms of the agreement, an abatement lease payment must be made. In the event of non-payment of a lease-backed obligation, the creditor is typically entitled to the leased asset, either through repossession or a simple right to re-let for the remaining term of the lease-backed obligation. This right to repossess or re-let the asset is an important security feature and can be a significant rating consideration, particularly for calculating likely losses in the event of a default by a fiscally stressed governmental lessee.

A non-lease annual appropriation obligation is backed solely by a government's covenant to consider appropriating for debt service. As with lease-backed obligations, annual appropriation obligations are not legally considered debt and are therefore exempt from statutory and constitutional restrictions on debt issuance that apply to local governments. From a credit perspective, non-lease annual appropriation obligations generally differ from secured lease-backed obligations in just one way: for non-lease annual appropriation obligations, no physical asset is pledged. Therefore, creditor recourse in the event of non-payment on an annual appropriation obligation would not include any right to repossess or re-let an asset, which in most lease-backed obligations is the project financed with the borrowing.¹⁰

The issuer of an annual appropriation obligation covenants to engage in certain administrative actions related to the budgeting and appropriation of debt service. Because appropriations are typically made through the government's annual budget process, these financings are commonly called "annual appropriation obligations." Once the appropriation is made, it is absolute and unconditional for the

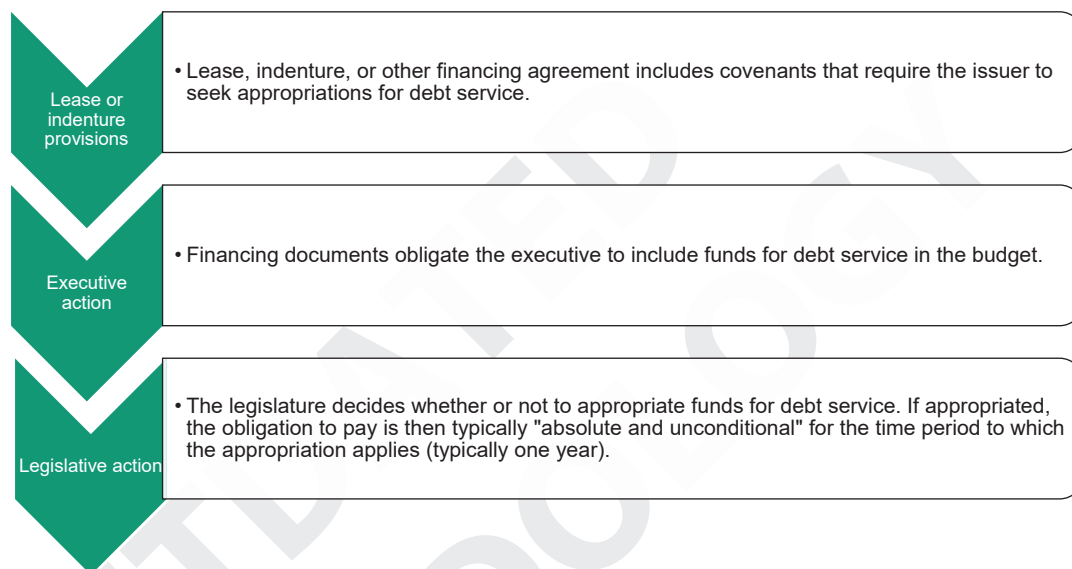
⁹ A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section of this report.

¹⁰ In some circumstances, the financed project and the leased asset are different. In such financings, often termed "asset transfer" leases, the leased asset is usually of greater importance or essentiality to the governmental lessee than the project being financed.

time period to which the appropriation applies (typically one year). After one year, the annual option to not appropriate renews. Governments usually do not identify a specific revenue stream from which appropriations are to be made, instead making payments from any legally available revenue source.

A typical payment process for an appropriation lease-backed obligation or an annual appropriation obligation is shown below (see Exhibit 2).

EXHIBIT 2

Typical Payment Process for an Appropriation Lease-Backed or Annual Appropriation Obligation

Source: Moody's Investors Service

As with lease-backed obligations, the failure of a government to appropriate for debt service on a non-lease annual appropriation obligation is often an indicator of severe stress and typically leads to a default on the obligation shortly thereafter. A non-appropriation decision would likely result in negative rating action on the government's GO rating since it would call into question the government's willingness to honor commitments made to investors. This connection to the government's GO credit quality normally creates a strong incentive for rated issuers to appropriate for debt service even though they are not legally obligated to do so. In choosing whether to appropriate, most rated governments are also mindful of the potential market penalty (a likely increase in future borrowing costs) that would result from a non-appropriation decision.

Moral Obligations

A **moral obligation** is a form of credit enhancement typically provided by a government to another entity. Generally, a highly credit-worthy government pledges its "moral obligation" to enhance a specific borrowing by a government of lesser credit quality. The debt is usually issued by a separate government entity, and the morally obligated government typically pledges to consider appropriating funds to replenish a debt service reserve that has been drawn upon. Creditor recourse in the event of non-payment is very limited for moral obligations, which, as the name suggests, are based more on good faith and a belief in market discipline than on legally enforceable covenants.

Moral obligation pledges are seen only infrequently at the local government level. Local governments typically issue moral obligation debt for their own economic-development-related borrowings. In some

cases, a local government provides its moral obligation pledge to its own borrowing if the unenhanced security is of weaker credit quality, such as a tax increment¹¹ revenue stream that provides narrow or uncertain debt service coverage.

In a typical moral obligation structure, a parent government pledges to consider appropriating for the replenishment of a debt service reserve under certain circumstances. In some cases, the pledge to consider appropriating applies to debt service itself. The moral obligation pledge is neither a guarantee to pay debt service or replenish a debt service reserve, nor is it a legal obligation to seek appropriation to pay for debt service or refill a reserve. Rather, it is the declaration that the pledging entity intends to support the debt with appropriations and will consider providing funding under certain circumstances.

In the event of non-payment, creditor recourse is limited to the default remedies provided under the unenhanced transaction's structure. While a moral obligation is weaker than a legal obligation to pay debt service, the entity providing the moral obligation pledge is signaling its support for the transaction to investors. Therefore, as with lease-backed obligations and non-lease annual appropriation obligations, the failure of a government to honor its moral obligation commitment is generally an indicator of severe stress that would likely result in negative rating action on the government's GO rating. Similarly, in weighing the decision whether or not to honor a moral obligation, governments typically consider the market impact of the decision. That potential impact is usually sufficient to motivate the government to make the moral obligation appropriation, absent severe stress.

From a credit perspective, moral obligations differ from lease-backed obligations and non-lease annual appropriation obligations in three ways. Because of these differences, moral obligations are typically rated lower than lease-backed obligations or annual appropriation obligations of the same entity.

- » First, unlike the legal covenants associated with typical lease-backed obligations and annual appropriation obligations, a government's moral obligation to pay debt service or replenish a debt service reserve is contingent upon legislative approval and is never absolute or unconditional. With a typical contingent lease-backed obligation or annual appropriation obligation, once the appropriation decision is made, the obligation to pay debt service is absolute and unconditional for the time period to which the appropriation applies (typically one year).
- » Second, a typical moral obligation pledge applies only if the underlying revenue stream is insufficient. Therefore, the amount the pledging government may be asked to appropriate, if any, is uncertain.
- » Third, the steps to pay debt service or replenish the debt service reserve under a moral obligation pledge are more complex than those of a typical lease-backed obligation or annual appropriation obligation. For example, the process begins when the debt service reserve is drawn on. The issuer or the trustee then notifies the executive (the mayor or budget officer) of the draw and the amount needed to replenish the debt service reserve. The executive may include in the budget request an amount needed to replenish the reserve. Finally, the legislature may approve the appropriation request.

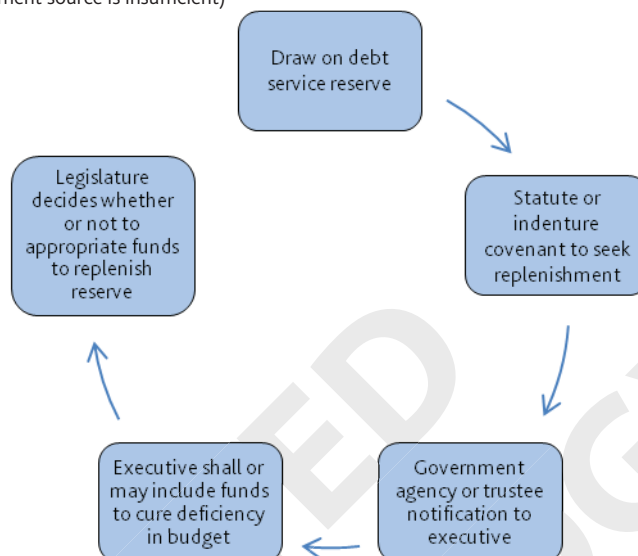
A typical payment process for a moral obligation is shown below (see Exhibit 3). This process can occur each budget cycle as necessary.

¹¹ For more details on our tax increment debt methodology, a link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publication" section of this report.

EXHIBIT 3

Typical Payment Process for a Moral Obligation

(assuming underlying payment source is insufficient)



Source: Moody's Investors Service

Other, Non-Contingent Local Government Obligations Rated Under This Methodology**Non-Contingent, Lease-backed Obligations**

Non-contingent, lease-backed obligations are structured with an underlying lease but without the contingency risk that is typical of a lease financing. Lease payments for this type of obligation are not subject to appropriation or abatement, and the obligor typically pledges its GO taxing authority to the lease payments. Less frequently, non-GO property taxes or other types of taxes are pledged. The absence of contingency risk combined with a GO pledge typically results in the obligation being rated at the same level as the obligor's GO bonds despite the more complex structure of the financing. For such GO-backed leases, notching (if any) is largely determined by the type of GO pledge, limited or unlimited tax; and if limited tax, the amount of additional taxing authority under the limit.

Non-Ad Valorem Debt

Non-ad valorem debt is broadly secured by a local government's covenant to budget and appropriate legally available revenues for debt service, with the explicit exclusion of revenues derived from ad valorem property taxes.¹² This type of debt is used frequently by Florida local governments and has also been used by a number of cities elsewhere in the US.

The non-ad valorem security is similar to others rated under this methodology in that it represents a claim on unspecific, unpledged general revenues, and because it is not governed by formal debt restrictions that apply to local governments. The security differs from the general government contingent obligations discussed earlier in this methodology, however, in that it has no legal contingency. Instead, the obligation to budget and appropriate for debt service extends through bond maturity. As with unsecured lease-backed obligations, non-lease annual appropriation obligations, and moral obligations, creditor recourse in the event of default on a non-ad valorem security does not include recourse to any physical asset.

¹² Bonds serviced by a broad pledge of taxes other than ad valorem property taxes are rated under this methodology. However, bonds serviced by a specific pledge of non-ad valorem property taxes, such as special assessments, are rated under a separate methodology.

Legally available non-ad valorem revenues are commonly considered to include all general government unrestricted operating revenues except those generated by ad valorem property taxes. These revenues often consist of sales taxes, utility taxes, state-shared revenues, and charges for services, which, importantly, governments use for both operations and debt repayment. While the absence of annual appropriation risk is a relative strength, “non-ad” structural protections are weak because bondholders have no lien on any particular non-ad valorem revenues. Additionally, there is no requirement for the issuer to maintain non-ad valorem revenues at any set levels, as there would be for debt secured by an enterprise net revenue pledge. Debt service for non-ad valorem debt therefore competes directly with other general budgetary demands.

Other Notched General Government Obligations

This methodology also applies to certain other types of notched general government obligations issued by US local governments other than K-12 public school districts,¹³ such as debt backed by a pledge of all available funds. Other obligations that fall into this category include pension obligation bonds (POBs) that lack the security of a GO pledge or a specific pledged tax. POBs are normally defined by their purpose rather than their security. For example, POBs can be issued as GO debt, either unlimited tax or limited tax, or as “unconditional legal obligations” of the governmental obligor. The primary rating methodology for each type of POB would be determined by its security pledge.

Please see Appendix B for a discussion of California POBs, which are rated under this methodology. This methodology also applies to California local governments' judgment obligation bonds (JOBs) and settlement obligation bonds (SOBs), which are similar to POBs in that they are unconditional obligations imposed by law and do not benefit from any specific revenue pledge.

Discussion of the Main Rating Factors

GO Rating: Starting Point for Analysis

When rating general government contingent obligations, the issuer's¹⁴ general obligation (GO) rating or its equivalent is the starting point for our analysis. This foundational GO rating is based on our methodology for US local government general obligation debt. A link to a list of our sector methodologies can be found in the “Moody's Related Publication” section of this report.

The GO rating incorporates the key factors we use to assess a government obligor's fundamental credit quality. An issuer's economy and tax base, financial operations and balance sheet strength, debt and other long-term liabilities, and management and governance are also significant considerations for evaluating a local government's ability and willingness to support its general government contingent obligations.

We then primarily consider two key factors to determine how far to notch the contingent obligation rating from the issuer's GO rating. The key factors are:

- » The essentiality of the leased asset or financed project: how important is the asset/project to the government in fulfilling its core functions; and
- » The financing's legal structure: how strong is the clarity and timing of the administrative process to make the annual debt service appropriation decision.

¹³ For US K-12 public school districts, we use the K-12 sector methodology to rate the obligations described in this paragraph.

¹⁴ Except where noted, the terms “issuer” and “obligor” are used interchangeably throughout this report. As a legal matter, the “issuer” is often a conduit or bond trustee and is therefore different from the government obligor that is ultimately responsible for the obligation's issuance.

This approach determines the suggested notching, absent the additional rating considerations described in the “Other Rating Considerations” section.

Not all local governments have GO ratings. Some local governments are authorized to issue GO debt, and others have the authority to issue GO debt but have not done so. Certain governments have public issuer ratings, which are equivalent to a GO rating. For other issuers, in the absence of a public GO or issuer rating, we use the relevant GO methodology to assign a non-public GO-equivalent rating as the starting point for our analysis.

Adjustment for GO Pledges with Unusually Strong Structural Elements

For certain local governments, the actual GO rating we assign can be higher than the government's inherent credit fundamentals would otherwise suggest. GO debt issued by these governments features a statutory lien, or the characteristics of a statutory lien, and a third party lockbox for the GO debt service levy.¹⁵ Due to the relative strength of these structural elements, the assigned GO ratings for these issuers have generally been one notch higher than they would be absent these features.

These structural elements apply to just the GO debt of such issuers. They do not apply to their contingent obligations. When determining the contingent obligation rating, notching from the upward-adjusted GO rating would create an inconsistency between the contingent obligation ratings for local issuers in states and sectors with these GO structural elements and those without. Therefore, when determining the number of notches below a GO rating to place a contingent obligation rating, we notch from the unadjusted GO rating. That is, for issuers with these structural features, we first remove the structural uplift provided to the GO rating to determine our starting point for the contingent liability analysis. This ensures that our general government contingent obligation ratings do not reflect structural considerations that only apply to GO debt.

Non-Ad Valorem Debt

As with other general government contingent obligations covered in this methodology, we notch non-ad valorem ratings downward from issuers' GO or GO-equivalent rating since their credit strength is closely related to GO credit quality. We typically assign non-ad ratings that are one notch below the GO rating due to the relatively weak legal structure in which ad valorem property taxes are not pledged along with other revenues, and due to the priority of the payment of essential service expenditures before debt service. We do not apply the notching guide in Exhibit 5 to these bonds, and the essentiality of the project being financed is not a key credit consideration.

Notching Factor 1: Essentiality

Essentiality is the first factor in our notching of general government contingent obligation ratings relative to the issuer's GO rating. We assess the relative importance to the issuer's core operations of the leased asset or, in the absence of a leased asset, the financed project. When multiple assets are the subject of a lease-backed financing, or in the absence of a lease, multiple projects are being financed, we typically use the essentiality of the single, most essential asset/project to generally characterize the essentiality of the entire group of assets/projects.

Why It Matters

The more important an asset is to the borrower, the less likely the borrower will be to exercise its right to not appropriate on the related contingent obligation. For abatement lease obligations, the more important the pledged asset is to the borrower, the more likely the borrower will be to ensure that it is repaired in an abatement circumstance. Debt for essential public purposes—such as water and sewer projects, hospitals, or universities—is more likely to have legislative support going forward than debt

¹⁵ Examples include certain local governments in California and Colorado.

for non-essential projects, such as recreational facilities, or private projects, such as certain economic development initiatives.

Our assessment of essentiality particularly informs our view of a government's likely long-term willingness to support secured lease-backed obligations, since the loss of an asset that is necessary to core government functions would disrupt the issuer's operations and impair its ability to carry out its mission. The connection between project essentiality and willingness to pay is more tenuous for unsecured lease-backed obligations, non-lease annual appropriation obligations, and moral obligations, since the failure to appropriate does not result in the loss of an asset. However, continued payment is primarily motivated by the government's estimation of its likely future need for funding similarly essential assets and projects, as failure to pay could significantly increase future borrowing costs associated with such assets or projects. Also, highly essential assets and projects are less likely to attract the sort of political controversy that can lead to a deliberate decision to not appropriate, even if the government is not in deep financial distress.

How We Assess It

In general, the less essential the financed asset or project, the greater the notching from the GO rating. Essentiality falls on a continuum, but trying to assign a specific asset or project to a point on that continuum would imply a greater degree of foresight into the future priorities and decisions of a local government than can be reasonably ascertained when its fiscal situation is relatively unconstrained. Thus we have chosen two broad categories: more essential services and less essential services (see Exhibit 4).

Sometimes, essentiality is relatively clear. For example, public safety is clearly a core function for many governments, and the related capital assets are necessary for providing this service. Therefore, we view police stations, courthouses, and jails as more essential, and they fall very high in the hierarchy of assets which a government would support to avoid a default of their obligations.

Similarly, to perform their core mission, library districts need libraries. In the context of these special purpose governments, we therefore almost invariably consider libraries more essential. Although these assets are generally less essential for other forms of governments like cities and counties, we usually consider libraries to be essential to a government's core mission. The nuanced differences in relative essentiality between, for instance, a library provided by a library district and a library provided by a city or county government are generally too narrow to justify a full rating notch distinction. In most cases, we evaluate such assets' essentiality in the context of a government's established policies and demonstrated priorities. By contrast, we generally consider parks less essential assets, whether they are provided by a park district or by a general purpose municipal government.

The question of essentiality is more challenging when the asset performs a function that does not fall within the generally recognized core government purposes of public safety, public health, education, and general public administration. For example, among cities, affordable or senior housing is a service that only the largest cities generally provide. In the event that a medium-sized or small city starts an affordable or senior housing project by issuing lease revenue bonds secured by the housing assets, the essentiality analysis is less clear. Nevertheless, we generally classify affordable and senior housing as essential if the provision of such housing is a clear priority of the local government.

Less essential assets and projects include community centers, theaters, and economic development projects. These types of assets and projects may clearly enhance quality of life or may be critical to a government's economic development objectives, but in our view, they are generally not necessary to core government functioning. Other financing arrangements in which we would view the asset or project as less essential are those involving competitive enterprises, such as golf courses or hotels. Such facilities may offer services already provided by the local private sector, rendering government provision or support less necessary.

The essentiality of a specific asset or project can change over time based on a local government's fiscal, economic, political and legal circumstances. Thus, Exhibit 4 is based on our view of what most governments will consider more essential or less essential most of the time.

EXHIBIT 4

Essentiality Categories by Asset/Project Type

More Essential to Government Operations	Less Essential to Government Operations
Affordable/senior housing	Animal shelters
Continuing care centers/nursing homes	Community/senior centers
Courthouses	Convention centers
Jails	Golf courses
Landfills	Hotels
Libraries	Ice rinks
Parking garages attached to essential facilities	Marinas
Police and fire stations	Miscellaneous economic development projects
Roads, streets, and interchanges	Parking garages attached to non-essential facilities
School buildings	Sports stadiums
Town halls	Theaters and concert halls
Water and sewer system facilities	Parks and undeveloped land

Note: Not an exhaustive list.

Source: Moody's Investors Service

While Exhibit 4 is a useful guide designed to help maintain consistency and transparency in our approach, our determination of essentiality can vary from the chart. For example, a theater or concert hall for a school of the arts could very well be more essential than a typical theater.

As discussed in the "Revenue Support" section of this methodology, we may also consider certain assets more essential than Exhibit 4 would indicate. This could occur when the governmental borrower never expects the asset to be self-supporting and it immediately provides full debt service support from its operating funds. Community/senior centers would be one such example. While generally less essential, such assets are typically not expected to be revenue generating aside from token amounts provided by user fees. The absence of any expectation of full "self-support" combined with the public health character of such facilities could support their characterization as more essential to certain governmental borrowers.

The determination of essentiality can be more challenging when the leased assets or financed projects consist of a blend of more essential and less essential assets or projects. This mix can occur either with a single financing of multiple assets or a master lease structure in which, over time, assets are added to a leased asset pool. Our general approach to asset pools is generally to characterize the essentiality of the entire asset pool by the single most essential asset. This reflects our opinion that this one, most essential asset would be the primary driver of the annual appropriation decision for the entire asset pool. Similarly, for an unsecured lease-backed obligation or non-lease annual appropriation obligation in which no asset is pledged, we would generally characterize the essentiality of a group of financed projects according to the single most essential project.

In the event that the financed project differs from the leased asset, the essentiality of the leased asset takes precedence in our evaluation. While the financed project is still a relevant credit consideration, it

is less significant than the nature of the leased asset that the obligor would lose in the event of a default.

Notching Factor 2: Legal Structure

The legal structure of the financing is the second primary factor in our notching framework for general government contingent obligations. Pertinent features of the legal structure include the nature of the payment obligation, the relative strength of the remedies in the event of default, and the detailed mechanics of the debt service payment process.

Why It Matters

Our assessment of the legal structure informs our view of the bondholder's legal security under the contingent obligation. A GO bond has no legal payment contingency. By its very definition, a contingent obligation incorporates a payment contingency. Based on this contingency alone, the credit quality of a general government contingent obligation is inherently weaker than that provided by a GO pledge. The extent to which it is weaker than the GO pledge is the focus of our legal structure analysis.

How We Assess It

The legal structure of the transaction incorporates the nature of the payment obligation, the remedies in the event of default, and the administrative and legal barriers to non-appropriation for debt service. Our evaluation primarily considers the following characteristics of a contingent obligation's legal structure:

- » Clarity: We typically assess the degree to which the pledge and its mechanics are clearly described in the statute, indenture, and other legal documents.
- » Timing: We generally review the sufficiency of timing between the government's decision to appropriate and the due date for debt service (or, in the case of most moral obligations, the timing to replenish the debt service reserve).
- » Parties: We typically consider the number of parties and the types of entities involved in the process of transferring funds between the ultimate revenue source and the actual payment on the rated obligation.

We generally divide legal structures into three categories: strong, moderate, and weak. For lease-backed and annual appropriation obligations, moderate legal structures for more essential assets and projects typically warrant one downward notch from the government's GO rating, while moderate legal structures for less essential assets and projects typically warrant two downward notches from the GO rating. Most legal structures of rated lease-backed obligations and annual appropriation obligations fall into the moderate category, because they have fundamental commonalities despite the wide range of statutory frameworks and issue specifics.

Structures that we characterize as strong or weak vary primarily according to the administrative process for paying debt service. An example of a particularly strong legal structure is a full-term lease-backed obligation that is not subject to annual appropriation or abatement. This legal structure effectively removes the annual appropriation risk or abatement risk despite the fact that the transaction is structured with a lease. Some rated obligations exhibit this type of strong legal structure, such as certain non-contingent lease-backed obligations for local governments in states that include Illinois, Michigan, and New Jersey.

Local government lease-backed obligations or annual appropriation obligations with a weak structure have been rare. However, some lease-backed obligations and annual appropriation obligations have

exhibited weak legal structures. In some cases the funds used to pay debt service are contractual payments made to a service provider, not direct appropriations for debt service. That more indirect flow of appropriations for debt service is weaker and typically results in additional notching.

Most moral obligation legal structures are characterized as strong. While legally weaker than lease-backed and annual appropriation obligations, a moral obligation's legal structure is considered in the context of the range of possibilities for moral obligations rather than all types of securities. This assessment reflects the relatively complex nature of moral obligation structures, which require several steps to be taken at the administrative and legislative levels after the underlying revenue stream fails. In order for their structures to be considered in accordance with Exhibit 5 below, legal mechanics need to leave no doubt that if the supporting government chooses to appropriate, sufficient funds to pay debt service will be available in time. Moral obligations with strong legal structures are typically rated two notches below the GO rating.

For moral obligations, we consider the legal structure to be strong if there is a clearly defined process for calling on the moral obligation pledge and if the process provides ample timing to notify the supporting entity and for funds to be provided in advance of a debt service payment date.

An example of a particularly weak moral obligation legal structure is one that involves a payment process with a third party entity that is not clearly defined in the legal documents governing the transaction. In this example, the third party may be an unrated LLC or not-for-profit entity with its own operating risk. Unless the legal documents governing the financing effectively remove this type of third party from the flow of funds, we consider this legal structure to be weak, particularly if there is a narrow window of time between the third party's disbursement of funds and the debt service due date. We currently do not rate any moral obligations with a weak legal structure.

Notching Guide

Our notching guidelines, based on the key factors described above, are summarized in Exhibit 5.

EXHIBIT 5

Notching Guide for Lease, Annual Appropriation and Moral Obligations

Security Type	Non-Contingent Lease-Backed Obligations	Contingent Lease-Backed and Annual Appropriation Obligations			Moral Obligations			
Essentiality	NA	More		Less	More			Less
Legal Structure	Strong	Moderate	Weak		Strong	Moderate	Weak	
Notches from GO rating:								
Zero	X							
One		X						
Two			X	X	X			
Three						X	X	X

Source: Moody's Investors Service

In the above notching guide, the weaker of the two key factors, essentiality and legal structure, generally indicates the typical notching for each security type. The exception to this general approach

is when a lease-backed obligation is not subject to appropriation or abatement and also benefits from the obligor's GO pledge. In this circumstance, the strong legal structure resulting from the absence of a contingency and the existence of the GO pledge trumps essentiality considerations and the slight, relative weakness introduced by the obligation's embedded lease. The typical notching range for contingent lease-backed obligations and annual appropriation obligations is one or two notches below the GO rating. The typical notching range for moral obligations is two or three notches below the GO rating.

For contingent, lease-backed obligations and annual appropriation obligations with pledged assets or financed projects that we consider more essential to the government's operations, we apply one downward notch if the legal structure is "moderate" and two downward notches if the legal structure is "weak." For contingent lease-backed obligations and annual appropriation obligations with pledged assets or financed projects that we consider less essential to government operations, we apply two downward notches.

For moral obligations, if the financed asset is more essential to government operations, we generally apply two downward notches if the legal structure is strong and three downward notches if the legal structure is moderate or weak. If the financed asset is less essential to government operations, we typically apply three downward notches. Moral obligation ratings that are more than three notches lower than the GO rating are extremely rare. In the case of a particularly weak moral obligation structure, our analysis would focus on the underlying credit, with the possibility that the moral obligation pledge could provide some rating uplift.

The greater number of notches for a moral obligation relative to a lease-backed obligation or an annual appropriation obligation for the same type of asset or project reflects the inherently weaker structure of the moral obligation pledge.

While an obligor's GO rating and the notching guide encompass credit factors that are typically most important, they do not capture every rating consideration. The actual notching for a general government contingent obligation could vary from the notching guide-indicated outcome for numerous reasons, including the "Other Rating Considerations" discussed below. The actual rating takes into consideration the relevant, known credit factors for each specific obligor and transaction.

Other Rating Considerations

Ratings may include additional factors, usually because they may have a meaningful effect in differentiating credit quality, but only in some cases. Such factors include financial controls and possible interference of other levels of government. Regulatory, litigation, liquidity, technology, changes in demographic and macroeconomic trends, and environmental, social and governance risks also affect ratings.

Following are some examples of additional considerations that may be reflected in our ratings and that may cause ratings to be different from scorecard-indicated outcomes.

Unusual Political Risk

A fiscally sound government may have the ability to honor a general government contingent obligation but, due to unusual political risk, may not have the willingness to do so. This risk is especially pronounced for financings in which the pledged asset or financed project is less essential to government operations, but the risk can occur even when the asset or project is more essential to core

government functions. To reflect unusual political risk in our ratings on contingent obligations, we typically evaluate the issuer's rationale for choosing the contingent obligation security over other financing options. If the government's motivation is to issue debt for a project that lacks sufficient voter support for a GO financing, or if the debt is being issued in contravention of clear and substantial negative voter sentiment, the assigned rating may be lower than the rating indicated by the notching guide to reflect heightened political risk.

Revenue Support

Expected revenue support can result in a contingent obligation rating that is higher or lower than the notching guide would indicate depending on the nature of the expected payment source. A higher rating on the contingent obligation could result if the expected but non-pledged payment source is derived from a demonstrated, stable revenue source that provides strong coverage of debt service payments on the contingent obligation. However, such support would be considered in the context of the downward notching from the GO rating for the legal structure of the contingent obligation and the essentiality of the pledged asset or financed project. Typically, self-support from an investment grade, non-general fund revenue source would not provide sufficient additional credit quality to remove all notching between the contingent obligation rating and the government's GO rating. However, for non-contingent lease obligations, a local government's pledge to use its GO taxing authority to support the lease payments would generally result in a rating that is equivalent to the GO rating.

In certain circumstances, governments expect debt service payments on contingent obligations to be fully supported with revenues from unproven or non-investment grade revenue sources. We generally view such an expectation as a negative credit factor, since it typically indicates that the government does not expect and is not prepared to support debt service, despite its pledge to consider appropriating and the issuer's securitization of the expected revenue stream in the capital markets. If the expected revenue stream fails to develop or performs poorly, the debt service associated with the obligation can become an unanticipated burden. The burdensome nature of supporting a project that was expected to be self-supporting can provide a ready rationale for exercising the legal right to not appropriate.

Fixed Cost Burden

While fixed costs¹⁶ are important to our assessment of a local government's ability to meet its general obligations, an unusually high fixed cost burden posed by outsized debt, pension and other post-employment obligations is a negative credit factor that could result in additional notching between an issuer's GO and contingent obligation ratings. We compare annual fixed costs to annual operating revenues to arrive at a fixed cost burden. The greater a government's fixed cost burden, the greater the likelihood that it would withdraw support for the contingent obligation in an event of fiscal distress. A fiscally-stressed issuer that is responsible for very high fixed costs is more likely to seek to preserve its ability to pay legal obligations by defaulting on contingent obligations.

Reputational Risk

The more a government has to lose by defaulting on contingent obligations, the less likely it is to do so. A government that clearly prioritizes its reputation for honoring financial commitments or a government that is highly dependent on regular capital market access is less likely to exercise its legal right to not appropriate. On the other hand, we consider any signal from the issuer that its reputation in the capital markets is not a priority to be a credit weakness, which may warrant additional downward notching on the contingent obligation rating.

¹⁶ In this context, fixed costs include expenses associated with pensions, retiree health benefits and debt service on the issuer's net tax-supported debt.

Payment Default History

Any local government with a demonstrated history of failing to honor financial obligations, as well as those that have clearly considered not honoring such obligations, would score negatively on this additional consideration, particularly if the same management team is in place. For moral obligations, we view positively an issuer that has a demonstrated history of honoring its moral obligation pledge, particularly since that pledge is rarely called upon.

Fiscal Stress

In situations where a local government is undergoing fiscal stress, we may widen the rating differential between the rating of the GO and the rating of the contingent obligation. For fiscally stressed obligors, widening of our notching beyond the general guidelines discussed above would typically reflect our more granular view of various securities' relative losses in the event of default, informed by the government's fiscal situation and priorities. These considerations are generally less important (and less ascertainable) for a fiscally healthy obligor not faced with such critical choices. Our views of relative expected loss would generally be informed by state law, case law within the relevant jurisdiction, and any other issuer-specific risk factors that might determine its relative willingness and ability to pay on various types of securities.

In severe fiscal stress, bankruptcy, or post-default instances, the rating differentials between an obligor's GO and contingent obligations can also narrow rather than widen. They can even be inverted if a weakly secured GO is expected to recover less than a contingent obligation. Such an obligation would generally be for an essential asset the debtor has indicated its intent to retain possession of. In these instances, the specific, anticipated recovery rates for each individual security type would be a more important rating factor than our general notching principles.

Mismatch Between Lease Term, Debt Maturity and Payment Timing Issues

A standard lease-backed obligation includes a lease term that extends for the life of the rated obligation, as well as an annual payment to the lessor that is timed to precede the debt service payment date. A well-structured lease-backed obligation would also match the lease term to the expected useful life of the leased asset. A structure in which the term of the lease ends prior to the maturity of the rated obligation is clearly a negative credit factor. A government's willingness to make lease payments for debt service would be weakened if the underlying lease has expired. A similar risk exists for equipment leases in which the lease-backed obligation extends beyond the relatively limited useful life of the equipment. Lease payments due the same day as debt service payments also pose unnecessary administrative risk and require stricter scrutiny by the administrator than the traditional 15-day advance payment.

Debt Service Reserve

The legal structure for a typical, annual appropriation lease-backed obligation or a non-lease annual appropriation obligation does not include a debt service reserve. Therefore, the presence of a debt service reserve for such financings is a positive credit factor. Conversely, the legal structure of a typical abatement lease-backed obligation includes a debt service reserve. Therefore, the absence of a debt service reserve for such financings is a negative credit factor. A debt service reserve for moral obligation debt is typically critical, since the replenishment of the reserve fund, post-default, is the usual mechanism for realizing the moral obligation commitment.

Insurance

For abatement lease-backed obligations, the absence of standard insurance provisions, such as title insurance and renters' interruption insurance, are negative credit considerations. Abatement leases

require the government to have the use or occupancy of the leased asset as a precondition for lease payments, so the absence of insurance that would mitigate the risk of compromised use or occupancy raises the risk of non-payment and the likelihood that the assigned rating may be lower than the rating indicated by the notching guide.

The vast majority of California abatement leases are issued without insurance coverage for seismic events. This poses an additional risk for investors, but not one that by itself is typically sufficient to warrant additional downward notching. While California is known for earthquakes, sufficiently large events to cause abatement have been very rare. Also, in the spectrum of legal structures, abatement leases are relatively strong compared to the annual appropriation structure that is used in most other states. Annual payment on an abatement lease is not an annual choice. It is compulsory so long as the obligor has use and occupancy of the leased property. This relative strength typically offsets the relative weakness posed by the absence of seismic coverage. The absence of seismic coverage could be a reason for downward notching in situations or localities where seismic risk is expected to be more pronounced, and, more generally, should seismic patterns deviate from the historical norm.

Other Risks

Insufficient capitalized interest, unusual construction risk, unusual procurement risk, or the risk of a third party bankruptcy affecting the expected debt service payment stream are all additional negative credit considerations for general government contingent obligations.

Assumptions

Key rating assumptions that apply in this sector include our view that sovereign credit risk is strongly correlated with that of other domestic issuers, that legal priority of claim affects average recovery on different classes of debt sufficiently to generally warrant differences in ratings for different debt classes of the same issuer, and the assumption that access to liquidity is a strong driver of credit risk.

Our forward-looking opinions are based on assumptions that may prove, in hindsight, to have been incorrect. Reasons for this could include unanticipated changes in any of the following: the macroeconomic environment, general financial market conditions, industry competition, disruptive technology, or regulatory and legal actions.

Limitations

In the preceding sections, we have discussed the main rating factors, many of the other rating considerations that may be important in assigning ratings, and certain key assumptions. In Appendix A, we discuss the scorecard factors for federal lease financings with renewal risk and many of the other considerations that may be important in assigning ratings to federal lease financings. In this section, we discuss limitations that pertain to the notching guide, the scorecard and the overall rating methodology.

Limitations of the Notching Guide

There are various reasons why notching guide-indicated outcomes may not map closely to actual ratings. The notching guide is a summary that does not include all of the considerations that are important to our assessment of local government contingent obligations. In addition, our ratings incorporate expectations for future performance. The actual importance of each factor in the notching guide may vary substantially based on the individual characteristics of the local government or the

terms and purpose of the contingent obligation. In addition, certain broad methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings in this sector. Examples of such considerations include how sovereign credit quality affects non-sovereign issuers and the assessment of credit support from other entities. Furthermore, in our ratings we often incorporate directional views of risks and mitigants in a qualitative way.

Limitations of the Federal Lease Financings with Renewal Risk Scorecard

There are various reasons why scorecard-indicated outcomes may not map closely to actual ratings.

The scorecard for federal lease financings with renewal risk is a relatively simple tool focused on indicators for relative credit strength. Credit loss and recovery considerations, which are typically more important as an issuer gets closer to default, may not be fully captured in the scorecard. The scorecard is also limited by its upper and lower bounds.

Factors that are outside the scorecard, including those discussed in the “Other Considerations” section of Appendix A, may be important for ratings, and their relative importance may also vary from transaction to transaction. In addition, certain broad methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings of federal lease financings.¹⁷ Examples of such considerations include the following: the assessment of credit support from other entities and the relative ranking of different classes of debt.

Furthermore, in our ratings we often incorporate directional views of risks and mitigants in a qualitative way.

General Limitations of the Methodology

This methodology document does not include an exhaustive description of all factors that we may consider in assigning ratings in this sector. Governments may face new risks or new combinations of risks, and they may develop new strategies to mitigate risk. We seek to incorporate all material credit considerations in ratings and to take the most forward-looking perspective that visibility into these risks and mitigants permits.

Ratings reflect our expectations for an issuer's future performance; however, as the forward horizon lengthens, uncertainty increases and the utility of precise estimates typically diminishes. In any case, predicting the future is subject to substantial uncertainty.

¹⁷ A link to a list of our sector and cross-sector methodologies can be found in the “Moody's Related Publications” section.

Appendix A: Federal Lease Financings

This appendix provides an overview of our approaches to rating a sub-set of lease-secured transactions, specifically those secured by leases and certain similar types of payments¹⁸ made by the US federal government through agencies or departments whose general operating budgets are funded by federal appropriation. We define federal lease financings as transactions where a payment stream from a department of the US government ("the lessee") is used to pay debt service. The lessor is typically a municipal entity or private sector entity, and the debt may be issued by a municipal entity acting as a conduit or a special purpose vehicle created for the single issuance. These transactions share some characteristics with the general lease framework for municipal transactions but also have important differences. Each transaction is unique, due to the non-standard provisions typical of federal leases, and therefore, this appendix is intended to provide additional transparency to the market about our approach that may be different from our methodology for most lease-backed obligations.

We have two different rating approaches to federal lease financings based on whether the financing is subject to federal lease renewal risk, i.e., where the debt does not fully amortize during the term of the current lease. Our primary approach applies to federal lease financings where the associated debt fully amortizes during the term of the current lease and investors do not face lease renewal risk. We take a different approach to transactions where the associated debt does not fully amortize during the lease term given the significant risk that lease renewal puts on the transaction; however, ratings for federal lease financings with renewal risk may also be affected by the factors and other considerations that affect lease financings without renewal risk. Both approaches are described in this appendix.

Approach to Federal Lease Financings Without Lease Renewal Risk

Our framework to rating federal lease financings where the debt fully amortizes during the term of the lease (and therefore does not face lease renewal risk) describes how we typically notch down from the rating of the US government¹⁹ where the US government is required to make lease payments and these payments represent the sole source of revenue pledged to repayment of the debt. Given the nature of the contractual obligation of the US government as lessee and the absence of lease renewal risk, we consider the credit quality of the transaction to be directly linked to that of the US government. Because the US government is not explicitly a party to the debt transaction and the lease payments are operating expenses, and not debt obligations of the federal government, the highest rating we typically assign to these transactions is two notches below the US government rating.

As described below, the risk of bankruptcy or the credit quality of other participants in the transaction (such as a municipal or private sector lessor) may be relevant to our assessment of the credit quality of the transaction relative to the rating of the US government. Where the credit quality of a non-federal participant is a dominant factor in our assessment of the transaction's credit quality (e.g., due to a regular flow of federal payments through a municipal or private operating entity and the payments could be reduced or delayed in the event of bankruptcy of that entity), the transaction rating may be constrained by the non-federal participant's credit quality, in the absence of other mitigating factors.

Below, we discuss our approach to rating federal lease transactions without renewal risk where the credit quality of other participants is not a meaningful factor in our assessment.

¹⁸ We use the term lease throughout this appendix to mean any similar contracts that obligate the federal government to make regular payments.

¹⁹ The US government is rated under the sovereign rating methodology. A link to a list of our sector and cross-sector rating methodologies can be found in the "Moody's Related Publications" section.

Discussion of the Approach to Rating Federal Lease Financings Without Lease Renewal Risk

Our approach to rating federal lease financings that do not face lease renewal risks comprises two primary qualitative factors: Reliability of Cash Flows and the Quality of Lease Terms and Structure. The approach also incorporates other considerations.

Factor: Reliability of Cash Flows

Why It Matters

The reliability of cash flows is important because it is a strong indicator of the likelihood that sufficient funds will be available to pay debt service on time and in full. Because individual federal agencies are typically responsible for making the lease payments from their federal budget appropriations, the flow of funds depends on an agency's access to the required amounts and on the proper transfer of the lease payments to the bond trustee. Any impediments to access and transfer of funds could interrupt the timely payment of debt service.

How We Assess It

We assess the reliability of cash flows based on the likelihood that any limitations on the availability of a federal agency's funding sources or impediments to the flow of funds to the bond trustee would result in an interruption to the on-time payment of debt service. We use two categories to assess the reliability of cash flows: Highly Reliable or Reliable. Transactions in this sector have typically had cash flows that are at least Reliable, enabling the use of the US Government rating as a starting point in our analysis. Where we assess the cash flows as less than Reliable, we would not use this methodology to rate the financing (see Scope section).

COMPLEXITY OF STRUCTURE:

The reliability of cash flows may be affected by the level of complexity that the structure introduces into the flow of funds. Although the federal government is contractually obligated to make lease payments, the structure may include participation from multiple parties within the transaction that are responsible for the disbursement of the funds. The lessor is typically a non-federal entity, such as a local government or private company, which may introduce additional risks to timely lease payment even in cases where the entity's credit quality is not a material consideration. A federal lease may also include requirements for invoicing or other approvals (beyond initial authorization) prior to disbursement of the funds. While moderate complexity in the cash flows is unlikely to result in prolonged interruption of lease payment, the additional steps may create temporary delays in federal lease payments, increasing the risk of a default on debt.

STRENGTH OF CASH AND RELATIONSHIP MANAGEMENT:

We also incorporate the strength of the lessee (i.e., the specific federal agency) in managing its cash flows and its relationships with lessors, based on our evaluation of the agency's track record. We are more likely to classify a federal lease financing's cash flows as Highly Reliable where the agency has an established history of managing multiple lease arrangements and a consistent record of cash flow management than a transaction where the agency has had minimal experience with federal lease structures.

EXPOSURE TO FUNDING RISKS:

In addition, we assess the exposure of the federal lease financing to the funding of the federal budget or other funding risks. Although federal lease financings without renewal risk are typically made under long-term payment authorizations, budget risk may arise when the availability of funds to make lease payments is subject to the annual federal budget process. In the event a federal budget has not been

adopted, or relevant department funding has been significantly reduced, the federal lease transaction may not receive sufficient revenue to pay debt service. Federal lease financings that are insulated from delayed federal budget passage, or are unlikely to have funding reduced (for example, based on the alignment of the relevant agency's purpose and function with enduring government policy priorities), are more likely to be assessed as having Highly Reliable cash flows.

We also assess mitigants to the effect of budget risk on cash flow reliability. Where we assess that an agency may be exposed to federal budget or funding risk, we consider whether the financing may have additional liquidity or other reserves that are sufficient to bridge any expected funding delays or reductions. This may include the agency's own operating reserves or reserves that are part of the bond structure, such as debt service reserves.

Factor: Quality of Lease Terms and Structure

Why It Matters

The terms and structure of a federal lease are important because they provide insights into the risks within the lease structure that increase or decrease the likelihood of delayed payment or non-payment of the lease obligation. While standard terms are found in almost all federal leases, some lease terms or structural elements may vary depending on the type of lease and the level of government authorization.

How We Assess It

We assess the quality of lease terms and structure based on our review of the federal lease and other material transaction documents. In our assessment of structural elements, we consider the operational and administrative capabilities of the parties in addition to their credit quality, where relevant, because they may add risk of disruption to the timely payment of the lease or debt service obligations. We use three categories to assess the quality of lease terms and structure: Very Strong, Strong, and Adequate. A lease whose terms and structure we categorize as "Adequate" generally provides sufficient protection against the risks of non-payment, but not as effectively as a lease whose terms and structure we categorize as "Very Strong" or "Strong."

AUTHORIZATION:

The level of government authorization for the project and federal lease is a strong indicator of the quality of the lease structure. Many federal leases and their corresponding projects have long-term authorization by the US Congress, which represents the highest echelon of US government approval that such contractual arrangements receive. Congressional authorization for a project typically heightens the visibility of the project, which typically strengthens the commitment of the agency and the overall federal government to ensure on-time payment of the lease obligations; therefore, a transaction where the federal lease receives specific congressional authorization is more likely to be categorized as Very Strong than one that is authorized at the agency or other non-congressional government level. Federal leases that do not receive specific congressional authorization may be funded within the agency's annual operating budget, but still benefit from long-term authorization. However, the projects they finance do not typically have the same visibility as those that are authorized by the US Congress. These projects may not have the same strength of agency commitment, and the lease payments may be exposed to agency budget pressures. We are more likely to assess these federal lease structures as Strong or Adequate.

MORTGAGE LIEN:

In our analysis of the quality of the lease terms, we consider whether there is a mortgage on the leased property. We are more likely to categorize a federal lease financing as Very Strong where the terms

include a mortgage on the leased property on behalf of bondholders. Where a federal lease includes a leasehold interest, but no mortgage, we assess the strength of the bondholder protection provided by the leasehold interest. A leasehold interest typically protects the priority of the bondholders' position and prevents the lessor or owner from putting additional liens on the facility.

ABATEMENT:

Although the federal leases we rate using this approach do not have a risk of lease non-renewal, some leases include terms whereby the lease payment is contingent upon the continued use and occupancy of the leased asset. This contingency poses abatement risk if the federal lessee is unable to use the property (due to damage or other reasons) and is legally allowed to reduce or halt lease payments. A federal lease that does not include abatement terms is more likely to be categorized as having Strong quality of lease terms. Where a lease is subject to abatement risk, we typically assess any meaningful mitigants, such as a contractual requirement that the lessor hold property and casualty insurance, rental interruption insurance or specialty insurance, and we consider the quality of that insurance.

FACILITY MAINTENANCE AND SET-OFFS:

Federal leases may be structured as "triple-net," where the lessee pays for its own maintenance, taxes, and utilities (which is a very positive attribute), or they may be structured such that the lessor provides some or all of these services. Leases that are not triple-net typically include set-off provisions, i.e., lease provisions that allow the lessee to pay less than the agreed-upon rent, in which case there may be insufficient resources to pay bondholders. Reasons for set-offs include failure of the lessor to perform all responsibilities and obligations under the lease (for example, maintenance of the facility), which permits the lessee to withhold all or portions of the rental payments. Where federal lease terms include set-off provisions, we assess the likelihood that lease payments could be set off, the potential amount and duration of the set-off and whether the provisions could affect debt service payments.

A related consideration is whether the lease payments are structured in either a single stream that includes the debt service and service components together, or as two separate payment streams. A single-payment structure may negatively impact bondholders if there are set-offs from the lease payment that affect the sufficiency of the lease payments to cover debt service payments. We consider these structural features on a case-by-case basis with other structural elements, such as pre-determined escalations in maintenance fees and the flow of funds, which may mitigate these risks.

We also consider the track record of the developer in maintaining the leased facility or similar facilities, as well as the lessor's ability to cover temporary set-off amounts with reserve funds. Where the set-off terms in a federal lease are unlikely to affect lease or debt service payments, due to the terms themselves or because they are effectively mitigated (e.g., by reserve funds), we are more likely to categorize the quality of the lease terms as Very Strong or Strong.

NON-FEDERAL PARTICIPANT RISK:

In federal lease financings, the lessor is a special purpose vehicle structured by the developer or a government entity (such as a city economic development authority that acts as a municipal conduit). In these types of structures, the bonds are issued by the special purpose vehicle or municipal conduit and the property is typically managed by the non-federal entity. The involvement of the non-federal entity may expose the federal lease financing to the credit risk of the lessor, including the risk that the bankruptcy of the developer or municipal entity will interrupt the flow of payments to bondholders.

As part of the transaction documents, a developer may obtain a non-consolidation opinion for a federal lease financing where the issuer is a special purpose vehicle. A non-consolidation opinion is a legal opinion (based on thorough legal analysis and case history) stating that assets pledged to

bondholders would not be consolidated into the bankruptcy trust estate if the developer or the municipality were to file for bankruptcy. The assignment of the lessor's interest in the rental payments directly to the trustee for the benefit of bondholders also helps to mitigate consolidation and performance risks. Based on our review of the non-consolidation opinion, we may consider such an assignment to be effective were the developer or the municipality to enter bankruptcy; however, bankruptcy courts have wide-ranging discretion in this regard. Where we assess that there is no risk of participant bankruptcy, or that a participant bankruptcy could interrupt transaction cash flow, we are more likely to categorize the quality of federal lease structure as Very Strong. Where there is some risk of participant bankruptcy interrupting transaction cash flow, we are more likely to categorize the quality of the federal lease structure as Strong or Adequate.

Where the credit quality of a non-federal participant is a dominant factor in our assessment of the transaction's credit quality (including bankruptcy risk), the rating of the federal lease financing may be constrained by the credit quality of that non-federal participant, in the absence of other mitigating factors.

Federal Leases Without Renewal Risk Approach: Preliminary Indicated Outcome and Other Considerations

Based on our assessments of Reliability of Cash Flows and Quality of Lease Terms and Structure, we typically apply at least two and up to five downward notches from the US Government rating, using the matrix in Exhibit 6. The result of this analysis is the preliminary indicated outcome before other considerations.

For example, if we assess an issuer's reliability of cash flows as Highly Reliable and its quality of lease terms and structure as Strong, the preliminary indicated outcome would typically be three notches below the US Government rating.

EXHIBIT 6

Typical Notching for Reliability of Cash Flows and Quality of Lease Terms and Structure

Quality of Lease Terms and Structure	Reliability of Cash Flows	
	Highly Reliable	Reliable
Very Strong	-2	-3
Strong	-3	-4
Adequate	-4	-5

Source: Moody's Investors Service

Other Considerations for Federal Lease Financings Without Renewal Risk

Ratings may reflect consideration of additional factors other than the two primary factors, usually because the factor's credit importance varies widely among the issuers in the sector or because the factor may be important only under certain circumstances or for a subset of issuers. Following are some examples of additional considerations that may be reflected in our ratings and that may cause ratings to be different from preliminary indicated outcomes.

A History of Late or Interrupted Lease Payments

We may apply further downward notching from the US Government rating where a federal lease financing has a history of late or interrupted lease payments, even where none of the late payments disrupted timely payment of debt service. We assess the history of late or interrupted lease payments by considering the number of and circumstances around the lateness or interruption as well as any systems or procedures the federal agency or participants have put in place to prevent such interruptions in the future.

Construction and Acceptance Risk

Federal lease financings are typically structured for projects that have been completed and accepted by the lessee. Construction risk and acceptance risk are present when a project must be completed or accepted before lease payments can be made for the benefit of bondholders. Construction risk may be mitigated by the use of experienced contractors, guaranteed price contracts with liquidated damages, and manageable construction schedules.²⁰ The risk of delay or of a project going over budget can be mitigated with guaranteed price contracts, reserve funds for capitalized interest and a construction reserve fund, especially for conventional types of buildings or projects. Where a federal lease financing is exposed to material construction and acceptance risk, the rating of the transaction will be the lower of our assessment of the credit quality during construction and the credit quality of the transaction once construction is complete. Where construction risk is not sufficiently mitigated, the rating is likely to be significantly lower than the preliminary indicated outcome (which is oriented to a steady-state, completed project), including non-investment grade.

Complex Maintenance and Poor Developer Performance:

For most federal lease financings where the developer has facility maintenance obligations, these obligations are relatively simple and standard for a property owner. Where a federal lease financing includes unusual risks related to project maintenance or other obligations (e.g., stringent maintenance standards in a complex government facility), we may apply further downward notching from the US Government rating based on our assessment of the risk and its mitigants. Similarly, where the developer's performance is poor, resulting in frequent set-offs or a damaged relationship with the federal lessee, we may apply further downward notching.

Approach to Federal Lease Financings with Lease Renewal Risk

Our approach to federal lease financings where the debt does not fully amortize during the term of the current lease centers on the significant risk that lease non-renewal represents to investors in these financings.

Full debt repayment for a transaction where there will be debt outstanding beyond the lease term typically relies on a future lease renewal with terms sufficient to service the remaining debt. In the

²⁰ For more information about the risks posed by construction and typical mitigants, please see our rating methodology that discusses construction risk in privately financed public infrastructure (PFI/PPP/P3) projects. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

event of non-renewal, sources of repayment are most likely limited to a re-lease of the financed facility to a third party or a sale of the facility. Federal lease financings are not lease-to-own agreements, and the federal government has no legal obligation to renew the lease or to repay the associated debt. The continuing essentiality of the facility in meeting public policy objectives and economic considerations, including the cost of renewing the lease relative to other options, are thus critical determinants of the government's incentives to renew the lease. Non-renewal is the principal risk where debt does not fully amortize during the current lease term, and the credit quality of these financings is therefore effectively separated from the credit quality of the US government.

Below, we discuss the scorecard used for these transactions. The scorecard is a relatively simple reference tool used to capture, in summary form, many of the factors that are generally most important in assigning ratings to federal lease financings with lease renewal risk. We also discuss other considerations, which are factors that are assessed outside the scorecard, usually because the factors' credit importance varies widely or because the factor may be important only under certain circumstances or for a subset of transactions. In addition, many of the considerations described in the "Approach to Federal Lease Financings Without Lease Renewal Risk" section also apply to lease financings with renewal risk.

Discussion of the Scorecard Factors

The scorecard comprises four factors: Likelihood of Lease Renewal, Leverage, Reuse Value and Structural Enhancements. Together, Likelihood of Lease Renewal and Leverage reflect our initial assessment of the likelihood that the leased project is sufficiently valuable to the federal government that the lease will be renewed with sufficient rent payments to fully repay or refinance all the debt outstanding after the term of the current lease expires. Reuse Value and Structural Enhancements, which are notching factors, relate to our assessment of attributes that may reduce the risk of credit losses in the event of a non-renewal.

Factor: Likelihood of Lease Renewal

Why It Matters

The likelihood of lease renewal represents the most important factor for federal lease financings where the debt does not fully amortize during the current lease term. The federal government has no legal obligation to renew the lease or to repay the associated debt, and most facilities designed for a public policy purpose may require significant investment to make them attractive to commercial tenants. In addition, these facilities may be difficult to repurpose because they are quite specialized or their location is not commercially attractive. As a result, the credit profile of such a transaction may have a widely divergent trajectory. Where re-leasing with the federal government is 100% assured, the transaction credit profile is typically very strong, but a failure to renew the lease is likely to result in high loss levels for creditors that imply a deeply speculative-grade rating. This bifurcation means that ratings for federal lease transactions with renewal risk are highly affected by the likelihood of renewal.

How We Assess It for the Scorecard

We score the likelihood of lease renewal based on a qualitative assessment of the long-term value of the facility to the federal government in relation to the cost of renewing the lease. Otherwise stated, we assess the likelihood that the federal government will renew the lease and make lease payments that will be sufficient to service the debt that will remain at the termination of the current lease. We use three scoring categories: Extremely Likely, Very Likely and Likely because an estimation of the likelihood of an event that will typically occur many years in the future (federal lease terms may be up to 20 years in length) is inherently subject to material uncertainty. We expect that lease renewal will be at least Likely in the vast majority of bond-financed federal lease transactions, as the drivers that led

the federal government to initially locate its activity in a specific facility are often enduring. However, should changes in the general environment or circumstances of specific transactions indicate that lease renewal is unlikely, we would typically focus our analysis on debtholder loss and recovery based on the remaining debt at lease expiration and the value of the facility absent the federal lease (see Other Considerations - Greater Visibility into the Likelihood of Renewal or Non-renewal).

Reasons the federal government may opt not to renew a lease could include a preference for a different facility (e.g., a newer replacement facility) or a reduced need for any similar facility in that region. Therefore, we consider the essentiality of the facility, including an evaluation of the alignment of the facility's purpose and function with enduring government policy priorities. We also consider how potential policy, technological, cultural and demographic changes may increase or reduce essentiality of the facility to the federal government over time. Facilities that serve government functions that have historically received consistent support or investment across multiple administrations, involve a multiyear planning and approval process, or that contribute to specific government initiatives in an area of stable or growing need are more likely to be assessed favorably for this aspect of lease renewal likelihood.

We also consider the level of specialization of the facility in our assessment of likelihood of lease renewal. Highly specialized, built-to-suit facilities (which may serve multiple purposes) are typically more challenging and costly to replace than facilities that serve more general functions, providing an incentive for the federal government to renew the lease. A facility that is highly specialized, e.g., one that is constructed to very stringent federal government specifications for physical security, is more likely to be assessed favorably for this aspect of lease renewal likelihood than a facility that has a more general purpose and is more easily replaced by the federal government.

In assessing the likelihood of lease renewal, we may consider the location of the facility, particularly its connection to a large or critical federal presence, as well as strong or growing demand for the purpose served by the facility. We may also consider prospective changes in federal leasing guidelines or federal accounting rules that could affect the future attractiveness of the lease structure in ways that increase or decrease the likelihood of lease renewal. The track record of the federal government or the particular federal agency in renewing leases for similar facilities may also inform our assessment.

Factor: Leverage

Why It Matters

Leverage is important because the greater the amount of debt remaining at the end of the current lease term, the greater the renewal lease payment stream needs to be (i.e., longer renewal lease term, higher lease rent or both) in order to service the debt. Lease financings where the debt does not fully amortize over the term of the current lease period have inherently high leverage. The developer of the facility has received cash up front and has transferred meaningful lease renewal risk to creditors, and the federal government bears no obligation to the holders of lease revenue debt. Projects with extremely high leverage could require more than one additional federal lease term or a significant increase in the annual shell rent during the renewal period to amortize the remaining debt, indicating much greater risk transfer from the lessor to creditors and a weaker credit profile.

How We Assess It for the Scorecard

We measure or estimate leverage quantitatively using a post-lease debt to annual lease payment ratio. For the ratio calculation, the numerator is the amount of debt that remains after lease termination,

and the denominator is the average of the last five years of annual shell rent payments²¹ under the existing lease. The ratio provides a simple, useful measure to compare leverage across lease financings and can be thought of as a rough approximation of the number of years that a renewed federal lease would need to be extended in order to repay the debt remaining at the end of the current lease term.²² This leverage metric also allows us to compare the remaining debt to the remaining useful life of the facility and the limitations of federal lease terms. Federal rules limit leases to a term of 20 years, which limits developers' ability to match the term of the debt financing to the expected useful life of the facility.

The Leverage factor is scored on one of three linear continuums, each corresponding to a Likelihood of Lease Renewal category (Extremely Likely, Very Likely, Likely). Using the Likelihood of Lease Renewal category, the Leverage metric and linear interpolation, the scorecard calculates a numeric preliminary scorecard-indicated outcome, which can range from 6 to 19. Exhibit 7 lays out the parameters of each continuum, including the thresholds and midpoints of the three categories of Leverage (High, Very High, Extremely High). Exhibit 7 also shows the lower and upper boundaries of the Leverage metric, which are less than or equal to five years and more than or equal to 31 years, respectively. In addition, Exhibit 7 also shows the preliminary alphanumeric outcomes associated with the midpoints of the three categories of leverage and with the upper and lower boundaries.

EXHIBIT 7

Preliminary Scorecard Outcomes Associated with Different Factor Scores

		LEVERAGE										
		High			Very High			Extremely High			Upper Bound	Lower Bound
		min	midpoint	max	min	midpoint	max	min	midpoint	max		
		5 Years	8 Years	11 Years	11 Years	16 Years	21 Years	21 Years	26 Years	31 Years	≤5 Years	≥31 Years
LIKELIHOOD OF LEASE RENEWAL	Extremely Likely	A3			Baa2			Ba2			A2	B1
	Very Likely	Baa3			Ba2			B2			Baa2	Caa1
	Likely	Ba3			B2			Caa1			Ba2	Caa3

Source: Moody's Investors Service

Notching Factors

The scorecard includes two notching factors, Reuse Value and Structural Enhancements, which may result in an upward adjustment of the preliminary scorecard-indicated outcome. Notching may be scored in half-notch increments. Numerically, an upward notch subtracts 1 from the numeric preliminary scorecard-indicated outcome. In aggregate, the notching factors can result in a total of up to two upward notches to the preliminary scorecard-indicated outcome to arrive at the numeric scorecard-indicated outcome. The numeric scorecard-indicated outcome is mapped to an alphanumeric outcome using the table in Exhibit 8. For example, if an issuer had a preliminary numeric score of 11.7, that would map to a Ba2 preliminary scorecard outcome, as shown in Exhibit 8. If the

²¹ We define shell rent as the portion of the total lease payment related to the facility construction and improvement costs, i.e., it is the portion tied to debt repayment. The actual name of these payments may vary by transaction.

²² There are some limitations to this metric. It does not incorporate required debt service (principal and interest expense) on the debt. Lease payments on a renewal lease would be established based on a negotiation between the developer and the federal government, and they could be higher or lower than the lease payments in the last five years of the current lease. As a result, we may also consider other indicators of leverage in our analysis. Please see the "Other Considerations for Federal Leases with Non-renewal Risk" section.

combined notching factors totaled two upward notches, the aggregate numeric score after notching would be 9.7, which would map to a Baa3 scorecard-indicated outcome.

The scorecard-indicated outcome cannot be better than A2 or worse than Caa3. While the effect of notching factors on the scorecard-indicated outcome is limited, ratings incorporate our full view of the impact of these factors on the credit profile of the federal lease financing.

Notching Factor: Reuse Value

Why It Matters

The expected Reuse Value is important to our assessment of the potential for the facility securing a federal lease financing to be re-leased or sold in the case of non-renewal by the federal government, because a successful re-leasing or sale could reduce losses to debtholders or potentially avoid default under this scenario.

How We Assess It for the Scorecard

In our qualitative assessment of this factor, we consider the facility's location, the overall quality of the facility and the ease of its conversion to alternative uses. A facility located in a desirable market with a strong economy, or where the market dynamics support the presence of the facility's specific purpose, typically draws greater commercial interest than a facility in a market with a weak economy. A high-quality, well-maintained facility is also typically more attractive to potential lessees. The ease of converting a government facility to a commercial purpose and a reasonable cost of conversion also influence the potential for the facility to be re-leased or sold and realize value. We may consider an appraisal of a facility's reuse value (i.e., the value of the facility in the absence of any federal lease) where the appraisal is prepared by a third party with a strong reputation, or we may estimate reuse value. This notching factor may result in an upward adjustment to the preliminary scorecard-indicated outcome of up to two notches.

Notching Factor: Structural Enhancements

Why It Matters

Structural Enhancements are important because they may mitigate losses to debtholders in the event that the federal government does not renew the lease.

How We Assess It for the Scorecard

In assessing this factor, we consider whether there are sufficient structural enhancements present to improve the likelihood of re-leasing the facility to an alternative tenant prior to a default. This notching factor may result in an upward adjustment to the preliminary scorecard-indicated outcome of up to one notch if several of the following enhancements are present:

- » Meaningful reserves pledged to debt that provide the equivalent of at least one year of shell rent payments.
- » An amortizing debt structure after lease termination with no large bullet payments.
- » The lease agreement requires that the lease renewal occur at least two years prior to the lease termination date.
- » The developer of the facility has a strong track record managing similar facilities and has the ability and willingness to undertake the conversion necessary for alternative use.
- » Other structural enhancements that provide similar protections.

We do not apply any upward notching for this factor in cases where the overall terms and conditions of the federal lease financing lack the structural features that we consider to be standard for federal leases with non-renewal risk.

Exhibit 8 shows how we map numeric scores and alphanumeric scores.

EXHIBIT 8

Preliminary Outcomes and Scorecard-Indicated Outcomes

Alphanumeric Preliminary Outcome / Scorecard-Indicated Outcome	Numeric Score Range	Midpoint Numeric Score
A2	$x \leq 6.5$	6
A3	$6.5 < x \leq 7.5$	7
Baa1	$7.5 < x \leq 8.5$	8
Baa2	$8.5 < x \leq 9.5$	9
Baa3	$9.5 < x \leq 10.5$	10
Ba1	$10.5 < x \leq 11.5$	11
Ba2	$11.5 < x \leq 12.5$	12
Ba3	$12.5 < x \leq 13.5$	13
B1	$13.5 < x \leq 14.5$	14
B2	$14.5 < x \leq 15.5$	15
B3	$15.5 < x \leq 16.5$	16
Caa1	$16.5 < x \leq 17.5$	17
Caa2	$17.5 < x \leq 18.5$	18
Caa3	$18.5 < x \leq 19.5$	19

Source: Moody's Investors Service

Other Considerations for Federal Lease Financings with Renewal Risk

Ratings may reflect consideration of additional factors that are not in the scorecard, usually because the factor's credit importance varies widely among the issuers in the sector or because the factor may be important only under certain circumstances or for a subset of issuers. Following are some examples of additional considerations that may be reflected in our ratings and that may cause ratings to be different from scorecard-indicated outcomes.

Greater Visibility into the Likelihood of Renewal or Non-renewal

In some cases, we may have information that permits us to have greater visibility into the likelihood of lease renewal or non-renewal. For example, we may consider that the risk of federal lease renewal is de minimis, which would typically occur when there is firm evidence that lease renewal is well under way with the existing federal tenant or a new tenant with similar credit quality, and the rating may be higher than the scorecard-indicated outcome.

Where we expect that the federal lease is unlikely to be renewed, we would typically focus our analysis on debtholder loss and recovery based on the remaining debt at lease expiration and the value of the facility absent the federal lease.

Additional Metrics

The leverage metric used in the scorecard is a simple, useful measure to compare leverage across lease financings; however, we may use additional metrics to inform our analysis of specific transactions,

including different indicators of leverage. For example, lease revenue debt as a percentage of development costs may provide insights into the developer's economic incentives and the extent of risk transfer to creditors. We may also consider the history of lease financings (e.g., original lease revenue debt of the facility and any debt added due to a refinancing during the lease term) in relation to the development of the facility and any subsequent improvements.

Structural Features

Structural features of the transaction that are non-standard may add significant risk. For federal leases with non-renewal risk, we consider that standard structural features would include a first mortgage on the leased facility, the absence of a ground lease (i.e., the property is owned in fee simple) and the absence of unusual impediments to creditors' ability to foreclose on the property in the event of a default.

Unusual Facility Needs

Unusual age, significant deferred maintenance or large capital improvement needs of the leased facility may affect our view of the likelihood of renewal or the effective leverage, because the developer or, in a worst-case scenario, the creditors may need to provide significant additional funds as an incentive to the federal government to renew the lease or to attract an alternative tenant.

Market Changes or Disruptions

Federal lease financings with non-renewal risk frequently also face refinancing risk. Market changes or disruptions may impede the developer's ability to obtain terms, including interest rate and tenor, necessary to a successful refinancing of the lease debt on or prior to maturity.

Other Lease Considerations

Ratings for federal lease financings with non-renewal risk may be affected by the factors and considerations affecting lease financings without renewal risk.

Appendix B: California Pension Obligation Bonds

In California, POBs are not GOs, which are secured by voter-approved, unlimited property tax pledges. They nevertheless constitute absolute and unconditional obligations of the issuing governments. Most California POBs are not backed by any specific revenue pledge, and unlike general government "debt", POBs may be issued without a vote. No vote is required since POBs represent obligations imposed by law (the fulfillment of a pension promise).

Since the POB obligation is typically general rather than specific, and since the pledge excludes the ad valorem property taxes that secure a California local government's GO bonds, they are similar to non-ad valorem debt issued in states like Florida. They are not exactly the same, however, since California POBs are payable from the ad valorem taxes not specifically restricted to general obligation bond debt service. Like Florida non-ad valorem debt and the types of general government contingent obligations that are the primary focus of this methodology, California POB debt service competes with a local government's other general expenditures.

Creditor recourse in the event of a POB default is very limited, since no asset or specific revenues are pledged. Although funding pensions would seem to constitute an important government purpose, we have seen that California POBs have been treated poorly in the handful of municipal bankruptcies in the state, in contrast to lease-backed obligations.

Most California POBs are rated two notches below the local government's GO rating, although a few are rated just one notch below the government's GO rating since they are additionally secured by a specific property tax called a pension tax override. Such pension overrides are ad valorem taxes, though with a limited rate. If the tax generates at least sum sufficient coverage of POB debt service, the rating is usually notched just once below the government's unlimited tax GO rating. Like non-ad valorem debt, for CA POB ratings we do not apply the notching guide in Exhibit 5, and the essentiality of the "project" being financed (previously unfunded pension liabilities) is not a key credit consideration.

Moody's Related Publications

Credit ratings are primarily determined through the application of sector credit rating methodologies. Certain broad methodological considerations (described in one or more cross-sector rating methodologies) may also be relevant to the determination of credit ratings of issuers and instruments. A list of sector and cross-sector credit rating methodologies can be found [here](#).

For data summarizing the historical robustness and predictive power of credit ratings, please click [here](#).

For further information, please refer to *Rating Symbols and Definitions*, which is available [here](#).

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OUTDATED
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