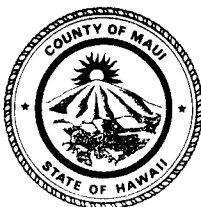


ALAN M. ARAKAWA  
MAYOR



KEITH A. REGAN  
MANAGING DIRECTOR

## OFFICE OF THE MAYOR

Ke'ena O Ka Meia  
COUNTY OF MAUI – Kalana O Maui

April 11, 2016

Honorable Alan M. Arakawa  
Mayor, County of Maui  
200 South High Street  
Wailuku, Hawaii 96793

APPROVED FOR TRANSMITTAL

  
\_\_\_\_\_  
Mayor Date 4/11/16

For Transmittal to:

Honorable Riki Hokama  
Chair, Budget and Finance Committee  
Maui County Council  
200 South High Street  
Wailuku, Hawaii 96793

Dear Chair White:

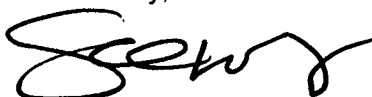
**SUBJECT: FISCAL YEAR ("FY") 2017 BUDGET (BD-8) (BF-1)**

Pursuant to your letter dated April 2, requesting an explanation as to whether collective bargaining contracts and their funding requirements have any impact on the County's bond rating we offer the following response.

HRS 89-1 (b) (2) requires public employers, such as the County of Maui to negotiate with and enter into written agreements with unions as the exclusive representatives on matters of wages, hours, and other conditions of employment. These contracts or agreements impact the financial requirements of the County and therefore are factors in the ratings provided by the three municipal rating agencies. Moody's General Obligation (GO) Bond Methodology is attached for your information and review. It provides detailed information on the factors and methodology that they utilize to rate our GO bonds.

Thank you for your attention to this matter. Should you have any questions, please feel free to contact me at Ext. 7212.

Sincerely,



SANANDA K. BAZ  
Budget Director

Attachment  
xc: Mayor Alan M. Arakawa

# Rating Methodology

## Moody's U.S. Public Finance

October 2009

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## General Obligation Bonds Issued by U.S. Local Governments

### Summary

This methodology report provides a detailed explanation of how Moody's evaluates the credit quality of bonds issued by counties, cities, school districts and other special districts in the United States that are backed by the entity's ad valorem taxing power. General Obligation (GO) ratings are forward-looking assessments of relative creditworthiness, based on Moody's analysis of four broad rating factors:

- Economic Strength
- Financial Strength
- Management and Governance
- Debt Profile

Moody's employs a weighted average approach to analyzing these factors to arrive at a rating range. The precise rating is based on a comparison with peers, interactions of the individual factors, and additional considerations that may not adequately be captured within the factors. While this framework is comprehensive, it still may not adequately capture the complex web of economic, financial and political issues that affect a local government's relative creditworthiness. Therefore, some of our general obligation ratings may lie outside the rating range implied by the weighted average approach.



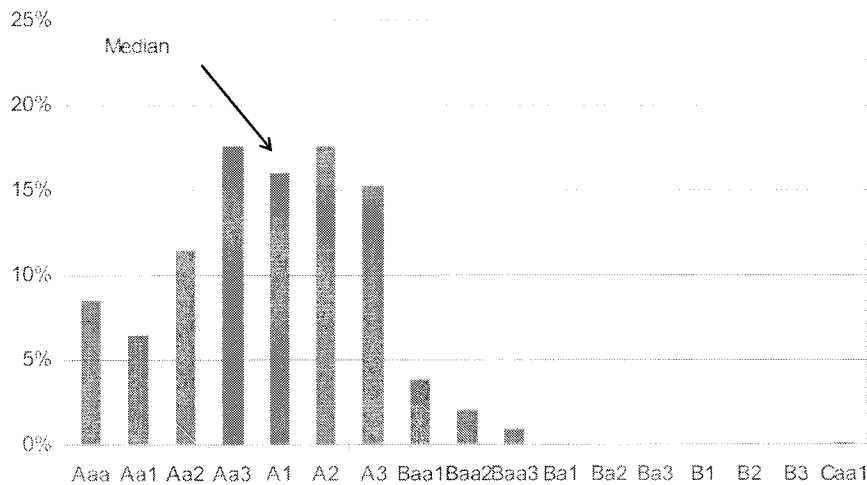
**Moody's Investors Service**

## General Obligation Bonds Issued by U.S. Local Governments

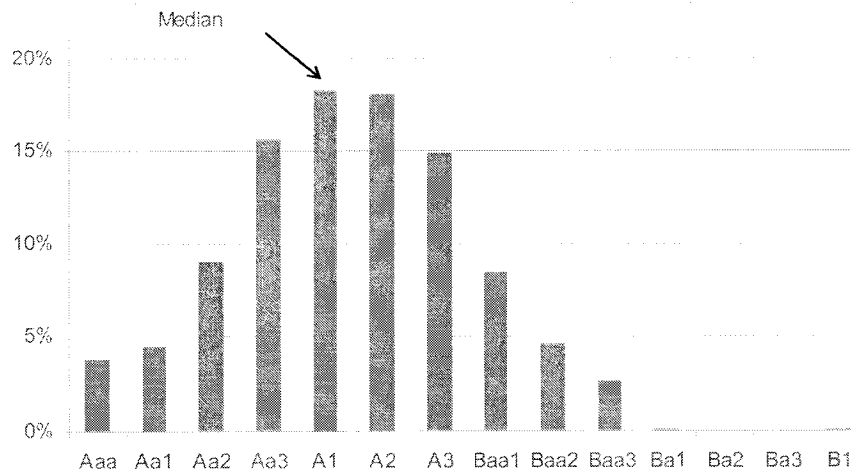
## OVERVIEW OF MOODY'S LOCAL GOVERNMENT GENERAL OBLIGATION RATINGS

Moody's maintains GO ratings (or Issuer Ratings, which describe what the GO rating would be for governments that do not have outstanding GO debt) for approximately 8,200 local governments. These include ratings for counties (approximately 1,000); cities, towns, villages (referred to as "cities" for purposes of this report, approximately 3,300); special purpose districts (approximately 600); and school districts (approximately 3,300). The U.S. local government sector is largely investment grade-rated, with only a handful of incidents of default. The median public ratings for counties, cities and school districts are A1, A1, and A2 respectively, as shown below.

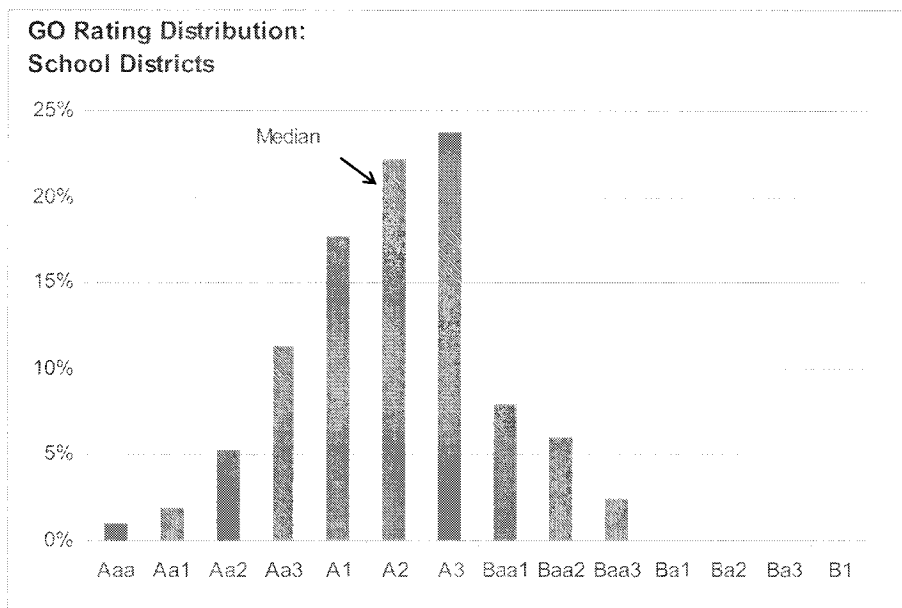
**GO Rating Distribution:  
Counties**



**GO Rating Distribution:  
Cities & Special Districts**



## General Obligation Bonds Issued by U.S. Local Governments



The G.O. rating generally conveys the highest and best security that a state or local government can offer, typically based upon a pledge of its full faith and credit. While local government GO bonds are secured by a pledge to levy property taxes sufficient to pay debt service, the analysis of GO credit quality is not limited to the narrow coverage of debt service by dedicated property taxes. The unconditional nature of this pledge ensures that in most cases all revenue producing powers of the municipality are legally committed to debt repayment. Accordingly, the GO analysis assesses overall financial flexibility and distance to distress, based on a broad evaluation of four rating factors.

## METHODOLOGICAL APPROACH

### Rating Factors

Moody's rating approach for local government GO bonds includes an analysis of four key rating factors and 16 sub-factors:

#### I. ECONOMIC STRENGTH

- a. Size and growth trend
- b. Type of economy
- c. Socioeconomic and demographic profile
- d. Workforce profile

#### II. FINANCIAL STRENGTH

- a. Balance sheet/liquidity
- b. Operating flexibility
- c. Budgetary performance

#### III. MANAGEMENT AND GOVERNANCE

- a. Financial planning and budgeting
- b. Debt management and capital planning
- c. Management of economy/tax base
- d. Governing structure
- e. Disclosure

## General Obligation Bonds Issued by U.S. Local Governments

## IV. DEBT PROFILE

- a. Debt burden
- b. Debt structure and composition
- c. Debt management and financial impact/flexibility
- d. Other long-term commitments and liabilities

## General Obligation Bonds Issued by U.S. Local Governments

**Analytic Approach**

Moody's general obligation bond ratings are forward-looking assessments of an entity's relative credit strength, and reflect our analysis of four rating factors – Economic Condition and Outlook, Financial Position and Performance, Debt Profile, and Management – as measured against a combination of qualitative and quantitative criteria. Each of the four factors is evaluated individually, incorporating unique state and sector attributes; ultimately, the rating outcome reflects a weighting of these assessments according to the following weighting system:

Economic Strength	40%
Financial Strength	30%
Management and Governance	20%
Debt Profile	10%

Economic Strength carries the greatest weight in our assessment of credit quality, as the property tax base is the source of bondholder security and the economy provides the source of leverage to support municipal operations. Moody's tax base analysis incorporates absolute valuation and historic growth rates, a qualitative assessment of the stability of the local economy and the relative socio-demographic strength of the community. Given the diversity and size of the local government sector, we see great variation among local economies with regard to both size and qualitative characteristics. As peer comparisons are an important component of rating committee discussions, economic factors weigh heavily in our determination of the relative credit quality of local governments.<sup>1</sup>

An entity's Financial Strength carries the next greatest weight, as a strong financial position can mitigate economic vulnerabilities or, conversely, a weak financial position in an economically vibrant community may signal an inability to leverage a strong tax base. Analysis of financial position and performance includes both a retrospective financial statement analysis, as well as a forecast of future financial flexibility based on a review of the current year's budget document and year to date performance. A strong financial position is highly correlated with the strength of management.

**Rating Implications of Limited Tax GO Pledges are Considered on a Case By Case Basis**

Most often, the GO security offers the issuer's full faith and credit pledge to levy ad valorem taxes, without limit as to rate or amount, for the timely payment of debt service (an unlimited tax, or GOULT pledge). In some instances, however, the property tax pledge is limited (GOLT). This may occur if taxes levied for debt service are subject to an overall cap on the property tax levy. Alternatively, an issuer may be legally permitted to levy an additional property tax for specific purposes, up to a specified rate or amount, and this additional, limited taxing authority is pledged to secure debt.

A rating distinction of up to two notches below an issuer's general obligation unlimited tax rating (e.g. from A1 to A3) may be applied to reflect the narrower security offered by a GOLT pledge. Moody's assesses the relative strength of unlimited vs. limited tax securities on a case by case basis, considering among other things the legal provisions which protect bondholders' potential claims on tax revenue in the event of a default. We also consider the degree to which a currently levied, limited tax rate is below the legally allowed maximum. Occasionally municipalities issue bonds combining limited tax and unlimited tax debt authorizations; here, the limited tax rating would generally apply.

Moody's also considers additional factors which may mitigate the relative credit weakness of the narrower limited tax security, resulting in a rating assigned to a limited tax issue equivalent to that of the local government's unlimited tax bonds. Mitigating factors often include:

- A strong financial position, including ample general fund reserves and adherence to comprehensive financial policies, which can cushion cyclical declines in property tax revenue or expenditure spikes
- Steady tax base growth which provides property tax revenue necessary to keep pace with expenditure growth

<sup>1</sup> Moody's utilizes a different weighting approach to evaluate state GO credit quality. Our state scorecard over-weights Finance and Management factors (30% each) relative to Debt and Economy factors (20% each). Most striking in comparison to the local government weighting approach is the underweighting of economic factors in the state scorecard. This reflects the lesser degree of variation among state economies as compared with the local government sector, as state economies, by definition, are broad and generally diverse.

## General Obligation Bonds Issued by U.S. Local Governments

Management and Governance carries a relatively lower weight of 20%, but is nevertheless important as management also affects other key rating factors. To the degree that management is proactive and policies and procedures are institutionalized, a stable credit profile is more likely to be maintained. Moody's general obligation bond ratings typically do not rise and fall with economic cycles; this stability is largely a reflection of local governments' ability to manage through difficult times. In combination, Financial Strength together with Management and Governance account for 50% of our assessment, underlining our view that relative strength in these two factors can mitigate economic challenges and drive rating outcomes.

Debt Profile rarely is the primary driver of a rating outcome, as reflected in its relatively low 10% weighting; however, debt burden trends are an indicator of a population's capacity to absorb additional obligations. In the event that a local government's capital needs are great, this may foretell future financial distress. Debt may become a greater concern if a municipality's variable rate debt exposure or swap portfolio presents significant liquidity or budgetary risks.

The outcome of this weighted average approach provides one input into Moody's credit analysis. Emphasis given to each factor may vary depending on where the credit lies on the rating scale and the degree to which it is an outlier on a given factor. These considerations, as well as the interaction between factors, may cause rating committee decisions to deviate from the rating range implied by the weighted average of the factors.

### FACTOR 1: ECONOMIC STRENGTH

The economic strength of a locality drives its ability to generate adequate financial resources – either through property tax levy, sales tax revenue or other revenue streams -- to meet operational and debt service needs. As such, this factor measures the intrinsic strength of the local revenue base.

#### Subfactor 1.a: Size and Growth Trend

Because GO bonds are secured by a property tax pledge, the size of the tax base is an important indicator of a local government's credit quality. Generally, a larger tax base offers the flexibility to generate substantial property tax revenue with only a minor increase in tax rates. Moody's analysis of economic growth incorporates a review of historical trends, including average annual increases in assessed and full valuation and building permit activity over time, to provide an indication of future economic performance. We review at least five years of historical assessed and full valuations (primarily valuation of real estate and personal property), paying close attention to growth patterns during periods of national or regional economic downturn. We also consider the kind of growth that has occurred. For example, does growth reflect appreciation of existing properties, which tends to be economically volatile, or new development? Further, if there is new development, is there existing demand or is development speculative? Additionally, Moody's will review historical building permit activity trends for residential and commercial construction to determine which sector is driving growth.

We also assess prospects for continuing development, which are projected based upon availability of land for future development, opportunities for annexation, and adequacy of infrastructure to support new development. Other factors that may affect a locality's ability to attract or retain growth potential include local taxing structure (compared with competing localities), labor costs, and availability of adequate labor supply to meet needs of local business. Moody's also considers the extent to which management is channeling assets and resources to promote future growth and development, including investment in infrastructure, management of zoning issues and other development factors. Additionally, the demand for new development is assessed, in part, by evaluating current occupancy rates and trends for all sectors of the real estate market. In reviewing more mature economies that are fully developed, Moody's will focus on efforts being undertaken to redevelop and generate the potential for new growth.

## General Obligation Bonds Issued by U.S. Local Governments

**Subfactor 1.b: Type of Economy**

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Moody's analysis of a local economy considers its role in the larger regional economy and how this might cushion or exacerbate vulnerability to economic shocks. On the most basic level, Moody's considers the type of economy: is it an urban center, a suburb or a rural area? Is it a residential bedroom community or an industrial, retail or services center? Based on the type of local economy, Moody's will focus its questions and comparisons to include things like commuting patterns, office or retail vacancy rates, or residential building permit activity.

Tax base diversity indicates a local economy's ability to weather fluctuations in a particular sector. With a diverse mix of industries, the impact of downturns in any particular sector may be less pointed. Risk associated with the presence of an industry vulnerable to downturn (i.e., tourism) may be partially mitigated by diversity within the economy, enabling continued growth in the face of a downturn in any one sector. Moody's will determine whether a diverse mix of industries is present to support job growth, tax base stability or growth, and a range of primary revenue streams for a locality. Moody's also considers the stability offered by institutional presences within a local economy. Economies anchored by universities or government presences, such as state capitols, often are better able to weather economic downturns as employment at these institutions tends to benefit from a greater degree of stability than other sectors.

Loss of a major taxpayer or downturn in a particular industry can be especially harmful to a local economy if it represents a major portion of the overall tax base. Apart from hurting ad valorem tax revenue, loss of a major taxpayer may lead to a spike in unemployment and adversely affect the operations of ancillary industries, in turn leading to indirect tax base declines. Moody's considers the assessed valuation of a locality's ten largest taxpayers in order to gauge concentration levels. In addition, concentration within a specific industry, especially vulnerable sectors like automotive manufacturing, will trigger a closer analysis of current operations among the top ten taxpayers. When available, a listing of the total levy generated by each of the top ten taxpayers will provide a clearer picture of the revenue impacts of any concentration. For example, a taxpayer may represent a major concentration of a locality's assessed valuation; however, due to incentives or other arrangements, a taxpayer may comprise a relatively small portion of revenues. Concentration among the top taxpayers also introduces potential risk to sales tax and income tax revenues, as closure or downsizing may affect local income levels, thereby reducing these revenues.

**Subfactor 1.c: Wealth and Demographics**

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A variety of demographic measures offer an indication of the ability of a locality to generate revenue to meet ongoing operational and debt service needs. We look at population trends using data provided by the US Census Bureau as a reflection of overall economic health. Population declines often accompany job losses, concentrating the burden for funding government expenditures within a smaller base of residents. Conversely, we recognize that rapid population growth could tax the resources of a locality as it endeavors to meet the demands for services created by a larger population.

Moody's compares per capita and median family income trends of a community to those of the nation. A community that has higher wealth levels may have relative flexibility to increase property tax rates in order to meet financial needs. Likewise, a wealthier community has greater spending power to sustain sales tax revenue and provide the demand necessary to support growth in the commercial and service sectors. Poverty trends are also considered; these may indicate the degree to which a local government could be strained by certain expenditures, such as those related to social service programs or public safety.

Moody's also considers full value per capita as a rough proxy for wealth. Relatively high full value per capita reflects the property wealth of the population; it may also reflect a concentrated tax base or a seasonal tourism-based economy with a relatively small permanent population. Conversely, a lower full value per capita could reflect the presence of significant tax-exempt property, such as a university, that nevertheless reflects a stable source of local revenue generation.



## General Obligation Bonds Issued by U.S. Local Governments

**Subfactor 1.d: Workforce Profile**

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Moody's analysis of workforce issues is focused on determining whether there is an adequate match between the needs of local businesses and the local labor supply, most typically based upon a review of employment data provided by the Bureau of Labor Statistics. Unemployment rates, adjusted for any seasonal fluctuation, are perhaps the most current measure of an area's economic health. Equally important are the unemployment trends over a period of time, which illustrate a municipality's demonstrated ability to withstand changes in national or regional economic fortunes and may provide an indication of future employment performance. Moody's compares local unemployment with statewide and national norms to assess an entity's relative economic vitality. Commuting patterns also enable Moody's to understand a locality's role in the regional economy and the vibrancy of the local employment market, both indicators of economic performance and influences on revenue raising potential.

**FACTOR 2: FINANCIAL STRENGTH**

Moody's financial analysis includes a review of historical financial performance as an indication of an issuer's ability to weather budgetary pressures stemming from economic downturns or other factors. Our analysis focuses on multiyear financial trends, rather than performance in any given year, to indicate financial health over the medium term. Financial flexibility is a key area of analysis, as it provides insight into a local government's ability to maintain or augment its financial position going forward, ensuring a sufficient buffer to address any unexpected contingencies.

**Subfactor 2.a: Balance Sheet/Liquidity**

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One financial statistic that is key to evaluating financial strength is the General Fund balance as a percent of revenues. This ratio provides a measure of the financial reserves potentially available to fund unforeseen contingencies as well as likely future liabilities. It is important to emphasize that the strength of a given level of fund balance varies depending on the particular issuer and its respective operating environment. Larger balances may be warranted if budgeted revenues are economically sensitive and therefore not easily forecasted, or to offset risk associated with tax base concentration, unsettled labor contracts and pending litigation. Alternately, municipalities with substantial revenue raising flexibility may carry smaller balances; this weakness is offset by their ability to generate additional resources when necessary. Accounting presentation varies from state to state; functions that are typically funded through the General Fund may be divided among several governmental funds, depending upon statewide norms. To provide meaningful comparisons across states, Moody's considers combined operating fund reserves as a percent of combined operating fund revenues, in addition to our analysis of the General Fund.

Although we assess fund balance in relation to sector medians, we are cognizant of statewide restrictions that may skew this comparison; for example, New York school districts are not permitted to maintain undesignated reserves in excess of 4% of the subsequent year's budget. Our analysis factors an entity's ability to maintain a healthy financial position within these statutory constraints, such as through the creation and funding of additional reserves. To the extent that significant reserves that are available to fund regular operating needs are held outside of the General or operating funds, Moody's analysts will add these funds to operating fund reserves to determine total available reserves as a percent of operating revenues.

Moody's balance sheet analysis also factors the composition of assets and liabilities; quality of receivables is reviewed to determine the likeliness of their realization. For instance, interfund receivables are analyzed to determine whether the assets to make payment are available or expected to become available in the near term. If not, we may adjust the fund balance downward, to more accurately reflect available resources. Moody's also relies on trends of receivables and payables for an indication of the evolution of a municipality's financial position. For instance, payables that increase at a significant pace may indicate future financial stress on a municipality's resources, while increased receivables may indicate delays in revenue realization or prompt questions about reliability of these receivables.

## General Obligation Bonds Issued by U.S. Local Governments

In addition to evaluating financial reserves, Moody's approach also considers the liquidity of the reserves. Solvency refers to having the assets to cover liabilities; however, funds may be solvent but may lack liquidity if non-cash assets do not convert to cash before liabilities are due. As the best defense against short term liquidity risk is cash, Moody's analyzes year-end cash (net of any proceeds of cash flow borrowing) as a percent of operating revenues. A declining net cash position may raise a red flag regarding an entity's financial health, particularly at lower rating levels; or it may suggest use of a municipality's cash for a capital project which may ultimately be reimbursed by the state or from future bond proceeds. We recognize that a mismatch between the timing of local government receipts and disbursements may necessitate issuance of cash flow notes; however, an increasing reliance on cash flow borrowing relative to budget growth is similarly an indicator of financial stress.

Moody's also reviews the financial condition of major internal service funds. In some cases, these funds may hold large reserves and represent another source of operating flexibility. On the other hand, budget pressures in the General and operating funds may be masked by artificially low charges for services provided by the internal service fund, essentially shifting an operating deficit from the General and operating funds to the internal service funds.

### Subfactor 2.b: Operating Flexibility

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The extent to which government financial managers can exert local control over operating performance is a significant determinant of an entity's ability to maintain a satisfactory distance from fiscal distress. Local governments face inevitable budgetary pressures which may be managed from either the revenue or expenditure side. To the extent an issuer has flexibility to control both revenues and expenditures, financial flexibility will be maximized. Importantly, in addition to considering an issuer's flexibility to increase revenues or reduce expenditures as necessary, Moody's also considers its demonstrated willingness to do so. When an issuer is unwilling to tap available flexibility, the value of that flexibility as a positive credit factor is diminished.

An entity's revenue raising flexibility may be constrained by constitutional or statutory property tax limits, such as property tax levy limits or caps on operating millage or millage increases. Moody's also considers the ability to raise various fees or tax rates without external approval as a factor in assessing revenue raising flexibility. Requirements for voter approval of budgets also limit flexibility, given the potential political resistance to tax increases. Additionally, local governments that rely on local source revenues for the majority of their operating revenues generally have greater control over their financial condition than those entities that are heavily dependent on outside sources such as state aid or other intergovernmental revenues which are prone to reduction during times of state fiscal stress.

Local control over expenditures is also reviewed. A higher proportion of fixed costs, such as debt service or mandated social service expenditures, as a percent of expenditures reduces flexibility to adjust expenditures if revenues fall below expectations. Conversely, funding of non-operating needs from recurring sources, such as financing of capital improvements on a pay-as-you-go basis, enhances flexibility; as these non-essential expenditures may be eliminated in the event of unforeseen budgetary pressures. Flexibility is also impacted to the extent an entity is bound by collective bargaining contracts, which limit control of expenditures; or to the extent it is exposed to enterprise sectors that carries significant operating risk (e.g. county nursing homes, which often require General Fund operating subsidies).

## General Obligation Bonds Issued by U.S. Local Governments

**Property Tax Limitations are Considered in Context of Overall Financial Flexibility**

Property tax is a primary revenue stream for many local governments and is generally considered a relatively stable and predictable source. In response to increasing local property tax burdens, compounded by periods of explosive market value growth in certain regions since the 1970s, several states began imposing property tax limitations. Since the 1978 adoption of California's constitutional amendment to limit property tax growth, commonly known as Proposition 13, a range of state limits have been enacted, either through constitutional amendment, legislation, or within a state's budgetary process. In other instances, limitations are specifically defined by local charter and are governed by a charter process at the local level that is similar to enacting constitutional amendments at the state level. These limitations can pose a range of fiscal constraints on a local government's ability to raise revenues and maintain structural balance. Statutory limitations within a state are sometimes different, depending on the taxing jurisdiction. For example, in Kansas, cities and counties have not had levy limits since 1999, whereas school districts are limited to 20 mills. Moody's assesses the impact of property tax limitations on local governments' financial flexibility and credit strength by evaluating the following factors:

**Mechanics and parameters of limitation**

- Limitations can be defined as maximum caps on the total rates or limitations on the annual rate of increase on property tax levies. Limitations can be some combination of the two, as is the case with California's Proposition 13, which caps property taxes at 1% of assessed valuation and also limits annual growth to the lesser of 2% or CPI, with exceptions for sales or improvements to existing property.
- The scope of the limitation is also critical; certain expenditures may be excluded from the limit, reducing the impact of the limit and improving the issuer's ability to maintain financial flexibility.
- Limitations can also be more discretely defined, with specific rate limits for different purposes. For example, Iowa cities have limitations for certain levies, but no limits for other purposes. The general operating levy is limited to \$8.10 per \$100 of taxable valuation, a special capital projects levy is limited to \$.675 while special revenue levies for police and fire are unlimited.
- Limitations may be ongoing and continuing, as enacted by state constitution or legislation. In some states, such as Wisconsin and Minnesota, the limits are imposed during the state's budget process and may or may not be imposed from one biennial budget to the next. For municipalities in states that periodically impose levy limits, they are sometimes able to stabilize finances in non-limited years, giving them the ability to prepare financially for years where revenue growth will be more restricted.

**Access to additional taxing or revenue capacity**

- Some local governments are able to maintain their levies below state limitations, leaving an unused margin that is fully accessible when needed. For example, a municipality may levy only 5 mills under a 10 mill cap that they could utilize for excess capacity. Similarly, municipalities operating under a growth limitation are sometimes allowed to accumulate any unused portion of the property tax limit from one year to the next, building a margin. Any voluntarily untapped margin that is accessible in future years grants the local government additional revenue raising flexibility when needed.

## General Obligation Bonds Issued by U.S. Local Governments

- Additionally, some limits allow for the local government to exceed or reduce the limitation, often by referendum vote or vote by the governing body, such as the city council, school board, or town meeting.
- Different local governments may have more or less control over raising additional revenues, such as special taxes, fees, and surcharges that could provide alternate revenue raising flexibility.
- Moody's will also consider the political will to use this margin, acknowledging that a significant available margin does not enhance flexibility if political pressures prevent its use. For local governments that have the option to implement overrides or leverage unused margins under existing limitations, a demonstrated willingness by management and the governing body to approve these local actions is key. While there may be political difficulties to enacting such property tax increases, Moody's views the ability to raise sufficient revenues to maintain structural balance in light of a demonstrated willingness.

## State and local fiscal oversight

- Some states monitor and enforce local governments' compliance with tax limitations and overall maintenance of fiscal healthy. Generally, strong oversight at the state or local level is viewed as a positive factor, limiting the likelihood of a local government developing serious financial stress under a property tax limit. Municipalities without periodic oversight or strong local policies could experience unmonitored financial decline that would be further stressed by the inability to rapidly increase property tax revenues under existing limitations.

## Expenditure flexibility

- A local government's control over expenditures is also critical in light of the scope of the revenue limitations we are considering.
- An issuer with a higher proportion of fixed costs, such as debt service or mandated social service expenditures, reduces flexibility to adjust expenditures if revenues fall below expectations. Expenditure flexibility is also limited to the extent an entity is bound by collective bargaining contracts.
- Conversely, a larger proportion of more discretionary items, such as the financing of pay-go capital or the existence of enhanced services and other non-essential expenditures that can be reduced or eliminated, provides a degree of flexibility in the event of unforeseen budgetary pressures.

**Subfactor 2.c: Budgetary Operations**

Moody's evaluates a local government's operating trend to see that financial reserves increase in step with budgetary growth. Additionally, we analyze operating performance to assess structural balance, i.e. the ability to fund recurring expenditures from recurring revenues. Reliance on non-recurring, or "one-shot" revenues, such as proceeds from the sale of assets, windfall delinquent tax collections, or the use of fund balance as a revenue source, leaves the issuer vulnerable should these one-time revenues fail to materialize in the future.

Additionally, revenue structures dependent on economically sensitive revenue sources, such as sales tax or real estate transfer taxes, are dependent on broader economic forces beyond the issuer's control, and pose a risk to budgetary operations. In contrast, property taxes tend to be less volatile, as lags built assessment practices often delay the impact of economic fluctuation. When volatile revenues fund a significant portion of operating costs, Moody's analysts try to gauge how much of the risk is mitigated by management's approach to budgeting for such revenue, what revenue alternatives exist, and what reserve policy is in place to counter

## General Obligation Bonds Issued by U.S. Local Governments

any fluctuations. Trends in revenues are also examined, specifically if major sources of revenues shift from more predictable revenue sources to more vulnerable ones, thereby increasing risk.

### **FACTOR 3: MANAGEMENT AND GOVERNANCE**

General obligation credit ratings do not generally move up in boom times and fall in recessions. One of the main factors behind this stability is the proven ability of governmental managers to implement strategies that maintain credit strength over the long-term. A strong governmental management team prepares well for economic downturns, maintains strong controls during boom times, and manages well during all phases of an economic cycle. Strong management can also mitigate challenges that are outside of the municipality's control, such as economic vulnerability or the existence of statutory revenue caps.

#### **Subfactor 3.a: Financial Planning and Budgeting**

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Moody's assessment of management and governance includes a comparison of budget versus actual performance trends, focusing on the accuracy of both revenue and expenditure forecasts. Revenue forecasting is a key concern, as overly optimistic revenue budgeting can lead to shortfalls within a fiscal year. The strongest financial managers work with information that is updated on a regular basis. For instance, property tax revenue projections will be more reliable if they are based on historic trends and include reasonable assumptions about the future of the local real estate market, the direction of national interest rates, and the local government's likely tax collection rate. Similarly, strong sales tax revenue projections incorporate recent actual trends and indicators of likely future purchasing demand – such as population trend numbers, expected unemployment rates and the impact of current and expected nearby retail competition. The strongest management teams have a solid track record of meeting projections in most line items over several years.

Moody's analysts also assess the government's track record of expenditure controls and conservative but reasonable expenditure projections. In Moody's view, the strongest management teams are able to discuss the levels of flexibility within each expenditure line item as well as discuss the details about the assumptions behind their budgeting. We bring to these expectations a sensitivity to political realities and to the sometimes difficult balancing act that government officials must perform between providing services and controlling costs. Strong expenditure controls lessen the likelihood of fiscal distress, within a fiscal year and beyond. Further, in times of economic weakening, revenues such as sales tax and income tax are likely to stagnate or even decline, and property tax collection rates may fall. The demonstrated ability and willingness to make mid-year budget adjustments in the face of revenue weakness are often key to keeping a budget balanced and avoiding reliance on non-recurring sources such as asset sales or draws from reserves. These "one-shot" approaches weaken management's options in the following fiscal year, when continued expenditure growth could cause further fiscal distress.

Adoption of fund balance policies, and adherence to these policies, increases the likelihood that sufficient levels of fund balance will be maintained, regardless of economic cycles or administrative turn-over. The fiscal policies of a well-managed municipality typically incorporate a plan related to reserves that establishes target and minimum fund balance levels, and specifies when they can be used. Policies that set fund balance levels based on the degree of fiscal vulnerability faced by a particular municipality (including such things as the cyclical nature of its revenue streams, the volatility of expenditure items and the likelihood of natural disasters) are generally more effective than those that do not. Moody's places relatively more reliance on investment and fund balance policies when they are in writing and have been adopted by the government in some formalized manner, such as through a resolution. A written policy, while not necessarily legally binding, indicates to Moody's that government officials have discussed the policy in full and reached consensus, and that the policy is likely to remain in place with a change in management.

Because the results of one fiscal year impact the next, Moody's sees value in the development of multi-year fiscal plans. Long-term fiscal plans generally encompass periods from three to five years, although some span as long as 10 years. These plans can provide useful information about a municipality's finances such as the level of revenue growth necessary to fund particular spending levels, or the impact that a slowdown in revenues or materially higher spending levels could have on fiscal stability. The best fiscal plans incorporate long-term capital planning, including the identification of future debt service costs and additional operational

## General Obligation Bonds Issued by U.S. Local Governments

costs associated with any new capital construction. Such integrated plans illustrate how a municipality intends to pay for projected service level increases and inflationary budget growth.

By plugging in various economic assumptions, government officials can use these plans to envision their budgetary needs over the near- to medium-term. Officials can "stress test" certain revenue streams – for instance, possibly learning that level state aid funding could be offset by expected property tax revenue growth, allowing for normal expenditure growth even during a state's fiscal crisis. Well constructed plans also identify areas of potential financial flexibility – for example, capital spending that could be reduced or fees that could be increased. In short, multi-year fiscal plans perform two important functions: one, they compel the issuer to develop quantitative contingency plans for various "what if" scenarios; and, two, they provide a road map that shows where the government's management team intends to go over the next several years.

### **Subfactor 3.b: Debt Management and Capital Planning**

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Formalized debt planning and debt policies provide bondholders with reassurances that debt burdens and operational debt costs will be kept at manageable levels while ongoing capital needs continue to be met. Debt policies typically specify both target debt burden levels and maximum allowable debt burden levels; the community's borrowing needs over the next five to ten years are then projected against these targets. Also, if an entity plans to issue a portion of their debt as variable rate obligations, or enter into interest rate swaps, it is important for the debt policy to incorporate management's reasons for utilizing these structures, and strategies for minimizing associated risks.

Regularly updated, multi-year capital improvement plans are useful tools in prioritizing and planning for future capital needs, and identifying financing sources for each of the upcoming capital projects. The strongest governmental management teams then incorporate their capital improvement plans into their debt projections and multi-year operating projections – identifying how both debt levels and operating capital expenditures will impact the balance sheet and financial operations. Some management teams adopt policies for their pay-as-you-go financing of capital work, such as earmarking certain revenues (e.g. impact fees) to be diverted annually into pay-go capital spending. Policies may also specify target levels for debt service as a percentage of overall expenditures.

Moody's also evaluates management's ability to cushion against risk related to variable rate debt and derivatives, particularly in light of recent and ongoing volatility in the variable rate debt markets. Here, we consider the frequency of monitoring variable rate debt and swap portfolios, demonstrated response to market changes, budgeting for interest rate volatility, and maintenance of sufficient liquidity in the event of bank bond term-outs or swap terminations.

### **Subfactor 3.c: Management of Economy/Tax Base**

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We recognize that, generally, economic performance is the most difficult of the four rating factors for management to control. Nevertheless, monitoring economic performance is an important practice, as economic indicators can cue management to adjust financial or debt policies in order to offset the impacts of an economic downturn or challenge. Strong managers also understand how historical economic trends can be used as a predictor for future economic performance, and can incorporate this analysis into economic forecasts and ultimately, into policy decisions. The successful pursuit by management of effective economic development or redevelopment is generally seen as a positive rating factor, while incentives that lead to uncertain revenues or services that are in excess of development benefits can negatively impact ratings.

## General Obligation Bonds Issued by U.S. Local Governments

**Subfactor 3.d: Governing Structure**

The statutory and regulatory environments in which local governments operate can vary significantly by state and by sector. Moody's analysis includes a comparison of peers within a given state, to evaluate management's ability to maximize flexibility relative to others facing the same constraints. However, as statutory limitations may materially impact relative credit quality on an absolute basis, we also conduct nationwide comparisons to assess relative credit quality. For example, imposition of a statewide 4% property tax cap in New Jersey has contributed to widespread utilization of fund balance to support operations across the state. We recognize this trend, and consider management's ability to operate within this new limitation. To maintain the consistency of our ratings, however, we also compare these municipalities to credits in other states that may not face similar caps. Absent other mitigating factors, we would expect local government credit quality to be depressed somewhat in state's that place disproportionate limitations on financial flexibility.

Additionally, we recognize that local governments, by definition, are influenced by political considerations. Often, in allocating and managing limited resources to meet growing demands for services, financial managers face political pressure to make decisions that adversely impact credit quality. For example, elected officials may oppose revenue enhancements, such as property tax levy increases, or may promise services which the municipality is not in a position to fund. In the best case, government financial managers have the autonomy to make financial policy decisions and are insulated from political considerations. On the other hand, elected officials can provide an effective check on financial policy decisions – ideally, the relationship between management and elected officials is a constructive one. In extreme cases of local government fiscal distress, an external oversight board may be appointed. Moody's views this oversight to be a positive step toward halting what may otherwise be a credit in "free fall," as the oversight board is further removed from local political concerns, freeing it to make what may be unpopular decisions to restore financial stability.

**Existence of Oversight Boards May Enhance Credit Quality**

Moody's considers the existence of state oversight of local government operations to be a positive rating factor. In some instances, agencies such as the Local Government Commission in North Carolina, or the Local Finance Board in New Jersey, play a supervisory role, establishing accountability, controls and consistency with regards to local government operations statewide. While these agencies do not provide direct credit enhancement, Moody's believes that they ensure consistent standards of financial integrity. Thus, although this type of oversight does not directly factor into our local government ratings, it may indirectly support credit quality by encouraging and/or requiring conservative fiscal management practices.

Alternately, in some states, mechanisms exist to impose state oversight or control boards to oversee the operations of local governments experiencing fiscal distress. Examples include the Buffalo (NY) Fiscal Stability Authority (BFSA) and the Pennsylvania Intergovernmental Cooperation Authority (PICA) which oversees the City of Philadelphia. Once established, these boards may exert varying degrees of control over a municipality's financial operations, including review and approval of budgets, contracts and debt issuances, or requirements for the development of multi-year financial recovery plans. Establishment of a control board may bring immediate fiscal relief in the form of additional state aid to the municipality or authorization for the issuance of deficit funding bonds. Oversight boards may also issue debt ultimately repaid by the local government's revenues, but structured to insulate the repayment stream from municipal financial distress; the enhanced bond security may enable a local government that might otherwise have fallen below investment grade to continue to access the capital markets. Moody's believes that the existence of such an oversight board does not raise credit quality; but, assuming a constructive relationship exists between the board and the municipality, it, may create a rating floor (generally investment grade) below which the local government's rating is unlikely to fall.

## General Obligation Bonds Issued by U.S. Local Governments

**Subfactor 3.e: Disclosure**

Full and timely disclosure of financial matters is a basic tenet of a well-functioning capital market system. The strongest management teams have audited or reviewed financial reports prepared annually, generally within six to nine months of the close of the fiscal year. Financial statements that are attested to by an outside firm are viewed as being more reliable than preliminary documents prepared by members of the government's finance department. While Moody's rates the debt of certain issuers that do not publish annual audits (usually, small communities), we generally consider those issuers to have weaker financial reporting practices and, therefore, weaker disclosure practices. The Governmental Accounting Standards Bureau (GASB) creates the accounting principles by which governmental accountants prepare their audited financial statements, and compliance with these standards increases transparency and comparability among issuers (assuming the use of these accounting principles are the norm for the state, with New Jersey's statutory accounting standard as one of several notable exceptions).

Moody's also considers the timeliness of annual budget adoption. Timely budget adoption allows for effective allocation of resources and ensures that government commitments are funded. The budget process allows stakeholders with competing demands on resources to prioritize needs. Management skills are tested when these stakeholders must be brought together, sometimes in a politically charged environment. Inability to adopt a budget in a timely manner may reflect management's failure to achieve consensus concerning a community's goals and priorities. Besides allowing for the uninterrupted provision of government services, to the extent the budget is adopted prior to the start of the fiscal year, the budget provides a basis for tracking financial performance. (Again, New Jersey is a notable exception, where passage of budgets after the start of the fiscal year is the norm and reflects local governments' ability to adopt continuing budgets and mail estimated tax bills, allowing for provision of services and finalization of prior year actual performance to inform the budget process.)

**Below Investment Grade Credits Face Range of Challenges**

While local government credit quality is generally strong given the broad nature of the general obligation pledge, a number of credits, typically those that are economically distressed or lacking in sound fiscal management, fall below investment grade (i.e., rated below Baa3). This group currently represents only about 0.1% of the 8,200 general obligation ratings maintained by Moody's in the local government sector.

Non-investment grade local government credits tend to display a unique array of credit risks, including significant erosion in the economic base, an extremely weakened financial position, and a limited willingness or ability to resolve these challenges. A trend of structurally imbalanced operations can result in deficit fund balance positions and a growing reliance on cash flow borrowing to provide operating liquidity. Certain of today's stressed credits have failed to benefit from the nation's recent economic expansionary period, leaving them with minimal financial flexibility to weather the current economic recession. Further, many of these credits remain dependent on discretionary allotments of state aid that may decline given weakening state economies.

Moody's places significant emphasis on the adoption and implementation of a reasonable plan to alleviate fiscal distress when evaluating below investment grade credits. These plans often incorporate non-recurring sources to augment reserves, including infusions of extraordinary state aid, deficit reduction bond proceeds or proceeds from the sale of municipal assets. Reviews of below investment grade ratings generally focus on the likelihood of a return to structural balance through recurring revenue enhancement and/or expenditure reductions as well as an established track record of renewed stability, reflecting willingness and ability to maintain any improvements.



## General Obligation Bonds Issued by U.S. Local Governments

**FACTOR 4: DEBT PROFILE**

Moody's analyzes how much debt the economic base is supporting, the flexibility to absorb additional borrowing needs, expected future borrowing needs and the resulting pro-forma impacts. Additionally, Moody's examines the impact of debt on financial flexibility, and management's ability to conservatively structure debt repayment.

**Subfactor 4.a: Debt Burden**

The debt burden measures the financial leverage of a community by calculating the amount of debt outstanding (or the accreted value, in the case of Capital Appreciation Bonds) compared to the entity's full valuation. Ultimately, the more leveraged a tax base is, the more difficult it is to service existing debt and to afford additional debt, and the greater the likelihood that tax base or financial deterioration will result in pressures to fund fixed debt service expenditures. Moody's assesses both the direct debt burden, which is that debt supported by a municipality's own revenue stream; and indirect debt burden, which includes debt incurred by overlapping or underlying entities, such as a school district and a city in the case of a county. The overall debt burden represents the total debt shouldered by the property tax base. As the areas of responsibility of different levels of government vary by state (e.g. in some states, counties issue debt on behalf of school districts, whereas in other states school districts have borrowing authority), analysis of overall debt burdens allows for more meaningful comparisons across states. There could be extreme instances when significant borrowing by one entity could have adverse credit implications for an overlapping entity.

Frequently, in calculating an issuer's debt burden, Moody's definition of "debt" differs from states' definitions of debt, with respect to statutory debt limitations. Specifically, state statute may exclude from its calculation general obligation debt that has any source of supporting revenue, even a dedicated property tax. For example, in certain states, bonds issued for open space preservation and supported by an open space property tax will be excluded from the calculation of an entity's statutory debt limits. However, Moody's would continue to carry this debt on the debt statement, as it is ultimately supported by the property tax base. Further, Moody's analysts include capital leases, lease revenue debt and other fixed obligations in our debt burden calculation. Bond Anticipation Notes are also included, as these will ultimately be converted to long term debt. On the other hand, long term operational liabilities, such as accrued vacation days, are not captured by Moody's on the debt statement.

Analysts may deduct general obligation tax debt that is supported by enterprise revenues such as water and sewer charges from our debt burden calculation. As a general guideline, if an essential enterprise system with supporting revenue streams has been self-supporting for the three preceding years, we will exclude the debt. For this reason, general obligation water and sewer supported debt is frequently deducted from our debt burden analysis. However, recently enacted rate adjustments or reliance on one-time revenues (ie: connection fees) may provide for analytical differences to this approach. Unlike certain enterprise revenues, with rare exceptions, Moody's does not back-out tax increment or special assessment supported debt. While we internally analyze the mitigating impact of these revenue streams on the general levy, we believe that these concentrated revenue streams from benefited properties are more similar to property tax supported obligations putting a burden on property values.

Generally, sales tax-secured debt is included in the debt burden if: (1) it is issued to fund capital needs related to services typically provided by the government (e.g. park improvements), (2) sales tax revenues in excess of debt service obligations revert to the general operating funds and are available to fund operating needs, or (3) the debt is ultimately secured by a general obligation pledge, although it is expected to be serviced from sales tax receipts. In these cases, Moody's analyzes debt with and without the sales tax component to better understand the debt burden's source impact. Although included in the debt burden calculation, the availability of sales tax revenues to offset debt service can mitigate the rating impact of an above-average debt burden.

Moody's will exclude sales tax revenue bonds when (1) the bonds are issued to fund needs not related to typical general government functions (e.g. stadium or mass transit capital improvements) and (2) the sales tax revenues are segregated and available only to fund debt service or capital expenditures related to these functions.

## General Obligation Bonds Issued by U.S. Local Governments

Some states provide assistance to local governments, particularly school districts, for the payment of general obligation debt service. Although, in many cases, these programs have a long track record, the state payments are often subject to annual appropriation. Therefore, Moody's does not generally deduct the portion of general obligation debt expected to be paid with state aid. But, in these situations, analysts will calculate an "adjusted" debt level reflecting expected statement payments and Moody's will consider both the gross and the adjusted debt levels in assigning the rating.

Sample Debt Statement (\$000) by FY		2008
<b>FY End Date</b>		<b>6/30/2008</b>
<b>Source of Debt Data</b>		<b>Audited</b>
General obligation, unlimited tax bonds		14,705
GOULT/Water & Sewer		8,694
General obligation, limited tax bonds		
Unconditional general fund obligations		
Sales tax and other special tax bonds		2,500
State loans		16,267
Lease rental bonds/COPs		
Capital leases		1,182
Assessment debt with government commitment		
Other guaranteed debt		
BANs, capital notes, CP		6,700
Other direct tax supported debt		
<b>Gross direct debt</b>		<b>50,048</b>
Less: Self-supporting GO debt		-8,694
Less: Self-supporting GOLT debt		
Less: Self-supporting lease debt		
Less: Other self-supporting debt		-16,267
<b>Net direct debt</b>		<b>25,087</b>
Overlapping debt		21,853
<b>Overall net debt</b>		<b>46,939</b>
Adjustments		
Adjusted overall net debt		
<b>Net Direct Debt as % of Full Value</b>		<b>1.4</b>
<b>Debt Burden (Overall Net Debt as % of Full Value)</b>		<b>2.2</b>

## General Obligation Bonds Issued by U.S. Local Governments

**Subfactor 4.b: Debt Structure and Composition**

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The structure of principal amortization is one indication of an entity's willingness and ability to repay debt. Generally, a conservative principal amortization schedule matches the useful life of the financed project. For example, structuring thirty year bonds for technology upgrades would be inconsistent with the expected useful life of the project. In such a scenario, repaying a liability for an asset that no longer exists could challenge the willingness of an entity to make debt payments; this is particularly relevant for appropriation-backed debt. Further, back end-loaded debt structures make it more difficult for borrowers to layer additional debt in the future. A level principal amortization schedule is common (e.g. 50% principal repayment within ten years for twenty year bonds); however, the amortization rate is also driven by matching the useful life of the projects. We also note that, while the structure of an individual series of debt may look irregular as a stand-alone repayment, it may be fine when considered in conjunction with the total amortization schedule of all community debt.

Moody's will also analyze the composition of the debt profile to assess a municipality's exposure to the interest rate and liquidity risks inherent in variable rate debt. The amount of variable rate debt that can be assumed by an issuer without jeopardizing its long-term rating will largely depend on its general credit strength and the following liquidity characteristics:

- Tightness of budgeted revenues and expenses;
- Predictability and seasonality of operating cash reserves during the year;
- Availability of financial resources not budgeted for operating needs; and
- Matching of interest rate-sensitive assets with variable rate exposure.

Moody's will test sufficiency of an issuer's liquidity under various term-out, swap termination, and interest rate scenarios.

**Subfactor 4.c: Debt Management and Financial Impact/Flexibility**

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The structure of debt, the level of debt and future borrowing needs can all impact the financial operations of a community. Debt service payments represent a required expense. As such, there is limited line-item flexibility available should financial operations become stressed. This is particularly true for limited tax general obligation debt or appropriation leases, in which debt service expenditures effectively compete with operating expenditures. Debt service as a percent of operating expenditures can vary, and frequently ranges from 5 - 15%. However, for communities experiencing rapid growth or pursuing aggressive principal amortization, this range can increase significantly. Moody's will consider the availability of dedicated revenue streams (e.g. special sales tax dedicated for debt service) as a mitigating factor when assessing the impact of debt service on a municipality's financial operations.

## General Obligation Bonds Issued by U.S. Local Governments

**Subfactor 4.d: Other long term commitments and liabilities**

Moody's analysis of a municipality's debt profile includes an assessment of the degree to which other non-debt long term commitments, such as pension obligations and other post-employment benefits (OPEB), primarily retiree health benefits, impact the entity's long term flexibility. Moody's views both OPEB and pension obligations as having debt-like characteristics, however, they tend to allow some flexibility to alter the terms of the obligation, such as benefit eligibility requirements. Moody's therefore considers the impact of these obligations in our overall credit assessment of an issuer. Additionally, should a municipality choose to provide funding for these long term liabilities through the issuance of pension obligation bonds or OPEB bonds, those bonds would be included in our debt burden calculations.

Moody's will analyze pension and OPEB funding levels to assess the future impact on an entity's financial operations. We recognize that funding levels naturally will rise and fall as actual experience diverges from actuarial assumptions, as benefits change, or as investment returns fluctuate. In the case of an unfunded pension liability, Moody's will examine the reason that it has arisen and the entity's ability and willingness to address it over a reasonable period of time. When assessing the credit impact of an unfunded OPEB liability, Moody's analysts will also consider assumptions regarding medical costs, as well as issuers' flexibility under relevant statutes or contracts to modify their post-employment health benefit offerings. In either case, a trend of declining funding levels and/or failure to make recommended annual payments would be viewed as negative credit factors.

**Pension Obligations Expected to Place Near Term Pressure on Ratings**

A broad deterioration in funding levels for public sector pensions is adding to fiscal pressure on some state and local governments and could contribute to negative rating actions for select issuers in the next several years. This reduction in funding levels is largely driven by significant investment losses in pension plans in the range of 20-30% throughout 2008, and early 2009-losses which for some issuers came on top of longer-term demographic pressures. Lastly, the problem for some issuers will be exacerbated by decisions by select governments to defer pension contributions during periods of budgetary stress.

Greater credit stress will be felt by both the government issuers that entered this cycle with marginal funding levels as well as those that face inflexible regulatory or legal pension funding requirements. Despite the recent strong performance of the equity markets since March 2009, asset losses from earlier periods continue to weigh on plan asset valuations. Historically, stock market volatility poses pro-cyclical economic risks. Funding pressure could partially ease if there is continued rapid rise in equity market values and rising rates lead to actuarial reduction in accrued liabilities through application of a higher discount rate.

In evaluating the strength or weakness of a rated issuer's retirement system we begin with a review of the funded ratio to assess the extent to which a government has set aside resources to meet its pension obligations. Our focus is on four key factors: the level of benefits, investment results, reporting assumptions, and the constitutional and legal requirements such as those covering funding levels and funding mandates.

Additionally, we examine the impact of management decisions on the viability of pension programs and the resulting credit implications. These management decisions may include reductions in plan contributions to meet a current budget, whether to under-fund a pension plan, and making a contribution that is less than a municipality's annual pension cost. Other "red flags" that may warn of potential fiscal distress are the changing of actuarial firms or committing limited municipal resources to new pension funding that is deferred until some future date.

## General Obligation Bonds Issued by U.S. Local Governments

**WHAT CAN MAKE A RATING MOVE UP OR DOWN**

Local government ratings generally remain outstanding for the life of the bonds. Moody's regularly reviews outstanding ratings through a ratings surveillance process. This process includes a review of annual financial disclosure documents, and may also include a phone call with management to discuss relevant trends, particularly if the credit profile appears to have changed since the last rating review.

Through regular monitoring, we evaluate changes that are absolute in nature (e.g. has the tax base size increased or decreased substantially? Are there material changes in financial reserves or liquidity?) as well as changes in relation to peers across the state and nation (e.g. do changes in unemployment rates mirror regional trends, or is the credit an outlier with regard to this economic indicator?) Modest changes in an entity's credit profile over short periods of time are not likely to result in rating movement; our focus instead is on more significant, multi-year trends. While economic factors carry the greatest weight in Moody's rating assignments, we have seen that over time, financial changes are most likely to drive rating movements. This reflects the fact that, generally speaking, economic changes tend to occur gradually; and that even in times of economic stress, managers have historically been able to take action in an effort to maintain stable credit quality.

**Outlooks and Watchlist Provide Information Regarding Direction of Likely Rating Movement**

In order to provide information regarding the short term and medium term direction of a particular rating, we employ outlooks and watchlist designations—to inform investors, issuers, and intermediaries of potential rating action.

A Moody's rating outlook is an opinion regarding the likely direction of an issuer's rating over the medium term. Where assigned, rating outlooks fall into the following four categories: Positive (POS), Negative (NEG), Stable (STA), and Developing (DEV – contingent upon an event). In the few instances where an issuer has multiple ratings with outlooks of differing directions, an "(m)" modifier (indicating multiple, differing outlooks) will be displayed, and Moody's written research will describe any differences and provide the rationale for these differences. A RUR (Rating(s) Under Review) designation indicates that the issuer has one or more ratings under review for possible change, and thus overrides the outlook designation. When an outlook has not been assigned to an eligible entity, NOO (No Outlook) may be displayed. Outlooks are employed for large or high profile issuers only; the vast majority of local government credits have no outlook assigned.

Moody's uses the Watchlist to indicate that a rating is under review for possible change in the short term. A rating can be placed on review for possible upgrade (UPG), on review for possible downgrade (DNG) or more rarely with direction uncertain (UNC). A credit is removed from the Watchlist when the rating is upgraded, downgraded or confirmed.

## General Obligation Bonds Issued by U.S. Local Governments

**Appendix A: General Obligation Rating Factors**

Moody's methodology for rating U.S. local government general obligation bonds incorporates analysis of the following rating factors and subfactors:

1. Economic Strength (40%)
  - a. Size and Growth Trend
    - i. Tax base size
    - ii. Historic growth trend
    - iii. Future growth potential
  - b. Type of Economy
    - i. Industry concentration
    - ii. Stability
    - iii. Taxpayer concentration
  - c. Socioeconomic and Demographic Profile
    - i. Population trend
    - ii. Poverty level
    - iii. Full value per capita
    - iv. Income
  - d. Workforce Profile
    - i. Unemployment rate
2. Financial Strength (30%)
  - a. Balance Sheet/Liquidity
    - i. General Fund balance as a % of General Fund revenues
    - ii. Liquidity trend
  - b. Operating Flexibility
    - i. Revenue raising flexibility
    - ii. Local control over expenditures
  - c. Budgetary operations
    - i. Trend of structurally balanced operations
    - ii. Exposure to volatile revenue streams
    - iii. Property tax collection rates
    - iv. Exposure to state aid reductions

## General Obligation Bonds Issued by U.S. Local Governments

## 3. Management and Governance (20%)

## a. Financial planning and budgeting

- i. Trend of budget-to-actual performance
- ii. Existence of and adherence to policies and procedures
- iii. Multi-year budgeting practices

## b. Debt Management and Capital Planning

- i. Multi-year capital planning practices
- ii. Management of risk related to variable rate debt and derivatives
- iii. Existence of and adherence to debt policies

## c. Economic Forecasting and Monitoring

- i. Monitoring of economic performance

## d. Governance Structure

- i. Constructive relationship with elected officials

## e. Disclosure

- i. Timely disclosure of key documents

## 4. Debt Profile (10%)

## a. Debt Burden

- i. Net direct debt as % of full value
- ii. Overall net debt as % of full value

## b. Debt Structure and Composition

- i. Amortization rate (10 years)
- ii. Liquidity and budgetary risk related to variable rate debt or derivatives

## c. Debt Management and Impact on Financial Flexibility

- i. Debt service as % of total operating expenditures

## d. Other Long Term Commitments and Liabilities

- i. Pension funding ratio

## General Obligation Bonds Issued by U.S. Local Governments

**Appendix B: Moody's Rating Definitions****WHAT IS A MOODY'S CREDIT RATING?**

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Moody's ratings are intended to provide capital market participants with a framework for comparing the credit quality of debt securities. A credit rating compresses an enormous amount of diverse information into a single symbol. Bonds with the same credit rating, therefore, may be comparable with respect to overall credit quality but may differ with respect to specific credit quality characteristics.

**Aaa**

Issuers or issues rated Aaa demonstrate the strongest creditworthiness relative to other US municipal or tax-exempt issuers or issues.

**Aa**

Issuers or issues rated Aa demonstrate very strong creditworthiness relative to other US municipal or tax-exempt issuers or issues.

**A**

Issuers or issues rated A present above-average creditworthiness relative to other US municipal or tax-exempt issuers or issues.

**Baa**

Issuers or issues rated Baa represent average creditworthiness relative to other US municipal or tax-exempt issuers or issues.

**Ba**

Issuers or issues rated Ba demonstrate below-average creditworthiness relative to other US municipal or tax-exempt issuers or issues.

**B**

Issuers or issues rated B demonstrate weak creditworthiness relative to other US municipal or tax-exempt issuers or issues.

**Caa**

Issuers or issues rated Caa demonstrate very weak creditworthiness relative to other US municipal or tax-exempt issuers or issues.

**Ca**

Issuers or issues rated Ca demonstrate extremely weak creditworthiness relative to other US municipal or tax-exempt issuers or issues.

**C**

Issuers or issues rated C demonstrate the weakest creditworthiness relative to other US municipal or tax-exempt issuers or issues.

Note: Moody's appends numerical modifiers 1, 2, and 3 to each generic rating category from Aa through Caa. The modifier 1 indicates that the issuer or obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category.



## General Obligation Bonds Issued by U.S. Local Governments

## Appendix C: Moody's Local Government Financial Ratio Definitions

This appendix provides definitions of terms and ratios used in local government credit analysis.

### Actual/Estimated Population, Annual Value

For a census year, this is the population within the boundaries of the local government as reported by the US Census. For other years, these are actual or estimated population figures reported by the local government itself or other sources.

### Average Annual Increase in Full Value (%)

The compound average annual increase in Total Full Value over the preceding five-year period. Thus, the Average Annual Increase in Full Value reported for 2002 is the average annual increase over the period 1997 to 2002. In cases where five years of data are not available, this statistic is calculated for the preceding four-year period. In some states, where assessed values or equalization rates are reset on a two-year cycle, average annual increase may be calculated for the preceding six-year period.

### Debt Burden (Overall Net Debt as % Full Value)

Overall Net Debt Outstanding divided by the fiscal year or most recent Total Full Value for the local government. Overall Net Debt Outstanding is equal to Direct Net Debt plus Overlapping Debt. Direct Net Debt is the local government's gross debt less sinking fund accumulations, short-term operating debt, and bonds and other debt deemed by Moody's analysts to be fully self-supporting from enterprise revenues. Direct Net Debt typically includes the non-self supporting portion of the local government's general obligation bonds, sales and special tax bonds, general fund lease obligations, bond anticipation notes, and capital leases. Overlapping Debt is the net debt of all overlapping and underlying units of local government that share the local government's property tax base, apportioned in accordance with property valuation.

### Debt Service as % of Operating Expenditures

Debt service expenditures for all Operating Funds and debt service funds combined divided by Operating Expenditures.

### Direct Net Debt Outstanding (\$000)

The local government's gross debt less sinking fund accumulations, short-term operating debt, and bonds and other debt deemed by Moody's analysts to be fully self-supporting from enterprise revenues. Direct Net Debt typically include the non-self supporting portion of the local governments general obligation bonds, sales and special tax bonds, general fund lease obligations, bond anticipation notes, and capital leases.

### Direct Net Debt as % of Full Value

Direct Net Debt Outstanding divided by the fiscal year or most recent Total Full Value for the local government.

### Full Value per Capita (\$)

Total Full Value divided by the fiscal year or most recent population for the local government.

### General Fund Balance as % of Revenues

Total general fund balance as reported in the local governments financial statements divided by Total General Fund Revenues.

## General Obligation Bonds Issued by U.S. Local Governments

**General Obligation / Issuer Rating**

In most states, the rating assigned by Moody's to the local governments General Obligation Unlimited Tax Bonds or, in the absence of GOULT debt, the Issuer (Implied General Obligation) rating assigned by Moody's. In some states, such as Texas and Nevada, where certain types of local government can only issue General Obligation Limited Tax Bonds, the rating shown is for the issuers GOLT debt.

**Median Family Income**

Median family income for residents within the boundaries of the local government as reported by the US Census.

**Median Family Income as % of State**

Median Family Income for the local government divided by Median Family Income for the state in which the local government is located.

**Median Family Income as % of U.S.**

Median Family Income for the local government divided by Median Family Income for the United States.

**Operating Expenditures**

Total expenditures for all Operating Funds and debt service funds combined including net transfers out and other uses as reported in the local government's financial statements. In some cases, Operating Expenditures may exclude certain items such as deposits of bond proceeds to refunding escrows which have been included in expenditures or other uses in the financial statements but which have been deemed by Moody's analysts to be non-recurring in nature. Note that when Operating Funds and debt service funds are combined to determine Operating Expenditures, transfers in are netted against transfers out.

**Operating Funds Balance as % of Revenues**

Total fund balance of all Operating Funds combined as reported in the local governments financial statements divided by Total Operating Funds Revenues.

**Operating Funds**

Operating Funds consist of the general fund as well as certain Special Revenue Funds that Moody's analysts have determined account for core governmental operations or operations that, in the case of similar local governments, would be accounted for in the general fund. Operating Funds include debt service funds for the calculation of the ratio

**Debt Service as a % of Operating Expenditures.**

Operating Funds generally do not include debt service funds for calculation of Operating Funds Balance, Operating Funds Balance as % of Revenues and similar ratios.

**Overall Net Debt Outstanding (\$000)**

Direct Net Debt plus the net debt of all overlapping and underlying units of local government that share the local government's property tax base, apportioned in accordance with property valuation.

**Payout, 10 Years**

The percentage of current principal outstanding scheduled to be retired in the next 10 years.

**Per Capita Income**

Per capita family income for residents within the boundaries of the local government reported by the US Census.

## General Obligation Bonds Issued by U.S. Local Governments

**Per Capita Income as % of State**

Per Capita Income for the local government divided by Per Capita Income for the state in which the local government is located.

**Per Capita Income as % of U.S.**

Per Capita Income for the local government divided by Per Capita Income for the United States.

**Population Change 1990-2000 (%)**

The increase or decrease in population, expressed as a percent, within the boundaries of the local government from the 1990 Census to the 2000 Census.

**Poverty Rate (%) (2000 Census)**

Percentage of persons within the boundaries of the local government with incomes below the poverty level, as reported by the US Census.

**Top Ten Tax Payers as % of Total, Most Recent Value**

Total assessed value of the ten largest property taxpayers for the local government, divided by the total assessed value of the local government, for the most recent year for which largest taxpayer data are available. In some cases, largest taxpayer data are reported using levy figures rather than assessed value figures. In those cases this statistic is the total levy for the ten largest taxpayers as a percent of the total levy for all taxpayers of the local government.

**Total Full Value (\$000)**

Estimated full market value of all taxable property within the boundaries of the local government as reported by local or state sources. Users of these data should be aware of significant variation in the methods and quality of property assessment from state to state and even among the municipal governments within a state. Definitions of taxable property also vary across the country, as does the dependability of equalization ratios used to convert assessed value to full value.

**Total General Fund Revenues (\$000)**

Total revenues including transfers in and other sources for the general fund as reported in the local government's financial statements. In some cases, General Fund Revenues may exclude certain items such as bond proceeds which have been included in revenues or other sources in the financial statements but which have been deemed by Moody's analysts to be non-recurring in nature.

**Total Operating Funds Revenues (\$000)**

Total revenues for all Operating Funds combined including net transfers in and other sources as reported in the local government's financial statements. In some cases, Operating Fund Revenues may exclude certain items such as bond proceeds which have been included in revenues or other sources in the financial statements but which have been deemed by Moody's analysts to be non-recurring in nature. Note that when Operating Funds are combined to determine Operating Funds Revenues, transfers in are netted against transfers out; as a result the value for Operating Funds Revenues may occasionally be less than the value General Fund Revenues.

**Unreserved General Fund Balance as % of Revenues**

Unreserved general fund balance as reported in the local governments financial statements divided by Total General Fund Revenues. In some cases, Unreserved General Fund Balance reported by Moody's may include certain amounts shown as reserves in the financial statements that Moody's analysts have deemed would be available to meet operating contingencies.

## General Obligation Bonds Issued by U.S. Local Governments

**Unreserved Operating Funds Balance as % of Revenues**

Unreserved fund balance of all Operating Funds combined as reported in the local governments financial statements divided by Total Operating Funds Revenues. In some cases, Unreserved Operating Funds Balance reported by Moody's may include certain amounts shown as reserves in the financial statements that Moody's analysts have deemed would be available to meet operating contingencies.

**Unreserved, Undesignated General Fund Balance as % of Revenues**

Unreserved, undesignated general fund balance as reported in the local governments financial statements divided by Total General Fund Revenues. In some cases, Unreserved, Undesignated General Fund Balance reported by Moody's may include certain amounts shown as reserves or designations in the financial statements that Moody's analysts have deemed would be available to meet operating contingencies.

**Unreserved, Undesignated Operating Funds Balance as % of Revenues**

Unreserved, undesignated fund balance of all Operating Funds combined as reported in the local governments financial statements divided by Total Operating Funds Revenues. In some cases, Unreserved, Undesignated Operating Funds Balance reported by Moody's may include certain amounts shown as reserves or designations in the financial statements that Moody's analysts have deemed would be available to meet operating contingencies.

## General Obligation Bonds Issued by U.S. Local Governments

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