

### Criteria | Governments | Request for Comment:

# Methodology For U.S. State Ratings

**Primary Credit Analysts:**

Robin Prunty, New York (1) 212-438-2081; robin\_prunty@standardandpoors.com  
James Wiemken, Chicago (1) 312-233-7005; james\_wiemken@standardandpoors.com  
Horacio Aldrete-Sanchez, Dallas (1) 214-871-1426; horacio\_aldrete@standardandpoors.com

**Chief Credit Officer, Corporates and Governments:**

Colleen Woodell, New York (1) 212-438-2118; colleen\_woodell@standardandpoors.com

**Chief Credit Officer:**

Mark Adelson, New York (1) 212-438-1075; mark\_adelson@standardandpoors.com

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## Criteria | Governments | Request for Comment:

# Methodology For U.S. State Ratings

Standard & Poor's Ratings Services is proposing to update its methodology and assumptions for rating United States state governments. We are publishing this article to help market participants better understand our proposed approach to assigning state ratings. This methodology would replace portions of "U.S. Public Finance Criteria: GO Debt" published Oct. 12, 2006 and is related to "Principles Of Corporate And Government Ratings," published June 26, 2007.

Standard & Poor's publicly rates all 50 states based on our qualitative and quantitative analysis of a range of financial, economic, and institutional factors. We are proposing to separate the criteria for our review of states from the broader general obligation (GO) criteria article in order to provide greater clarity and detail in explaining our methodology and the quantitative and qualitative factors that influence state ratings. For this reason, and to enhance the comparability and transparency of our ratings, we are now requesting comment on the proposal described herein.

In this article, "rating" refers to the rating assigned to GO debt of U.S. states or the issuer credit rating if no GO debt is outstanding. The elements of the proposal are found in "Methodology," below.

## SCOPE OF THE CRITERIA

This criteria would apply to all U.S. state governments.

## PROPOSAL SUMMARY

We are proposing to keep the same general analytic framework to rate U.S. states, which results from a combination of quantitative and a qualitative analysis around five main factors:

- Government framework;
- Financial management;
- Economy;
- Budgetary performance and flexibility; and
- Debt and liability profile.

We are also proposing to increase the transparency of our rating methodology through the following:

- To calibrate more precisely each of the above five rating factors based on our view of quantitative and qualitative elements, in order to improve the comparability of our ratings globally; and
- To explain in a transparent manner how the rating for each state is determined from the combination of the various rating factors.

## SPECIFIC QUESTIONS FOR WHICH WE ARE SEEKING A RESPONSE

- Do you agree with separating the GO criteria for U.S. states from the broader GO criteria article that we have historically published covering all levels of governments, in order to provide greater transparency?
- Do you agree that the proposed rating factors and individual metrics focus on the key factors affecting state government creditworthiness? Can you comment on the advantages and disadvantages of this approach?
- Do you agree with scoring each individual metric in order to establish an overall score for each factor and translating that score to a rating? Do you agree that it results in a more transparent approach?

## IMPACT ON OUTSTANDING RATINGS

We do not expect any significant rating changes as a result of this criteria update.

## RESPONSE DEADLINE

We encourage market participants to submit written comments on the proposal and the above questions by June 11, 2010 to [CriteriaComments@standardandpoors.com](mailto:CriteriaComments@standardandpoors.com).

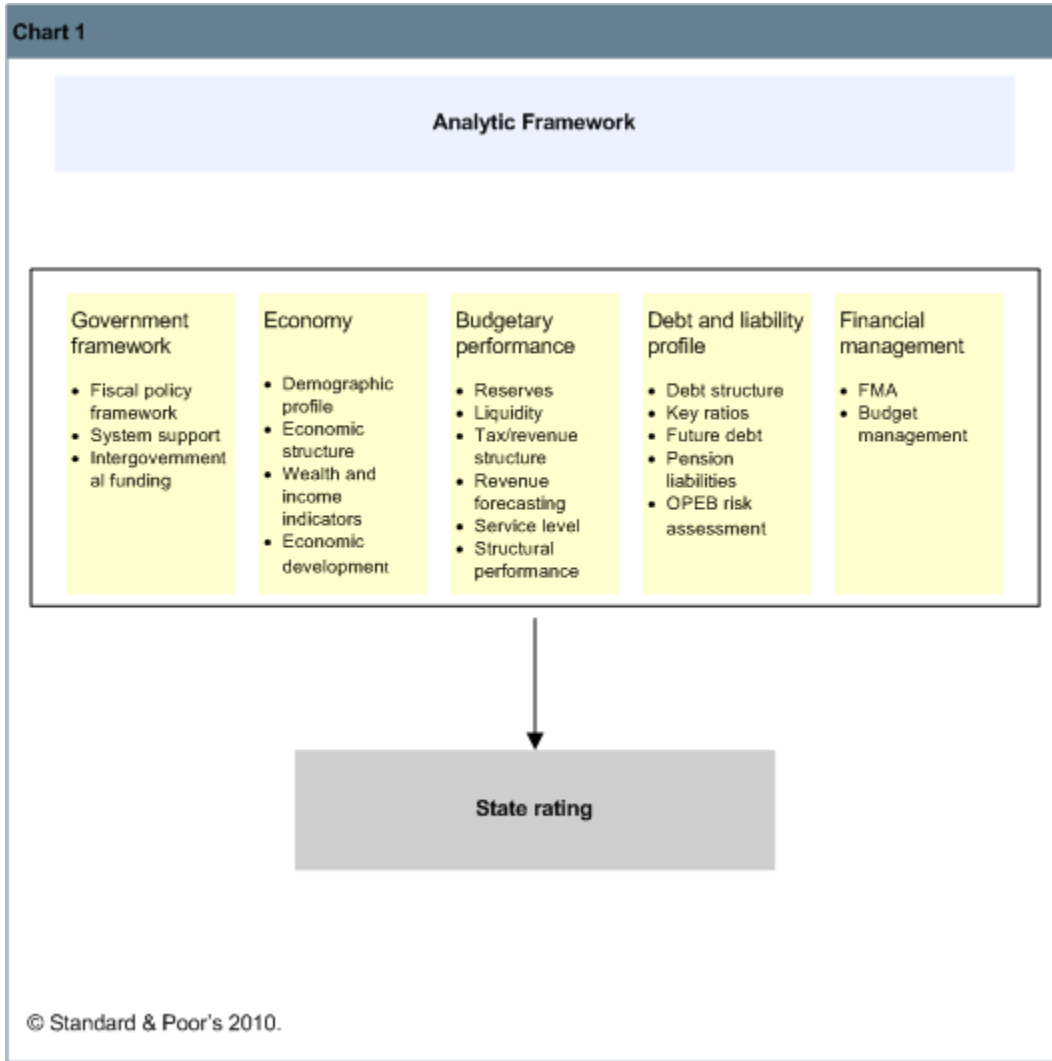
## METHODOLOGY

### Overall Analytic Framework For U.S. States

Standard & Poor's assigns credit ratings to U.S. states based on our qualitative and quantitative analysis of a range of financial, economic, managerial, and institutional factors. Our overall analytic framework would center around the following factors:

- Government framework;
- Financial management;
- Economy;
- Budgetary performance and flexibility; and
- Debt and liability profile.

Each of these factors would be assessed utilizing various credit metrics. The metrics are all scored on a scale from 1 (the strongest) to 4 (the weakest). For each metric there may be several indicators evaluated to develop the metric score. In this case we would score each indicator individually on the same scale and average the scores to develop the score for the metric. The metrics for each factor would be averaged in order to develop a composite score for each factor. The scores for the five factors are combined and averaged to arrive at an overall score which is then translated to the rating as illustrated in Table 1. We will weight each of these factors equally when assessing the individual state credit rating.



The table below indicates the state rating level that would most likely be achieved based on the overall score assigned to each state, with one notch flexibility up or down.

**Table 1**

<b>Rating Levels And Scores</b>	
<b>Score</b>	<b>Rating</b>
1-1.5	AAA
1.6-1.8	AA+
1.9-2	AA
2.1-2.2	AA-
2.3-2.4	A+
2.5-2.6	A
2.7-3	A-
3.1-4	BBB Category

### **Other factors impacting state ratings**

The following factors may impact or override the rating conclusions reached on the methodology outlined herein.

**Notching down factors.** If one of the metrics carries a score that is substantially worse than the average or is assessed at '4' for the budgetary performance or debt and liabilities metrics, the rating could be one or two notches lower than the rating indicated in table 1 and the methodology outlined herein. A weak liquidity position or a high level of risk relating to derivatives/variable rate debt would be examples.

**Overriding factors.** As mentioned above, we view U.S. states as generally having a strong commitment to their legal obligation to pay debt despite difficult or stressful economic cycles. Any change in this willingness to support debt would translate to a rating far below what is indicated. In addition, if we think liquidity deteriorates suddenly and access to the capital markets is questionable, a rating could also be more than a category below what is indicated in table 1 and the methodology outlined below.

### **Impact of institutional framework on state ratings**

Under the U.S. Constitution, state governments have broad powers to establish their own tax structures and expenditure responsibilities and therefore possess unique administrative and financial flexibility. State public finance systems are in our view mature and accounting standards are well-developed, contributing to a high level of transparency. States typically have balanced-budget requirements and well-developed revenue and expenditure monitoring policies and procedures. The priority of payment for debt service is generally defined and capital market access is also generally well-established. As noted above, we believe U.S. states generally have a strong commitment to their legal obligation to pay debt despite difficult economic cycles. U.S. states may not file for bankruptcy under the U.S. Bankruptcy Code. We believe that these factors contribute to a strong institutional framework and a strong debt repayment history for the sector. These unique characteristics, considered under our analytic methodology for rating states, generally contribute to a high credit profile for the sector, typically in the 'AA' category or higher.

In differentiating state ratings above the 'AA' rating level or identifying circumstances in which ratings might be below the 'AA' category, our methodology would include a review of various quantitative and qualitative measures relating to management and government framework, financial performance and flexibility, economy, and debt and liability profile. Under the proposed methodology, our quantitative analysis of states would incorporate a review of a number of measures of financial and economic performance as well as debt and other liabilities. Our qualitative analysis would assess the government framework and how we think it affects state powers, the political environment, and management policies and practices. While many of the quantitative measures tend to be cyclical over time, we believe the qualitative aspects of the criteria allow for rating stability through economic cycles.

### **Relationship to sovereign rating**

State ratings are not directly linked to the rating of the U.S. The rating on a state or local government can be higher than a sovereign rating (see "Methodology: Rating A Regional Or Local Government Higher Than Its Sovereign," published Sept. 9, 2009) if, in our view, the individual credit characteristics remain stronger than those of the sovereign in a scenario of economic or political stress. Other factors that would be reviewed include what we consider to be a predictable institutional framework that limits the risk of negative sovereign intervention and the ability to mitigate negative intervention from the sovereign due to high financial flexibility and independent treasury management.

### **Stress scenarios and calibration of state ratings**

To calibrate state ratings, Standard & Poor's uses the stress scenarios associated with each rating category level, as presented in Appendix IV of the criteria article "Understanding Standard & Poor's Rating Definitions," published

June 3, 2009, (hereafter called the "stress scenario article").

Given the institutional framework described above, we believe that a state should be able to attain at least a 'AA' rating level, because we expect it should be able to meet its financial obligations, even in a very severe stress scenario, in which GDP could decline up to 15%, unemployment could go up to 20% and stock markets could decline up to 70% as defined in the stress scenario article.

We base our opinion on the fact that states have a broad range of options to mitigate the impact of a very severe economic crisis. These options include revenue adjustments, managing disbursements, and accessing reserves or other forms of liquidity when necessary in order to restore budgetary balance. In this context, we believe that a state with an above-average credit profile (generally representative of a wealthy and well-diversified economy, good management, good liquidity, and flexibility) should be able to withstand this level of stress and still meet its financial obligations.

## Government Framework

We believe that the government framework in place for a state is an important factor in establishing a rating. Each state has a unique government structure and political environment that can affect its powers as defined by federal and state law and influence its fiscal position. The three metrics we use to assess government framework are: fiscal policy framework; system support (federal government); and intergovernmental funding framework (local government).

### Fiscal policy framework

The framework within which a state taxes, spends, and issues debt influences a state's ability to manage through various economic stress scenarios in our opinion. When evaluating the fiscal policy framework of a state we analyze both constitutional and statutory provisions around the following:

- **Balanced budget requirement:** In contrast to the federal government and many local governments, most U.S. states are required by statute or their constitution to propose or adopt a balanced budget. Others are required to ensure balance during the fiscal year. In our opinion, this requirement tends to force budgetary discipline.

**Table 2**

Balanced Budget Requirement	
Score	
1	Constitutional/statutory requirement for budget balance when introduced and adopted. The budget is required to stay in balance during the year.
2	Budget must be balanced when introduced or when adopted but no legal requirement to maintain balance during the year.
3	There is no requirement to propose or adopt a balanced budget but there is a track record of doing so.
4	No balanced budget requirements exist.

- **Tax structure:** Most states enjoy the flexibility to set and modify tax rates, deductions, exemptions, and collection dates. If this can be achieved without major constitutional, legal, or administrative difficulty, these discretionary powers can quickly and favorably influence a state's fiscal condition.

Table 3

Tax Structure	
Score	
1	State has legal autonomy to raise taxes, revenues (rate and base); no constitutional constraint or extraordinary legislative threshold.
2	There are some legal restrictions on adjusting certain taxes or revenues but not all revenues.
3	There are constraints (constitutional, high legislative threshold, voter approval) to adjusting taxes or revenues.
4	There are multiple constraints including constitutional, statutory, and voter approval requirements relating to all key revenue sources.

- **Disbursement autonomy:** While states generally have broad service responsibilities, most enjoy considerable discretion in establishing funding levels for state assistance, shifting responsibilities to local government and establishing or changing disbursement dates for various programs. This affords a high level of control over budgets and cash flow which can positively affect fiscal standing.

Table 4

Disbursement Autonomy	
Score	
1	High degree of flexibility in adjusting disbursements; extends to nearly all program areas.
2	Flexibility exists but may not be for all program areas.
3	Flexibility is constrained; contributes to budgetary inflexibility.
4	Flexibility to adjust disbursements is extremely limited.

- **Voter initiatives:** A state's autonomy can be limited and this can affect relative credit standing in our view. Where decisions about specific tax or revenue levels, spending allocations, and debt issuance are placed in the hands of the electorate, states have reduced flexibility to respond to changing economic or financial situations, in our opinion.

Table 5

Voter Initiatives	
Score	
1	Not a voter initiative state; sovereign powers are strong.
2	State has some initiative activity but it has not negatively affected operations or limited flexibility over time.
3	State has an active initiative process which has affected state revenues and/or expenditures and flexibility has been diminished.
4	Initiative process is highly active and has substantially impaired operations of government.

- **Legal framework for debt:** Legal guidelines and the specific security features relating to GO debt are analyzed. This review would include the nature of the repayment pledge, the priority of payment for debt service, amortization features that are imbedded in constitution or statute, and legal restrictions related to debt issuance.

Table 6

Legal Framework (Debt)	
Score	
1	High degree of legal flexibility to issue debt for a range of purposes. There is a strong legal priority for payment of debt.
2	Some legal limitation on debt issuance which has not been restrictive. There is a legal priority for debt but it is not a first dollar priority.
3	Very limited legal ability to issue debt; lack of voter support or limited access to alternative debt structures. There is no established legal priority for debt.
4	Cannot issue debt, there is a lack of voter support. There is no priority of payment for debt service.

**System support (federal government)**

System support is an assessment of the predictability of the public finance system in a federal context, the match between revenue sources and their responsibilities, the degree of transparency and accountability, as well as the existence of a prudent fiscal policy framework. Included in this assessment is the predictability and stability of funding flows from the federal government to states (see "Methodology: Assessing The Institutional Framework For International Local And Regional Governments," published July 30, 2009).

**Intergovernmental funding framework (local government)**

How services and programs are provided across state and local governments and what the funding relationship has been over time are in our view important considerations because they influence revenues, spending and overall budget flexibility.

Funding of local governments and school districts is a large part of each state's budget. We review the legal requirements and historical patterns of state assistance. If a state has broad discretion in adjusting spending flows to local governments, it will have a high level of control over budgeting and cashflow. Conversely, limited legal capacity to adjust programs and spending levels or limited political willingness to do so translates into less autonomy.

**Table 7**

Intergovernmental Funding Framework	
Score	
1	Level of assistance to local governments is limited or highly flexible from a legal standpoint or by historic patterns; strong ability to downstream reductions.
2	Level of assistance to local governments is high; flexibility (either legal or practical) may be limited at times.
3	Level of assistance is high and is not flexible from a legal or practical standpoint; ability to downstream budget issues is restrained.
4	Very limited flexibility exists.

**Financial Management**

The rigor of a government's financial management practices is an important factor in Standard & Poor's analysis of a government's creditworthiness. Managerial decisions, policies, and practices have a direct effect on a government's financial position and operations, debt burden, and other key credit factors. A government's ability to implement timely and sound financial and operational decisions in response to economic and fiscal demands is in our view a key factor in assessing credit quality. Both the financial policies and the framework for budget management are the key metrics to assessing financial management and are scored individually and averaged to develop an overall score for financial management.

**Financial Management Assessment**

Standard & Poor's analyzes the impact of financial management policies and practices through the use of the Financial Management Assessment (FMA). The FMA attempts to provide a transparent assessment of a government's financial practices and to highlight aspects of management that are common to most governments in a consistent manner (see "USPF Criteria: Financial Management Assessment", June 27, 2006). Based on the current framework, a state is assigned a "strong", "good", "standard" or "vulnerable" assessment.



## Budget management framework

While the FMA outlines policies in a range of areas including budget amendments, the framework for managing the budget (including legal framework as well as the policies in practice) is a factor in the high credit profile of U.S. states and we believe it is important in differentiating state credit ratings above or below the 'AA' rating level.

In assessing the budget management framework, we review whether:

- There is a formal schedule for providing revenue and spending forecast updates throughout the year;
- There are frequent (two or more times) updates during the fiscal year, especially during weak economic periods;
- Constitutional or statutory mechanisms are in place which force action on budget imbalance through the year;
- Budget adjustments are implemented in a timely manner to restore balance, generally within 30 days of budget gap being identified;
- There is a legal requirement to end the year in balance or a strong track record of doing so absent a legal requirement;
- The executive branch/budget office has broad powers to adjust appropriations;
- Legislative approval is required to restore balance but the response is timely (adjustments begin within about 30 days of the gap being identified);
- There is a well-established track record of making difficult and politically unpopular revenue and spending decisions in order to restore balance during the fiscal year;
- Gap-closing solutions are generally focused on structural budget balance or do they typically rely on non-recurring revenue or spending actions; and
- Deficits are not carried forward.

A state that meets all but one or two of the above budget management items would likely receive the highest score for its budget management framework while a state that exhibits only one or two of these characteristics would likely result in the lowest score.

**Table 8**

Budget Management Framework	
Score	
1	Framework is formalized, strong, and proactive; adjustments are timely, with emphasis on structural balance.
2	Framework is good but process may be less defined and adjustments may be less timely.
3	Monitoring is established but adjustments are not timely and response is uneven.
4	Framework is weak which prohibits timely adjustment; deficits carry forward into the next fiscal year.

## Economy

Economic factors are an important component of our credit review. We believe that economic fundamentals play an important role in revenue generation and also influence spending and infrastructure requirements for state governments. We evaluate a range of economic indicators and evaluate the match between a state's economic profile and tax structure. Our economic review focuses on four metrics: demographic profile, economic structure including employment composition and regional economic opportunities, wealth and income indicators, and economic development and growth prospects. Each of these metrics is scored (1-4) and averaged to assess the overall economic fundamentals of a state. Where there are multiple indicators for each metric, they are also scored (1 to 4) and averaged to develop the metric score.

## Demographic profile

We believe that the structure and growth characteristics of a state's population base provide critical information about revenue-generating capability as well as the costs of providing services and infrastructure. It is also a factor in revenue distribution at the federal level. We analyze historic population trends for each state relative to national and regional trends. We also focus on projections for future growth or decline. The age profile of the population base and changes in it over time are also considerations due to the high proportion of state spending tied to education and social service programs. To assess this we review the age dependency ratio calculated by the U.S. Census Bureau. The key indicators of for demographic profile are:

- Population growth trends; and
- Age distribution of population.

**Table 9**

Demographic Profile		
	Indicators	
Score	Population growth trends	Age dependency ratio*
1	Strong population growth relative to U.S.	Relatively low dependent population (more than 5% below U.S. levels).
2	Stable population trends; steady growth over time in line with U.S.	Dependent population ratio in line with U.S. levels.
3	Demographic trends are negative at periods.	Dependent population is well above U.S. (0- +5%).
4	Growth has declined for more than a decade.	Dependent population has significant variance (more than 5%-10% from U.S.).

\* From the U.S. Census.

## Economic structure

The composition, output, and diversity of the employment base plays a role in the link between a state's economy and its ability to generate revenues. A state's economic structure can also influence the level of services it provides and can contribute to spending growth pressures. A review of the economic structure, growth trends, and how various indicators perform during economic cycles allows us to assess the relative stability or cyclical nature of a state's economy. We also review changes in the structure of the economy over time to assess diversification trends and how this may affect future economic performance. The key indicators are:

- Employment composition by sector and how it compares to the national distribution;
- Employment, labor force, and unemployment trends;
- Retail sales growth trends and key components of retail activity; and
- Gross state product.

**Table 10**

Economic Structure				
	Indicators			
Score	Unemployment	Employment composition/diversity of base	GSP* per capita	GSP growth
1	Rate 2%+ below U.S.	Employment mix in line with U.S.; limited concentration; performance tends to be less cyclical than U.S.	>100% of U.S.	Growth consistently above U.S.
2	Rate within 2% +/- of U.S.	Employment base exhibits some concentration that contributes to more cyclical performance than the U.S. economy as a whole.	>85% of U.S.	Growth in line with U.S.
3	Rate 2%+ above U.S.	Employment base is concentrated; performance has been cyclical and weak relative to the U.S. over the past decade	>75% of U.S.	Growth below the U.S. periodically.

**Table 10**

<b>Economic Structure (cont.)</b>				
4	Rate 5% or more above U.S.	Employment base has high level of concentration relative to U.S. distribution which has contributed to cyclical performance and weak trends over decades.	<75% of U.S.	Growth has consistently been below U.S. levels.

\* GSP - gross state product.

We evaluate these indicators in the context of regional and national performance. In addition to the key indicators, we analyze the largest employers relative to current economic conditions to assess the potential for cyclical performance and how those firms might affect future growth and development. We include regional patterns of employment in the review if an individual state benefits from proximity to other labor markets.

### Wealth and income indicators

We consider wealth levels of a state as part of the economic review. How income compares to national levels and how growth rates have trended over time can provide useful information about ability to tax residents. While higher wealth and income levels often translate to a high ability to pay taxes, they can also translate to a higher level of revenue volatility for states as most rely on personal income tax revenue and capital gains performance. We also evaluate income generation by sector. A higher than average (relative to U.S. distribution) contribution from certain sectors is important to consider as it relates to the ability to generate revenues and assess the potential for growth and the volatility of resources. Since state's fund a range of social service programs geared toward low income residents, we also analyze the disparity in income in a state. An income distribution that lacks extremes on either end may contribute to greater revenue stability and less spending pressure so the absolute level of income may be less telling for states from a fiscal standpoint. The key indicators are:

- Per capita personal income;
- Per capita personal income growth rates; and
- Income by sector relative to U.S. average.

**Table 11**

<b>Income And Wealth</b>			
<b>Indicators</b>			
<b>Score</b>	<b>Per capita personal income rank</b>	<b>Personal income growth rates</b>	<b>Income by sector</b>
1	>100% of U.S.	Positive growth relative to U.S.; less cyclical.	Income by sector in line with U.S.; limited concentration; performance tends to be less cyclical than U.S.
2	>85% of U.S.	Steady growth but may be uneven relative to U.S. and more cyclical over time.	Income base exhibits some concentration that contributes to more cyclical performance than the U.S. economy as a whole.
3	75%-85% of U.S.	Growth is evident at times but is consistently below U.S.	Income base is concentrated; performance has been cyclical and weak relative to the U.S. at times.
4	<75% of U.S.	Performance below U.S. consistently and trends have been negative over economic cycles.	Income base has high level of concentration relative to U.S. distribution which has contributed to cyclical performance and weak trends for at least a decade.

### Economic development/growth prospects

In addition to historic economic trends, we consider each state's economic development initiatives and future growth prospects as they are likely to affect future revenue generating capacity. We have identified areas that we believe will drive future development. A state that displays a preponderance of attributes in a given section below will be assigned that score. We express our assessment of economic development prospects as follows:

Table 12

Economic Growth Prospects	
Score	
1	The state's climate, location, resources, employment opportunities, affordability, or tax structure are likely to support above-average demographic trends or significant private sector investment. Major urban centers are vibrant and continue to attract in-migration and investment. Key employers and higher education anchors are substantial and are catalysts to continuous investment over time. Key employment sectors are tied to areas that are expected to grow at an above-average pace. Infrastructure is in place to support growth and development.
2	The state's climate, location, resources, employment opportunities, affordability or tax structure should provide for growth in population and employment over time but growth across the state may be uneven. Some, but not all, of the urban centers are attracting investment and are major centers of job creation. Higher education anchors are not situated near major urban center or major employment centers, which could limit their effectiveness. Concentration of economic activity in certain sectors may limit overall growth in the state as these industries have weak or below-average growth prospects.
3	We expect the state to experience limited growth or possibly decline for a range of reasons including reliance on sectors that are experiencing structural decline; affordability/tax structure present a competitive disadvantage.
4	Growth prospects are not evident and there is little focus by the state on economic development initiatives.

## Budgetary Performance and Flexibility

While states prepare audits each year on a generally accepted accounting principles (GAAP) basis, budget development, appropriations, budget monitoring, and reserves are all expressed on a budgetary basis, which is more closely aligned with a cash basis presentation. While budget-based financial information is a primary focus of our financial review because it is how state finances are managed on a day-to-day, we analyze the audited financial statements and variations between GAAP and budget-based financial disclosure to gain a more complete understanding of a state's financial condition. We assess six key metrics in order to evaluate budgetary performance and flexibility. These metrics are scored individually and averaged to develop an overall assessment of budgetary performance and flexibility. Where there are multiple indicators for each metric, they are also scored (1 to 4) and averaged to develop the metric score.

### Reserves

State revenues are cyclical and generally respond swiftly to changing economic conditions. Looking at the history of revenue shortfalls for states, no budget reserve fund could be sized to completely address the potential for volatility in a severe recession or revenue downturn. It is our opinion, however, that states with well-funded reserves will have maximum flexibility to address shortfalls when they occur.

**Formal budget reserves.** The history of state budget reserves is that they have been increased in times of economic growth and depleted in times of economic decline. Over the past two decades there has been a trend by states toward greater formalization of budget reserve policies. We believe that a clearly articulated policy and steady funding of reserves is important so the reserves can be used to manage through economic cycles. In addition to the level of funding, our review includes how the size of the reserve compares to historic revenue and spending volatility, and the track record of funding the reserve, including any replenishment mechanisms.

Table 13

Budget-Based Reserves Relative To Revenue And Spending	
1	Above 8%
2	4%-8%
3	1%-4%
4	Below 1%

Note: Refers to reserve policy levels and not actual funding level as we observe that reserves are often depleted through economic cycles.

**Other reserves.** In addition to formal budget reserves, we review financial reserves and balances identified in funds outside of the state's main operating fund or general fund that may be available for budget purposes.

**Table 14**

Other Reserves	
Score	
1	More than 2%; these reserves are available without legislative approval for transfer.
2	More than 2% but transfer/use requires legislative approval.
3	Up to 2%; transfer may or may not require legislative approval.
4	No available reserves in other funds.

Note: Other reserves might be a combination of other funds outside of the state's main operating fund (non-general fund).

### Liquidity

Standard & Poor's believes that a state's liquidity position is an important component of its overall credit profile. In analyzing liquidity, we review the following areas:

**Liquidity management policies/practices.** Nearly all states have well-developed cash monitoring capabilities, including daily monitoring of balances, and well-developed forecasting tools that enable swift reaction to imbalances. We also consider the ability to adjust disbursements and collections.

**Cash flow predictability.** The fluctuation in receipts and disbursements during the year and determining mismatches and how this changes from year to year.

**Internal cash flow generation capacity.** States often have broad discretion to access liquidity from other than general funds. We examine whether all funds are commingled--which provides a high degree of flexibility--or whether legislative or executive authority is required to shift resources from other funds to cover key operating fund requirements. We also factor into our review of liquidity the level of reserves available for cash flow purposes across state government.

**External cash flow borrowing.** We review borrowing cash flow purposes and how that has fluctuated over time.

**Table 15**

Liquidity Management And Position	
Score	
1	Strong cash monitoring capabilities; broad authority to access liquidity from pooled funds which allows for highly predictable cash management., receipts and disbursements are aligned; broad authority to adjust disbursements; little or no reliance on external borrowing.
2	Strong cash monitoring capabilities, access to pooled cash is available but may be limited to certain funds; receipts and disbursements may not be totally aligned during the fiscal year; well-defined contingencies are in place to augment internal resources; external borrowing is conducted with ease and stable over time relative to the size of the budget; ability to manage disbursements may be limited in some areas.
3	Cash monitoring is comprehensive; access to internal liquidity is not sufficient to address timing or is restricted; recurring receipts and cash disbursements are not aligned and there may be variability that leads to external borrowing requiring regular adjustments through the course of the budget year, internal estimation of cash flow needs difficult to predict.
4	Liquidity is weak and needs are volatile at times; state is meeting certain obligations only by deeply delaying payment on other obligations; ability to access pooled cash is limited; external borrowing is common and not predictable in terms of size and frequency; borrowing expanding relative to the size of the budget and may cross fiscal years.

### Tax/revenue structure

Levying taxes has been a key tool for states in managing through a range of economic cycles. We believe that a state's tax structure, including the range of taxes, the ability and willingness to adjust them, and how they align with

economic activity within its borders is an important credit factor.

**Diversity of revenue sources.** We evaluate the range of taxes levied or revenues generated by each state and what the relative contributions are from each source. This includes a review of both the tax base and the rates to understand how they align with a state's economy and ultimately how they affect the volatility and predictability of revenues.

**Table 16**

Revenue Diversity Score	
Score	
1	State has contributions from at least two major sources that generally contribute more than 15%-20% each.
2	State relies on one key revenue source, generally providing more than 65% to fund operations but revenue aligns with key economic strengths of the state.
3	State relies on one key revenue source for more than 65% of revenues; key revenue source does not align closely to economic fundamentals.
4	State relies on one revenue source to fund more than 90% of operations.

**Revenue adjustment history.** While the legal framework for levying taxes and adjusting the tax rate and base are measured as part of the government framework, the practical ability and willingness are assessed as part of the financial flexibility and performance.

**Table 17**

Revenue Adjustment History	
Score	
1	Strong track record of revenue adjustments; adjustments are timely.
2	There is a demonstrated track record revenue adjustments; response is generally less timely and may lag by a fiscal year.
3	Revenue adjustments are made periodically but they are not timely and may lag structural imbalance by more than a year.
4	Revenue adjustments are not implemented.

### Revenue forecasting process

State revenues tend to be volatile during economic downturns because they rely on personal income tax, sales tax, corporate income tax, and other economically sensitive sources. In our view, these sources tend to react more swiftly to economic growth and decline and are more difficult to forecast than property tax revenues. As a result, the revenue forecasting process is part of the review for each state. Specifically, we review what economic sources and projections provide the foundation for the forecast and how the forecast compares to other economic projections, as well as those of the state's peers. We also evaluate the process in place to establish the forecast: is it a non-partisan, consensus-revenue estimating process or a forecast negotiated by the executive and legislative branches through the budget adoption process. Forecasts would be analyzed to determine if they align with the current economic environment and historic performance.

**Table 18**

Revenue Forecasting Process	
Score	
1	There is a formal, non-partisan, consensus revenue forecasting process that reviews forecast several times during fiscal year.
2	There is a formal and detailed revenue forecast process; may be done by executive and legislative branch separately with an attempt to align the forecast in advance of budget approval based on economic considerations.
3	Revenue forecast is detailed and comprehensive but final outcome may be "negotiated" and there is some level of political influence over outcome.
4	There is no formal revenue forecasting process.

## Service levels and expenditures

The range and level of services provided by each state varies significantly. We believe that expenditure composition and how this has changed over time is useful in assessing fiscal stability and flexibility.

**Legal framework.** The legal framework for funding various service responsibilities is important to the extent that it creates or constrains budget flexibility. Spending for Medicaid is an example of a federally mandated program that is costly and usually difficult to adjust. Certain states provide a high level of services under the program, while others provide less. These differences will affect overall budget flexibility. Other services may have a constitutional or statutory basis of funding. Funding for K-12 education is a constitutional obligation for nearly all states. A state facing a legal challenge to its funding system will often have additional spending requirements, which could diminish flexibility.

**Discretionary vs. non-discretionary.** When evaluating the range of services provided we analyze which are non-discretionary (mandates, statutory, constitutionally required, or contractual) and would be difficult to reduce versus those that are discretionary.

**Predictability.** When evaluating state spending, we also review how predictable the expenses are: do they fluctuate with the economic environment (social service programs are an example), are they regularly tied to other statutory actions (stringent prison sentencing laws translating to higher prison costs), or influenced by other policies or factors specific to a state (debt vs. pay-as-you-go policies or collective bargaining agreements). In our opinion, services that are not predictable contribute to volatility.

**Table 19**

Service Levels/Expenditures	
Score	
1	Expenditures are predictable and do not vary significantly from budgeted expectations; high degree of flexibility to reduce services/expenditures in most program areas. This flexibility is measured in terms of the legal ability and the political willingness.
2	Expenditures are generally predictable but may experience cyclical trends; ability to cut services and expenditures is good, but may not extend to all program areas from a practical or legal standpoint.
3	Expenditures tend to be cyclical and less predictable with variances relative to budget common in certain program areas; ability to cut services/ expenditures is adequate but many program areas are excluded from a practical or legal standpoint.
4	Expenditures are very cyclical and unpredictable and variances relative to the budget are common for many program areas; the state has exhibited a persistent reluctance or inability to reduce expenditures and service levels.

## Structural budget performance

We consider a state's budget to be structurally balanced if current revenues match current operating expenditures. We believe that having a structurally balanced budget is an important measure of fiscal performance and we review a state's performance in achieving this through economic cycles. We recognize that structural balance is difficult to maintain during economic downturns when revenue performance is weak, but we believe it is also difficult during periods of strong economic growth when excess revenue can lead to expansion of programs and services. Most state governments that do multi-year financial planning will almost always show out-year gaps regardless of the economic climate as scarce resources are balanced against virtually unlimited spending needs. Periods of imbalance are common for states but we believe that a track record of aligning recurring revenues and expenditures over time is an important element of fiscal performance.

Table 20

Structural Budget Performance	
Score	
1	Surpluses are regularly recorded in periods of positive economic growth; surpluses are used to fund reserves and other non recurring items. In periods of economic decline, focus on addressing budget imbalance includes structural solutions (generally more than 50%) rather than all one time measures.
2	Balanced operating results are typically achieved during periods of positive economic growth; commitment to reserves and non-recurring program areas is not formalized and may not be consistent; in periods of decline, focus on budget balance may be more reliant on non-recurring measures (more than 50%) to restore balance.
3	Balanced operating results may be achieved in positive economic periods but there is limited commitment to reserves and non-recurring program areas (surpluses largely fund higher recurring spending). In periods of economic and revenue decline, focus on budget balance may be more reliant on non-recurring measures (more than 75%) to restore balance.
4	There is limited focus on structural budget balance; deficits are regularly carried forward into future fiscal years and reserves are not funded in periods of positive economic growth.

## Debt And Liability Profile

Debt and liability analysis remains a significant focus of Standard & Poor's overall credit evaluation of states. In particular, we are interested in debt service expense and how it might compete with funding of other long-term liabilities and operating costs for future tax streams and revenue sources. In general, serial bond issues are the most common form of financing which allows for predictable servicing costs. We evaluate four key metrics and for each metric we score key indicators. Each of these indicators is scored separately and then averaged to develop the overall score for the metric.

Our review of a state's debt profile includes an emphasis on debt management which is outlined in the FMA. States with high ratings tend to have formal and well-defined debt management policies, which typically include guidelines for issuing debt, affordability parameters, and policies for variable-rate debt and use of derivatives.

### Debt structure

Standard & Poor's debt ratio calculations for states aggregate all tax-supported obligations, including GO bonds, appropriation obligations, and special-tax bonds such as sales, personal income, and gas tax bonds. In general, our tax-supported debt calculation will not include debt that is issued for true enterprise or self-sustaining purposes, such as toll revenue bonds if revenues are sufficient to cover debt service costs (see "USPF Criteria: Debt Statement Analysis," Aug. 22, 2006). Once we have determined a net direct tax supported debt figure, we calculate various ratios.

We do not include grant anticipation revenue (GARVEE) bonds in state debt calculations if they are payable solely from dedicated federal revenues. We will also exclude bonds secured by tobacco settlement revenues from state debt calculations if they conform to our stress scenarios for rating such debt and are payable exclusively from settlement revenues. There have not been a wide range of securitizations of assets or future revenues. We would evaluate each on a case-by-case basis to determine if it would be included as tax supported debt or a contingent liability. We exclude contingent obligations or moral obligation debt from the tax-supported debt calculation if there has been no state support required. As the use of public-private partnerships expands, there will be careful evaluation of the nature of a state's obligation under various long-term agreements in determining whether the obligation is considered part of a state's tax-supported debt burden or would be considered a contingent liability.



## Key debt ratios

Standard & Poor's examines a variety of ratios to measure debt structure, including:

**Debt per capita.** This ratio establishes comparative ranges based on the population that is served and pays for the debt.

**Table 21**

Tax-Supported Debt Per Capita	
Low (1)	Below \$500
Moderate (2)	\$500-\$2,000
Moderately high (3)	\$2,000-\$3,500
High (4)	Above \$3,500

**Debt as a percentage of personal income.** We consider this ratio to be relevant because we believe the capacity to pay is a critical factor in debt analysis.

**Table 22**

Tax-Supported Debt/Personal Income	
Low (1)	Below 2%
Moderate (2)	2%-4%
Moderately high (3)	4%-7%
High (4)	Above 7%

**Debt service as a percentage of expenditures.** We believe this ratio is an important indicator, and one that states have emphasized more than other measures to assess affordability. Debt service to operating revenue and debt service to operating expenditures usually track closely, although distortions in the first ratio can occur if nonrecurring revenues are factored into state revenue bases.

**Table 23**

Tax-Supported Debt Service As A % of General Government Spending	
Low (1)	Below 2%
Moderate (2)	2%-6%
Moderately high (3)	6%-10%
High (4)	Above 10%

**Debt to state gross domestic product (GDP).** We have not used this ratio widely in the past but anticipate reporting on it in the future. We use this measure widely for sovereign and non-U.S. public finance and we believe it should allow enhanced comparability for government ratings.

**Table 24**

Tax-Supported Debt As A % Of State GDP	
Low (1)	Below 2%
Moderate (2)	2%-4%
Moderately high (3)	4%-7%
High (4)	Above 7%

**Debt amortization.** Serial amortization is a common feature for government debt issuance in the U.S. Debt service relative to the size of the budget is in our view an important affordability measure but needs to be evaluated in the context of the overall debt amortization schedule. A low debt service carrying charge ratio could simply be a

function of a very slow 30-year amortization, which would be viewed differently from a 15-year schedule. The benchmark of 50% of principal repaid in 10 years is considered average. This indicator assumes serial debt amortization where rapid amortization can allow new debt to be issued without affecting debt burden measures.

**Table 25**

<b>Debt Amortization (10 year)</b>	
Very rapid (1)	80%-100%
Rapid (2)	60%-80%
Average (3)	40%-60%
Slow (4)	Less than 40%

**Derivative and variable rate debt.** As part of the overall debt profile we also review the use of derivatives, variable rate debt, bank bond exposure, liquidity calls, and acceleration provisions relating to variable rate debt. With respect to derivatives, we analyze the objectives in entering into these contracts (e.g., hedging, cost reduction), the type of risk they are designed to mitigate, the extent of their use, management's tolerance for risk, and the controls in place to monitor these instruments. We also evaluate the risk associated with the swap portfolio (see "USPF Criteria: Municipal Swaps," June 27, 2007, and "USPF Criteria: Debt Derivative Profile Scores," March 27, 2006) and factor it into the overall analysis of debt structure. We also review policies relating to variable rate debt issuance and how the overall debt program is managed. If we assess a high level of risk (for example a DDP score of 4) related to any of these areas, it could potentially become a "notching down" factor in assessing the rating.

### Future debt

Although a state's current debt burden is important, we believe it should be viewed in the context of future needs. This would include a review of the processes for authorizing debt, the types of capital and infrastructure a state is responsible for, and the timeframe for issuance. The legal authorization and practice of issuing debt for operating purposes and how this is amortized is also a factor in our review of a debt profile. We would also consider other long-term funding requirements and contingent liabilities in this measure including payments associated with litigation or other long-term liabilities that could alter the future debt or fixed cost burden.

**Table 26**

<b>Future Debt</b>	
<b>Score</b>	
1	Limited future debt planned; will generally be issuing what is amortized; issuance will adhere to affordability guidelines and debt indicators are not expected to move out of the current range.
2	Debt issuance is expected to exceed amortization; issuance may not follow an affordability guidelines; issuance could slightly elevate ratios but will remain in the current range.
3	Significant additional debt is planned; indicators will likely elevate above current range; investment is for capital, infrastructure or strategic economic investment.
4	Significant additional debt is planned, ratios will elevate above current ranges; debt issuance is centered on funding operations rather than capital.

Many non-debt liabilities have created funding challenges for states. While these liabilities or obligations do not necessarily constitute debt, they represent spending requirements that states are obligated to fund or raise revenue for and which, politically or legally, they may have limited ability to scale back. Included in this category are unfunded pension liabilities, school building aid programs, other post employment benefit liabilities (OPEBs), natural disaster entities, unemployment compensation, and workers compensation funds. Many states have had to convert some of these soft liabilities to actual bond obligations or have had to devote a greater share of total budget resources to them.

## Pension liabilities.

We annually review state pension liabilities and trends related to funding progress. This analysis includes changes in assets and liabilities, funded ratios, and unfunded actuarial accrued liabilities. Pension asset valuations can change, as can the actuarial liabilities. A state's commitment to funding the actuarial required contribution and how substantive and volatile these contributions are relative to the total budget are key credit considerations. While we measure pension liabilities along with debt indicators relative to population and income, these liabilities are not included in the debt ratios that we report on due to variation in how the liabilities are calculated. Specifically, there are a broad range of actuarial methods and assumptions allowed by the Governmental Accounting Standards Board (GASB) for governments in the U.S. and interest earnings assumptions differ by state.

**Table 27**

Pension Funded Ratio (3-Year Average)	
Strong (1)	90% or above
Above average (2)	80%-90%
Below average (3)	60%-80%
Weak (4)	60% or Below

**Table 28**

Pension Funding Levels	
Strong (1)	Consistently funds actuarial required contributions (ARC).
Above average (2)	Funds ARC in most years but occasionally contributes less.
Below average (3)	Has not funded ARC for 3 years.
Weak (4)	Has not funded ARC for more than 3 years.

## Other post employment benefits

All states are now reporting OPEB liabilities pursuant to GASB Statement 45. Currently, OPEB expenditures are funded generally on a pay-as-you-go basis and GASB Statement 45 does not require funding of the liability. Under the statement, liabilities attributable to OPEB and the annual required contribution for employers are actuarially determined and reported. From a credit standpoint, OPEB liabilities and funding strategies will be evaluated similarly with the evaluation of pension obligations. This analysis will include a review of the historical and projected pay-go costs for OPEB and how that compares to the actuarial required contributions from a budgetary standpoint. The legal and practical flexibility that a state has to adjust the liabilities and the overall strategy to manage the cost of these benefits will affect future contribution rates and budgetary requirements. Similar to pensions, the annual fixed costs and potential for growth will be evaluated as part of an overall review of a state's debt and liability profile, but will not appear on the debt statement.

**Table 29**

OPEB Risk Assessment	
Low (1)	Limited benefits provided or benefit consists of allowing some participation in the health plan (cost paid entirely by the retiree, implicit subsidy recorded), high level of discretion to change benefits, pay-go costs are not significantly different from the actuarial required contribution.
Moderate (2)	Moderate/average liability relative to state peers, proactive management of the liability, some flexibility to adjust benefit levels, contributions in excess of the annual pay-go amount have been made in order to accumulate assets to address the liability.
Elevated (3)	Above-average liability relative to state peers, options to address the liability are being considered but plans are not well-developed, there may be some flexibility to adjust benefits but changes have been limited.
High (4)	High liability relative to state peers, high level of benefits that are viewed as inflexible based on statute/constitution/contract terms, a lack of management action to address the liability which will lead to accelerating pay-go contributions.

## **Related Criteria And Research**

- Principles Of Corporate And Government Ratings, June 26, 2007.
- USPF Criteria: GO Debt, Oct. 12, 2006
- USPF Criteria: Financial Management Assessment, June 27, 2006
- USPF Criteria: Debt Statement Analysis, Aug. 22, 2006
- USPF Report Card: 2009 State Debt Review: Significant Challenges Lie Ahead, Dec. 16, 2009
- Market Declines Will Shake Up U.S. State Pension Funding Stability, Feb. 26, 2009
- U.S. States' OPEB Liabilities And Funding Strategies Vary Widely, June 3, 2009

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