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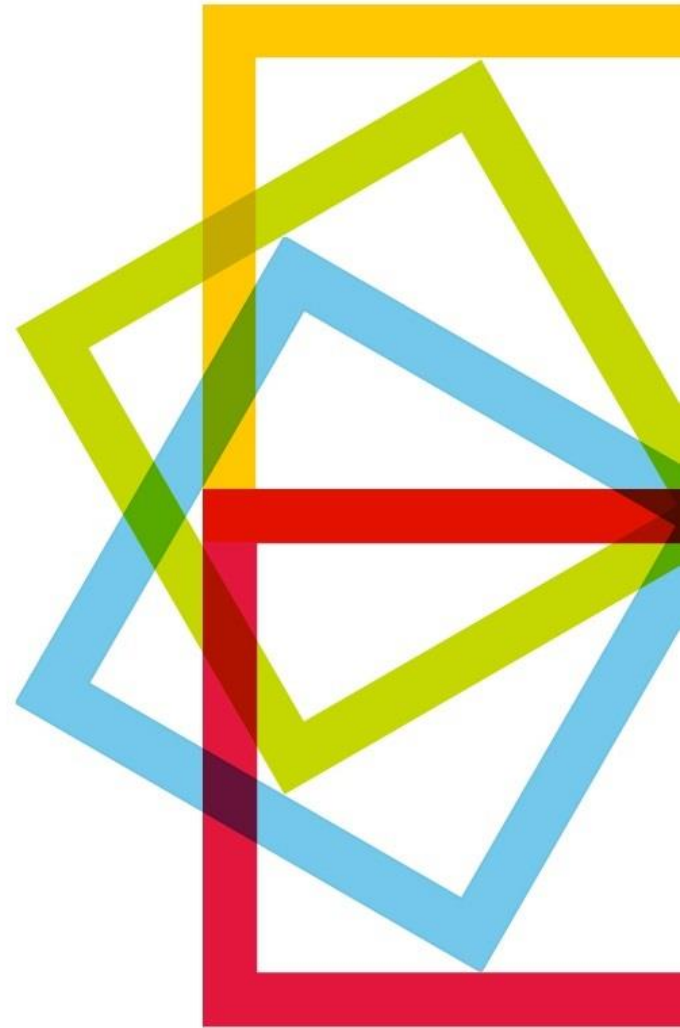
McGRAW HILL FINANCIAL

**MASSACHUSETTS COLLECTORS AND TREASURERS  
ASSOCIATION**

**44th ANNUAL SCHOOL**

**UNIVERSITY OF MASSACHUSETTS, AMHERST, MA**

**U.S. Local Governments: Methodology And  
Assumptions - An Overview of S&P's Local GO  
Criteria and Top 10 Management  
Characteristics of Highly Rated U.S. Public  
Finance Issuers**



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# Agenda

- What are credit ratings
- Overview of Criteria and Analytic Framework for Local Governments
- MA Credit Strengths and Weaknesses
- Revisiting Management Conditions and Top 10 Management Characteristics of Highly Rated U.S. Public Finance Issuers

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# Credit Ratings: What They Are And Are Not

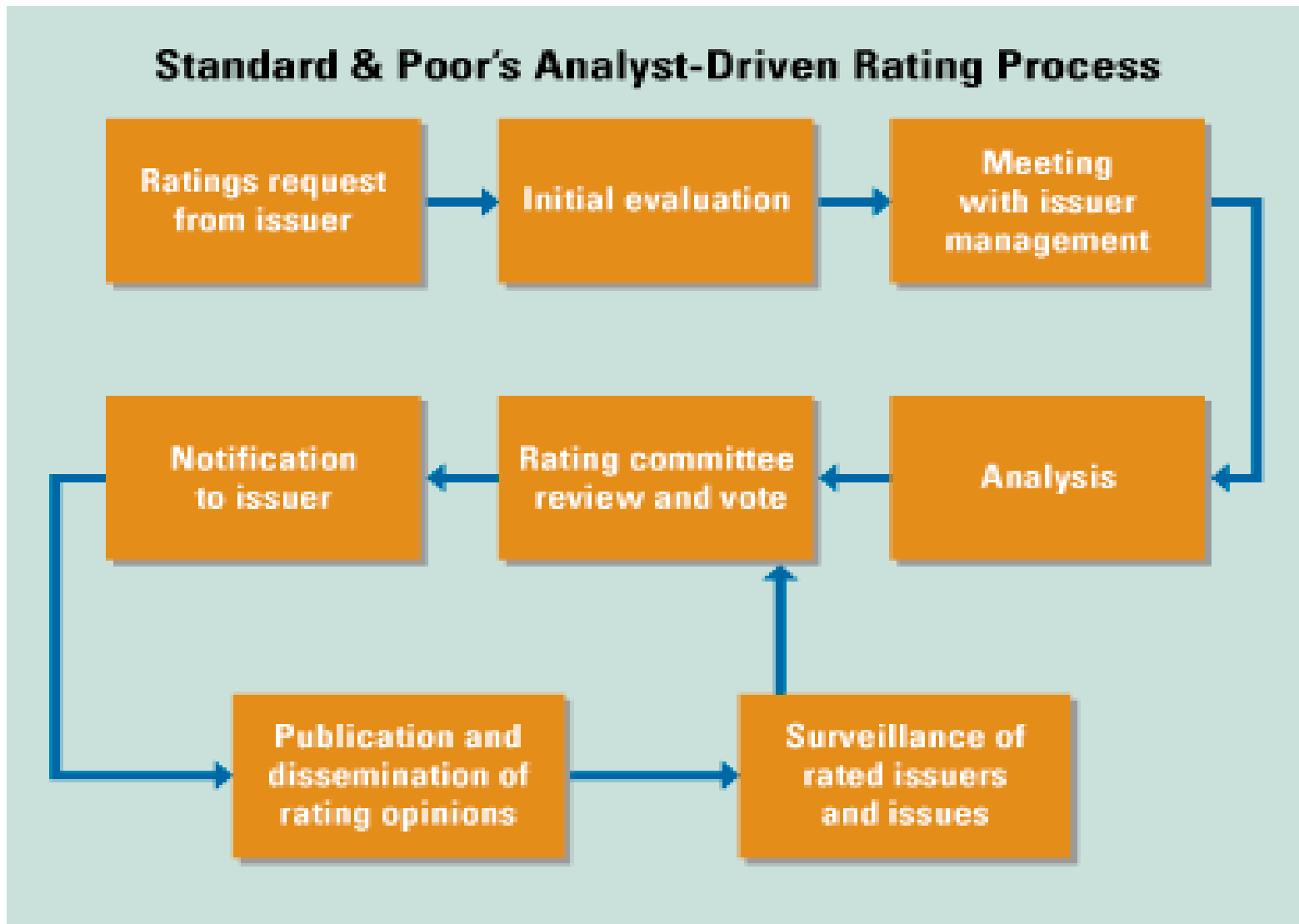
## Are:

- Opinions about relative credit risk
- Opinion about ability & willingness of an issuer to meet financial obligations in full & on time
- Forward looking and continually evolving
- Intended to be comparable across different sectors and regions

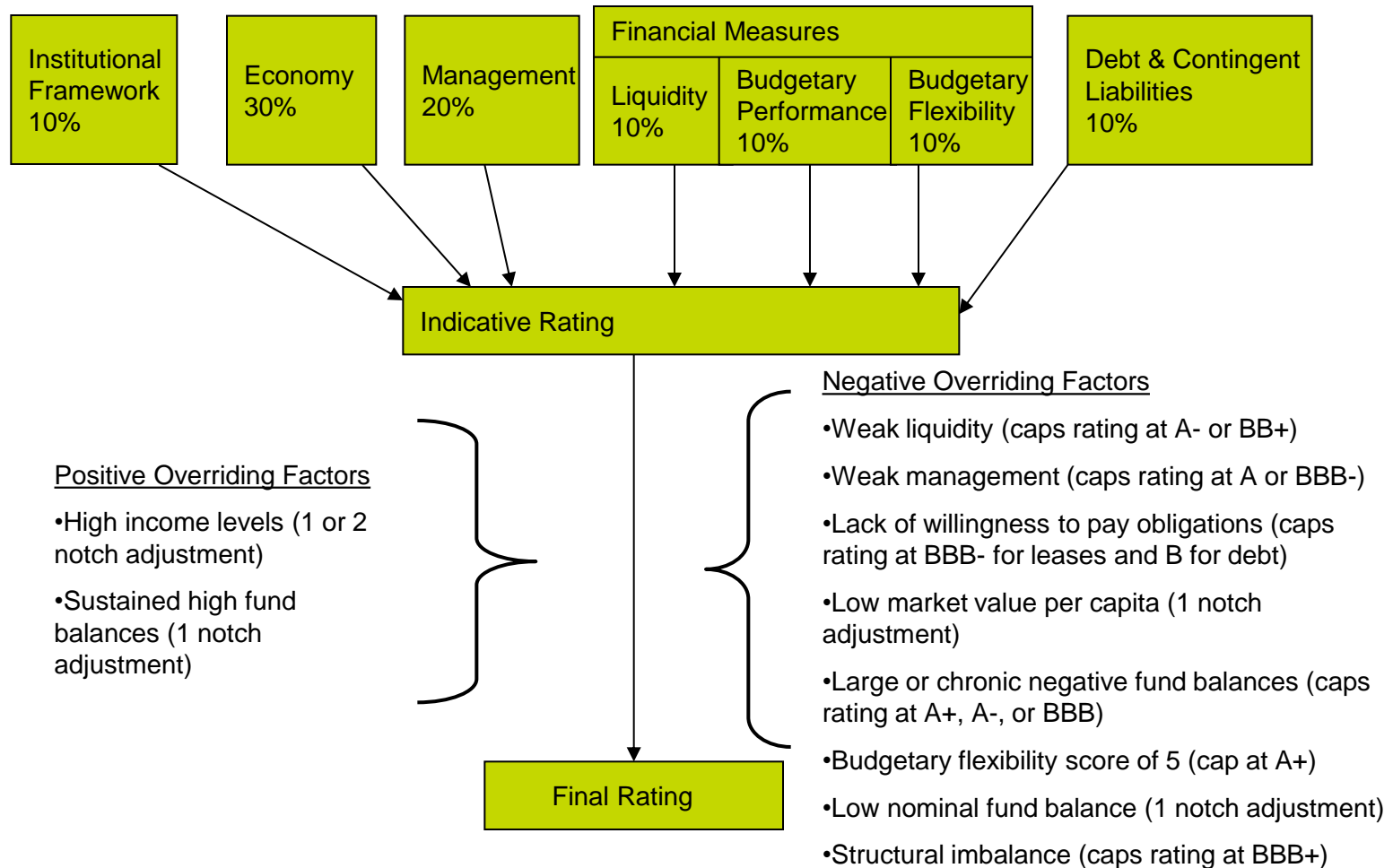
## Are not:

- Investment advice
- Indications of market liquidity or price
- Guarantees of future credit risk
- Absolute measures of default probability
- Expected ultimate loss given default

# Ratings Process



# Local Government Analytical Rating Framework



# Summary of the Factors

Revisiting The Local GO Criteria Factors

# Institutional Framework (1 of 7 Factors)

Institutional  
Framework  
10%

**Assesses the legal and practical environment in which the local government operates**

**The score is based on the average of four discretely scored areas**

- *Predictability*: the extent to which a local government can forecast its revenues and expenditures on an ongoing basis
- *Revenue and expenditure balance*: the extent to which a local governments have the ability to finance the services they provide
- *Transparency and accountability*: the overall institutional framework's role in encouraging the transparency and comparability of relative financial information
- *Systemic support*: the extent to which local governments receive extraordinary support from a state government when the local government is under extreme stress

# Economic Score (2 of 7 Factors)

Economy  
30%

- Assess both the health of the asset base relied upon to provide both current and future locally derived revenues as well as the likelihood of additional service demands resulting from economic deterioration
- The initial score (1 - very strong) through (5 - very weak) is based on market value per capita and projected per capita income as a % of U.S.
- Per capita income is based on a 5-year projection
- Especially high income will lead to a positive override and especially low market value per capita will lead to a negative override

	Total Market Value Per Capita				
Projected Per Capita EBI as a % of U.S. Projected Per Capita EBI	>\$195,000	\$100,000 to \$195,000	\$80,000 to \$100,000	\$55,000 to \$80,000	≤\$55,000
>150	1	1.5	2	2.5	3
110 to 150	1.5	2	2.5	3	3.5
85 to 110	2	2.5	3	3.5	4
70 to 85	2.5	3	3.5	4	4.5
≤70	3	3.5	4	4.5	5



# Economic Score Adjustments

Economy  
30%

Qualitative factors with a positive impact on the initial score	Qualitative factors with a negative impact on the initial score
Participation in a larger broad and diversified economy	Negative budget impact from demographic profile: population decrease and/or high share of dependent population (>55%) have a material negative impact on future revenue growth and expenditure needs.
A stabilizing institutional influence with a longstanding role as a major employer, such as higher education, health care, military, or large and stable corporate presence.	High county unemployment rate (>10%).
	If employment concentration where an individual sector (excluding education/health, government, and transportation, trade and utilities) represents more than 30% of the nonfarm work base, or tax base concentration where the top 10 taxpayers represent more than 35% of the tax base, the score worsens by one point. If the top 10 taxpayers exceed 45% of the tax base, the score worsens by two points.

# Management Score (3 of 7 Factors)

Management  
20%

- Assess the impact of management conditions on the likelihood of repayment
- The proposed Financial Management Assessment (FMA) is based upon our current methodology

**Table 9: Assessing the Management Score (see paragraphs 47-56)**

Rounded Score	Characteristics
1 (Very strong)	FMA score of “strong” and none of the factors in score ‘4’ or ‘5’ is present.
2 (Strong)	FMA score of “good” and none of the factors in score ‘4’ or ‘5’ is present.
3 (Adequate)	FMA score of “standard” and none of the factors in score ‘4’ or ‘5’ is present.
4 (Weak)	FMA score of “vulnerable” or any of the following is present: there is a financial reporting restatement that has a material negative impact; any of the conditions in score ‘5’ existed in the past three years; the structural imbalance override condition exists or existed within the past three years; or a very high debt, pension and OPEB burden.
5 (Very weak)	Regardless of the FMA score, any of the following is present: a management team that lacks relevant skills resulting in a weak capacity for planning, monitoring, and management; an auditor has delivered a going concern opinion; the government appears unwilling to support a debt or capital lease obligation; or the government is actively considering bankruptcy in the near term

# Management Score (3 of 7 Factors)

Institutional  
Framework  
10%

1. Revenue and expenditure assumptions
2. Budget amendments and updates
3. Long term financial planning
4. Long term capital planning
5. Investment management policies
6. Debt management policies
7. Reserve and liquidity policies

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# Financial Measures

- Three components factor into our assessment of a municipality's financial credit characteristics
- Budgetary flexibility, budgetary performance, and liquidity
- Each factor is weighted 10% — all financial measures together are 30%

Financial Measures		
Liquidity 10%	Budgetary Performance 10%	Budgetary Flexibility 10%

# Financial Measures: Budgetary Flexibility Score (4 of 7 Factors)

**Budgetary Flexibility**  
10%

The budgetary flexibility initial score measures the degree to which the government can create additional financial flexibility in times of stress

- Available fund balance as a % of general fund expenditures: the average of the most recently reported fiscal year and our estimate for the following year, which may differ from that shown in the original or amended budget
- When other fund balances outside of the government’s general fund are available beyond the current fiscal year, they are included in the calculation
- This measure can cap a rating or it can be a positive override if extremely strong

## Budgetary Flexibility Ranges

available reserves as a percent of expenditures

Very Strong (1)	> 15%
Strong (2)	8% to 15%
Adequate (3)	4 to 8
Weak (4)	1 to 4
Very Weak (5)	< 1%

## The budgetary performance initial score measures the current fiscal balance of the government

- Total governmental funds net result: the most recent year's net total governmental funds on a budgetary basis as a percent of expenditures
- General fund net result: the most recent year's general fund operational balance as a percent of expenditures

Assessing The Budgetary Performance Score					
	Total Governmental Funds Net Result (%)				
General fund net result (%)	> -1	-1 to -5	-5 to -10%	-10 to -15	≤ -15
(> 5)	1	2	3	3	4
(-1 to 5)	2	3	3	4	5
(≤ -1)	3	4	4	5	5

# Financial Measures: Liquidity Score (6 of 7 Factors)

Liquidity  
10%

The initial score measures the availability of cash and cash equivalents to service both debt and other expenditures

**Initial liquidity score: combination of two measures**

- Total government cash as % of total governmental funds debt service
- Total cash % of total governmental funds expenditures

**Table 12: Assessing The Liquidity Score (see paragraphs 68-72)**

	Total Government Available Cash As % Of Total Governmental Funds Debt Service				
Total Government Available Cash As % Of Total Governmental Funds Expenditures	>120	100 to120	80 to100	40 to 80	≤40
>15	1	2	3	4	5
8 to15	2	2	3	4	5
4 to 8	3	3	3	4	5
1 to 4	4	4	4	4	5
≤1	5	5	5	5	5

# Debt and Contingent Liability (7 of 7 Factors)

Debt & Contingent Liability  
10%

## Initial debt score: combination of two measures

- Total governmental funds debt service as a percentage of expenditures
  - Measures the annual fixed cost burden that debt places on the government
- Net direct debt as a percentage of total governmental funds revenue
  - Measures the total debt burden on the government's revenue position rather than the annual cost of the debt, which can be manipulated by amortization structures

Assessing The Debt And Contingent Liabilities Score					
	Net Direct Debt As % Of Total Governmental Funds Revenue				
TGF Debt Service As A % of TGF Expenditures	<30	30 to 60	60 to 120	120 to 180	≥180
< 8	1	2	3	4	5
8 to 15	2	3	4	4	5
15 to 25	3	4	5	5	5
25 to 35	4	4	5	5	5
≥35	4	5	5	5	5



# Debt and Contingent Liability Adjustments

Debt & Contingent Liability  
10%

Qualitative factors with a positive impact on the initial score:	Qualitative factors with a negative impact on the initial score:
Overall net debt as a percentage of market value below 3%.	Overall net debt as a percentage of market value exceeding 10%.
Overall rapid annual debt amortization, with more than 65% coming due in 10 years.	Significant medium-term debt plans produce a higher score when included.
	Exposure to interest-rate risk or instrument provisions that could increase annual payment requirements by at least 20%.
	Unaddressed exposure to large unfunded pension or OPEB obligations leading to accelerating payment obligations over the medium term that represent significant budget pressure (see paragraph 80). If there is a plan to address the obligations, the final score worsens by one point; otherwise the score worsens by two points.
	Speculative contingent liabilities or those otherwise likely to be funded on an ongoing basis by the government representing more than 10% of total governmental revenue.

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# Positive Credit Factors:

## Relative to national peers S&P rated Massachusetts cities/towns

- Participate in or are near exceptionally broad and diversified economies.
- Exhibit extremely strong, mature and diverse tax base.
- Have stronger household income measures
- Demonstrate stable and predictable revenue sources – property/sales tax.
- Carry sufficient budgetary reserves and better budget flexibility.
- Practice good financial management.
- Show a low fixed debt burden, with most having what we consider to be an aggressive principal debt amortization schedule and no contingent liquidity risks.

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# Negative Credit Factors:

## Relative to national peers S&P rated Massachusetts cities/towns

- Are built-out communities with many having minimal prospects for organic tax base growth.
- Older, slower-growing population than the U.S. and slower-growing employment.
- Constrained ability to raise revenues if needed due to tax caps.
- Limited flexibility in managing labor costs.
- Higher pension and retiree health liabilities.

# Revisiting the Management Factor

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# Revisiting the FMA:

- Revenue and Expenditure Assumptions
- Budget Amendments and Updates
- Long-term Financial Planning
- Long-term Capital Planning
- Investment Management Policies
- Debt Management Policies
- Reserve and Liquidity Policies

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# Revenue and Expenditure Assumptions

**Are the organizations' financial assumptions and projections realistic and well grounded from both long-term and recent perspectives?**

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<b><i>Strong</i></b>	Formal historic trend analysis is performed and updated annually for both revenue and spending; regular effort is made to determine whether revenues or expenditures will deviate from their long-term trends over the next couple of years; evidence of independent revenue forecasting exists(when possible).
<b><i>Standard</i></b>	Optimistic assumptions exist that, while supportable, add risk; assumptions are based on recent performance, but little evidence of questioning or validating assumptions exists.
<b><i>Vulnerable</i></b>	Assumptions neglect likely shortfalls, expenditure pressures or other pending issues; assumptions exist which enjoy no prudent validation.

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# Budget Amendments and Updates

**Are there procedures for reviewing and amending the budget based on updated information and actual performance to ensure fiscal targets are met?**

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***Strong*** At least quarterly budget surveillance is maintained to identify problem areas and enable timely budget adjustments; management exhibits ability and willingness to address necessary intra-year revenue and expenditure changes to meet fiscal targets.

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***Standard*** Semiannual budget reviews exist; management identifies variances between budget and actual performance.

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***Vulnerable*** No formal process exists for regular review and timely updating of budget during the year.

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# Long-term Financial Planning

**Does management have a long-term financial plan that allows them to identify future revenues and expenditures as well as address upcoming issues that might affect these?**

***Strong*** A multi-year financial plan exists where future issues are identified and possible solutions are identified, if not implemented; revenue and expenditure decisions are made primarily from a long-term perspective. Structural balance is a clear goal.

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***Standard*** Multi-year projections are done informally; multi-year projections are done, but without discussion of pending issues, so that issues are not addressed; some one-shot actions exist, but the long-term consequences of these actions are acknowledged and communicated.

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***Vulnerable*** No long-term financial planning exists; operational planning is done on a year-to-year (or budget-to-budget) basis; one-shot budget fixes are used with little attention to long-term consequences.

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# Long-term Capital Planning

Has the organization created a long-term capital improvement program?

**Strong** A five-year rolling CIP with funding identified for all years exists and is linked to the operating budget and long-term revenue and financing strategies.

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**Standard** A five-year CIP is done, but is generally limited to projects to be funded from the current budget plus a four-year wish list; some funding for out-year projects is identified, but not all.

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**Vulnerable** No five-year CIP exists; capital planning is done as needs arise.

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# Investment Management Policies

Has the organization established policies pertaining to investments?

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<i>Strong</i>	Investment policies exist and are well defined; strong reporting and monitoring mechanisms exist and are functioning.
<i>Standard</i>	Informal or non-published policies exist; policies are widely communicated and followed.
<i>Vulnerable</i>	Absence of informal or non-published policies

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# Debt Management Policies

**Has the organization established policies on debt issuance; maturity and debt service structure; use of security and pledges, credit enhancement, and derivatives?**

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<b><i>Strong</i></b>	Debt policies exist and are well defined; strong reporting and monitoring mechanisms exist and are functioning. If swaps are allowed, a formal swap management plan that follows S&P's guidelines (see the DDP) has been adopted.
<b><i>Standard</i></b>	Basic policies exist; policies are widely communicated and followed. If swaps are allowed there is a swap management plan in place, but it does not follow S&P's guidelines.
<b><i>Vulnerable</i></b>	Absence of basic policies or clear evidence that basic policies are followed. Swaps are allowed but there is no swap management plan in place, and/or there is no local (non-FA) knowledge about the swap.

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# Reserve and Liquidity Policies

**Has the organization established a formalized operating reserve policy, which takes into account the governments cash flow/operating requirements and the historic volatility of revenues and expenditures through economic cycles?**

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- Strong*** A formal operating reserve policy is well defined. Reserve levels are clearly linked to the government's cash flow needs and the historic volatility of revenues and expenditures throughout economic cycles. Management has historically adhered to it.
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- Standard*** A less defined policy exists, which has no actual basis but has been historically adhered to it.
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- Vulnerable*** Absence of basic policies or, if they exist, are not followed.
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# Evaluating additional Management Risks

- Event Risk, how ably can management react to natural disasters
- Political Instability, Turnover or Gridlock
- Inability to execute approved structural reforms
- Management team lacks relevant management skills
- Timeliness of financial disclosure could alert to material negative financial restatements and/or Auditor's ongoing concern
- Is Management actively considering bankruptcy, or are they unwilling to support capital lease or appropriation debt.



Management and administrative characteristics can move a rating up or down more significantly and swiftly than any other factor.

S&P published a list of some distinct commonalities in the management practices of highly rated U.S. public finance issuers over the years.



## 1. Focus on structural balance

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- Some issuers view a balanced budget as:
  - current revenues + available reserves = operating expenditures
- S&P views a balanced budget as:
  - recurring revenues = recurring expenditures
- Highly rated credits:
  - Maintain or quickly return to structural balance during a period of economic weakness.
  - Are not reliant on one-time revenues to fund ongoing expenditures.



## 2. Strong liquidity management

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- Ability to manage cash flow and identify potential issues.
- Sufficient money to meet debt obligations.
- Access to pooled cash or interfund loan is not enough, accountability of where cash comes from and how to pay back is important.
- Liquidity risk often tie to variable rate demand obligations or other debt instruments.





### 3. Regular economic and revenue updates to identify shortfalls early

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- Regular intervals is a key feature of stable financial performance.
- Evaluate historical performance of key revenues is important because each government has different leading or lagging economic indicators that signal potential revenue variance issues based on its economic structure.
- It's also important to identify a surge in revenues to determine if the trend is short term or sustainable.



## 4. An established rainy day/budget stabilization reserve

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- Formalized financial reserve policy is a consistent feature of most S&P's highly rate credits.
- Factors to establish the level:
  - Cash flow/operating requirement
  - Volatility of revenue/expenditures, and
  - Susceptibility to a natural disaster



## 5. Prioritized spending plans and established contingency plans for the operating budget

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- What part of the budget is discretionary vs mandatory?
- What spending could be legally or practically reduced?
- Scenario building and analysis of revenue results.



## 6. Strong long-term and contingent liability management

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- Growing pension and OPEB pay-as-you-go and unfunded liabilities.
- Management of non-essential government operations such as stadiums, convention centers, golf course.



## 7. Multiyear financial plan that considers the affordability of actions

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- Is the plan comprehensive and based on realistic assumptions?
  - Putting a general inflator across all expenditures and revenues might not work for all line items.
- Plan often has out-year gaps projected, which would allow governments to work out, in advance, the optimal method of restoring fiscal balance.



## 8. A formal debt management policy to evaluate future debt profile

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- Many highly rated governments have developed debt affordability guidelines or models, such as:
  - Debt as a percentage of market value;
  - Debt as a percentage of operating expenditures;
  - Variable rate debt does not exceed X% of total debt;
  - Amortization of debt to be no longer than X years, etc.



## 9. A pay-as-you-go financing strategy as part of the operating and capital budget

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- Advantage is to lower debt service costs but also provides operating budget flexibility when the economy or revenue growth slows.
- A long term capital improvement plan that identify sources and uses of fund.



## 10. A well-defined and coordinated economic development strategy

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- How significant a resource commitment should be dedicated to running economic development programs and offering incentives?
- Synergies of activities to create employment, enhance diversification, and generate solid income growth.
- Coordinated effort between state and local governments.





## Top 10 Management Characteristics of Highly Rated U.S. Public Finance Issuers

FMA Category	Example from Article
Revenue and expenditure assumptions	1
Budget amendments and updates	2, 3, 5
Long term financial planning	7
Long term capital planning	9
Investment management policies	2
Debt management policies	6, 8
Reserve and liquidity policies	2, 4

Proactive budget and liability planning, strong liquidity management, and the establishment of reserves are among the factors the strongest issuer share

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