Cash Forecasting: Rating Agency Perspective & Applications

North Carolina Government Finance Officers Association

December 9, 2020

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Credit Rating Overview and Rating Methodologies

Credit Rating Overview

Moody's Investors Service	Standard & Poor's	Fitch Ratings
Aaa	AAA	AAA
Aa1	AA+	AA+
Aa2	AA	AA
Aa3	AA-	AA-
A1	A+	A+
A2	A	A
A3	A-	A-
Baa1	BBB+	BBB+
Baa2	BBB	BBB
Baa3	BBB-	BBB-
Non Investment Grade		

- Both Moody's and S&P recognize "Management" as a key factor in Local Government Ratings.
- This is a credit area where local governments have short-term control over process and outcomes.

Moody's Local Government Rating Methodology

Category	Rating Percentage	Short Term Control	Long Term Control
Economy / Tax Base	30%		✓
Finances	30%	✓	✓
Management	20%	✓	✓
Debt / Pensions	20%	✓	✓

S&P Local Government Rating Methodology

Category	Rating Percentage	Short Term Control	Long Term Control
Institutional Framework	10%		✓
Economy	30%		✓
Management	20%	✓	✓
Budget Flexibility	10%	✓	✓
Budgetary Performance	10%	✓	✓
Liquidity	10%	✓	✓
Debt and Contingent Liabilities	10%	✓	✓

Rating Agency Commentary on Management

Moody's

- "A local government's success in navigating the legal, political and practical environment in which it operates depends on a multitude of factors, including management's mastery in understanding its resources and managing its responsibilities, public and executive support for its plans, and its willingness to use the tools at its disposal."

- "**When evaluating a credit, we seek to understand the probable impact of fund balance policies, multi-year financial or capital planning, liquidity management, accuracy of budget forecasts, and willingness to make midyear adjustments.** 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 municipality vulnerable should these one-time revenues fail to materialize."

Source: Moody's US Local Government General Obligation Debt, January 2014

S&P

- **"Major elements of governmental financial management include economic analysis, revenue forecasting, risk management, accounting practices, financial strategies, cash and liquidity administration, and debt management.** All of these elements have an impact on a government's bottom line, and, as a result, on its credit quality. If a government is unable or unwilling to employ its authority in a timely manner to address events that impact its budget and financial condition, its credit rating can be adversely affected.

- S&P measures the strength of management through its Financial Management Assessment.

Source: S&P's U.S. Local Governments General Obligation Ratings: Methodology And Assumptions, September 2013

S&P's Financial Management Assessment (FMA) Overview

Overview

- S&P utilizes its Financial Management Assessment for both General Obligation and Utility Revenue credits.

- S&P's areas of focus in the FMA methodology are:
  - **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

- Each of the seven factors is graded individually, with the final FMA assessment qualitatively determined based on the scoring of these seven factors.

Table 9
Assessing The Management Score (see paragraphs 48-58)

Score	Characteristics
1 (very strong)	FMA score of "Strong" and none of the factors in scores '4' or '5' are present.
2 (strong)	FMA score of "Good" and none of the factors in scores '4' or '5' are present.
3 (adequate)	FMA score of "Standard" and none of the factors in scores '4' or '5' are 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 within 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 is exhibiting an unwillingness to support a debt or capital lease obligation; or the government is actively considering bankruptcy in the near term.
Qualitative factors with a positive impact on the initial score	**Qualitative factors with a negative impact on the initial score**
Consistent ability to maintain balanced operations.	Frequent management turnover inhibiting a current understanding of the government's financial position and its ability to adjust, or political gridlock, or instability that brings the same results.
Government service levels are limited.	Consistent inability to execute approved structural reforms for two consecutive years.
For each relevant qualitative factor, the score changes by one point. The final management score equals the initial score adjusted up or down based on the net effect of the qualitative adjustments. Qualitative adjustments cannot improve an initial management score of '5' or, in certain cases, a score of '4' (see paragraph 57).	

Source: S&P's U.S. Local Governments General Obligation Ratings: Methodology And Assumptions, September 2013

FMA Criteria Related to Cash Flow and Forecasting

Overview

- Four of the seven key focus areas in the FMA review are connected to cash flow projections and forecasting.
- Specific to the budget process, S&P is focused on historical trend analysis, ongoing budget to actual monitoring throughout the year, and multi-year projections.
- Long term financial planning efforts are emphasized, with focus on identifying future issues and possible solutions identified.
- Long-term capital planning is also evaluated, with the goal of having funding identified for future projects, as well as planning for any related operating budgetary impacts.

Table 1

Revenue And Expenditure Assumptions	
Are the organization's financial assumptions and projections realistic and well grounded from both long-term and recent trend perspectives?	
Strong	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).

Table 2

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?	
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.

Table 3

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.

Table 4

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.

Source: S&P's Financial Management Assessment, June 2006

Revenue and Expenditure Assumptions

- Development of a long-term budget planning process can be another important element when preparing to interact with rating agencies and investors.

- Elements of the long-term budget planning process can include:
  - Historic Trend Analyses.
  - Forward looking projections for key revenue and expenditure line items.
  - Sensitivity analyses to identify potential cash flow implications of board / management initiatives.
  - Processes exist for reviewing and amending budget assumptions on a regular basis.

LONG-RANGE FORECAST

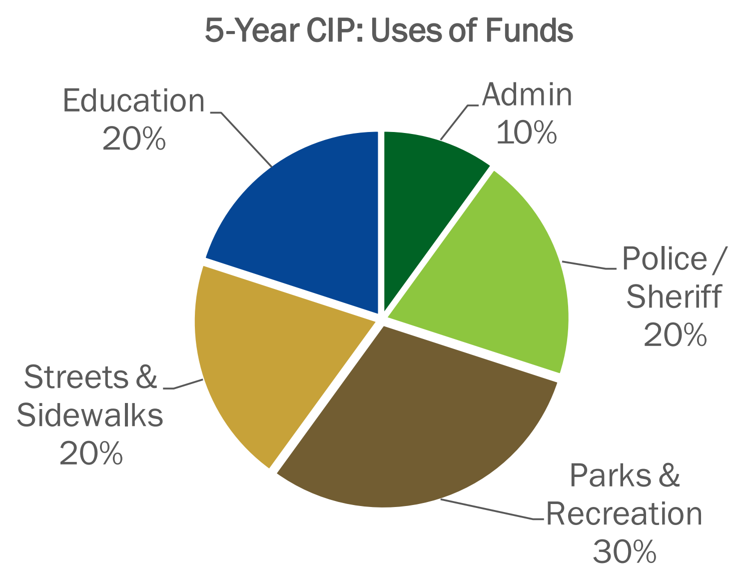
CORE FORECAST ASSUMPTIONS

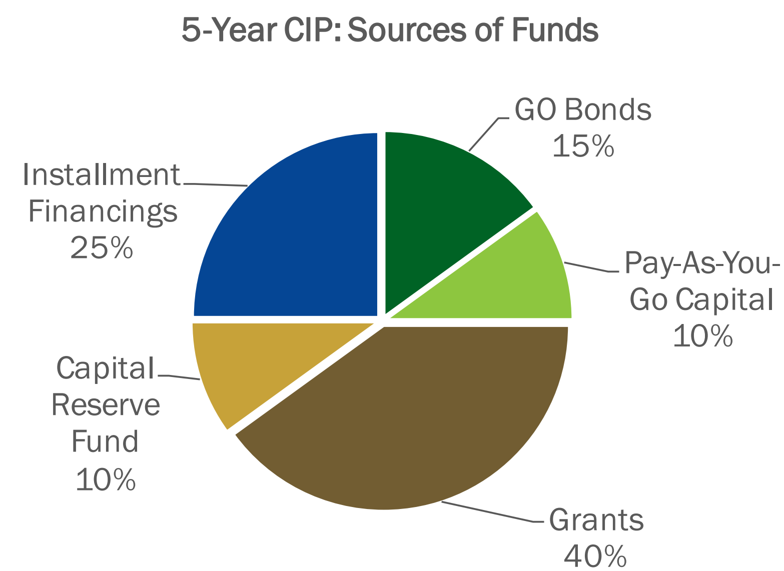
Major Category	2018	2019	2020	2021	2022
Revenues					
Revenues	• Conservative • $0.39 Tax Rate • Ad Valorem collection rate 99.7% • $15 Vehicle Decal • $25 Stormwater ERU • Sales Tax 4.25% growth • 6% growth over prior year original budget (less transfers & carryovers)	• Conservative • $0.39 Tax Rate • Ad Valorem collection rate 99.7% • $15 Vehicle Decal • $25 Stormwater ERU • Sales Tax 4% growth • 3% average growth	• Conservative • $0.39 Tax Rate • Ad Valorem collection rate 99.6% • $15 Vehicle Decal • $25 Stormwater ERU • Sales Tax 4% growth • 3% average growth	• Conservative • $0.39 Tax Rate • Ad Valorem collection rate 99.6% • $15 Vehicle Decal • $25 Stormwater ERU • Sales Tax 4% growth • 3% average growth	• Conservative • $0.39 Tax Rate • Ad Valorem collection rate 99.6% • $15 Vehicle Decal • $25 Stormwater ERU • Sales Tax 4% growth • 3% average growth
Transfers In	• Capital Reserve Fund - Quint	• None	• Capital Reserve Fund - Quint	• None	• None
Expenditures					
Personnel	• Merit average 3% • Targeted market adjustments • 3 Firefighters • Transportation Planner • K9 Unit • Healthcare Insurance 2% increase	• Merit average 2% • Insurance 7% increase • LGERS Buy Back removed 5.35%	• Merit average 2% • Insurance 7% increase	• Merit average 2% • 3 Firefighters - Quint • Insurance 7% increase	• Merit average 2% • Insurance 7% increase
Operations	• Inflationary Adjustments • Operations Reserve • IT Replacements • Bond Sale Cost • Land Use Plan Update • Enterprise System • Building Security Improvements • Municipal Elections	• Inflationary Adjustments • Operations Reserve • Fire Inspections Billing • IT Replacements • Bond Sale Cost • Land Use Plan Update • Building Security Improvements	• Inflationary Adjustments • Operations Reserve • Fire Inspections Billing • IT Replacements • Municipal Elections	• Inflationary Adjustments • Operations Reserve • Fire Inspections Billing • IT Replacements	• Inflationary Adjustments • Operations Reserve • Fire Inspections Billing • IT Replacements • Municipal Elections
Capital Outlay	• Fire Apparatus/ Vehicle Replacements • IT & Other Replacements • Higher Street Maintenance • Building Repairs • K9 Dog & Vehicle	• Vehicle Replacements • IT & Other Replacements • Higher Street Maintenance • Building Repairs • Equipment Replacements	• Fire Apparatus/ Vehicle Replacements • IT & Other Replacements • Higher Street Maintenance • Equipment Replacements	• Vehicle Replacements • IT & Other Replacements • Higher Street Maintenance • Equipment Replacements	• Vehicle Replacements • IT & Other Replacements • Higher Street Maintenance • Equipment Replacements
Debt Service	• Minor Retiring Debt • 2012 Bond Debt McCrimmon Ext PH1 Full Debt • McCrimmon Ext PH 2 Partial • Morrisville-Carpenter Rd Improvement Partial Debt	• Minor Retiring Debt • 2012 Bond Debt MAFC Partial Debt • McCrimmon Ext – Full Debt PhI/PhII • Morrisville-Carpenter Rd Improvement Full Debt	• Minor Retiring Debt • 2012 Bond Debt MAFC Full Debt	• Minor Retiring Debt • Fire Station One Retiring Debt after FY2021	• Minor Retiring Debt • Public Safety Radios Retiring Debt after FY2022
Capital Transfers Out	• Capital Reserve Funding • MSD Funding • Stormwater Subsidy • Town Center • Sidewalk Capital Project • Church St. Park Field Lights	• Capital Reserve Funding • MSD Funding • Stormwater Subsidy	• Capital Reserve Funding • MSD Funding • Stormwater Subsidy	• Capital Reserve Funding • MSD Funding • Stormwater Subsidy	• Capital Reserve Funding • MSD Funding • Stormwater Subsidy

100

Long-Term Financial and Capital Planning

- The development of a multi-year Capital Improvement Plan ("CIP") includes:
  - Identifying realistic capital and maintenance needs (not a wish list).
  - Assigning funding sources for all projects with a balanced approach of pay-as-you-go cash, grants, reserves and debt.
  - Analyzing potential operating budget impacts associated with planned capital projects.
  - Revisiting this process at regular intervals.
  - Adopting a plan at the governing level.



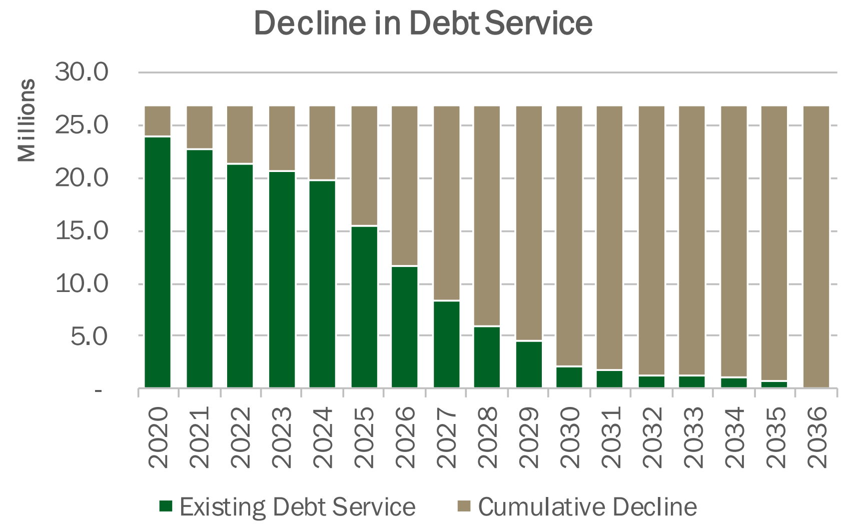


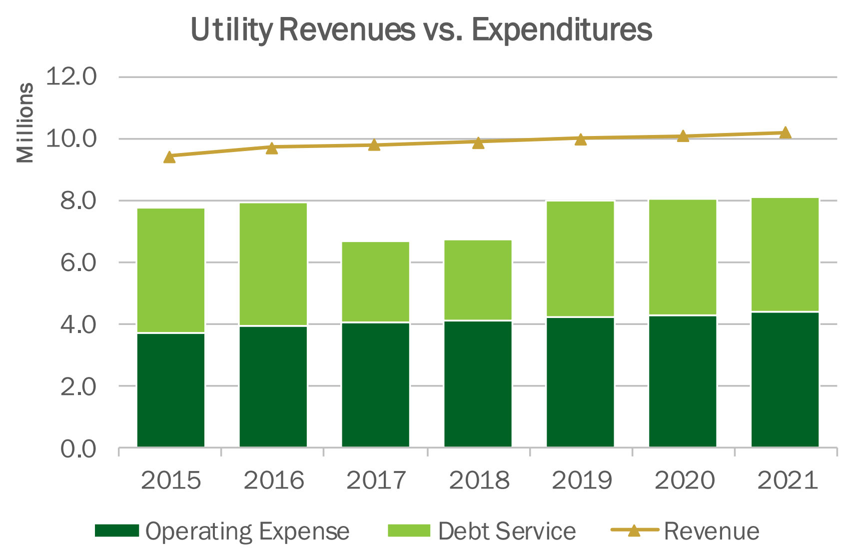
Long-Term Financial and Capital Planning

- Aggregate annual tax-supported debt service and other capital funding requirements:
  - Existing Debt Service Payments.
  - Estimated CIP Debt Service.
  - Pay-as-you-go Capital.
  - Operating Impacts of Capital Projects.

- Identify Revenue Sources in current Fiscal Year budget dedicated to debt service and capital:
  - Sustainable General Fund Budget Revenues.
  - Fund Balance / Reserves.
  - State Revenues (e.g. Sales Tax, Lottery, etc.).
  - Federal Revenues / Subsidies.

- For Utility-Supported projects, develop a forward looking Pro-Forma Financial model to forecast future revenues, operating / capital expenses and existing / future debt service payments.





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