

## Seifried & Brew, LLC (“S&B”) Standard Municipal Bond Rating Methodology

S&B’s Municipal Bond Ratings assess the underlying credit risk of a municipality. S&B features two rating and report types as distinguished by its two separate analytical models: the Standard Municipal Bond Ratings and Priority Municipal Bond Ratings model. The methodology presented here focuses on Standard S&B ratings which involve a more extensive, manual spread of data that incorporates financial and non-financial data in a systematic manner. S&B offers Standard ratings in several different report types for pre-purchase and post-purchase rating needs.

### Multi-Step Rating Methodology

S&B uses a multi-step process to assign its Standard Rating and to determine whether a municipal’s bond is investment grade or non-investment grade:

- 1) Determination of financial management Rating (S&B 1, S&B 2, S&B 3, S&B 4)
- 2) Determination of Rating gradation adjustments (+, -, no adjustment)
- 3) Confirmation of Rating or Rating Override

#### 1. Determination of Financial Management Sub-Rating

S&B’s primary Rating analysis is in regards to the financial management of each municipality. S&B broadly defines financial management as the ability of the municipality to maintain sufficient revenues and moderate expenses so that payments of principal and interest are met over the maturity of the Bond issue. The financial management sub-rating follows a scale of S&B 1 to S&B 4, with S&B 1 being the lowest risk of default and S&B 4 being the highest risk (see Appendix A).

S&B utilizes its analytical model, the S&B Municipal Bond Rating Program (“the Program”) to analyze an array of financial data. The Program performs calculations on financial data manually input by S&B, thereby generating values which are then applied to the scoring system. The Program calculates current and multiple year percentage change values as well as a series of financial ratios (see Appendix B). Each financial indicator that contributes to the final rating is assigned a subscore by comparing the indicator to a set of benchmarks. Subscores are weighted and combined to generate an overall numeric score which determines the S&B financial management Rating of the municipality.

The Program features two sections for financial and economic data input and analysis based on the following two primary security types which are determined by the official statement of the Bond Issue:

*General Obligation Debt (“GO”)*: General obligation bonds are secured by a pledge of the full faith, credit, and unlimited taxing power of the municipality, or its general revenues. The municipality is obligated to levy an ad valorem tax. For GO bonds, the Program determines financial management by focusing on the municipality’s revenues, especially ad valorem taxes, and the management of financial resources in its governmental funds.

*Revenue Bond Debt (“REV”)*: Revenue bonds are secured by a pledge of specific revenues generated by each municipality. The program determines financial management of revenue

bonds by analyzing the municipality's ability to adjust rates and improve performance to generate net revenues and cash flow that allow it to meet debt service requirements over the life of the bonds.

## *2. Application of Weighted Rating Gradation Adjustments and Finalization of S&B Rating*

The second step in S&B's rating determination finalizes the overall Rating by applying a series of adjustments for financial and economic indicators that lead to a gradation of + / - / or no adjustment. These indicators are less quantitative in nature. The indicators are weighted using a point system and the final rating adjustment depends upon whether certain threshold levels are reached. How close the financial management rating numeric score is to the rating threshold will affect the impact of the indicators on the financial management rating. The following are the rating adjustment categories:

### *Debt*

S&B analyzes several debt indicators broadly known as "ability to pay" ratios for General Obligation bonds. These indicators include debt per capita, debt to assessed valuation, and debt margin. These indicators are scored and factored together on an absolute basis. Revenue bonds have a limited array of debt indicators, with S&B rating analysis primarily focused on usage statistics and its impact of debt service payments on operations, hence debt coverage.

### *Local Pension*

S&B rates Local Pension performance for each municipality based primarily upon the annual contribution amount to its pension trust fund. S&B analyzes the relative impact of these contributions on total operations, the rate of change of these contributions, and the funded ratio on an absolute basis. The scoring is as follows: Strong, Moderate, Weak, Very Weak. For Revenue bonds, local pension data is not always provided.

### *State Pension*

S&B ranks each State's overall pension performance on an absolute basis according to their funded ratio. The scoring is as follows: Strong, Moderate, Weak, Very Weak. For Revenue bonds, State pension data might be irrelevant.

### *Economic Table*

Key economic and demographic data for the County is tabulated and each category of data is converted into the following relative five-level performance scale: Strong, Above Average, Average, Below Average, Poor. County performance is compared to other Counties in the State and to the Nation as a whole. State performance level is compared to other States in the Nation and to National levels. The overall performance level is calculated on a relative basis. S&B uses various government data sources to generate the economic profile.

### *Trend*

S&B has developed a comprehensive tool for trend analysis analyzing ten factors relative to inflation. The resulting trend designation is Positive, Stable, or Negative.

### 3. Rating Override

While in most cases, S&B agrees with the Program rating, there are several possible reasons in which a rating override may take place. The Rating can be influenced by a single or pending event, such as litigation, technical default, lack of financials, extraordinary items, accounting adjustments, budgeting performance, or economic performance. S&B reviews financial statements and the program with some of the following questions in mind, looking for significant financial items that might lead to an override:

*Liquidity and cash: Is there risk that the Municipality may not meet its near term liabilities obligation commitments in the coming years?*

*Property taxes/ Revenue: Does the trend in property taxes indicate potential future solvency issues?*

*Long-term Debt and Pension: Will burden of long-term obligations impact future solvency?*

*Economics: Will the County's economic environment impact the Municipality negatively?*

*Trends: What is the General Trend of the Municipality? If it's declining, is it severe?*

If the financial statement does not follow Generally Accepted Accounting Principles, such as a municipality reporting on a cash basis, or if the structure of the Bond does not apply to the Program, a manual evaluation of the statement is performed called the "Internal Due Diligence" document. Otherwise, the rating is documented with an S&B Scorecard.

#### APPENDIX A : S&B Rating Scale

THE RATING OF AN **S&B 1** INDICATES FINANCIAL STRENGTH and that S&B believes there is minimal risk regarding the municipality's ability to pay principal and interest as expected on its debt.

AN **S&B 2** RATING REVEALS SOME DECREASE IN FINANCIAL STRENGTH, but S&B believes there would still be minimal risk regarding the municipality's ability to pay principal and interest. AN **S&B 3** RATING INDICATES A MUNICIPALITY THAT HAS SHOWN NEGATIVE TRENDS IN FINANCIAL MANAGEMENT. Although S&B believes this type of municipality will likely pay principal and interest as expected, the credit should be monitored closely for any further deterioration.

**An S&B 1, S&B 2, and S&B 3 rating is considered "investment grade" and "PASS" credits.**

AN **S&B 4** RATING INDICATES A MUNICIPALITY WITH SIGNIFICANT FINANCIAL ISSUES THAT COULD IMPACT ITS ABILITY TO PAY PRINCIPAL AND INTEREST AS EXPECTED. While a municipal issue with an S&B 1, 2, or 3 rating would not be considered impaired for credit issues, an S&B 4 rating would be considered "impaired" and would be classified for "Other Than Temporarily Impaired (OTTI)".

**An S&B 4 is considered "non-investment grade". An S&B 4 is considered a "Substandard," "Doubtful"**

or “Loss” credit.

A RATING WITH A “+” indicates that the rating was strong within its respective S&B rating number, but not strong enough to be at the next highest rating. A rating with a “-” Indicates that the rating was weak within its respective S&B rating number, but not weak enough to be at the next lowest rating. These gradations are not to be construed as indications of future movement in the rating.

## APPENDIX B : Scoring Rating Indicators and Calculations

### **GENERAL OBLIGATION DEBT**

#### *LONG TERM DEBT*

Debt Limit Incurred

Debt to Assessed Valuation

Debt Service expenditures to total Revenues

Long-term Liabilities to total Assets

Interest Expense to total expense

#### *STATEMENT OF NET POSITION*

Change in Unrestricted Net Position

Debt to Assets

Current Ratio

Quick Ratio

Unrestricted Net Position to Expenses

#### *STATEMENT OF ACTIVITIES*

Change in Total Revenues

Relative Change in Revenues

Net Profit Margin

Change in Property Tax Revenue

Change in Charges for Service

Change in Grant Funding

Change in Alternate Revenues

#### *GENERAL FUND*

Days Cash on Hand

Unassigned General Fund Balance

Operating Surplus in General Fund

Change in General Fund Balance

General Fund Balance to Expenditures

General Fund Budget Revenue Performance

General Fund Budget Expense Performance

#### *NOTES*

Pension and Other Post Employment Benefit Contributions

Pension Funded Ratio

#### *ADJUSTMENTS*

County Economic Score

State Economic Score

Local Pension Score

State Pension Score

Debt per Capita  
Debt to Assessed Valuation  
Debt Margin  
Financial Trend

**REVENUE BONDS**

Usage Statistics  
Change in Debt Service Coverage Ratio  
Debt Service Coverage Ratio  
Current Ratio  
Quick Ratio  
Change in Capital Assets  
Debt to Assets  
Change in Unrestricted Net Position  
Unrestricted Net Position to Expenses  
Change in Primary Pledged Revenues  
Interest Expense to Total Expense  
Relative Change in Revenue  
Change in Total Revenues  
Net Profit Margin  
Operating Cash Flow  
Change in Total Cash  
Days Cash on Hand

**ADJUSTMENTS**

County Economic Score  
State Economic Score  
State Pension Score  
Debt Per Capita  
Debt to Assessed Valuation  
Debt Service to Revenues