



# **ICE MUNICIPAL BOND INDICES METHODOLOGY**

**ICE INVESTMENT GRADE MUNICIPAL BOND INDEX**

**ICE HIGH YIELD MUNICIPAL BOND INDEX**

**Winter 2017**



## Table of Contents

Introduction.....	3
Index Eligibility Criteria and Rules for Inclusion.....	3
Issuer .....	3
Currency .....	3
Maturity .....	3
Taxability .....	3
Coupon .....	3
Quality .....	3
Bond Types .....	4
Amount Outstanding.....	4
Index Calculations.....	5
Index Level Calculations .....	5
Index Maintenance.....	5
Reinvestment of Cash Flows .....	5
New Issues.....	5
Security in Default .....	5
Index Governance.....	6
Index Committee.....	6
Index Policy.....	6
Timing and Pricing Source .....	6
Calendar .....	6
Verification .....	6
Recalculation Policy.....	7
Index Dissemination.....	7
Disclaimer .....	8



## Introduction

The ICE U.S. Municipal Bond Index Family includes USD denominated, fixed rate, tax exempt bonds. The index includes state and local general obligation bonds, revenue bonds, insured and pre-refunded bonds. This methodology was created by ICE Indices to measure the performance of the underlying interest of the U.S. Municipal and U.S. Municipal High Yield Index. The U.S. Investment Grade and High Yield Index have an inception date of November 30, 2016. Index history is available back to December 31, 2005.

## Index Eligibility Criteria and Rules for Inclusion

### Issuer

Bond issuer must be a U.S. state, U.S territory, or local government or agency where interest on the bond is exempt from U.S. federal income taxes and may be subject to the AMT.

### Currency

Principal and interest must be denominated in USD.

### Maturity

Each bond must have an expected maturity (redemption date) greater than or equal to one year from the rebalancing date. No bonds mature in the index.

### Taxability

Only fully tax-exempt issues are eligible.

### Coupon

Bonds must have a fixed coupon schedule.

### Quality

#### New Issues

New issues must be rated by at least one of the two rating agencies (Moody's, S&P) to be considered for the Investment Grade Index as of the rebalancing date.

#### Non-rated and Defaulted Bonds

Non rated bonds are included in the High Yield index with the exception of Escrow to Maturity or Pre-Refunded bonds

A security is considered in default for index inclusion if the issuer misses an interest or principal payment. Defaulted bonds are removed at the first possible rebalancing after default.



## Rating Classifications

### **Investment Grade Index**

- All eligible securities must be rated investment grade (Baa3/BBB-) by S&P and Moody's, with the lower rating used when the ratings differ.
- If only one agency rates a bond, that rating is used and must be considered investment grade.

### **High Yield Index**

- If rated, all eligible securities must be rated high yield (Ba1/BB+ or lower) by S&P and Moody's, with the lower rating used when the ratings differ.
- If only one agency rates a bond, that rating is used and must be considered high yield.
- Non-Rated securities are included.

## Bond Types

Bond Type	Investment Grade Index	High Yield Index
Floating Rate	Excluded	Excluded
Escrow to Maturity	Included	Excluded
Derivatives	Excluded	Excluded
Pre-Refunded	Included	Excluded
Monetary Defaults	Excluded	Excluded
Secondary Insured bonds where new securities are issued	Excluded	Excluded
Private placement	Excluded	Excluded
Crossover refunded bonds	Excluded	Excluded
Bonds backed by LOC or GICs	Excluded	Excluded
Limited Offerings	Excluded	Excluded
Term Mode (Greater than 1 year to the adjustment date)	Included	Included
Partial Pre -refunded bonds	Excluded	Excluded
Illiquid securities where dependable pricing is unavailable	Excluded	Excluded
Fixed to Floating	Excluded	Excluded
Remarketed issues	Included	Included
Taxable Municipals including Build America Bonds	Excluded	Excluded

## Amount Outstanding

### **Investment Grade Index**

Par Value of at least \$10 million and issued as part of a transaction of \$100 million.

### **High Yield Index**

Par Value of at least \$5 million and issued as part of a transaction of \$25 million



## Index Calculations

### Index Level Calculations

The total return is calculated by aggregating the interest return, reflecting the return due to paid and accrued interest, and price return, reflecting the gains or losses due to changes in the end-of-day price and principal repayments.

For further details regarding Index Calculations please refer to the ICE U.S. Bond Index Calculation Methodology.

#### Accuracy

Index levels will be provided to four decimal places.

#### Market Weight

The indices in the ICE US Municipal Index Series are market value weighted.

## Index Maintenance

#### Rebalancing

The ICE Municipal Index Series is rebalanced monthly, three days prior to the last business day of the month. A pro-forma index will be made available starting on T-4, and is intended to reflect the Constituent changes from the prior rebalancing date based on index eligibility. The index is not adjusted for securities that become eligible or ineligible for inclusion during the month. Any such changes are incorporated in the new index, which begins publishing on the third business day prior to the last business day of the month, and made effective from the first day of the following month.

#### Reinvestment of Cash Flows

Interest and principal payments earned by the index are held without a reinvestment return until month-end when they are removed from the index.

#### New Issues

Qualifying securities issued on or before the month-end rebalancing date may qualify for inclusion, if the required security reference information and pricing are readily available.

#### Security in Default

For index purposes, a security is considered to be in default if it has missed a scheduled interest or principal payment. Defaulted bonds from municipal issuers are not eligible for our indices, such as the US ICE Municipal High Yield Index. Once a municipal bond is identified as in default from an index standpoint, its accrued interest is set to zero, reversing out any accrual posted since the last coupon payment, and it will have a zero coupon return. The bond continues to be priced in the returns universe until month-end, at which time it will exit the index for the following month. When securities default, index users will see all analytics, such as duration and spread, set to zero.



## Index Governance

### Index Committee

ICE Indices' Index Committee maintains the indices. All committee members are full-time professionals at ICE Indices. Meetings are held monthly and whenever deemed appropriate.

The Index Committee oversees the management of the indices, including determinations of intra-rebalancing changes, maintenance and inclusion policies, and other matters affecting the maintenance and calculation of the indices.

In fulfilling its responsibilities, the Index Committee has full and complete discretion to (i) amend, apply, or exempt the application of index rules and policies as circumstances may require and (ii) add, remove, or by-pass any bond in determining the composition of an index.

The Interactive Data Index Governance Committee (the Governance Committee) is responsible for governance, accountability and oversight of the Indices. The Governance Committee provides oversight to the Interactive Data ETF & Index Services team which has daily responsibilities for the development, issuance and operation of the Indices. The Governance Committee will approve any necessary changes in the Index Methodology. The Interactive Data Index Services Team is then responsible for implementing the changes and notifying Subscribers. Advance notice will be provided, where possible, and the amount of notice will be based upon the severity of the impact of the change to allow for comments from Subscribers and appropriate preparation to implement the change. Comments from Subscribers will be made available via the Interactive Data website.

An advisory process is in place to alert Subscribers to the Administrator's response to market stress or disruption.

## Index Policy

### Timing and Pricing Source

4:00 p.m. ET evaluations from Interactive Data will be used to calculate the Index levels at the end of each day. Bonds in the Indices are priced on the bid side.

### ICE/NYSE ISSUED SECURITIES WILL NOT BE EVALUATED OR INCLUDED IN THE UNIVERSE

### Calendar

Indexes follow the US bond market holiday schedule (SIFMA). Index levels are calculated daily at the end of each Business Day. Where the bond market closes early per the SIFMA schedule, Index levels may be calculated at a time in accordance with the recommended close. However, evaluated pricing from Interactive Data must be available to calculate the Indices.

### Verification

Index levels are calculated using 4:00 p.m. ET evaluations from Interactive Data. These evaluations are based upon methodologies designed to accurately and reliably reflect the market the Index is based upon.



Interactive Data's bid-side evaluations are market-based measurements that represent its good faith opinions as to what the holder would receive in an orderly transaction (for an institutional round lot position typically 1MM or greater current value USD or local currency equivalent) under current market conditions. Trades and bids are reviewed to determine that the lot size is representative of an institutional round lot, though smaller or retail sized lots may be considered especially if this is the only or primary trading information available.

Interactive Data Pricing and Reference Data's evaluators meet regularly to discuss market movements and other macro-economic information. Interactive Data evaluates U.S. Treasury securities by obtaining feeds continuously from a number of live data sources including active market makers and inter-dealer brokers (IDB). Sources are reviewed on the basis of their historical accuracy for individual issues and maturity ranges. As new information is received it is compared against the previous evaluation as part of the daily process. The Interactive Data Index Services team also maintains a verification process designed to identify price tolerance breaks for further investigation.

Expert Judgment, when needed to establish an Index determination, will be based upon the Interactive Data Index Design Principles, which detail the core design principles adhered to by the Administrator in establishing an Index determination specific to that Index. The Interactive Data Index Design Principles are available on request.

### **Recalculation Policy**

ICE Indices reserves the right to recalculate an index under certain limited circumstances. ICE Indices may choose to recalculate and republish an index if it is found to be incorrect or inconsistent within two trading days of the publication of the index level in question for one of the following reasons:

- Index methodology event
- Late announcement
- Revised source data

Any other restatement or recalculation of an index is only done under extraordinary conditions.

### **Index Dissemination**

Index levels are available through ICE Indices' Web site at <http://www.theice.com/marketdata/reports/210>, major quote vendors (see codes below), numerous investment-oriented Web sites, and various print and electronic media.

<b>Tickers Index (Total Return)</b>	<b>Ticker</b>
ICE U.S. Investment Grade Municipal Bond Index	ICEMIG
ICE U.S. High Yield Municipal Bond Index	ICEMHY

### **FTP**

Daily index levels and index data are available via FTP subscription.

### **Website**

For further information, please refer to ICE Indices' Web site at <https://www.theice.com/market-data/pricing-and-analytics/index-services>



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