

**S&P National AMT-Free
Municipal Bond Index
*Methodology***

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Introduction

Index Objective and Highlights

The S&P National AMT-Free Municipal Bond Index measures the performance of investment-grade municipal bonds that are exempt from U.S. federal income tax and the Alternative Minimum Tax (AMT). Constituents of the index are derived from the S&P Municipal Bond Index. Index constituents are market-value weighted, subject to the concentration limits defined in *Index Construction*.

For more information on the S&P Municipal Bond Index, please refer to the S&P Dow Jones Indices' S&P Municipal Bond Index Methodology available at www.spdji.com.

For a list of defined terms used in this methodology please refer to Appendix I.

Index Family

The family consists of a broad-based national index, maturity based, and state level municipal bond indices. At this time the maturity based and state level indices include:

Maturity-Based Indices:

- S&P Intermediate Term National AMT-Free Municipal Bond Index
- S&P 1-5 Year National AMT-Free Municipal Bond Index
- S&P Short Term National AMT-Free Municipal Bond Index
- S&P 5-15 Year National AMT-Free Municipal Bond Index
- S&P 7-12 Year National AMT-Free Municipal Bond Index
- S&P 12-22 Year National AMT-Free Municipal Bond Index
- S&P 15+ Year National AMT-Free Municipal Bond Index
- S&P Long Term National AMT-Free Municipal Bond Index

State Indices

S&P DJI also calculates the following State indices which may have different eligibility requirements from the indices above. Please see *Index Eligibility* for more details.

- S&P California AMT-Free Municipal Bond Index
- S&P New York AMT-Free Municipal Bond Index
- S&P Intermediate Term California AMT-Free Municipal Bond Index
- S&P Intermediate Term New York AMT-Free Municipal Bond Index
- S&P Short Term California AMT-Free Municipal Bond Index
- S&P Short Term New York AMT-Free Municipal Bond Index

Supporting Documents

This methodology is meant to be read in conjunction with supporting documents providing greater detail with respect to the policies, procedures and calculations described herein. References throughout the methodology direct the reader to the relevant supporting document for further information on a specific topic. The list of the main supplemental documents for this methodology and the hyperlinks to those documents is as follows:

Supporting Document	URL
S&P Dow Jones Indices' Fixed Income Policies & Practices Methodology	Fixed Income Policies & Practices
S&P Dow Jones Indices' Fixed Income Index Mathematics Methodology	Index Mathematics Methodology

This methodology was created by S&P Dow Jones Indices to achieve the aforementioned objective of measuring the underlying interest of each index governed by this methodology document. Any changes to or deviations from this methodology are made in the sole judgment and discretion of S&P Dow Jones Indices so that the index continues to achieve its objective.

Eligibility Criteria

Eligibility Factors

A bond must meet all of the following criteria, as of the rebalancing reference date, to be eligible for index inclusion.

Issuer. The bond issuer must be a U.S. state, federal district (the District of Columbia) or local government or agency such that interest on the bond is exempt from U.S. federal income taxes.

Dated Date. New additions must have a dated date later than Dec 31, 2010 to be eligible for index inclusion.

Pricing. Securities Evaluations | ICE Data Services must provide daily pricing on the bond.

Investment grade. The bond must have a rating of at least BBB- by S&P Global Ratings (SPGR), Baa3 by Moody's, or BBB- by Fitch, except in the case of a pre-refunded/escrowed to maturity bond. A bond must be rated by at least one of the three rating agencies in order to qualify for the index. For the avoidance of doubt, the lowest rating is used in determining if a bond is investment grade. Pre-refunded bonds or bonds escrowed to maturity are considered Investment Grade.

Issuance. The bond must be denominated in U.S. dollars.

Security Type. The following bond types are specifically excluded:

- Bonds subject to alternative minimum tax (AMT)
- Bonds issued by U.S. territories and the Commonwealth of Puerto Rico
- Bonds issued under SEC Rule 144A
- Commercial paper
- Derivative securities (inverse floaters, forwards, swaps)
- Housing bonds
- Insured conduit bonds where the obligor is a for-profit institution
- Non-insured conduit bonds
- Non-rated bonds (except pre-refunded/escrowed to maturity bonds)
- Notes
- Taxable municipals
- Tobacco bonds
- Variable rate debt (except for known step-up/down coupon schedule bonds)

Deal Size. Except for the State Indices' Deal Size criteria below, each bond in the index must be a constituent of a deal where the original offering amount was at least US\$ 100 million.

- **State Indices' Deal Size:**
 - **New York:** Each bond must be a constituent of a deal where the original offering amount was at least US\$ 20 million.

Minimum Par Amount. Except for the State Indices' Par Amount criteria listed below, the amount outstanding, or par amount, is used to determine the weight of the bond in the index. The bond must have a minimum par amount of US\$ 25 million to be eligible for inclusion.

- **State Indices' Par Amounts:**
 - **California.** The bond must have a minimum par amount of US\$ 15 million to be eligible for inclusion.
 - **New York.** The bond must have a minimum par amount of US\$ 5 million to be eligible for inclusion.

Minimum Term. As of the next rebalancing date, the bond must have a minimum term to maturity greater than one calendar month. For any bond with an announced full call, the call date must be greater than one calendar month.

Maturity Based Indices. The maturity based sub-indices are constituted as follows:

- The S&P Intermediate Term National AMT-Free Municipal Bond Index includes all bonds in the National index that have an effective maturity, as measured from the first business day of the month, that is greater than or equal to one month and less than 20 years.
- The S&P 1-5 Year National AMT-Free Municipal Bond Index includes all bonds in the National index that have an effective maturity, as measured from the first business day of the month, that is greater than or equal to one year and less than five years.
- The S&P Short Term National AMT-Free Municipal Bond Index includes all bonds in the National index that have an effective maturity, as measured from the first business day of the month, that is greater than or equal to one month and less than five years.
- The S&P 5-15 Year National AMT-Free Municipal Bond Index includes all bonds in the National index that have an effective maturity, as measured from the first business day of the month, that is greater than or equal to five years and less than fifteen years.
- The S&P 7-12 Year National AMT-Free Municipal Bond Index includes all bonds in the National index that have an effective maturity, as measured from the first business day of the month, that is greater than or equal to seven years and less than twelve years.
- The S&P 12-22 Year National AMT-Free Municipal Bond Index includes all bonds in the National index that have an effective maturity, as measured from the first business day of the month, that is greater than or equal to twelve years and less than twenty-two years.
- The S&P 15+ Year National AMT-Free Municipal Bond Index includes all bonds in the National index that have an effective maturity, as measured from the first business day of the month, that is greater than or equal to fifteen years. Callable bonds with a call date less than three years from the rebalancing date are excluded from the index.
- The S&P Long Term National AMT-Free Municipal Bond Index includes all bonds in the National index that have an effective maturity, as measured from the first business day of the month, that is greater than or equal to twenty-two years.

Index Construction

Constituent Weighting

At each rebalancing, the index is market-value-weighted, subject to the following:

- No single issuer can exceed 25% of the weight of the index.
- Individual issuers that represent at least 5% of the weight of the index cannot in aggregate account for more than 50% of the weight of the index.

Prerefunded and Escrowed to Maturity bonds are excluded from the issuer capping constraint. Any excess weight is proportionally redistributed to all uncapped bonds.

Prices as of the rebalancing reference date are used in determining index bond concentration.

Index Calculations

Securities Evaluations | ICE Data Services reports the evaluated price of each bond in the index. The prices used in the index calculation add the accrued interest for each bond to the price reported by Securities Evaluations | ICE Data Services.

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 Securities Evaluations | ICE Data Services/ end-of-day price.

Questions and requests for written criteria and methodology regarding Securities Evaluations | ICE Data Services can be made by contacting ICE Data Services via email at SE-ChallengeInquiry@TheICE.com.

For further details regarding Index Calculations, please refer to S&P Dow Jones Indices' Fixed Income Index Mathematics Methodology.

Index Maintenance

The index is maintained in accordance with the following rules:

- New eligible bonds are added to the index on the next rebalancing date, subject to the schedule of the monthly rebalancing procedures.
- Any index bond that fails to meet any one of the eligibility factors is removed from the index on the next rebalancing date.
- Par amounts of index bonds are adjusted on the rebalancing date to reflect any changes that have occurred since the previous rebalancing date, due to partial calls, tenders, etc. However, where there is notification at any time during the month that a callable index bond will be called in its entirety, the relevant index bond is removed from the index on the next rebalancing date.
- Any index bond that is downgraded below investment grade between rebalancing dates is removed at the next rebalancing date.
- Where an index bond is in default or misses an interest payment, the price reported by Securities Evaluations | ICE Data Services shall be used. However, the Index Committee may determine that the bond be removed from the index at a different price and may specify a price of \$0.00.
- If an index bond is no longer priced by Securities Evaluations | ICE Data Services, the last available Securities Evaluations | ICE Data Services price is used. However, the Index Committee may determine that a different price be used. For clarity, index bonds that are no longer priced by Securities Evaluations | ICE Data Services fail to meet the Pricing Eligibility Factor and are removed at the next rebalancing date.

Rebalancing

The index is normally reviewed and rebalanced on a monthly basis. The Index Committee, nevertheless, reserves the right to make adjustments to the index at any time that it believes appropriate.

Deletions

Bonds are deleted from the index at the rebalancing for the following reasons:

- Bonds that are completely called or tendered during the course of the month.
- Bonds that are scheduled to be completely called or redeemed, during the course of the calendar month following the rebalancing date.
- Bonds where calls have reduced the known outstanding amount to less than US\$ 25 million during the course of the month.
- Any bond that is downgraded below investment grade between rebalancing dates.

Additions, deletions and other changes to the index arising from the monthly rebalancing are published, after the close of business, three business days prior to the last business day of the month (“the announcement date”). Publicly available information, up to and including the close on the fourth business day preceding the rebalancing date, is considered in the rebalancing.

Index changes published in the announcement are normally subject to revision and become effective after the close on the last business day of the month (“the rebalancing date”).

Rebalancing Schedule	
Rebalancing Frequency	Monthly
Rebalancing Date	Last day of the rebalancing period (T)
Announcement Date	T minus 3
Reference Date	T minus 4

Currency of Calculation and Additional Index Return Series

Additional currency and currency hedged versions of the indices, as well as maturity, sector and rating-based sub-indices, may be available. For a list of available sub-indices and tickers, please refer to S&P Dow Jones Indices' Fixed Income Index Directory available at www.spdji.com.

For more information on currency and currency hedged indices, please refer to S&P Dow Jones Indices' Fixed Income Index Mathematics Methodology.

Base Dates and History Availability

Index history availability, base dates, and base values are shown in the table below.

Index	Launch Date	First Value Date	Base Date	Base Value
S&P National AMT-Free Municipal Bond Index	08/31/2007	01/29/1999	08/31/2007	100
S&P California AMT-Free Municipal Bond Index	08/31/2007	01/29/1999	08/31/2007	100
S&P New York AMT-Free Municipal Bond Index	08/31/2007	01/29/1999	08/31/2007	100
S&P Intermediate Term National AMT-Free Municipal Bond Index	07/19/2010	08/31/2007	08/31/2007	100
S&P Intermediate Term California AMT-Free Municipal Bond Index	09/04/2012	06/30/2010	06/30/2010	100
S&P Intermediate Term New York AMT-Free Municipal Bond Index	09/04/2012	06/30/2010	06/30/2010	100
S&P 1-5 Year National AMT-Free Municipal Bond Index	07/19/2010	08/31/2007	08/31/2007	100
S&P Short Term National AMT-Free Municipal Bond Index	08/31/2007	01/29/1999	08/29/2008	100
S&P Short Term California AMT-Free Municipal Bond Index	04/02/2012	12/31/2009	12/31/2009	100
S&P Short Term New York AMT-Free Municipal Bond Index	04/02/2012	12/31/2009	12/31/2009	100
S&P 5-15 Year National AMT-Free Municipal Bond Index	11/30/2017	6/30/2010	6/30/2010	100
S&P 7-12 Year National AMT-Free Municipal Bond Index	11/29/2012	12/31/2009	12/31/2009	100
S&P 12-22 Year National AMT-Free Municipal Bond Index	11/29/2012	12/31/2009	12/31/2009	100
S&P 15+ Year National AMT-Free Municipal Bond Index	11/30/2017	6/30/2010	6/30/2010	100
S&P Long Term National AMT-Free Municipal Bond Index	11/29/2012	12/31/2009	12/31/2009	100

Index Governance

Index Committee

S&P Dow Jones Indices' Municipal Bond Index Committee maintains the index. The Committee is comprised of full-time employees or agents of S&P Dow Jones Indices. Meetings are held regularly.

The Committee oversees the day-to-day management of the index, including the monthly rebalancing, determinations of intra-rebalancing changes to the index, and maintenance and inclusion policies, including additions or deletions of bonds and other matters affecting the maintenance and calculation of the index. In fulfilling its responsibilities, the 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 the index.

The Committee may rely on any information or documentation submitted to it or gathered by it that the Committee believes to be accurate. The Committee reserves the right to reinterpret publicly available information and to make changes to the index based on a new interpretation of that information at its sole discretion.

The Index Committee is separate from and independent of other analytical groups at S&P Global. In particular, the Index Committee has no access to or influence on decisions by S&P Global Ratings analysts.

S&P Dow Jones Indices' Index Committees reserve the right to make exceptions when applying the methodology if the need arises. In any scenario where the treatment differs from the general rules stated in this document or supplemental documents, clients will receive sufficient notice, whenever possible.

In addition to the daily governance of indices and maintenance of index methodologies, at least once within any 12-month period, the Index Committee reviews the methodology to ensure the indices continue to achieve the stated objectives, and that the data and methodology remain effective. In certain instances, S&P Dow Jones Indices may publish a consultation inviting comments from external parties.

For information on Quality Assurance and Internal Reviews of Methodology, please refer to S&P Dow Jones Indices' Fixed Income Policies & Practices Methodology.

Index Policy

Announcements

Announcements of any relevant information pertaining to the index are made after market close. Press Releases are posted on S&P Dow Jones Indices' Web site at www.spdji.com.

Holiday Schedule

The index is calculated when the Securities Industry and Financial Markets Association (SIFMA®) declares the U.S. fixed income markets to be open.

Rebalancing

The Index Committee may change the date of a given rebalancing for reasons including market holidays occurring on or around the scheduled rebalancing date. Any such change will be announced with proper advance notice where possible.

End-of-Day Calculation

Index levels are calculated at the end of each business day, after market close. The current day's index levels are published via S&P Dow Jones Indices' Web site. On business days that SIFMA® recommends closing the U.S. fixed income markets early, index levels may be calculated at a time in accordance with the recommended early close time set for that day. Index levels are also posted on major quote vendors and other media outlets as noted in *Index Dissemination*.

Index Releases

Releases are issued by S&P Dow Jones Indices at the end of the business day, after market close.

Recalculation Policy

For information on the recalculation policy please refer to S&P Dow Jones Indices' Fixed Income Policies & Practices Methodology.

For information on Calculations and Pricing Disruptions, Expert Judgment and Data Hierarchy, please refer to S&P Dow Jones Indices' Fixed Income Policies & Practices Methodology.

Contact Information

For questions regarding an index, please contact: index_services@spglobal.com.

Index Dissemination

Index levels are available through S&P Dow Jones Indices' website at www.spdji.com, and major quote vendors (see codes below).

Tickers

The table below lists headline indices covered by this document. All versions of the below indices that may exist are also covered by this document. Please refer to the [S&P DJI Methodology & Regulatory Status Database](#) for a complete list of indices covered by this document.

Index	Index Code
S&P National AMT-Free Municipal Bond Index	SPMUNUS
S&P California AMT-Free Municipal Bond Index	SPMUNCA
S&P New York AMT-Free Municipal Bond Index	SPMUNNY
S&P Intermediate Term National AMT-Free Municipal Bond Index	SPMUNIM
S&P Intermediate Term California AMT-Free Municipal Bond Index	SPMUNIC
S&P Intermediate Term New York AMT-Free Municipal Bond Index	SPMUNIN
S&P 1-5 Year National AMT-Free Municipal Bond Index	SPMUN15
S&P Short Term National AMT-Free Municipal Bond Index	SPMU5YR
S&P Short Term California AMT-Free Municipal Bond Index	SPMU5CR
S&P Short Term New York AMT-Free Municipal Bond Index	SPMU5NR
S&P 5-15 Year National AMT-Free Municipal Bond Index	SPMU515
S&P 7-12 Year National AMT-Free Municipal Bond Index	SPMU7YR
S&P 12-22 Year National AMT-Free Municipal Bond Index	SPMU12R
S&P 15+ Year National AMT-Free Municipal Bond Index	SPMU15R
S&P Long Term National AMT-Free Municipal Bond Index	SPMU22R

Index Data

Daily index level data is available via subscription.

For product information, please contact S&P Dow Jones Indices, www.spdji.com/contact-us.

Web site

For further information, please refer to S&P Dow Jones Indices' Web site at www.spdji.com.

Appendix I – Defined Terms

Announcement Date. The date on which changes to the index are published, after the close of business, three business days prior to the last business day of the month.

Business Day. Any day that U.S. municipal bonds are traded, as determined by the Securities Industry and Financial Markets Association (SIFMA®).

Close. The end of a calendar or business day for the purpose of calculating index values and other statistics.

Eligible Bond. A bond that meets all of the eligibility criteria, based on publicly available information as of the close of the business day preceding the announcement date.

Index Bond. A bond that is included in the index.

Par Amount. The total par or “face value” amount outstanding of an index bond or an eligible bond, net of partial calls, tenders and mandatory sinking fund payments.

Rebalancing Date. The last business day of each month (after the close), when the changes to the index published on the Announcement Date, become effective.

Reference Date. The date on which publicly available information, up to and including the close on the fourth business day preceding the rebalancing date, is considered in the rebalancing.

Appendix II – Methodology Changes

Methodology Changes

Methodology changes since January 1, 2015 are as follows:

Change	Effective Date (After Close)	Methodology	
		Previous	Updated
Eligible Security Type	03/31/2021	<p>Security Type. The following bond types are specifically excluded:</p> <ul style="list-style-type: none"> • Bonds subject to alternative minimum tax (AMT) • Bonds issued by U.S. territories and the Commonwealth of Puerto Rico • Commercial paper • Derivative securities (inverse floaters, forwards, swaps) • Housing bonds • Insured conduit bonds where the obligor is a for-profit institution • Non-insured conduit bonds • Non-rated bonds (except pre-refunded/escrowed to maturity bonds) • Notes • Taxable municipals • Tobacco bonds • Variable rate debt (except for known step-up/down coupon schedule bonds) 	<p>Security Type. The following bond types are specifically excluded:</p> <ul style="list-style-type: none"> • Bonds subject to alternative minimum tax (AMT) • Bonds issued by U.S. territories and the Commonwealth of Puerto Rico • Bonds issued under SEC Rule 144A • Commercial paper • Derivative securities (inverse floaters, forwards, swaps) • Housing bonds • Insured conduit bonds where the obligor is a for-profit institution • Non-insured conduit bonds • Non-rated bonds (except pre-refunded/escrowed to maturity bonds) • Notes • Taxable municipals • Tobacco bonds • Variable rate debt (except for known step-up/down coupon schedule bonds)
Change to the Minimum Par Amount of New York state indices	01/31/2019	A bond must have a par amount of at least US\$ 25 million in order to be eligible for index inclusion.	A bond must have a par amount of at least US\$ 5 million in order to be eligible for index inclusion.
Change to the Minimum Par Amount of California state indices	01/31/2019	A bond must have a par amount of at least US\$ 25 million in order to be eligible for index inclusion.	A bond must have a par amount of at least US\$ 15 million in order to be eligible for index inclusion.
Change to the Minimum Deal Size of New York state indices	01/31/2019	A bond must be a constituent of a deal where the deal's original offering amount was at least US\$ 100 million.	A bond must be a constituent of a deal where the deal's original offering amount was at least US\$ 20 million.
Change to the Dated Date Criterion	10/02/2017	Bonds must have a dated date within three months of the monthly rebalancing in order to be eligible for index inclusion.	New additions must have a dated date later than Dec 31, 2010 to be eligible for index inclusion.
Elimination of the Mutual Fund Holding Criterion	10/02/2017	Bonds must be held by mutual funds in order to be eligible for index inclusion.	--

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