

**S&P Dow Jones
Indices**

A Division of **S&P Global**

S&P AMT-Free Municipal Series *Methodology*

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Introduction

Index Objective

The S&P AMT-Free Municipal Series Indices measure the performance of investment-grade, tax-exempt U.S. municipal bonds maturing in specific calendar years. Index constituents are tax-exempt under the Alternative Minimum Tax (AMT). Index constituents are market-value weighted, subject to the concentration limits defined in *Index Construction*.

Index Family

The S&P AMT-Free Municipal Series consists of a series of indices corresponding to the maturities listed below. Each index is comprised of non-callable bonds matching its respective maturity.

- 2021
- 2022
- 2023
- 2024
- 2025

The S&P AMT-Free Municipal Dec Series consists of eight indices corresponding to the maturities listed below. Each index is comprised of non-callable bonds matching its respective maturity.

- 2021
- 2022
- 2023
- 2024
- 2025
- 2026
- 2027
- 2028

The S&P AMT-Free Municipal Callable-Adjusted Series consists of three indices corresponding to the maturities listed below. Each index is comprised of bonds matching its respective maturity and call options as per eligibility criteria.

- 2026
- 2027
- 2028

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

Universe.

- **S&P AMT-Free Municipal Series and S&P AMT-Free Municipal Dec Series.** Bonds that are constituents of the S&P Municipal Bond Index form the eligible universe for each series.

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.

- **S&P AMT-Free Municipal Callable-Adjusted Series.** Bonds that are constituents of the S&P Municipal Bond Index, and callable bonds that meet the specific eligibility criteria defined below, form the eligible universe for this series.

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 as well as the AMT.

Excluded from the indices are bonds issued by U.S. territories and the Commonwealth of Puerto Rico.

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, 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 index inclusion. The lowest rating is used in determining if a bond is investment grade. In determining eligibility, S&P Dow Jones Indices uses the long-term rating. If the bond is insured, the insured rating is used for eligibility. If the insured rating does not qualify as investment grade, the issue rating is used to determine eligibility. Bonds pre-refunded or escrowed to maturity are considered to be Investment Grade.

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

Optionality. Non-callable issues and bonds with put options are eligible for index inclusion. Callable bonds must satisfy the following criteria for each series:

- **S&P AMT-Free Municipal Series and S&P AMT-Free Municipal Dec Series.** Callable bonds are ineligible except in the case of pre-refunded/escrowed to maturity bonds.
- **S&P AMT-Free Municipal Callable-Adjusted Series.** Callable bonds are eligible subject to the following:
 - Callable bonds with an effective maturity within the index maturity range (defined in the Maturity Range section below), and a next call date no sooner than two years prior to the index maturity year, are eligible for index inclusion.
 - Callable bonds with an effective maturity up to four years after the index maturity year, if the next call date is within the index maturity range, are eligible for index inclusion.

Security Type. The following bond types are specifically excluded:

- Bonds subject to alternative minimum tax (AMT)
- Bonds with early redemption dates (callable provisions)
- Bonds with sinking fund provisions
- Bonds issued under SEC Rule 144A
- Commercial paper
- Conduit bonds where the obligor is a for-profit institution
- Derivative securities (inverse floaters, forwards, swaps)
- 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)

In addition to the exclusions above, the S&P AMT-Free Municipal Series 2018-2025 exclude the following:

- Health care bonds
- Housing bonds
- Industrial bonds

Minimum Maturity Par Amount. Bonds must have a minimum maturity par amount of US\$ 2 million to be eligible for index inclusion.

Maturity Range. Index maturity ranges are as follows:

- **S&P AMT-Free Municipal Series 2018-2025.** Each bond must have an inclusive maturity range of June 1st to September 1st in the respective year of its maturity. Pre-refunded bonds with pre-refunded dates that fall in this maturity range are included.
- **S&P AMT-Free Municipal Dec Series 2021-2028 and S&P AMT-Free Municipal Callable-Adjusted Series 2026-2028.** Each bond must have an inclusive maturity range of January 1st to December 1st in the respective year of its maturity. Pre-refunded bonds with pre-refunded dates that fall in this maturity range are included.

Index Construction

Index Calculations

The indices are market-value-weighted, except when concentration limits are breached as explained below. Securities Evaluations | ICE Data Services provides the price of each index bond. The prices used in the index calculation add the accrued interest for each bond to the price provided by Securities Evaluations | ICE Data Services.

The total return of each index is calculated by aggregating 1) the interest return, reflecting the return due to paid and accrued interest, 2) the principal return, reflecting the gains or losses due to changes in end-of-day prices and principal repayments, and 3) the reinvestment return, reflecting the reinvestment of payments relating to the maturity or pre-refunding of bonds prior to the maturity date, at the daily rate of return of the S&P National AMT-Free Municipal VRDO Index.

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.

Constituent Concentration Requirements

At each monthly rebalancing, no index constituent can represent more than 30% of the weight of the index, and the five highest weighted index constituents cannot account for more than 65% of the weight of the index in aggregate. Prices as of the rebalancing reference date are used in determining an index bond concentration and weights are proportionately distributed.

Callable Bonds Concentration

For the S&P AMT-Free Municipal Callable-Adjusted Series, as the index approaches the respective maturity year, bonds with an effective maturity date after the index maturity year are subject to weight capping. The capping period will commence five years prior to the maturity year of the index. The capping period will conclude prior to the start of the index maturity year, at which time all bonds with an effective maturity date after the index maturity year will have exited the index. Only bonds with an effective maturity within the maturity year will remain in the index during the index maturity year.

Upon commencement of the capping period, bonds will be subject to capping starting with bonds that have an effective maturity date in the month furthest from the index maturity year. At each subsequent rebalancing, bonds with an effective maturity in the month furthest from the maturity year of the index that have not commenced capping will be capped. An uncapped bond will receive a factor of 1.00. The factor for bonds subject to capping will be reduced by 1/12 each rebalancing until it drops to zero weight, at which time the bond will exit the index. Please refer to the example on the following page for an illustration of the capping schedule.

Callable Bonds Concentration Capping Schedule Example

Index: S&P AMT-Free Municipal Series Callable-Adjusted Dec 2028 Index

Index Maturity: December 2028

Capping Period: January 2023 - December 2027

Max Effective Maturity: December 2032

		Effective Maturity Date		
		12/01/2032	11/01/2032	10/01/2032
		Index Rebalance Date		
01/01/2023	1.0000	No Cap		
02/01/2023	0.9167	1.0000	No Cap	
03/01/2023	0.8333	0.9167	1.0000	
04/01/2023	0.7500	0.8333	0.9167	
05/01/2023	0.6667	0.7500	0.8333	
06/01/2023	0.5833	0.6667	0.7500	
07/01/2023	0.5000	0.5833	0.6667	
08/01/2023	0.4167	0.5000	0.5833	
09/01/2023	0.3333	0.4167	0.5000	
10/01/2023	0.2500	0.3333	0.4167	
11/01/2023	0.1667	0.2500	0.3333	
12/01/2023	0.0833	0.1667	0.2500	
01/01/2024	Drop	0.0833	0.1667	
02/01/2024		Drop	0.0833	
03/01/2024			Drop	

		Effective Maturity Date		
		03/01/2029	02/01/2029	01/01/2029
		Index Rebalance Date		
10/01/2026	1.0000	No Cap		
11/01/2026	0.9167	1.0000	No Cap	
12/01/2026	0.8333	0.9167	1.0000	
01/01/2027	0.7500	0.8333	0.9167	
02/01/2027	0.6667	0.7500	0.8333	
03/01/2027	0.5833	0.6667	0.7500	
04/01/2027	0.5000	0.5833	0.6667	
05/01/2027	0.4167	0.5000	0.5833	
06/01/2027	0.3333	0.4167	0.5000	
07/01/2027	0.2500	0.3333	0.4167	
08/01/2027	0.1667	0.2500	0.3333	
09/01/2027	0.0833	0.1667	0.2500	
10/01/2027	Drop	0.0833	0.1667	
11/01/2027		Drop	0.0833	
12/01/2027			Drop	

Index Maintenance

The indices are maintained in accordance with the following rules:

- Eligible bonds are added to the indices on the next rebalancing date, subject to the schedule of monthly rebalancing procedures.
- Par amounts of index bonds are adjusted on the rebalancing date to reflect any changes that have occurred since the previous rebalancing date
- Any index bond that is downgraded below investment grade between rebalancing dates is removed at the next rebalancing.
- 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 price from Securities Evaluations | ICE Data Services 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 indices are reviewed and rebalanced on a monthly basis.

Deletions. Bonds are deleted from an index at the monthly rebalancing if the criteria for inclusion are no longer met as of the reference date.

Publicly available information, up to and including the close on the fourth business day preceding the rebalancing date (“the reference date”), is considered in the rebalancing.

Additions, deletions and other changes to the indices arising from the monthly rebalancing are published no earlier than three business days prior to the last business day of the month.

Changes are 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 index calculation, please refer to S&P Dow Jones Indices’ Fixed Income Index Mathematics Methodology.

Reinvestment of Maturing Securities

As noted in *Eligibility Criteria*, each bond in a given index has an inclusive maturity range in the respective year of its maturity. Bonds that mature or are pre-refunded in its stated maturity range in their respective year of maturity do not accrue interest past the maturity or pre-refund date. All payments related to the maturity or pre-refunding of a bond are reinvested at the daily rate of return of the S&P National AMT-Free Municipal VRDO Index for the duration of each index series.

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 AMT-Free Municipal Series 2018 Index	09/30/2009	09/30/2009	09/30/2009	100
S&P AMT-Free Municipal Series 2019 Index	09/30/2009	09/30/2009	09/30/2009	100
S&P AMT-Free Municipal Series 2020 Index	03/31/2011	11/01/2010	11/01/2010	100
S&P AMT-Free Municipal Series 2021 Index	11/01/2011	11/01/2011	11/01/2011	100
S&P AMT-Free Municipal Series 2022 Index	06/01/2012	06/01/2012	09/30/2009	100
S&P AMT-Free Municipal Series 2023 Index	03/04/2013	01/31/2013	05/31/2013	100
S&P AMT-Free Municipal Series 2024 Index	06/02/2014	06/02/2014	06/02/2014	100
S&P AMT-Free Municipal Series 2025 Index	01/02/2018	11/30/2017	11/30/2017	100
S&P AMT-Free Municipal Series Dec 2021	08/20/2015	07/31/2015	07/31/2015	100
S&P AMT-Free Municipal Series Dec 2022	08/20/2015	07/31/2015	07/31/2015	100
S&P AMT-Free Municipal Series Dec 2023	02/01/2016	12/31/2015	12/31/2015	100
S&P AMT-Free Municipal Series Dec 2024	02/01/2016	12/31/2015	12/31/2015	100
S&P AMT-Free Municipal Series Dec 2025	02/01/2016	12/31/2015	12/31/2015	100
S&P AMT-Free Municipal Series Dec 2026	02/01/2016	12/31/2015	12/31/2015	100
S&P AMT-Free Municipal Series Dec 2027	09/20/2018	12/30/2016	12/30/2016	100
S&P AMT-Free Municipal Series Dec 2028	09/20/2018	12/30/2016	12/30/2016	100
S&P AMT-Free Municipal Series Callable-Adjusted Dec 2026 Index	09/20/2018	12/30/2016	12/30/2016	100
S&P AMT-Free Municipal Series Callable-Adjusted Dec 2027 Index	09/20/2018	12/30/2016	12/30/2016	100
S&P AMT-Free Municipal Series Callable-Adjusted Dec 2028 Index	09/20/2018	12/30/2016	12/30/2016	100

Index Governance

Index Committee

S&P Dow Jones Indices' Municipal Bond Index Committee maintains the indices. All committee members are full-time professionals at S&P Dow Jones Indices. Meetings are held monthly and whenever deemed appropriate.

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

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 an 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 indices based on a new interpretation of that information at its sole discretion.

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 indices are made after market close. Press releases are posted on S&P Dow Jones Indices' Web site at www.spdji.com.

Holiday Schedule

The indices are calculated when the Securities Industry and Financial Markets Association (SIFMA®) recommends 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

Index 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, major quote vendors (see codes below), numerous investment-oriented websites, and various print and electronic media.

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 AMT-Free Municipal Series 2021 Index	SPMUS21
S&P AMT-Free Municipal Series 2022 Index	SPMUS22
S&P AMT-Free Municipal Series 2023 Index	SPMUS23
S&P AMT-Free Municipal Series 2024 Index	SPMUS24
S&P AMT-Free Municipal Series 2025 Index	SPMUS25
S&P AMT-Free Municipal Series Dec 2021	SPMUD21
S&P AMT-Free Municipal Series Dec 2022	SPMUD22
S&P AMT-Free Municipal Series Dec 2023	SPMUD23
S&P AMT-Free Municipal Series Dec 2024	SPMUD24
S&P AMT-Free Municipal Series Dec 2025	SPMUD25
S&P AMT-Free Municipal Series Dec 2026	SPMUD26
S&P AMT-Free Municipal Series Dec 2027	SPMUD27
S&P AMT-Free Municipal Series Dec 2028	SPMUD28
S&P AMT-Free Municipal Series Callable-Adjusted Dec 2026 Index	SPMDC26
S&P AMT-Free Municipal Series Callable-Adjusted Dec 2027 Index	SPMDC27
S&P AMT-Free Municipal Series Callable-Adjusted Dec 2028 Index	SPMDC28

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 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, currently 04:00 PM New York Time.

Effective Maturity. For fixed income securities with a mandatory redemption, call, tender or similar event prior to the maturity date, it is the date of such future event. If no mandatory redemption, call, tender or similar event is applicable to the security, it is the maturity date.

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 as determined by the Index Committee, net of partial calls, tenders and mandatory sinking fund payments.

Rebalancing Date. The last business day of each month, 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 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)
Index Names	04/30/2019	<p>S&P AMT-Free Municipal Series Callable Factor-Adjusted Series:</p> <ul style="list-style-type: none"> • S&P AMT-Free Municipal Series Callable Factor-Adjusted Dec 2026 Index • S&P AMT-Free Municipal Series Callable Factor-Adjusted Dec 2027 Index • S&P AMT-Free Municipal Series Callable Factor-Adjusted Dec 2028 Index 	<p>S&P AMT-Free Municipal Callable-Adjusted Series:</p> <ul style="list-style-type: none"> • S&P AMT-Free Municipal Series Callable - Adjusted Dec 2026 Index • S&P AMT-Free Municipal Series Callable - Adjusted Dec 2027 Index • S&P AMT-Free Municipal Series Callable-Adjusted Dec 2028 Index
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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