

muni 360

The comprehensive view of the municipal bond market.

MacKay Municipal Managers™ The minds behind munis.



INVESTMENTS



2018 Municipal Bond Market Insights: “A Year of Return and Risk” Mid-Year Update

MacKay Municipal Managers™ employs a relative value investment approach across all of their municipal strategies, with a focus on total return. The team seeks to capitalize on opportunities created by the mispricing of securities and will move along the credit curve based on where they find the best relative value. An emphasis is placed on risk management, and they currently do not employ leverage in the mutual funds they manage, which can increase volatility. The team’s active research-driven process and keen emphasis on risk control may benefit investors seeking attractive tax-free income.

Top Five Municipal Market Insights for 2018 – “A Year of Return and Risk”



Taxable Municipal Issuance Accelerates

Rationale

We expect taxable municipal issuance could double to ~\$60B annually. We believe that low rates, tight credit spreads and demand for yield should keep taxable municipal yields low. Issuers will likely refinance their higher cost tax-exempt debt with taxable municipal bonds, overcoming the elimination of tax-exempt financed advanced refundings by the 2017 tax reform act. The increased volume of taxable municipal bonds should broaden the investor base, increase liquidity, and provide attractive yield opportunities. Individual investors in high tax states where the top marginal rate is quickly reached may also find in-state taxable municipal bonds, still exempt at the state level, to be attractive.

Portfolio in Action

While our mutual funds do not have direct impact in terms of material exposure to taxable municipal bonds, increased taxable municipal issuance leads to decreased tax-exempt municipal bond supply therefore contributing to positive technicals broadly. In select investment mandates where taxable municipal bonds are part of the investment guidelines, MacKay Municipal Managers seeks relative value opportunities in this segment of the market.

Mid-Year Status

Pending: We believe issuers will likely refinance their higher cost tax-exempt debt with taxable municipal bonds since advance refundings in the tax-exempt market are no longer an option.

While taxable municipal bond issuance is not currently on track to double in 2018, the market has observed an increase, if annualized, of ~20%.¹ We believe this will accelerate over time, particularly as the market observes more clarity in Washington DC related to infrastructure spending.

¹ J.P. Morgan



High Yield Municipal Bonds' Outperformance Continues

Rationale

We anticipate that favorable technical and improving fundamental conditions will result in tighter high yield municipal credit spreads and outperformance relative to investment grade municipal bonds. Tax reform will likely reduce tax-exempt issuance by 30%, while individual investor and mutual fund manager demand remains strong. We believe ongoing economic expansion and increasing tax revenues, especially excise taxes, should improve coverage ratios for dedicated tax bonds. Stronger credit fundamentals should result in tighter spreads as investor comfort with high yield increases. However, 2018 implementation of the SEC's rules governing liquidity risk for mutual funds and exchange traded funds will likely result in the underperformance of non-rated municipal debt as the rule favors frequently traded bonds with published ratings and proven price transparency.

Portfolio in Action

MacKay Municipal Managers increased exposure to credit within the investment grade portfolios that we manage to capitalize on attractive spreads and yield potential.

Based on our view that high yield municipals would outperform in 2018, MacKay Municipal Managers recommended an overweight of 70% to investment grade and 30% to high yield municipals as a starting point for the average moderate investor. This represented a constructive view on high yield municipals since an 80% investment grade/20% high yield allocation indicates the team's neutral position.

In July, 2018, the team updated the recommended allocation to 75% investment grade/25% high yield municipals maintaining a constructive, albeit tempered, view of high yield municipals.

Mid-Year Status

On Target: Through June 30, 2018, year-to-date performance for the Bloomberg Barclays High Yield Municipal Bond Index was 3.66%, outperforming the Bloomberg Barclays Municipal Bond Index by 391 basis points, which returned -0.25% for the same period.²

² Bloomberg Barclays Municipal Bond Index and Bloomberg Barclays High Yield Municipal Bond Index, as of June, 2018



Intermediate Municipal Bonds Underperform

Rationale

Low yields, interest rate sensitivity, correlation to Treasury yields, and curve flattening will, in our opinion, result in underperformance of higher quality intermediate municipal bonds. We anticipate that higher short-term yields and diminished demand from banks and property and casualty insurance companies will lead to a flatter curve. We believe that investors who reposition away from the high grade portion of the intermediate yield curve to invest in longer, more credit sensitive municipal bonds will experience a higher level of income. This is due to the higher yield on longer maturity bonds, a better return profile due to credit spread tightening and improved liquidity from owning bonds in a more favored portion of the market.

Portfolio in Action

For some time, MacKay Municipal Managers has largely avoided the intermediate, high-grade segment of the market within maturity ranges of 3 to 8 years. Instead, the team has actively managed an overweight position within longer, more credit sensitive municipal bonds as we seek a more compelling return profile for clients. That said, in cases where the yield curve flattens and credit spreads tighten, the team may gravitate down the curve and increase credit quality if we are no longer being compensated for this positioning.

Mid-Year Status

On Target: On a year-to-date basis through 6/29/2018, the intermediate segment of the municipal market has underperformed an actively managed investment grade portfolio taking a barbelled approach with a focus on credit-oriented bonds.

For example, and on a year-to-date basis through 6/29/2018, the [MainStay MacKay Tax Free Bond Fund \(MTBIX\)](#), has returned 0.73%³ while the Bloomberg Barclays 5-10 Year Index has returned -0.36% during the same period.⁴ The Fund's benchmark, the Bloomberg Barclays Municipal Bond Index, has returned -0.25%.⁵

³ Morningstar – Performance as of 6/29/2018. Returns represent past performance which is no guarantee of future results. Current performance may be lower or higher. Investment return and principal value will fluctuate, and shares, when redeemed, may be worth more or less than their original cost. Performance reflects a contractual fee waiver and/or expense limitation agreement in effect through 2/28/19, without which total returns may have been lower. This agreement renews automatically for one-year terms unless written notice is provided prior to the start of the next term or upon approval of the Board. Visit nylinvestments.com/funds for the most recent month-end performance. For standardized Fund performance, click the hyperlinked Fund name.

⁴ Bloomberg Barclays Municipal 5-10 Year Index

⁵ Bloomberg Barclays Municipal Bond Index



Tax-Exempt Municipal/Treasury Ratios Hit 20-Year Lows

Rationale

We expect that Municipal/Treasury yield ratios will decline due to supply/demand technicals and improving fundamental conditions. As a result, we anticipate that tax-exempt municipal bonds will outperform Treasury bonds and other high-quality taxable bonds. We look to the 2017 tax law changes to increase demand for income exempt at both the federal and state levels and reduce tax-exempt supply. In high tax states, the relative outperformance of tax-exempt bonds will be particularly impactful.

Portfolio in Action

Within MacKay Municipal Managers' investment process, the team seeks exposure on segments of the yield curve where the most compelling value is observed. This includes an assessment of municipal/ Treasury ratios across the yield curve. With this in mind, the team has largely avoided the intermediate segment of the curve, while taking a "barbelled" approach combining longer dated with maturities with primarily 1 to 3 year maturity bonds. This positioning could change periodically since it is driven by where we believe we can capture value at the time.

Mid-Year Status

Pending: In early 2018, projections of low supply and high demand materialized, although rising rates caused 10 and 30-Year Municipal/Treasury yield ratios to rise as of 6/29/2018. At the same time, 5-Year ratios have declined thus far in 2018.

MacKay Municipal Managers believes a decline in Municipal/Treasury yield ratios will accelerate in the second half of 2018.

Yield Ratios – 5, 10, and 30 Year

- As of 1/1/2018: 76%, 82%, and 93% respectively⁶
- As of 6/29/2018: 73%, 86%, and 98% respectively⁶

⁶ MMD: Thomson Reuters as of January 1, 2018 and June 29, 2018



Tax-Exempt Market Liquidity Declines

Rationale

We believe that liquidity will decline and volatility will rise. Lower corporate tax rates will reduce the profitability of trading tax-exempt debt for brokerdealers, leading to a reduction in trading capital committed to the municipal market. As a result, they will likely redeploy capital into the taxable markets to generate trading profits. For capital still committed to the municipal market, we expect broker-dealers to prefer rated, liquid names as the capital cost of positioning non-rated paper will be prohibitive. As a result, non-rated bonds will trade primarily on an agency basis, where the broker will only transact with the seller and buyer simultaneously. We believe this will further reduce their liquidity and, most likely, value.

Portfolio in Action

In a municipal market where bank and broker dealer committed capital and liquidity has declined since 2008, MacKay Municipal Managers believes liquidity management is an integral part of a prudent investment process. When managing “daily access” mutual funds, the team seeks to maintain liquidity on a “local level”, by maintaining some cash, avoiding leverage, and carrying modest levels of non-rated bonds relative to many peers managing high yield municipal portfolios. This positions the team well to effectively navigate and potentially capitalize, particularly during steeper municipal market sell-offs and recoveries.

Mid-Year Status

On Target: In light of lower corporate tax rates, banks and property and casualty insurance companies scaled back municipal purchases and were also net sellers in the first half of the year. As referenced in Insight 3, the intermediate maturity segment of the municipal market has underperformed due to this lack of buying from a consistent liquidity provider. Large broker dealers remain active in the secondary market, however, this activity has been heavily tied to recent underwritings while smaller regional broker dealer’s activity in the secondary market has dropped significantly, also detracting from market liquidity.

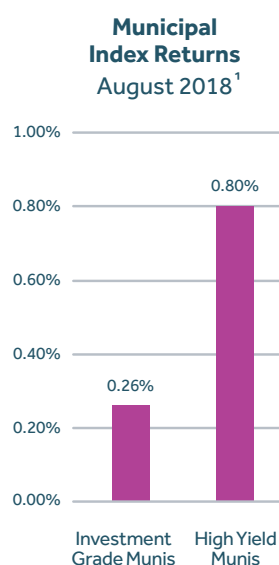
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Municipal Market Monthly Update

August 2018 Summary¹

- ▶ Bloomberg Barclays Municipal Index returned +0.26% in August, bringing YTD returns to +0.25%.
- ▶ Bloomberg Barclays High Yield Municipal Index returned +0.80%, bringing YTD returns to +4.86%.
- ▶ Municipal issuance in August totaled \$33 billion, up 25% month-over-month but down 13% year-over-year, with net issuance at -\$11 billion. Gross issuance YTD is \$224 billion, with net issuance at -\$41 billion.
- ▶ Muni flows were positive in August, with inflows averaging about \$530 million per week.



Performance Details¹

- ▶ Bloomberg Barclays Municipal Index returned +0.26% in August, bringing YTD returns to +0.25%.
 - Munis underperformed vs. US Treasuries, which returned +0.77% in August. Muni performance was mixed across the curve, with the long end in positive territory.
 - The best performing revenue sectors were hospitals (+0.34%), education (+0.33%), and water & sewer (+0.32%).
 - The top performing municipalities for the month were Puerto Rico (+1.22%), Vermont (+0.75%), and Montana (0.75%).
- ▶ Bloomberg Barclays High Yield Municipal Index returned +0.80%, bringing YTD returns to +4.86%.
 - Performance was driven primarily by water & sewer (+6.52%) and transportation (+1.50%).
 - Excluding Puerto Rico credits, the high yield muni index returned +0.61%, bringing YTD returns to +3.92%.

¹ Source: Barclays Research, as of 8/31/18. Investment grade munis represented by Bloomberg Barclay Municipal Index; High yield munis represented by Bloomberg Barclays High Yield Municipal Index. Past performance is not indicative of future results. An investment cannot be made in an index.

Market Technicals

Supply

- ▶ In August, supply came in at \$33 billion, bringing YTD issuance to \$224 billion – 15% less than the same period last year. Net issuance was -\$11 billion, bringing YTD net issuance to -\$41 billion.
- ▶ Favorable technicals are expected to reverse – positive net supply is likely in the coming weeks as redemptions fall.

Flows

- ▶ Muni funds that report weekly have averaged \$300 million of inflows per week YTD. In August, muni funds reported inflows of \$1.6 billion, bringing YTD inflows to \$15 billion.
- ▶ High yield muni inflows faltered early in the month, but overall continued at a strong pace.

Spreads & Performance

High Yield Municipal Index Yields Minus Investment Grade Municipal Index Yields



Source: Barclays Research, as of 8/31/18

Representative indexes: High Yield Municipal Index: Bloomberg Barclays High Yield Municipal Index and Investment Grade Municipal Index: Bloomberg Barclays Municipal Index. Past performance is not indicative of future results. An investment cannot be made in an index. Standard Deviation measures how widely dispersed a fund's returns have been over a specific period of time. A high standard deviation indicates that the range is wide, implying greater potential for volatility.

Ratio of Municipal High Yield Index to Corporate High Yield Index Yield to Worst



Source: Barclays Research, as of 8/31/18

Representative indexes: Municipal High Yield Index: Bloomberg Barclays High Yield Municipal Index and Corporate High Yield Index: Bloomberg Barclays U.S. Corporate High Yield Index. Past performance is not indicative of future results. An investment cannot be made in an index. Standard Deviation measures how widely dispersed a fund's returns have been over a specific period of time. A high standard deviation indicates that the range is wide, implying greater potential for volatility. The yield to worst (YTW) is the lowest potential yield that can be received on a bond without the issuer actually defaulting. The YTW is calculated by making worst-case scenario assumptions on the issue by calculating the return that would be received if the issuer uses provisions, including prepayments, calls or sinking funds. This metric is used to evaluate the worst-case scenario for yield to help investors manage risks and ensure that specific income requirements will still be met even in the worst scenarios.

Returns (%), as of August 31, 2018

	Number Issues	Price Return	Coupon Return	MTD Total Return	Past 3m	Past 6m	Year to Date	Past 12m
Municipal Bond Index	53,592	-0.09%	0.35%	0.26%	0.59%	1.75%	0.25%	0.49%
1 Year (1-2)	4,062	-0.41%	0.38%	-0.04%	0.52%	0.69%	1.14%	0.64%
3 Year (2-4)	7,173	-0.40%	0.37%	-0.03%	0.69%	0.86%	1.05%	-0.06%
5 Year (4-6)	5,955	-0.39%	0.35%	-0.04%	0.63%	1.19%	0.66%	-0.74%
7 Year (6-8)	5,311	-0.29%	0.35%	0.06%	0.71%	1.55%	0.21%	-0.79%
10 Year (8-12)	10,002	-0.03%	0.34%	0.31%	0.76%	1.96%	-0.04%	-0.10%
15 Year (12-17)	10,481	0.12%	0.34%	0.47%	0.66%	2.29%	0.11%	1.07%
20 Year (17-22)	5,729	0.10%	0.35%	0.45%	0.52%	2.25%	0.00%	1.32%
Long Bond (22+)	4,879	0.06%	0.35%	0.41%	0.31%	2.07%	-0.23%	1.28%

MTD: Month to Date

Source: Barclays Research, as of 8/31/18

Representative indexes: Bloomberg Barclays Municipal Index, Bloomberg Barclays Municipal 1 Yr 1-2, Bloomberg Barclays Municipal 3 Yr 2-4, Bloomberg Barclays Municipal 5 Yr 4-6, Bloomberg Barclays Municipal 10 Yr 8-12, Bloomberg Barclays Municipal 20 Yr 17-22, and Bloomberg Barclays Municipal Long 22+ Yr.

Past performance is not indicative of future results. An investment cannot be made in an index.

High Grade Municipals Returns by Sector

August 2018	(%)	Year-to-Date 2018	(%)
Tobacco	0.3	Tobacco	1.4
Education	0.3	Housing	0.6
Hospital	0.3	Hospital	0.5
Water & Sewer	0.3	Resource Recovery	0.4
Transportation	0.3	Leasing	0.4
Special Tax	0.3	IDR/PCR (ex-tobacco)	0.3
Electric	0.3	Electric	0.2
Leasing	0.2	Transportation	0.2
Housing	0.2	Water & Sewer	0.1
IDR/PCR (ex-tobacco)	0.2	Education	0.1
Resource Recovery	0.1	Special Tax	0.1

Representative index: Bloomberg Barclays Municipal
AAA Index

High Yield Municipals Returns by Sector

August 2018	(%)	Year-to-Date 2018	(%)
Water & Sewer	6.2	Water & Sewer	27.7
Transportation	1.5	Electric	10.1
Electric	0.9	Special Tax	5.6
Special Tax	0.9	HY Tobacco	5.1
Leasing	0.8	Resource Recovery	4.0
Resource Recovery	0.8	Transportation	3.4
Housing	0.7	Leasing	3.2
Education	0.7	IDR/PCR (ex-tobacco)	3.1
IDR/PCR (ex-tobacco)	0.6	Education	2.2
HY Tobacco	0.5	Hospital	1.9
Hospital	0.4	Housing	1.8

Representative index: Bloomberg Barclays High
Yield Municipal Index

Source: Barclays Research, as of 8/31/18

Past performance is not indicative of future results. An investment cannot be made in an index.



2018 Quarterly Overview: State Coffers Fill Up in FY 2018

▲ 4.90%

2018 general fund
revenue growth

▲ 3.20%

expected rise in
2019 state outlays

39

states meeting or
surpassing revenue
projections in 2018

After two lean years, the fiscal health of states has improved as revenues for FY 2018 have exceeded expectations, according to the Spring 2018 Fiscal Survey of the States conducted by the National Association of State Budget Officers (NASBO).¹ For full fiscal year 2018, general fund revenues were estimated to grow by 4.90% on average, up from just 2.70% in FY 2017, according to NASBO.

As of late in fiscal 2018, 39 states had reported meeting or surpassing their original projections for the year.

Much of the increase came as result of higher personal income tax revenues in the fourth quarter of 2017, as upper-income earners prepaid taxes to capitalize on deductions that were to be eliminated or reduced.²

This increase in revenues is making possible a rise in spending, and according to NASBO, state outlays are expected to rise by 3.20% in fiscal 2019, up from just 1.00% in fiscal 2018. Full coffers have also allowed many states to avoid mid-year budget cuts. In FY 2017, 23 states reported having to reduce their spending halfway through the year, for a combined total of \$4.9 billion, but in fiscal 2018 only nine states have made cuts, totaling just \$830 million.

Despite the appreciable growth in revenues, fiscal health varies widely from state to state. More than half (27) report that budgets have still not returned to their level of a decade ago, adjusted for inflation. On the other hand, nine states report that spending is now more than 10% above the level of fiscal 2008.³

For FY 2019, states are predicting an average revenue increase of 2.10% increase (median: 2.80%), with 40 states forecasting revenue gains. Forty-two states plan to increase spending for FY 2019, up from 35 in FY 2018.⁴

¹ The Fiscal Survey of States, National Association of State Budget Officers, Spring 2018.

² "Decade After Recession Began, Revenue Higher in 34 States," Pew Charitable Trusts, www.pewtrusts.org, May 2, 2018.

³ The Fiscal Survey of the States, op. cit.

⁴ Ibid.



Key Market Developments

Medicaid Expansion¹

States spent an additional 4.50% on Medicaid in FY 2018, and the program will continue to make up a larger and larger share of state budgets. States that expanded their programs to “newly eligible” adults began to pick up 5% of those new costs in 2017, and that share will rise to 10% by 2020, according to NASBO.

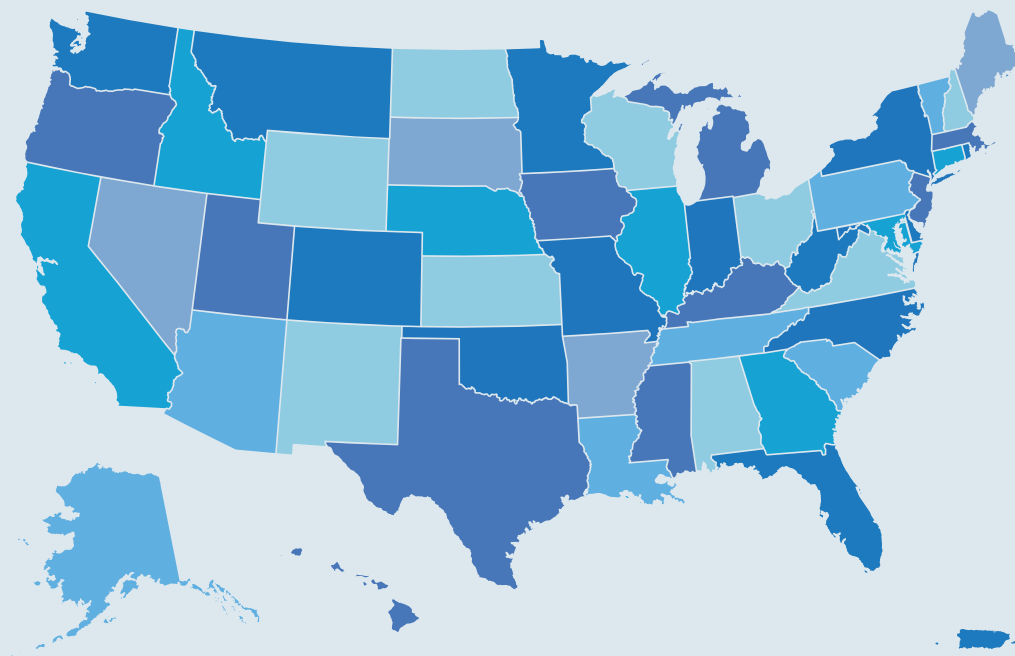
But in the short term, spending on this program is expected to moderate. Overall spending will rise by a median rate of only 1.90% in FY 2019, according to governors’ proposed budgets. State spending on this program is expected to rise by a median rate of 1.50%. States continue to look for ways to cut drug costs, reduce fraud, and expand managed care.

Tax Cuts and Jobs Act (TCJA)¹

Some of the increase in state revenues in FY 2018 has resulted from the federal tax reform passed in December 2017. The TCJA produced a surge in revenues in December as high-income households made prepayments to capitalize on expiring tax breaks. Data from April 2018 also showed a surge in revenues, according to NASBO.

Because revenue forecasts for FY 2019 were completed before TCJA was passed, states are still trying to grasp the full impact of the new law, and it is unclear whether the bump in tax revenues seen in FY 2018 will be repeated in FY 2019, according to NASBO.

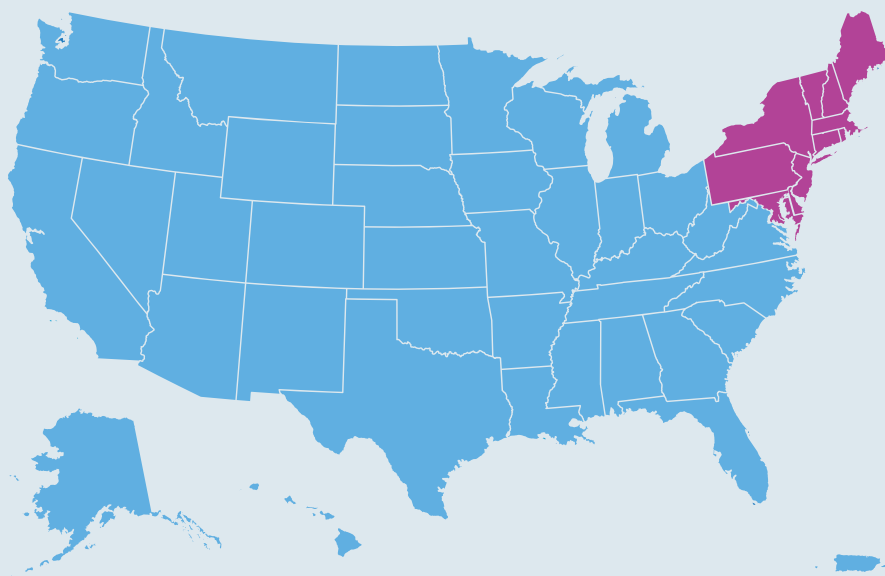
¹ The Fiscal Survey of the States, Spring 2018, National Association of State Budget Officers, www.nasbo.org



Regional Developments

State governments across the country are reaping significant gains in state revenues collections as the strong US economy and higher than projected revenue receipts have resulted in budget surpluses and growing reserves. Personal income tax receipts, which provide the primary revenue source to most state coffers, experienced the most sizable increase. However, this increase is more than likely attributable to one-time payment withholdings prior to the enactment of higher tax rates with the 2017 tax reform *Tax Cut and Jobs Act*. Fiscal 2019 state budgets project the ninth consecutive year of spending and revenue growth and continued increase to state rainy day fund reserves, which will reach a record average of 6.2% of general fund spending.¹

¹ The National Association of State Budget Officers (NASBO), www.nasbo.org



North

CT, DE, MA, MD, NJ, NY, PA, NH, RI, VT

The State of Connecticut reported favorable revenues in 2018, allowing for a large nearly \$1 billion transfer to its rainy day fund. The State of New York experienced an 8.3% increase in personal income tax receipts in FY 2018, and a 22% increase in its General Fund balance. The State of Massachusetts collected \$1.1 billion more in tax revenue than estimated with over \$500M deposited into state reserves. Pennsylvania made a \$22 million deposit to its rainy day fund, its first deposit to this account since 2009. The State of New Jersey reported a small surplus for 2018 and was able to pass an on-time budget for FY 2019, avoiding a repeat of the government shutdown which occurred in 2017.^{1,2}

	2018 - Increase in General Fund Revenues ²	Increase in Personal Income Tax Revenues ²	Reserves % of 2018 Budget ²
CT	▲ 31.4%	▲ 35.1%	5.25%
NJ	▲ 4.5%	▲ 9.2%	3.8%
NY	▲ 6.8%	▲ 8.3%	4.0%
MA	▲ 8.6%	▲ 10.6%	6.4%

¹ The National Association of State Budget Officers (NASBO), www.nasbo.org

² Sources: CT: <https://www.ct.gov/opm/site/default.asp>; NJ: <https://www.nj.gov/treasury/omb/>; NY: <https://www.budget.ny.gov/>; MA: <https://www.mass.gov/how-to/fiscal-year-2018-budget>

State Profiles



Connecticut

Capital City
HartfordGovernor
Dan Malloy (D)

Total issuance, as % of the market ¹	1.59%
# of issuers ²	273
Pension funded ratio (2017) ³	43.85%
State GO ratings	
Moody's ⁴	A1
S&P ⁴	A+
Fitch ⁴	A+
Top marginal rates	
State level, 2018 ⁵	6.99%
Federal and state combined ⁵	43.99%
Tax equivalent yields ⁶	
2%	3.83%
3%	5.75%
4%	7.66%



Delaware

Capital City
DoverGovernor
John Carney (D)

Total issuance, as % of the market ¹	0.21%
# of issuers ²	83
Pension funded ratio (2017) ³	82.80%
State GO ratings	
Moody's ⁴	Aaa
S&P ⁴	AAA
Fitch ⁴	AAA
Top marginal rates	
State level, 2018 ⁵	6.60%
Federal and state combined ⁵	43.60%
Tax equivalent yields ⁶	
2%	3.80%
3%	5.70%
4%	7.60%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Maine

Capital City
AugustaGovernor
Paul LePage (R)

Total issuance, as % of the market ¹	0.1%
# of issuers ²	153
Pension funded ratio (2017) ³	81.93%
State GO ratings	
Moody's ⁴	Aa2
S&P ⁴	AA
Fitch ⁴	—
Top marginal rates	
State level, 2018 ⁵	7.15%
Federal and state combined ⁵	44.15%
Tax equivalent yields ⁶	
2%	3.84%
3%	5.76%
4%	7.68%



Maryland

Capital City
AnnapolisGovernor
Larry Hogan (R)

Total issuance, as % of the market ¹	4%
# of issuers ²	253
Pension funded ratio (2017) ³	68.56%
State GO ratings	
Moody's ⁴	Aaa
S&P ⁴	AAA
Fitch ⁴	AAA
Top marginal rates	
State level, 2018 ⁵	5.75%
Federal and state combined ⁵	42.75%
Tax equivalent yields ⁶	
2%	3.74%
3%	5.61%
4%	7.48%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Massachusetts

Capital City
BostonGovernor
Charlie Baker (R)

Total issuance, as % of the market ¹	2.10%
# of issuers ²	597
Pension funded ratio (2017) ³	59.94%
State GO ratings	
Moody's ⁴	Aa1
S&P ⁴	AA
Fitch ⁴	AA+
Top marginal rates	
State level, 2018 ⁵	5.10%
Federal and state combined ⁵	42.10%
Tax equivalent yields ⁶	
2%	3.70%
3%	5.55%
4%	7.39%



New Hampshire

Capital City
ConcordGovernor
Chris Sununu (R)

Total issuance, as % of the market ¹	0.07%
# of issuers ²	99
Pension funded ratio (2017) ³	62.58%
State GO ratings	
Moody's ⁴	Aa1
S&P ⁴	AA
Fitch ⁴	AA+
Top marginal rates	
State level, 2018 ⁵	5.00%
Federal and state combined ⁵	42.00%
Tax equivalent yields ⁶	
2%	3.69%
3%	5.54%
4%	7.38%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



New Jersey

Capital City
TrentonGovernor
Phil Murphy (D)

Total issuance, as % of the market ¹	3.83%
# of issuers ²	1,258
Pension funded ratio (2017) ³	35.79%
State GO ratings	
Moody's ⁴	A3
S&P ⁴	A-
Fitch ⁴	A
Top marginal rates	
State level, 2018 ⁵	8.97%
Federal and state combined ⁵	45.97%
Tax equivalent yields ⁶	
2%	3.98%
3%	5.97%
4%	7.96%



New York

Capital City
AlbanyGovernor
Andrew Cuomo (D)

Total issuance, as % of the market ¹	15.68%
# of issuers ²	2,248
Pension funded ratio (2017) ³	94.51%
State GO ratings	
Moody's ⁴	Aa1
S&P ⁴	AA+
Fitch ⁴	AA+
Top marginal rates	
State level, 2018 ⁵	8.82%
Federal and state combined ⁵	45.82%
Tax equivalent yields ⁶	
2%	3.97%
3%	5.95%
4%	7.94%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Pennsylvania

Capital City
HarrisburgGovernor
Tom Wolf (D)

Total issuance, as % of the market ¹	3.86%
# of issuers ²	1,915
Pension funded ratio (2017) ³	55.32%
State GO ratings	
Moody's ⁴	Aa3
S&P ⁴	A+
Fitch ⁴	AA-
Top marginal rates	
State level, 2018 ⁵	3.07%
Federal and state combined ⁵	40.07%
Tax equivalent yields ⁶	
2%	3.56%
3%	5.34%
4%	7.13%



Rhode Island

Capital City
ProvidenceGovernor
Gina Raimondo (D)

Total issuance, as % of the market ¹	0.17%
# of issuers ²	109
Pension funded ratio (2017) ³	54.59%
State GO ratings	
Moody's ⁴	Aa2
S&P ⁴	AA
Fitch ⁴	AA
Top marginal rates	
State level, 2018 ⁵	5.99%
Federal and state combined ⁵	42.99%
Tax equivalent yields ⁶	
2%	3.76%
3%	5.64%
4%	7.52%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Vermont



Capital City
Montpelier



Governor
Phil Scott (R)

Total issuance, as % of the market ¹	0.04%
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# of issuers ²	37
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Pension funded ratio (2017) ³	64.26%
------------------------------------------	--------

State GO ratings

Moody's ⁴	Aaa
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S&P ⁴	AA+
------------------	-----

Fitch ⁴	AAA
--------------------	-----

Top marginal rates

State level, 2018 ⁵	8.95%
--------------------------------	-------

Federal and state combined ⁵	45.95%
-----------------------------------------	--------

Tax equivalent yields⁶

2%	3.98%
----	-------

3%	5.97%
----	-------

4%	7.96%
----	-------

¹ Barclays

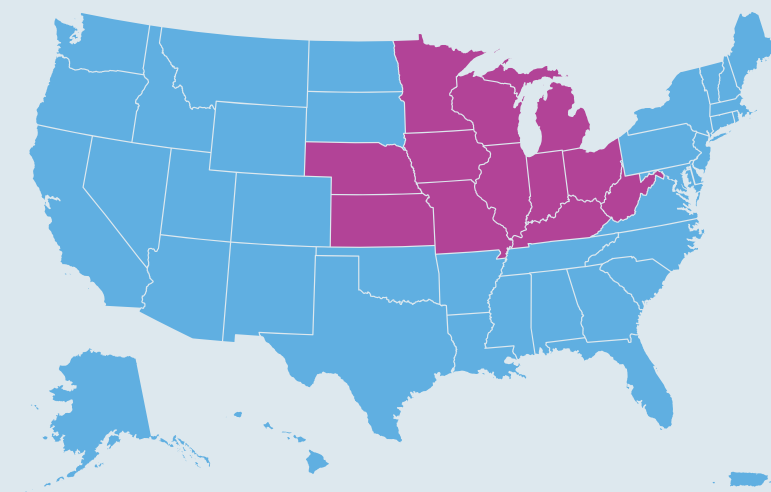
² Electronic Municipal Market Access (EMMA)

³ Bloomberg, 2017

⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018

⁵ Tax Foundation

⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.



Central

IA, IL, IN, KS, KY, MI, MN, MO, NE, OH, WI, WV

Central regional states have fully recovered from weaknesses of the Great Recession. The State of Michigan reports that year to date General Fund revenues are up +3.50% (Michigan fiscal year ends 9/30) and Net Personal Income tax receipts are up +7.20%. Actual FY 2018 receipts were 2% greater than estimates in the State of Illinois as Personal Income Tax receipts were 2.1% greater than estimates. Kentucky ended FY 2018 with a \$120M surplus, resulting in an \$82M contribution to the State's Budget Reserve Trust Fund, which remains below the 5% target. Ohio tax receipts year to date are 2.6% greater than projected and the State deposited an additional \$657.5M into its rainy day fund at the end of FY 2018. Ohio did see a 5.0% decrease in revenues due to an approximate 20% reduction in federal grants due to changes in Medicaid grant funding.^{1,2}

	2018 - Increase in General Fund Revenues ²	Increase in Personal Income Tax Revenues ²	Reserves % of 2018 Budget ²
MI (FYE 9/30)	▲ 3.5%	▲ 7.2%	2.1%
IL	▲ 41% ³	▲ 39.2% ³	0.0%
KY	▲ 3.4%	▲ 4.8%	0.0%
OH	▼ 5.0%	▲ 10.6%	2.0%

¹ The National Association of State Budget Officers (NASBO), www.nasbo.org

² Sources: MI: <https://www.michigan.gov/budget/>; IL: <https://www2.illinois.gov/sites/budget/Pages/default.aspx>; KY: <https://osbd.ky.gov/Pages/default.aspx>; OH: <https://obm.ohio.gov/default.aspx>

³ The State of Illinois revenue increase reflects the increase in the state income tax from 3.75% to 4.95% and the corporate tax rates from 5.25% to 7.00% which were incorporated in the FY 2018 budget.

State Profiles



Iowa

Capital City
Des MoinesGovernor
Kim Reynolds (R)

Total issuance, as % of the market ¹	0.17%
# of issuers ²	1,229
Pension funded ratio (2017) ³	82.13%
State GO ratings	
Moody's ⁴	—
S&P ⁴	—
Fitch ⁴	—
Top marginal rates	
State level, 2018 ⁵	8.98%
Federal and state combined ⁵	45.98%
Tax equivalent yields ⁶	
2%	3.98%
3%	5.97%
4%	7.96%



Illinois

Capital City
SpringfieldGovernor
Bruce Rauner (R)

Total issuance, as % of the market ¹	4.60%
# of issuers ²	2,402
Pension funded ratio (2017) ³	38.42%
State GO ratings	
Moody's ⁴	Baa3
S&P ⁴	BBB-
Fitch ⁴	BBB
Top marginal rates	
State level, 2018 ⁵	4.95%
Federal and state combined ⁵	41.95%
Tax equivalent yields ⁶	
2%	3.69%
3%	5.53%
4%	7.37%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Indiana

Capital City
IndianapolisGovernor
Eric Holcomb (R)

Total issuance, as % of the market ¹	0.86%
# of issuers ²	1,851
Pension funded ratio (2017) ³	65.04%
State GO ratings	
Moody's ⁴	—
S&P ⁴	—
Fitch ⁴	—
Top marginal rates	
State level, 2018 ⁵	3.23%
Federal and state combined ⁵	40.23%
Tax equivalent yields ⁶	
2%	3.57%
3%	5.36%
4%	7.15%



Kansas

Capital City
TopekaGovernor
Jeff Colyer (R)

Total issuance, as % of the market ¹	0.41%
# of issuers ²	1,040
Pension funded ratio (2017) ³	67.12%
State GO ratings	
Moody's ⁴	—
S&P ⁴	—
Fitch ⁴	—
Top marginal rates	
State level, 2018 ⁵	5.70%
Federal and state combined ⁵	42.70%
Tax equivalent yields ⁶	
2%	3.74%
3%	5.61%
4%	7.48%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Kentucky

Capital City
FrankfortGovernor
Matt Bevin (R)

Total issuance, as % of the market ¹	0.66%
# of issuers ²	934
Pension funded ratio (2017) ³	33.87%
State GO ratings	
Moody's ⁴	Aa3
S&P ⁴	A+
Fitch ⁴	—
Top marginal rates	
State level, 2018 ⁵	6.00%
Federal and state combined ⁵	43.00%
Tax equivalent yields ⁶	
2%	3.76%
3%	5.64%
4%	7.52%



Michigan

Capital City
LansingGovernor
Rick Snyder (R)

Total issuance, as % of the market ¹	1.69%
# of issuers ²	1,810
Pension funded ratio (2017) ³	65.14%
State GO ratings	
Moody's ⁴	Aa1
S&P ⁴	AA-
Fitch ⁴	AA
Top marginal rates	
State level, 2018 ⁵	4.25%
Federal and state combined ⁵	41.25%
Tax equivalent yields ⁶	
2%	3.64%
3%	5.46%
4%	7.28%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Minnesota

Capital City
St. PaulGovernor
Mark Dayton (D)

Total issuance, as % of the market ¹	1.09%
----------------------------------------------------	-------

# of issuers ²	2,149
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Pension funded ratio (2017) ³	63.34%
------------------------------------------	--------

State GO ratings

Moody's ⁴	Aa1
----------------------	-----

S&P ⁴	AA+
------------------	-----

Fitch ⁴	AAA
--------------------	-----

Top marginal rates

State level, 2018 ⁵	9.85%
--------------------------------	-------

Federal and state combined ⁵	46.85%
-----------------------------------------	--------

Tax equivalent yields⁶

2%	4.05%
----	-------

3%	6.08%
----	-------

4%	8.11%
----	-------



Missouri

Capital City
Jefferson CityGovernor
Mike Parson (R)

Total issuance, as % of the market ¹	0.73%
----------------------------------------------------	-------

# of issuers ²	1,956
---------------------------	-------

Pension funded ratio (2017) ³	77.86%
------------------------------------------	--------

State GO ratings

Moody's ⁴	Aaa
----------------------	-----

S&P ⁴	AAA
------------------	-----

Fitch ⁴	AAA
--------------------	-----

Top marginal rates

State level, 2018 ⁵	5.90%
--------------------------------	-------

Federal and state combined ⁵	42.90%
-----------------------------------------	--------

Tax equivalent yields⁶

2%	3.75%
----	-------

3%	5.63%
----	-------

4%	7.50%
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¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Nebraska

Capital City
LincolnGovernor
Pete Ricketts (R)

Total issuance, as % of the market ¹	0.51%
# of issuers ²	1,336
Pension funded ratio (2017) ³	90.18%
State GO ratings	
Moody's ⁴	—
S&P ⁴	—
Fitch ⁴	—
Top marginal rates	
State level, 2018 ⁵	6.84%
Federal and state combined ⁵	43.84%
Tax equivalent yields ⁶	
2%	3.82%
3%	5.73%
4%	7.64%



Ohio

Capital City
ColumbusGovernor
John Kasich (R)

Total issuance, as % of the market ¹	2.44%
# of issuers ²	1,892
Pension funded ratio (2017) ³	78.47%
State GO ratings	
Moody's ⁴	Aa1
S&P ⁴	AA+
Fitch ⁴	AA+
Top marginal rates	
State level, 2018 ⁵	4.997%
Federal and state combined ⁵	42.00%
Tax equivalent yields ⁶	
2%	3.69%
3%	5.53%
4%	7.38%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Wisconsin

Capital City
MadisonGovernor
Scott Walker (R)

Total issuance, as % of the market ¹	1.33%
# of issuers ²	1,554
Pension funded ratio (2017) ³	99.98%
State GO ratings	
Moody's ⁴	Aa1
S&P ⁴	AA
Fitch ⁴	AA+
Top marginal rates	
State level, 2018 ⁵	7.65%
Federal and state combined ⁵	44.65%
Tax equivalent yields ⁶	
2%	3.88%
3%	5.82%
4%	7.76%

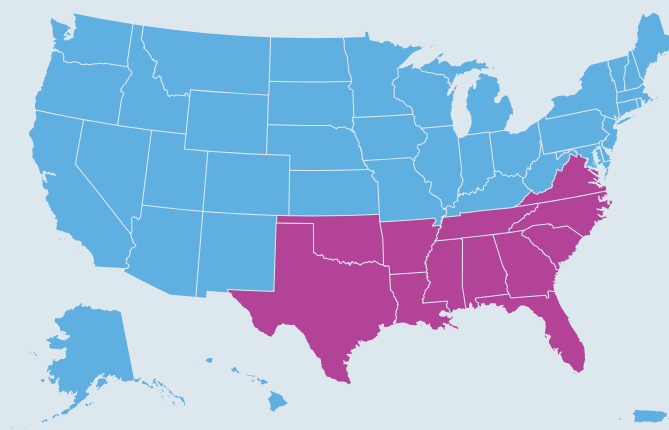


West Virginia

Capital City
CharlestonGovernor
Jim Justice (R)

Total issuance, as % of the market ¹	0.20%
# of issuers ²	290
Pension funded ratio (2017) ³	79.23%
State GO ratings	
Moody's ⁴	Aa2
S&P ⁴	AA-
Fitch ⁴	AA
Top marginal rates	
State level, 2018 ⁵	6.50%
Federal and state combined ⁵	43.50%
Tax equivalent yields ⁶	
2%	3.80%
3%	5.69%
4%	7.59%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.



South

AL, AR, FL, GA, LA, MS, NC, OK, SC, TN, TX, VA

The State of Florida reported FY 2018 General Revenues receipts that were \$205 million, or +0.7%, greater than estimates with the State's largest revenue source, Sales Tax receipts, collecting 1.9% greater than estimates and +5.0% greater than FY 2017. (The State of Florida does not levy a personal income tax.) The State of Georgia continues to post strong revenue increases with +6.1% increase in state Income Tax – Individual collections and +5.0% Net Sales and Use Tax increases in FY 2018. The State of Oklahoma reported FY 2018 gross receipts +\$1.2M greater than FY 2017, with an 8.50% increase in income tax receipts and a large 58% increase in oil and gas gross production tax increase. Texas reported strong revenue growth of +10.5% for FY 2018 and \$2.5B over the original budgeted estimate. Sales Taxes receipts, the State's largest tax revenue source, were \$1.02B over forecast. The State of Texas now boasts the largest rainy day fund balance in its history at \$11.9B or approximately 22% of its 2018 budget.^{1,2}

	2018 - Increase in General Fund Revenues ²	Increase in Personal Income Tax Revenues ²	Reserves % of 2018 Budget ²
FL	▲ 5.5%	Sales Taxes +5.0% ³	4.5%
GA	▲ 4.4%	▲ 6.1%	10.9%
OK	▲ 11.1%	▲ 8.5%	22%
TX	▲ 10.5%	Sales Taxes +10.0% ³	22%

¹ The National Association of State Budget Officers (NASBO), www.nasbo.org

² Sources: FL: https://www.dms.myflorida.com/agency_administration/planning_budget_and_fiscal_integrity; GA: <https://opb.georgia.gov/>; OK: <https://www.ok.gov/OSF/documents/bud18.pdf>; TX: <https://comptroller.texas.gov/transparency/>

³ The State of Florida and the State of Texas do NOT levy a personal income tax; sales taxes are the largest revenue source for both states.

State Profiles



Alabama

Capital City
MontgomeryGovernor
Kay Ivey (R)

Total issuance, as % of the market ¹	0.88%
# of issuers ²	1,171
Pension funded ratio (2017) ³	70.85%
State GO ratings	
Moody's ⁴	Aa1
S&P ⁴	AA
Fitch ⁴	AA
Top marginal rates	
State level, 2018 ⁵	5.00%
Federal and state combined ⁵	42.00%
Tax equivalent yields ⁶	
2%	3.69%
3%	5.54%
4%	7.38%



Arkansas

Capital City
Little RockGovernor
Asa Hutchinson (R)

Total issuance, as % of the market ¹	0.15%
# of issuers ²	894
Pension funded ratio (2017) ³	76.29%
State GO ratings	
Moody's ⁴	Aa1
S&P ⁴	AA
Fitch ⁴	—
Top marginal rates	
State level, 2018 ⁵	6.90%
Federal and state combined ⁵	43.90%
Tax equivalent yields ⁶	
2%	3.82%
3%	5.74%
4%	7.65%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Florida

Capital City
TallahasseeGovernor
Rick Scott (R)

Total issuance, as % of the market ¹	4.41%
# of issuers ²	1,895
Pension funded ratio (2017) ³	79.06%
State GO ratings	
Moody's ⁴	Aa1
S&P ⁴	AAA
Fitch ⁴	AAA
Top marginal rates	
State level, 2018 ⁵	0.00%
Federal and state combined ⁵	37.00%
Tax equivalent yields ⁶	
2%	3.38%
3%	5.07%
4%	6.76%



Georgia

Capital City
AtlantaGovernor
Nathan Deal (R)

Total issuance, as % of the market ¹	2.11%
# of issuers ²	1,012
Pension funded ratio (2017) ³	79.23%
State GO ratings	
Moody's ⁴	Aaa
S&P ⁴	AAA
Fitch ⁴	AAA
Top marginal rates	
State level, 2018 ⁵	6.00%
Federal and state combined ⁵	43.00%
Tax equivalent yields ⁶	
2%	3.76%
3%	5.64%
4%	7.52%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Louisiana

Capital City
Baton RougeGovernor
John Bel Edwards (D)

Total issuance, as % of the market ¹	1.03%
# of issuers ²	640
Pension funded ratio (2017) ³	65.56%
State GO ratings	
Moody's ⁴	Aa3
S&P ⁴	AA-
Fitch ⁴	AA-
Top marginal rates	
State level, 2018 ⁵	6.00%
Federal and state combined ⁵	43.00%
Tax equivalent yields ⁶	
2%	3.76%
3%	5.64%
4%	7.52%



Mississippi

Capital City
JacksonGovernor
Phil Bryant (R)

Total issuance, as % of the market ¹	0.28%
# of issuers ²	468
Pension funded ratio (2017) ³	61.08%
State GO ratings	
Moody's ⁴	Aa2
S&P ⁴	AA
Fitch ⁴	AA
Top marginal rates	
State level, 2018 ⁵	5.00%
Federal and state combined ⁵	42.00%
Tax equivalent yields ⁶	
2%	3.69%
3%	5.54%
4%	7.38%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



North Carolina

Capital City
RaleighGovernor
Roy Cooper (D)

Total issuance, as % of the market ¹	1.41%
# of issuers ²	520
Pension funded ratio (2017) ³	90.67%
State GO ratings	
Moody's ⁴	Aaa
S&P ⁴	AAA
Fitch ⁴	AAA
Top marginal rates	
State level, 2018 ⁵	5.499%
Federal and state combined ⁵	42.50%
Tax equivalent yields ⁶	
2%	3.72%
3%	5.59%
4%	7.45%



Oklahoma

Capital City
Oklahoma CityGovernor
Mary Fallin (R)

Total issuance, as % of the market ¹	0.34%
# of issuers ²	914
Pension funded ratio (2017) ³	77.92%
State GO ratings	
Moody's ⁴	Aa2
S&P ⁴	AA
Fitch ⁴	AA
Top marginal rates	
State level, 2018 ⁵	5.00%
Federal and state combined ⁵	42.00%
Tax equivalent yields ⁶	
2%	3.69%
3%	5.54%
4%	7.38%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



South Carolina

Capital City
ColumbiaGovernor
Henry McMaster (R)

Total issuance, as % of the market ¹	1.04%
# of issuers ²	456
Pension funded ratio (2017) ³	54.25%
State GO ratings	
Moody's ⁴	Aaa
S&P ⁴	AA+
Fitch ⁴	AAA
Top marginal rates	
State level, 2018 ⁵	7.00%
Federal and state combined ⁵	44.00%
Tax equivalent yields ⁶	
2%	3.83%
3%	5.75%
4%	7.66%



Tennessee

Capital City
NashvilleGovernor
Bill Haslam (R)

Total issuance, as % of the market ¹	1.13%
# of issuers ²	622
Pension funded ratio (2017) ³	96.23%
State GO ratings	
Moody's ⁴	Aaa
S&P ⁴	AAA
Fitch ⁴	AAA
Top marginal rates	
State level, 2018 ⁵	3.00%
Federal and state combined ⁵	40.00%
Tax equivalent yields ⁶	
2%	3.56%
3%	5.34%
4%	7.12%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Texas

Capital City
AustinGovernor
Greg Abbott (R)

Total issuance, as % of the market ¹	9.52%
# of issuers ²	4,241
Pension funded ratio (2017) ³	76.06%
State GO ratings	
Moody's ⁴	Aaa
S&P ⁴	AAA
Fitch ⁴	AAA
Top marginal rates	
State level, 2018 ⁵	0.00%
Federal and state combined ⁵	37.00%
Tax equivalent yields ⁶	
2%	3.38%
3%	5.07%
4%	6.76%

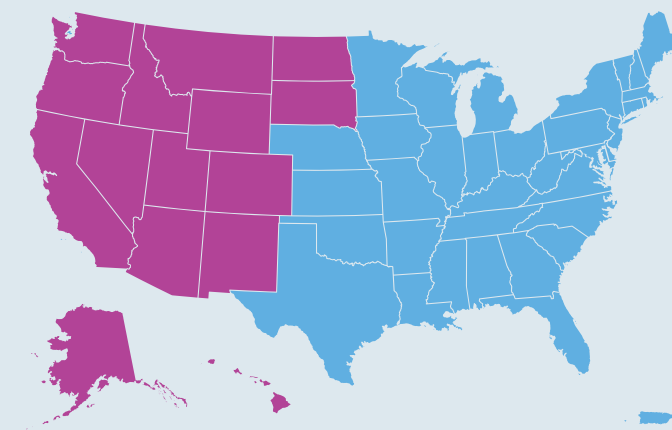


Virginia

Capital City
RichmondGovernor
Ralph Northam (D)

Total issuance, as % of the market ¹	1.98%
# of issuers ²	644
Pension funded ratio (2017) ³	77.22%
State GO ratings	
Moody's ⁴	Aaa
S&P ⁴	AAA
Fitch ⁴	AAA
Top marginal rates	
State level, 2018 ⁵	5.75%
Federal and state combined ⁵	42.75%
Tax equivalent yields ⁶	
2%	3.74%
3%	5.61%
4%	7.48%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.



West

AK, AZ, CA, CO, HI, ID, MT, ND, NM, NV, OR, SD, UT, WA, WY

The State of California anchors the Western United States as the world's 5th largest economy. The State rolls into FY 2018-2019 with large budget reserves and healthy revenue growth. Personal income tax revenues certainly grew in FY 2017-2018 due to the federal tax changes in 2017 as taxpayers' prepaid state and local taxes, but have primarily been bolstered by capital gains taxes due to stock market performance, and a delay of asset sales from 2016 in anticipation of the tax changes. Arizona posted a large surplus in FY 2018 with General Fund revenues growing 6.4%. The growth is also primarily attributable to Individual Income Taxes, as many taxpayers prepaid their state and local taxes at the end of calendar year 2017. Utah has also seen strong growth as the State's economy continues to expand, notching a strong 8.7% revenue growth and an impressive 15.3% reserves balance. Personal income taxes have driven revenues in Colorado as well growing 11.5% YoY. Growth here is in line with other surrounding states, as well as strong oil and gas royalties and solid business and rental income.^{1,2}

	2018 - Increase in General Fund Revenues ²	Increase in Personal Income Tax Revenues ²	Reserves % of 2018 Budget ²
CA	▲ 8.13%	▲ 6.6%	10.45%
CO	▲ 13.1%	▲ 11.5%	6.13%
AZ	▲ 6.4%	▲ 10%	4.5%
UT	▲ 8.7%	▲ 10.7%	15.3%

¹ The National Association of State Budget Officers (NASBO), www.nasbo.org

² Sources: CA: <http://www.ebudget.ca.gov/>; CO: <https://www.colorado.gov/governor/office-state-planning-budgeting>;
AZ: <http://www.ospb.state.az.us/2018-budget.html>; UT: <https://budget.utah.gov/>

State Profiles



Alaska

Capital City
JuneauGovernor
Bill Walker (I)

Total issuance, as % of the market ¹	0.20%
# of issuers ²	69
Pension funded ratio (2017) ³	66.62%
State GO ratings	
Moody's ⁴	Aa3
S&P ⁴	AA
Fitch ⁴	AA
Top marginal rates	
State level, 2018 ⁵	0.00%
Federal and state combined ⁵	37.00%
Tax equivalent yields ⁶	
2%	3.38%
3%	5.07%
4%	6.76%



Arizona

Capital City
PhoenixGovernor
Doug Ducey (R)

Total issuance, as % of the market ¹	1.62%
# of issuers ²	663
Pension funded ratio (2017) ³	62.73%
State GO ratings	
Moody's ⁴	—
S&P ⁴	—
Fitch ⁴	—
Top marginal rates	
State level, 2018 ⁵	4.54%
Federal and state combined ⁵	41.54%
Tax equivalent yields ⁶	
2%	3.66%
3%	5.49%
4%	7.32%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



California

Capital City
SacramentoGovernor
Jerry Brown (D)

Total issuance, as % of the market ¹	17.18%
# of issuers ²	5,286
Pension funded ratio (2017) ³	66.53%
State GO ratings	
Moody's ⁴	Aa3
S&P ⁴	AA-
Fitch ⁴	AA-
Top marginal rates	
State level, 2018 ⁵	13.30%
Federal and state combined ⁵	50.30%
Tax equivalent yields ⁶	
2%	4.36%
3%	6.54%
4%	8.71%



Colorado

Capital City
DenverGovernor
John Hickenlooper (D)

Total issuance, as % of the market ¹	1.70%
# of issuers ²	1,349
Pension funded ratio (2017) ³	47.13%
State GO ratings	
Moody's ⁴	—
S&P ⁴	—
Fitch ⁴	—
Top marginal rates	
State level, 2018 ⁵	4.63%
Federal and state combined ⁵	41.63%
Tax equivalent yields ⁶	
2%	3.67%
3%	5.50%
4%	7.33%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Hawaii

Capital City
HonoluluGovernor
David Ige (D)

Total issuance, as % of the market ¹	0.90%
# of issuers ²	46
Pension funded ratio (2017) ³	54.80%
State GO ratings	
Moody's ⁴	Aa1
S&P ⁴	AA+
Fitch ⁴	AA
Top marginal rates	
State level, 2018 ⁵	11.00%
Federal and state combined ⁵	48.00%
Tax equivalent yields ⁶	
2%	4.15%
3%	6.22%
4%	8.30%



Idaho

Capital City
BoiseGovernor
Butch Otter (R)

Total issuance, as % of the market ¹	0.09%
# of issuers ²	200
Pension funded ratio (2017) ³	91.27%
State GO ratings	
Moody's ⁴	—
S&P ⁴	—
Fitch ⁴	—
Top marginal rates	
State level, 2018 ⁵	7.40%
Federal and state combined ⁵	44.40%
Tax equivalent yields ⁶	
2%	3.86%
3%	5.79%
4%	7.72%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Montana

Capital City
HelenaGovernor
Steve Bullock (D)

Total issuance, as % of the market ¹	0.04%
# of issuers ²	284
Pension funded ratio (2017) ³	72.86%
State GO ratings	
Moody's ⁴	Aa1
S&P ⁴	AA
Fitch ⁴	AA+
Top marginal rates	
State level, 2018 ⁵	6.90%
Federal and state combined ⁵	43.90%
Tax equivalent yields ⁶	
2%	3.82%
3%	5.74%
4%	7.65%



Nevada

Capital City
Carson CityGovernor
Brian Sandoval (R)

Total issuance, as % of the market ¹	0.81%
# of issuers ²	158
Pension funded ratio (2017) ³	74.45%
State GO ratings	
Moody's ⁴	Aa2
S&P ⁴	AA
Fitch ⁴	AA+
Top marginal rates	
State level, 2018 ⁵	0.00%
Federal and state combined ⁵	37.00%
Tax equivalent yields ⁶	
2%	3.38%
3%	5.07%
4%	6.76%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



New Mexico

Capital City
Santa FeGovernor
Susana Martinez (R)

Total issuance, as % of the market ¹	0.30%
# of issuers ²	292
Pension funded ratio (2017) ³	62.52%
State GO ratings	
Moody's ⁴	Aa1
S&P ⁴	AA
Fitch ⁴	—
Top marginal rates	
State level, 2018 ⁵	4.90%
Federal and state combined ⁵	41.90%
Tax equivalent yields ⁶	
2%	3.68%
3%	5.52%
4%	7.37%



North Dakota

Capital City
BismarckGovernor
Doug Burgum (R)

Total issuance, as % of the market ¹	0.08%
# of issuers ²	444
Pension funded ratio (2017) ³	63.78%
State GO ratings	
Moody's ⁴	—
S&P ⁴	—
Fitch ⁴	—
Top marginal rates	
State level, 2018 ⁵	2.90%
Federal and state combined ⁵	39.90%
Tax equivalent yields ⁶	
2%	3.55%
3%	5.33%
4%	7.10%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Oregon

Capital City
SalemGovernor
Kate Brown (D)

Total issuance, as % of the market ¹	0.92%
# of issuers ²	539
Pension funded ratio (2017) ³	83.12%
State GO ratings	
Moody's ⁴	Aa1
S&P ⁴	AA+
Fitch ⁴	AA+
Top marginal rates	
State level, 2018 ⁵	9.90%
Federal and state combined ⁵	46.90%
Tax equivalent yields ⁶	
2%	4.06%
3%	6.09%
4%	8.11%



South Dakota

Capital City
PierreGovernor
Dennis Daugaard (R)

Total issuance, as % of the market ¹	0.09%
# of issuers ²	253
Pension funded ratio (2017) ³	100.08%
State GO ratings	
Moody's ⁴	—
S&P ⁴	—
Fitch ⁴	—
Top marginal rates	
State level, 2018 ⁵	0.00%
Federal and state combined ⁵	37.00%
Tax equivalent yields ⁶	
2%	3.38%
3%	5.07%
4%	6.76%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Utah

Capital City
Salt Lake CityGovernor
Gary Herbert (R)

Total issuance, as % of the market ¹	0.47%
# of issuers ²	445
Pension funded ratio (2017) ³	90.31%
State GO ratings	
Moody's ⁴	Aaa
S&P ⁴	AAA
Fitch ⁴	AAA
Top marginal rates	
State level, 2018 ⁵	5.00%
Federal and state combined ⁵	42.00%
Tax equivalent yields ⁶	
2%	3.69%
3%	5.54%
4%	7.38%



Washington

Capital City
OlympiaGovernor
Jay Inslee (D)

Total issuance, as % of the market ¹	3.18%
# of issuers ²	939
Pension funded ratio (2017) ³	89.60%
State GO ratings	
Moody's ⁴	Aa1
S&P ⁴	AA+
Fitch ⁴	AA+
Top marginal rates	
State level, 2018 ⁵	0.00%
Federal and state combined ⁵	37.00%
Tax equivalent yields ⁶	
2%	3.38%
3%	5.07%
4%	6.76%

¹ Barclays² Electronic Municipal Market Access (EMMA)³ Bloomberg, 2017⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018⁵ Tax Foundation⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

State Profiles



Wyoming



Capital City
Cheyenne



Governor
Matt Mead (R)

Total issuance, as % of the market ¹	0.04%
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# of issuers ²	85
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Pension funded ratio (2017) ³	75.91%
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State GO ratings

Moody's ⁴	—
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S&P ⁴	—
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Fitch ⁴	—
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Top marginal rates

State level, 2018 ⁵	0.00%
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Federal and state combined ⁵	37.00%
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Tax equivalent yields⁶

2%	3.38%
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3%	5.07%
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4%	6.76%
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¹ Barclays

² Electronic Municipal Market Access (EMMA)

³ Bloomberg, 2017

⁴ SIFMA Municipal Bond Credit Report, Q1 2018, May 2018

⁵ Tax Foundation

⁶ Tax equivalent yield assumes the current maximum state and federal income tax rate (for 2018) and the 3.8% Medicare surcharge. Tax treatment of Fund distributions vary; investors should consult a tax advisor with respect to the tax implications of an investment in a Fund that invests in tax-exempt securities.

Neither New York Life Investment Management LLC, nor its affiliates or representatives provide tax, legal or accounting advice. Please contact your own professionals.

Definitions

Active management is the use of a human element, such as a single manager, co-managers or a team of managers, to actively manage a fund's portfolio. Active management strategies typically have higher fees than passive management.

Advanced refunding enables an issuer to "refinance" and obtain the benefit of lower interest rates when their outstanding bonds that offer higher interest rates have not reached their callable date.

Pension funded ratio is the ratio of a pension's assets to its liabilities, or obligations. Typically, the ratio is reported as a percentage, with 100% indicating the pension is able to pay all its future obligations. A figure below 100% indicates the fund is not currently able to meet its future obligations.

Tax-equivalent yield is the yield that would be required on a taxable security to provide the same yield after taxes as is provided by a tax-exempt municipal bond. The higher a person's tax bracket is, the higher the tax-equivalent yield will be. Tax-equivalent yield is often used when evaluating municipal bonds.

Bloomberg Barclays Municipal Bond Index is considered representative of the broad market for investment-grade, tax-exempt bonds with a maturity of at least one year. Bonds subject to the alternative minimum tax or with floating or zero coupons are excluded.

Bloomberg Barclays High Yield Municipal Index: An unmanaged index of municipal bonds with the following characteristics: fixed coupon rate, credit rating of Ba1 or lower or non-rated using the middle rating of Moody's, S&P, and Fitch, outstanding par value of at least \$3 million, and issued as part of a transaction of at least \$20 million. In addition, the bonds must have a dated-date after December 31, 1990 and must be at least one year from their maturity date.

Credit ratings: Moody's rates borrowers on a scale from Aaa through C. Aaa through Baa3 represent investment grade, while Ba1 through C represent non-investment grade. Standard & Poor's rates borrowers on a scale from AAA to D. AAA through BBB represent investment grade, while BB through D represent non-investment grade. Fitch rates borrowers on a scale from AAA to D. AAA to BBB represent investment grade, while BB through D represent non-investment grade.

About Risk

All investments are subject to market risk and will fluctuate in value.

A portion of a municipal fund's income may be subject to state and local taxes or the Alternative Minimum Tax. Investments in bonds are subject to interest-rate risk and can lose principal value when interest rates rise. Bonds are also subject to credit risk, in which the bond issuer may fail to pay interest and principal in a timely manner. High-yield securities (commonly referred to as "junk bonds") are generally considered speculative because they present a greater risk of loss than higher-quality debt securities and may be subject to greater price volatility. High-yield municipal bonds may be subject to increased liquidity risk, as compared to other high-yield debt securities. Municipal securities risks include the ability of the issuer to repay the obligation, the relative lack of information about certain issuers, and the possibility of future tax and legislative changes, which could affect the market for and value of municipal securities. Such uncertainties could cause increased volatility in the municipal securities market. Securities that are liquid at the time of purchase may subsequently become illiquid, due to events relating to the issuer of the securities, market events, economic conditions, or investor perceptions.

Past performance is no guarantee of future results. It is not possible to invest directly in an index.

For more information about MainStay Funds®, call 800-624-6782 for a prospectus or summary prospectus. Investors are asked to consider the investment objectives, risks, and charges and expenses of the investment carefully before investing. The prospectus or summary prospectus contains this and other information about the investment company. Please read the prospectus or summary prospectus carefully before investing.



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