

## U.S. MUNICIPAL BOND MARKET

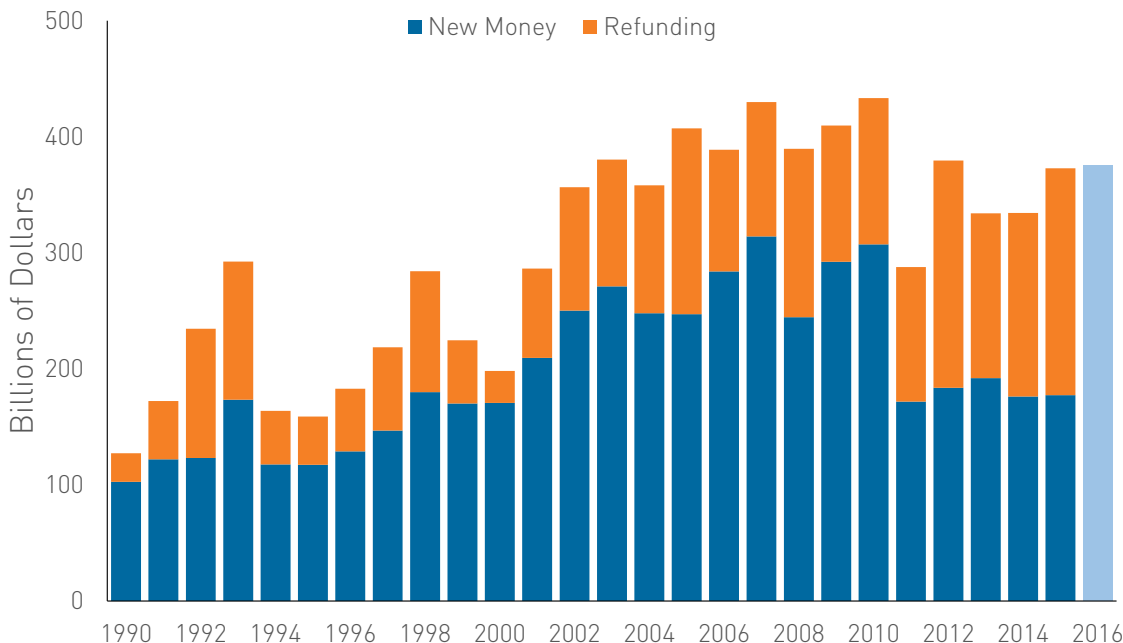
# The Municipal Market in 2016: Themes to Consider

- Total municipal bond issuance for 2016 will probably come in between \$325 billion and \$375 billion.
  - We expect refunding issuance to continue to be driven by the interest-rate environment. There are likely still going to be refunding opportunities issuers can take advantage of in 2016. New money issuance will almost certainly remain below the 2001-10 average.
- A need to upgrade infrastructure exists throughout the United States. The problem is that revenues to support new debt service are scarce. Policy makers' political will in support of infrastructure is waning, despite recent proposals and rhetoric.
  - Public finance issuers have largely not been able to take advantage of the low-interest-rate environment to finance new infrastructure. Impediments are likely to continue into 2016. We do not think issuer enthusiasm for a taxable Build America Bond (BAB) product is very high, partly because of the [sequester subsidy reduction](#).
- The U.S. economy has continued to slowly strengthen in 2015, despite worries about China and Europe and intermittent concerns about domestic data.
  - The PNC Economics Department indicates the, "[Economy Continues to Expand at End of 2015, With Solid Job Growth](#)." Stu Hoffman's group continues to think the Federal Reserve is, "[On Track for a December Rate Hike](#)," which would occur at the December 15-16 Federal Open Market Committee meetings.
- Municipal bond market credit conditions are favorable, overall. Credit quality is and will remain stable for most public finance entities into next year. We are observing that an increasing number of public finance credit profiles are improving.
  - Issuers with stable to improving credit profiles are those that have actively adjusted to the new post-2008 recession fiscal reality. The year 2015 could be the first since the 2008

Contents	Page
2016 Themes to Consider	1
State Issuer Ratings	3
Municipal Rating Definitions	4
PNC Municipal Publications	5

*Municipal bond market credit conditions are favorable, overall.*

## Municipal Bond Issuance for 2016 Will Be in Line with Recent Experience



Source: PNC Municipal Strategy

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recession in which state and local government upgrades (Moody's rated) finally outpace downgrades. Upgrades could outpace downgrades in 2016 too.

- On the other hand, some public finance credit profiles will deteriorate in 2016 despite the U.S. economic recovery. We anticipate that the number of public finance downgrades (Moody's rated), especially to local governments, is likely to remain somewhat elevated and comparable to recent years.
  - Credit quality will fall for issuers who have not accepted and adjusted to the new fiscal reality. An alarming number of state and local governments remained structurally imbalanced despite the broader economic recovery. We are also finding there are pockets where issuers are more susceptible to credit deterioration. It will also be difficult for these issuers to adjust during the next economic downturn. This is an important trend to watch throughout 2016 and beyond.
- [Most state and local governments have well-funded pension plans.](#) The underfunded pension dilemma is very much plan specific, and not yet near a level we would describe as systemic. But we expect some credit and rating deterioration to gradually occur in 2016 as a result of unfunded pension liabilities. That being said, pension liabilities are a key factor to consider when assessing public finance credit quality. These obligations have the potential to creep-up and overwhelm credit profiles if their costs and funding are not truthfully assessed.
  - The impact on the municipal credit landscape from public pensions is currently not severe, but it is worsening. The underfunded pension situation is often referred to as an ["invisible crisis."](#) Pension costs, in most cases, are not a significant portion of state and local governments' budgets—not yet anyway—but they are starting to crowd out other spending. New accounting standards will slightly help increase transparency, but a lack of understanding about the liabilities remains a problem. Public pensions are legacy costs that have yet to be fully taken into account by some political actors. The funding of pensions is often punted off into the future often because of the lack of understanding about the costs and consequences. Too often politics are to blame for many of the underfunded public pension plans. These types of political problems require political solutions. The first wave of tax increases instituted by Chicago, Illinois, could be a wake-up call to state and local governments and cause them to seriously consider, then consistently and reliably fund, pension liabilities.
- Significant fiscal pressures have converged on Puerto Rico (Caa3/CC/CC) and its related credits. It is likely that a complex debt restructuring involving much of the commonwealth's \$70 billion debt will occur. This would most likely transpire over a protracted period of time—months and years—and include issuers linked to the island, its creditors, and municipal insurers.
  - Puerto Rico defaulted on appropriation-backed debt in August 2015. There was intense speculation that the Puerto Rico Government Development Bank might default on a \$354 million guaranteed payment due December 1. The payment was made, however; and now observers are wondering whether payments due in 2016 are at risk. Financial and political pressures are likely to continue and intensify into and throughout the new year.
- Almost \$19 billion of municipal bonds were insured by municipal insurers during the first nine months of 2015: Assured Guaranty Ltd. (\$10.6 billion); Build America Mutual (\$7 billion); Municipal Assurance Corp. (\$760 million) and National Public Finance Guarantee Corporation (\$386 million).
  - Insurer penetration will continue to progress into 2016. Assured and National have Puerto Rico exposure. Build America Mutual has no Puerto Rico exposure.
- Demographic shifts are already influencing the credit quality of U.S. public finance issuers. Changing demographics will continue to affect public finance issuers gradually in 2016 and then at a more profound level as time passes.
  - Families are not having as many children and people are living longer. Advanced economies such as that of the U.S. are also seeing labor force dynamics and consumption patterns evolve. Regional and state by state migration has had and will continue to have a more immediate impact on public finance credit.

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*The year 2015 could be the first since the 2008 recession in which state and local government upgrades (Moody's rated) finally outpace downgrades.*

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*Most state and local governments have well-funded pension plans. The underfunded pension dilemma is very much plan specific, and not yet near a level we would describe as systemic.*

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## U.S. State Underlying Ratings and Rating Outlooks (as of December 1, 2015)

State	Moody's			S&P			Fitch		
	Rating	Outlook	Last	Rating	Outlook	Last	Rating	Outlook	Last
Alabama	Aa1	Stable	4/16/2010	AA	Stable	8/3/2007	AA+	Stable	5/3/2010
Alaska	Aaa	Negative	12/16/2014	AAA	Negative	8/18/2015	AAA	Stable	1/7/2013
Arizona	Aa2 <sup>1</sup>	Stable	5/4/2015	AA <sup>1</sup>	Stable	5/22/2015		None	
Arkansas	Aa1	Stable	4/16/2010	AA	Stable	1/10/2003		None	
California	Aa3	Stable	6/25/2014	AA-	Stable	7/2/2015	A+	Stable	2/25/2015
Colorado	Aa1 <sup>1</sup>	Stable	4/16/2010	AA <sup>1</sup>	Stable	7/10/2007		None	
Connecticut	Aa3	Stable	1/20/2012	AA	Negative	3/9/2015	AA	Stable	7/23/2015
Delaware	Aaa	Stable	4/30/2010	AAA	Stable	2/22/2000	AAA	Stable	4/13/2006
Dist. Of Columbia	Aa1	Stable	3/12/2015	AA	Stable	9/29/2014	AA	Stable	9/29/2014
Florida	Aa1	Stable	4/16/2010	AAA	Stable	7/12/2011	AAA	Stable	8/23/2013
Georgia	Aaa	Stable	4/16/2010	AAA	Stable	7/29/1997	AAA	Stable	4/13/2006
Hawaii	Aa2	Positive	10/12/2015	AA	Stable	10/22/2014	AA	Stable	6/15/2011
Idaho	Aa1 <sup>1</sup>	Stable	4/16/2010	AA+ <sup>1</sup>	Stable	3/29/2011	AA+	Stable	4/5/2010
Illinois	Baa1	Negative	10/22/2015	A-	CW Negative	5/8/2015	BBB+	Stable	10/19/2015
Indiana	Aaa <sup>1</sup>	Stable	4/16/2010	AAA <sup>1</sup>	Stable	7/18/2008	AAA	Stable	10/15/2014
Iowa	Aaa <sup>1</sup>	Stable	4/16/2010	AAA <sup>1</sup>	Stable	9/11/2008	AAA	Stable	4/5/2010
Kansas	Aa2 <sup>1</sup>	Stable	4/30/2010	AA <sup>1</sup>	Negative	8/6/2014		None	
Kentucky	Aa2 <sup>1</sup>	Stable	6/2/2014	A+ <sup>1</sup>	Negative	1/31/2013	AA-	Stable	11/8/2012
Louisiana	Aa2	Negative	2/13/2015	AA	Negative	2/13/2015	AA	Stable	4/5/2010
Maine	Aa2	Stable	6/4/2014	AA	Stable	5/24/2012	AA	Stable	1/22/2013
Maryland	Aaa	Stable	7/19/2013	AAA	Stable	5/7/1992	AAA	Stable	4/13/2006
Massachusetts	Aa1	Stable	4/16/2010	AA+	Negative	11/23/2015	AA+	Stable	4/5/2010
Michigan	Aa1	Stable	7/24/2015	AA-	Positive	7/20/2015	AA	Stable	4/2/2013
Minnesota	Aa1	Stable	7/30/2013	AA+	Positive	8/5/2015	AA+	Stable	7/7/2011
Mississippi	Aa2	Stable	4/16/2010	AA	Stable	11/30/2005	AA+	Stable	11/6/2015
Missouri	Aaa	Stable	7/19/2013	AAA	Stable	2/16/1994	AAA	Stable	4/13/2006
Montana	Aa1	Stable	4/16/2010	AA	Stable	5/5/2008	AA+	Stable	4/5/2010
Nebraska	Aa2 <sup>2</sup>	Stable	4/16/2010	AAA <sup>1</sup>	Stable	5/5/2011		None	
Nevada	Aa2	Stable	3/24/2011	AA	Stable	3/10/2011	AA+	Stable	4/5/2010
New Hampshire	Aa1	Stable	4/16/2010	AA	Stable	12/8/2014	AA+	Stable	4/5/2010
New Jersey	A2	Negative	4/16/2015	A	Stable	9/10/2014	A	Stable	8/19/2015
New Mexico	Aaa	Stable	7/19/2013	AA+	Negative	11/26/2014		None	
New York	Aa1	Stable	6/16/2014	AA+	Stable	7/23/2014	AA+	Stable	6/20/2014
North Carolina	Aaa	Stable	1/12/2007	AAA	Stable	6/25/1992	AAA	Stable	4/13/2006
North Dakota	Aa1 <sup>1</sup>	Stable	4/16/2010	AAA	Stable	12/13/2013		None	
Ohio	Aa1	Stable	3/16/2012	AA+	Stable	7/15/2011	AA+	Stable	4/5/2010
Oklahoma	Aa2	Stable	4/16/2010	AA+	Stable	9/5/2008	AA+	Stable	4/5/2010
Oregon	Aa1	Stable	4/16/2010	AA+	Stable	3/9/2011	AA+	Stable	4/5/2010
Pennsylvania	Aa3	Negative	10/16/2015	AA-	Stable	9/25/2014	AA-	Stable	9/23/2014
Puerto Rico	Caa3	Negative	7/1/2015	CC	Negative	9/10/2015	CC	RW Negative	6/29/2015
Rhode Island	Aa2	Stable	10/6/2014	AA	Stable	6/18/2014	AA	Stable	7/18/2011
South Carolina	Aaa	Stable	12/7/2011	AA+	Stable	7/11/2005	AAA	Stable	4/13/2006
South Dakota	Aa2 <sup>1</sup>	Stable	5/27/2010	AAA <sup>1</sup>	Stable	5/4/2015	AA+ <sup>1</sup>	Stable	4/5/2010
Tennessee	Aaa	Stable	12/7/2011	AA+	Positive	10/22/2015	AAA	Stable	4/5/2010
Texas	Aaa	Stable	4/16/2010	AAA	Stable	9/27/2013	AAA	Stable	4/5/2010
Utah	Aaa	Stable	4/16/2010	AAA	Stable	6/7/1991	AAA	Stable	4/13/2006
Vermont	Aaa	Stable	4/16/2010	AA+	Stable	11/10/2014	AAA	Stable	4/5/2010
Virginia	Aaa	Stable	7/19/2013	AAA	Stable	11/11/1992	AAA	Stable	4/13/2006
Washington	Aa1	Stable	7/19/2013	AA+	Stable	11/12/2007	AA+	Stable	7/19/2013
West Virginia	Aa1	Negative	10/14/2015	AA	Stable	8/21/2009	AA+	Stable	7/8/2011
Wisconsin	Aa2	Positive	11/20/2014	AA	Stable	8/15/2008	AA	Stable	4/5/2010
Wyoming		None		AAA <sup>1</sup>	Stable	5/3/2011		None	

<sup>1</sup>Denotes issuer credit rating (no general obligation debt)

<sup>2</sup>Denotes a lease rating

Source: Moody's, Standard & Poor's, Fitch, and PNC Municipal Capital Markets

## Municipal Credit Rating Scale and Definitions

	Rating Agency			Rating Definition
	Moody's	S&P	Fitch	
Investment Grade	Aaa	AAA	AAA	Exceptionally strong credit quality, subject to the lowest level of credit risk
	Aa1	AA+	AA+	Very strong investment-grade credit quality, subject to very low credit risk
	Aa2	AA	AA	
	Aa3	AA-	AA-	
	A1	A+	A+	High investment-grade credit quality, subject to low credit risk
	A2	A	A	
	A3	A-	A-	
	Baa1	BBB+	BBB+	Good investment-grade credit quality, subject to moderate credit risk, profiles could contain some speculative characteristics
	Baa2	BBB	BBB	
Baa3	BBB-	BBB-		
Non-Investment (Speculative) Grade	Ba1	BB+	BB+	Weak credit quality, judged to be speculative, subject to substantial credit risk
	Ba2	BB	BB	
	Ba3	BB-	BB-	
	B1	B+	B+	Very weak credit quality, judged to be highly speculative and subject to a high level of credit risk
	B2	B	B	
	B3	B-	B-	
	Caa1	CCC+	CCC+	Extremely weak credit quality, judged to be highly speculative, subject to a very high level of credit risk
	Caa2	CCC+	CCC+	
	Caa3	CCC-	CCC-	
	Ca	CC	CC+	Extremely speculative credit quality, in or near default, some prospect of recovery
		CC		
		CC-		
C	D	DDD	Lowest rating, typically in default, little prospect for recovery of principal or interest	

Source: Moody's, Standard & Poor's, Fitch, and PNC Municipal Capital Markets

## PNC Municipal Bond Market Commentary

Title	Date	Notes
Let's Hear It for the States, Let's Give the States a Hand: U.S. State Fiscal Outlook	October 5, 2015	State credit quality has been extremely resilient
As Good as It Gets: Public Finance Downgrades Outpaced Upgrades in 2Q15	September 16, 2015	Recent trend reinforces importance of credit selection
Pennsylvania State Aid Intercept for School Districts- A Summary	September 14, 2015	Intercept based on ability to appropriate school funding
What Does PA's Delayed Budget Mean for Municipal Credit?	August 12, 2015	Delay not as important as the issues that divide
Local Government Sector Update: Strong Fiscal Management Key to Upgrades	July 27, 2015	Upgrades outpaced downgrades in 1Q15
Close to a Lost Decade of U.S. State Tax Revenues: U.S. State Fiscal Outlook	June 22, 2015	Seven years after recession, revenues just positive

Source: PNC Municipal Capital Markets

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