

## ISSUE BRIEF

**The Feds giveth and the Feds taketh away: The budget sequester means Illinois governments could lose hundreds of millions in federal bond subsidies**

**Martin J. Luby**, *University of Texas at Austin and the University of Illinois Institute of Government and Public Affairs*

**ABSTRACT:** The federal government created the Build America Bond (BAB) program in 2009 as a way to improve access to capital financing for state and local governments during the 2007-2008 financial crisis. In contrast to earlier programs that exempted the interest on municipal bonds from taxation, the BAB program provided direct subsidies to governments to offset interest costs. State and local governments sold more than \$151 billion in BABs between 2009 and 2010 when the BAB program ended. Governments in Illinois sold more than \$11 billion in BABs during this period. But since instituting the budget sequester in 2013, the federal government has reduced bond subsidies on BABs by between 6.8 and 8.7 percent per year. This reduced bond subsidies to Illinois governments by approximately \$70 million between 2013 and 2016. And if the federal budget sequester remains in place, bond subsidies in Illinois will be reduced by hundreds of millions of dollars over the next two decades. This will significantly exacerbate existing state and local infrastructure challenges. This situation is illustrative of a broad class of situations in which Illinois' fiscal health is inter-connected with federal policies that are largely beyond its control.

## INTRODUCTION

Illinois state government and the various local governments (cities, towns, counties, school districts, public authorities and state universities) use debt to finance their capital activities. These capital activities are diverse and often entail developing and building roads, bridges, transit systems, buildings, hospitals and telecommunication systems to name just the most common types of infrastructure projects financed by debt. Before the financial crisis in 2007-2008, most state and local governments sold tax-exempt bonds to finance their infrastructure. These bonds are often referred to as municipal bonds. The prevailing feature of tax-exempt municipal bonds is that the interest an investor receives by purchasing the bond is exempt from federal income taxes (and, in some states, state income taxes as well).

The 2007-2008 financial crisis constrained all financial markets including the municipal bond market. Many investors became risk averse and reduced their investments in the municipal bond market. For example, according to the U.S. Treasury Department, in the fourth quarter of 2008, municipal bond sales were 68 percent of sales in the pre-financial crisis era and interest costs were 100 percent higher than the previous era (U.S. Treasury Department, 2011). In March 2009, the federal government created the Build America Bond (BAB) program as a way to "unfreeze" the market for state and local government debt and to reduce the cost of borrowing. The BAB program lasted until December 31,

2010.<sup>1</sup> The Treasury Department paid a 35 percent direct subsidy of the interest costs of any Build America Bond sold by a state or local government. BABs were popular with both bond issuers and investors with state and local governments selling \$64 billion and \$117 billion in BABs in 2009 and 2010, respectively. These amounts represented 16 percent and 27 percent of all long-term municipal bond sales in 2009 and 2010 (Luby, 2012).

## **BUILD AMERICA BONDS VERSUS TRADITIONAL TAX-EXEMPT BONDS**

The primary differences between tax-exempt bonds and BABs are their tax status, federal subsidy type and early redemption provisions. Build America Bonds are direct subsidy taxable bonds while tax-exempt bonds are indirect subsidy tax-exempt bonds. State and local governments receive an indirect federal subsidy on tax-exempt bonds by the fact that bond investors will accept a lower rate of return (and, thus, bond issuers will pay a lower interest cost) because they do not have to pay federal income taxes on their investment. Another difference is that tax-exempt bonds can be redeemed prior to maturity at 100 percent of par whereas BABs often can only be redeemed at the more expensive (to the issuer) “make-whole price.” This is not an insignificant technical difference since the 100 percent of par early redemption provision allows state and local governments to refinance more easily their tax-exempt bonds and achieve interest cost savings whereas the make-whole provision makes this much more cost-prohibitive for BABs.<sup>2</sup>

The BAB program provided borrowing cost benefits to governments in two ways. First, BABs were more broadly attractive to the universe of investors. Tax-exempt bonds, by definition, are only attractive to investors that have federal income tax liabilities. Many large bond investors, such as U.S. pension funds, foreign governments and other institutional investors who do not pay federal income taxes, avoid tax-exempt bonds even though the risk characteristics of tax-exempt bonds would normally be appealing to them. On the other hand, taxable municipal bonds like BABs were attractive to these investors, thus broadening the supply of capital funds for state and local governments which, in turn, drove down borrowing costs. The second benefit of the BAB program relates to the cost efficiency of each bond type. The generous BAB subsidy (35 percent) and the general inefficiency of tax-exempt bonds<sup>3</sup> resulted in state and local governments receiving substantial borrowing cost benefits by issuing taxable BABs relative to traditional tax-exempt bonds. The U.S. Treasury Department calculated that state and local governments saved more than \$20 billion in interest costs by selling BABs instead of tax-exempt municipal bonds in 2009 and 2010 (U.S. Treasury Department, 2011).<sup>4</sup>

---

<sup>1</sup> The BAB program expired on December 31, 2010. President Obama included various provisions to resurrect the BAB program in his budgets proposals after 2010 but none were supported by Congress.

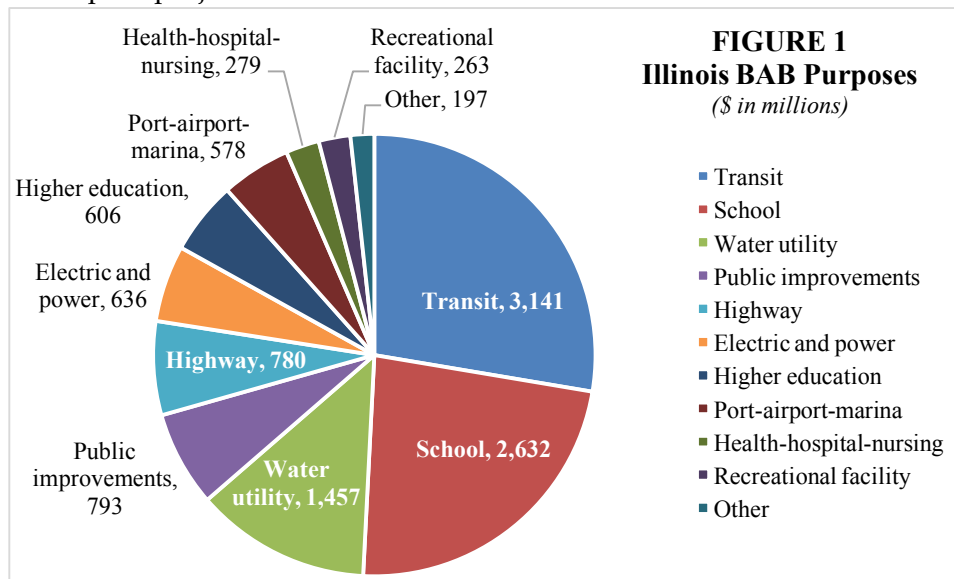
<sup>2</sup> A full description of make-whole early redemption provisions is beyond the scope of this policy brief. For our purposes, the thrust of the make-whole provision is that it penalizes the bond issuer and compensates the investor for early redemption of the bonds in a declining interest rate environment, thus reducing the likelihood that BABs would be refinanced. While some BABs were sold with 100 percent par redemption provision, most were sold with a make-whole provision as this is the type of redemption provision most acceptable to taxable bond investors (Pierog, 2013).

<sup>3</sup> See Luby (2012) for a discussion on the inefficiency of tax-exempt bonds

<sup>4</sup> Historically, most tax-exempt municipal bonds are refinanced early for interest cost savings. This is not the case for taxable BABs given their make-whole early redemption provision. It is unclear if this \$20 billion calculated benefit takes into account the likelihood that tax-exempt bonds will be refinanced later at lower interest rates. If not, the size of this benefit is overstated (see Orr and Luby, 2016, for a further discussion).

## BUILD AMERICA BOND SALES IN ILLINOIS

Like many governments throughout the United States, the state of Illinois and its local governments were active sellers of Build America Bonds in 2009 and 2010. The Appendix lists all the BABs issued by Illinois governments, noting their purpose and bond amount. There were 245 BAB issues totaling \$11.362 billion. These BABs were sold by a diverse group of governments including the state, cities, counties, school districts, state universities, and public authorities. Figure 1 shows that the largest amount of BAB proceeds funded transit (\$3.1 billion), school construction (\$2.6 billion) and water utility (\$1.4 billion) projects. Other significant BAB spending was on public improvements (\$793 million), highway (\$780 million), electric and power (\$636 million), higher education (\$606 million) and port-airport-marina (\$578 million) projects. As shown in the figure, BABs financed many typical state and local government capital projects.



While BABs were indeed sold by a diverse cross section of governments in Illinois, the largest users by dollar amount included 10 government/government types: State of Illinois, City of Chicago, Illinois Tollway, Chicago Public Schools, two municipal electric authorities (Illinois Municipal Electric and Northern Illinois Municipal Power), Chicago Metropolitan Water Reclamation District, Cook County, Chicago Transit Authority, four state universities (Western, Eastern, Northern and Southern) and the Regional Transportation Authority. Table 1 lists the largest issuers of BABs in Illinois by bond amount. The table also includes the Chicago Housing Authority since it is a sister agency of the City of Chicago.<sup>5</sup> These 11 governments sold 30 BAB issues totaling \$8.847 billion in bonds. These 30 issues only represented 12 percent of the total bond issues (30 of 245) but comprised 78 percent of the total dollar amount of BABs in Illinois (\$8.847 billion of \$11.362 billion).

<sup>5</sup> Governments/government types were included in this list if they sold over \$100 million in BABs. While the Chicago Housing Authority did not sell at least \$100 million in BABs, it was included because it is a sister agency of the City of Chicago.

<b>TABLE 1</b> <b>LARGEST ISSUERS OF BUILD AMERICA BONDS IN ILLINOIS</b> <i>(by bond amount)</i>		
<b>Bond Issuer</b>	<b>Number of Bond Issues</b>	<b>Bond Amount (\$ in millions)</b>
State of Illinois	5	3,245
City of Chicago	6	1,448
Illinois Tollway	2	780
Chicago Public Schools	2	643
Municipal Electric Authorities	4	627
Chicago Metropolitan Water Reclamation District	1	600
Cook County	2	560
Chicago Transit Authority	1	505
State Universities (Northern, Eastern, Western and Southern)	5	301
Regional Transportation Authority	1	113
Chicago Housing Authority	1	25
<b>Totals</b>	<b>30</b>	<b>8,847</b>
<i>Source: US Treasury Department</i>		

State government was by far the largest issuer of BABs in Illinois, selling five issues totaling \$3.2 billion. The City of Chicago came in second, selling six issues totaling \$1.44 billion. All the rest of the issuers in this group sold less than \$1 billion in BABs. Not surprisingly given infrastructure needs, governments in the Chicagoland area represented the largest aggregate issuers of this select group with the City of Chicago, Illinois Tollway, Chicago Public Schools, Chicago Metropolitan Water Reclamation District, Cook County, Chicago Transit Authority, Regional Transportation Authority and Chicago Housing Authority selling a total of \$4.6 billion of BABs. Table 2 details the date, purpose and amount of these governments' BAB issues. This analysis focuses on these bond issues, which represent a sizeable majority of Illinois BABs.

**TABLE 2**  
**SELECT BUILD AMERICA BOND ISSUES SOLD BY ILLINOIS GOVERNMENTS**  
*(30 Bond Issues; \$8.847 Billion in Bonds)*

<b>Date</b>	<b>Bond Issuer</b>	<b>Bond Issue Purpose</b>	<b>Bond Amount (\$ in millions)</b>
1/28/2010	State of Illinois	Transit improvements	1,000
7/14/2010	State of Illinois	Transit improvements	900
4/20/2010	State of Illinois	School/transit improvements	700
8/11/2009	Chicago Metropolitan Water Reclamation District-Greater Chicago	Water utility/sewer improvements	600
4/15/2010	City of Chicago	Port-airport-marina improvements; refunding notes	578
9/10/2009	Chicago Board of Education	School improvements	518
3/24/2010	Chicago Transit Authority	Transit improvements	505
5/12/2009	State of Illinois Toll Highway Authority	Highway improvements	500
4/6/2010	State of Illinois	School improvements	345
6/11/2010	County of Cook	Public improvements	309
6/17/2010	State of Illinois	Transit improvements	300
7/15/2009	State of Illinois Municipal Electric Agency	Electric light & power improvements	295
11/24/2009	Illinois State Toll Highway Authority	Highway improvements	280
6/18/2009	Cook County	Health-hospital-nursing home improvements	251
10/26/2010	City of Chicago	Sewer improvements	250
11/4/2010	City of Chicago	Water utility improvements	250
12/1/2010	City of Chicago	Transit/school improvements	214
11/18/2010	Illinois Municipal Electric Agency	Electric light & power improvements	140
12/9/2010	Northern Illinois University	Higher education improvements	126
10/14/2010	Chicago Board of Education	School improvements	125
8/6/2009	Northern Illinois Municipal Power Agency	Electric light & power improvements	120
1/7/2010	Regional Transportation Authority	Transit improvements	113
1/14/2010	City of Chicago	Transit improvements; refunding notes	98
9/23/2009	Eastern Illinois University	Higher education improvements	85
11/30/2010	Northern Illinois Municipal Power Agency	Electric light & power improvements	72
8/19/2010	City of Chicago	School improvements	58
5/7/2009	Southern Illinois University	Higher education improvements	54
2/4/2010	Chicago Housing Authority	Housing	25
7/27/2010	Western Illinois University	Higher education improvements	25
2/24/2010	Western Illinois University	Higher education improvements	12
<b>Total</b>			<b>8,847</b>
<i>Source: US Treasury Department</i>			

## FEDERAL BUDGET SEQUESTRATION

Between 2009 and 2012, governments that issued BABs received the full 35 percent interest cost subsidy on their bonds. In 2011, the super committee sequestration was passed as part of the Budget Control Act of 2011. This law stipulated that Congress must cut \$1.5 trillion from the federal budget over 10 years and, if Congress failed to agree on such reductions, automatic sequestration cuts would be implemented starting in 2013. Congress was unable to reach consensus on such cuts and BAB subsidies were subject to sequestration cuts beginning March 1, 2013.<sup>6</sup> For the remainder of fiscal year 2013 (March 1, 2013 through September 30, 2013), BAB subsidy payments were reduced by 8.7 percent. Due to the failure to reach agreement on budget cuts, the sequestration has stayed in effect in subsequent

<sup>6</sup> The federal budget sequestration affected all types of direct subsidy bonds not just Build America Bonds. While BABs comprised the vast majority of direct subsidy bonds, Illinois governments also issued other direct subsidy bonds such as Qualified School Construction Bonds, Qualified Zone Academy Bonds, New Clean Renewable Energy Bonds, and Qualified Energy Conservation Bonds, which also saw their bond subsidies cut. This policy brief does not include these other direct subsidy bonds in its analysis so it reflects a conservative estimate of the impact of the budget sequester on bond subsidies.

years. Fiscal year 2017's sequestration reduction for BAB subsidies is 6.90 percent. Congressional action will be necessary to end the sequestration reduction. Table 3 details the BAB subsidy sequestration reduction for each fiscal year between 2013 and 2017.

<b>TABLE 3            BUILD AMERICA BOND            FEDERAL BUDGET SEQUESTRATION            REDUCTIONS BY PERIOD</b>	
<b>Period</b>	<b>Sequestration Reduction</b>
3/1/13-9/30/13	8.70 percent
10/1/13-9/30/14	7.20 percent
10/1/14-9/30/15	7.30 percent
10/1/15-9/30/16	6.80 percent
10/1/16-9/30/17	6.90 percent
<i>Source: US Treasury Department</i>	

State and local governments sold BABs with the expectation that that they would receive the full bond subsidy. In the past, a subsidy reduction after bonds were sold was not something state and local governments generally had to be concerned about. Fixed rate, tax-exempt bonds carry an indirect subsidy that is established and fixed to maturity at the time the bonds are sold and reflected what investors were willing to accept as a rate of return. For this kind of bond, subsequent federal budget or tax policy changes did not affect state and local government interest cost on their tax-exempt bonds. For BABs, the subsidy reductions forced state and local governments to come up with other funds. This is an especially acute concern in Illinois given its infrastructure funding challenges.<sup>7</sup> How much did the federal budget sequester of BAB subsidies already affect Illinois governments and how much could it affect these governments in the future?

## DATA, METHODOLOGY AND ANALYSIS

The 30 bond issues sold by the largest issuers of BABs in Illinois (see Table 2) comprise 78 percent of all the BABs sold in the state. In order to calculate the bond subsidy reductions, I reviewed the official statements executed in connection with each BAB bond sale.<sup>8</sup> Official statements contain details of the bond issue, including the scheduled interest payments on the bonds. I calculated the scheduled 35 percent bond subsidy for the scheduled interest payments in each year between March 1, 2013 and January 1, 2017 simply by multiplying 35 percent by the bond interest payment. Based on the federal budget sequester reduction rates described in Table 3, I calculated the bond subsidy reduction for each interest payment by multiplying the applicable federal sequester reduction rate by the scheduled bond subsidy amount. For interest payments on October 1 (i.e., the beginning of the federal fiscal year), I assumed bond subsidies were reduced by the sequester reduction rate of the previous fiscal year since the government would likely have requested payment 60 to 90 days prior to the October 1 interest payment date.

Table 4 details the subsidy reduction for each bond issue further categorized by each of the 11 governments. **Total reduction in BAB subsidies for these governments for the interest payment period March 1, 2013 through January 1, 2017 was \$53.9 million.** Naturally, the largest issuers of BABs

<sup>7</sup> See Luby (2015) for an analysis of the State of Illinois' infrastructure funding deficit

<sup>8</sup> Official statements are available on the electronic municipal market access (EMMA) web portal created by the Municipal Securities Rulemaking Board (MSRB)

in Illinois, the State of Illinois and the City of Chicago, realized the biggest subsidy reductions. The State of Illinois and the City of Chicago lost about \$18 million and \$10 million, respectively. The Illinois Tollway, the two municipal electric authorities, Chicago Public Schools, Cook County, Chicago Metropolitan Water District and the Chicago Transit Authority each received between \$3.2 million and \$4.7 million less than planned. The four state universities realized \$2 million less in BAB subsidies than expected.

The \$53.9 million reduction in federal bond subsidies is 1) only attributable to 78 percent of the BAB amounts sold in Illinois and 2) only for the 2013 to 2017 period. We can approximate total losses to all Illinois issuers during this period by noting that if 78 percent of the BAB amount produced a reduction of \$53.9 million in bond subsidies, **we can estimate that 100 percent of the BAB bond amount in Illinois would result in a \$69.28 million reduction** (i.e., \$53.9 million divided by 78 percent).<sup>9</sup> This is an estimate, since the actual total subsidy reduction would be based on the interest rate and maturity date of all Illinois bonds and some could be different than those of the largest issuers. However, the largest issuers' bond structures were fairly typical so making such an estimate seems reasonable.

Moreover, because most of these BABs were sold with maturities ranging from 20 to 30 years, many will remain outstanding for the next 15 to 25 years. If the federal budget sequester remains in effect during this period, the total reduction in bond subsidies will be much larger than the estimate given. This assumption does not seem far-fetched given the continued gridlock in Congress as well as the current control by the Republican Party, many members of which have expressed a policy preference for continuing the sequester (Peterson and Timiraos, 2015).<sup>10</sup>

To get a sense of the potential bond subsidy reductions if the sequester stays in effect during the full term of the bonds, Table 5 details reductions for the City of Chicago's six BAB issues for the 2013 to 2017 period and over the full period to maturity. This analysis assumes the federal budget sequestration for BABs stays at 6.9 percent (i.e., the current rate) until the final maturity. As shown in the table, the bond subsidy reductions rise from \$10 million to \$56 million just for the City of Chicago. Thus, the 2013 to 2017 period represents only about 17.59 percent of the total bond subsidy reduction for the City of Chicago's BABs. If the 2013 to 2017 period represented 17.59 percent of the bond subsidy reduction for all Illinois BABs, **we can estimate that the full term to maturity BAB subsidy reduction would be \$394 million** (i.e., \$69.28 million divided by 17.59 percent). This represents the future reduction in federal bond subsidies if the budget sequester remains in place. The same caveats on generalizing bond structure from the City of Chicago to all Illinois issuers remain although Chicago's structure was also fairly typical. Moreover, whether it is \$300 million or \$500 million, the thrust of the analysis remains the same: **Illinois governments would lose substantial funding for infrastructure if the federal bond sequestration is not repealed.**

---

<sup>9</sup> Also, remember this only represents bond subsidy reductions of BABs not other direct subsidy bonds Illinois governments sold such as Qualified School Construction Bonds, Qualified Zone Academy Bonds, New Clean Renewable Energy Bonds, and Qualified Energy Conservation Bonds, which would increase this bond subsidy reduction amount.

<sup>10</sup> Absent Congressional action, the sequester reductions will continue through 2024. However, if the sequester continues that long, it seems likely that Congress may extend the sequester or use some other mechanism to continue spending restraint. As such, for the purpose of this analysis, it is reasonable to assume automatic reductions on the BABs through the term of the bonds whether this particular sequester is still in effect or not.

**TABLE 4**  
**SELECT BUILD AMERICA BOND ISSUERS IN ILLINOIS**  
**FEDERAL BUDGET SEQUESTRATION REDUCTION AMOUNTS BY BOND ISSUE**  
(March 1, 2013 through January 1, 2017 Interest Payment Period)

	State of Illinois	City of Chicago	Chicago Public Schools	Chicago Transit Authority	Chicago Housing Authority	Metropolitan Water District	Cook County	Regional Transportation Authority	Illinois Tollway	State Universities	Municipal Electric Authorities
General Obligation 2010-1	5,083,510										
General Obligation 2010-2	1,919,494										
General Obligation 2010-3	4,116,549										
General Obligation 2010-4	1,663,193										
General Obligation 2010-5	5,279,668										
General Obligation 2009C		621,562									
General Obligation 2010B		1,634,991									
General Obligation MSAC 2010B		288,645									
O'Hare Revenue 2010B		3,876,090									
Wastewater Revenue 2010B		1,756,913									
Water Revenue 2010B		1,716,682									
General Obligation 2009E			3,164,514								
General Obligation 2010D			829,950								
Sales Tax Revenue 2010B				3,136,776							
Revenue Bonds 2010					110,438						
General Obligation August 2009						3,495,492					
General Obligation 2009B							1,622,427				
General Obligation 2010D							1,958,085				
General Obligation 2010B								674,414			
Revenue Series 2009A									3,058,454		
Revenue Series 2009B									1,668,588		
Northern IL Univ. Revenue Series 2010										1,062,766	
Eastern IL Univ. COPS Series 2009A										518,357	
Southern IL Univ. Revenue Series 2009A										269,033	
Western IL Univ. COPS Series 2010										54,320	
Western IL Univ. Revenue Series 2010										158,079	
IL Muni. Electric Revenue 2009C											1,956,735



IL Muni. Electric Revenue 2010A											866,698
North. IL Mun. Power Revenue 2009C											814,592
North. IL Mun. Power Revenue 2010A											570,666
<b>Totals</b>	<b>18,062,414</b>	<b>9,894,882</b>	<b>3,994,464</b>	<b>3,136,776</b>	<b>110,438</b>	<b>3,495,492</b>	<b>3,580,512</b>	<b>674,414</b>	<b>4,727,042</b>	<b>2,062,554</b>	<b>4,208,690</b>
											<b>\$53,947,679</b>

<b>TABLE 5</b> <b>CITY OF CHICAGO BUILD AMERICA BOND ISSUES</b> <b>FEDERAL BUDGET SEQUESTRATIONS REDUCTIONS BY BOND ISSUE</b> (March 1, 2013-January 1, 2017 Period versus Bond Issue Period to Maturity)		
<b>Bond Issue</b>	<b>Reductions Through 2013- 2017</b>	<b>Reductions Through Bond Issue Period to Maturity</b>
General Obligation 2009C	621,562	3,197,510
General Obligation 2010B	1,634,991	9,813,186
General Obligation MSAC 2010B	288,645	763,036
O'Hare Revenue 2010B	3,876,090	23,001,801
Wastewater Revenue 2010B	1,756,913	9,479,595
Water Revenue 2010B	1,716,682	10,010,713
<b>Totals</b>	<b>9,894,882</b>	<b>56,265,841</b>

## DISCUSSION

This policy brief had three aims. First, it represents the first aggregate analysis that we are aware of that quantifies the impact of the federal budget sequester on bond subsidies to state and local governments. Second, the policy brief provides an estimate of the federal bond subsidy reductions to Illinois governments contextualizing such budget cut in terms of the state's long-term infrastructure challenges. The \$394 million long-term estimate in subsidy reductions adds to significant fiscal stress from other sources in recent years.

Finally, this report offers implications for policy in terms of the future use and structure of direct subsidy bond programs. While the Build America Bond program expired in 2010, there has been no shortage of attempts at resurrecting it (Sabol and Puentes, 2015). Moreover, the Trump administration has indicated an interest in direct subsidies for taxable bonds to help finance its ambitious trillion-dollar infrastructure plan. For example, a report released by President Trump's senior policy advisors Wilbur Ross and Peter Navarro on October 27, 2016 expressed a clear preference for taxable direct subsidy bonds:

*"We believe that this tax credit-assisted program could help finance up to a trillion dollars' worth of projects over a ten-year period. This innovative financing option would serve as a critical supplement to existing financing programs, public-private partnerships, Build America Bonds, and other prudent funding opportunities." (page 6)*

*"In fact, both Trump and Clinton support the concept of Build America Bond program. It permits government issuers to issue taxable bonds instead of the usual tax-exempt ones. This provides issuers with access to investors who seek taxable income and therefore broadens the potential market." (page 7) (Navarro and Ross, 2016)*

There is strong empirical evidence that the BAB program did provide significant savings over tax-exempt bonds for state and local governments. But, as estimated here, those savings were overstated given the impact of the federal budget sequester. This overstatement is even larger if we take into account the likelihood that tax-exempt bonds (unlike BABs) can more easily be refinanced at lower interest rates. The policy brief seeks to illuminate the tradeoffs brought about by the inherent uncertainty associated with direct subsidy bonds such as BABs.

What alternative policies are possible? First, legislation that creates any new direct subsidy bond program could include provisions that shield bond subsidies from current or future budget sequesters. Such a provision could guarantee that state and local governments receive the funding they expect. This provision would also encourage these governments to use the program in the first place. Absent such provision, this may not be the case since many of these governments have lost faith in the federal government given their BAB subsidy reduction experiences. Second, as part of any direct subsidy bond sale, state and local governments could consider creating a reserve fund with a portion of the direct subsidy bond proceeds. Such a fund could only be used to retire the bonds or to make up any federal subsidy deficiencies in the event of a future budget sequester. Third, government issuers of direct subsidy bonds could try to sell their bonds with the 100 percent par early redemption provision rather than the traditional taxable bond make-whole provision. While investors will likely demand a greater return for including such call provision which would reduce the interest cost benefit of the direct subsidy bond, it will certainly provide greater future financial flexibility. This early redemption flexibility would be advantageous if interest rates decline and the government wants to refinance or if future federal budget actions affect the direct subsidy program negatively enough that the government no longer wants exposure to it.

Finally, I note that state and local governments' financial exposure to after-the-fact changes in federal Build America Bond policies is illustrative of a broader policy issue. Many public and private actors are reluctant to make decisions based on government policies that may be altered by future political leaders. For example, many states were reluctant to take part in the Medicaid expansions offered under the Affordable Care Act despite the federal government's promise to bear the entire cost in the short-term and 90 percent of the cost in the long-term. This reluctance was due, at least in part, from concern that the rules of the game might be changed in the future. Similarly, many private sector actors may be reluctant to make capital investments or hire employees if they fear that future government policies will significantly change economic incentives. Government policies must, of course, adapt to conditions and changing political ideologies but abrupt and unexpected changes can have significant costs and can undercut government credibility with respect to future policies.

## REFERENCES

- Luby, Martin J. (2012). "Federal Intervention in the Municipal Bond Market: The Effectiveness of the Build America Bond Program and its Implications on Federal and Subnational Budgeting" *Public Budgeting & Finance* Volume 32, Number 4, pp. 46-70.
- Luby, Martin J. (2015). "All Bad Things Come in Threes? The State of Illinois' Third Type of Deficit, the Infrastructure Funding Deficit." Institute of Government and Public Affairs, University of Illinois. Available at: <https://igpa.uillinois.edu/report/all-bad-things-come-threes>
- Navarro, Peter and Wilbur Ross. (2016). "Trump Versus Clinton on Infrastructure." October 27. Accessed at: <http://peternavarro.com/sitebuildercontent/sitebuilderfiles/infrastructurereport.pdf>
- Orr, Peter and Martin J. Luby. (2016). "From NIC to TIC to RAY: Calculating True Lifetime Cost of Capital for Municipal Borrowers." Paper presented at Brookings Institution 5<sup>th</sup> Annual Municipal Finance Conference July 12. Available at: <https://www.brookings.edu/wp-content/uploads/2016/10/orr-luby.pdf>

Peterson, Kristina and Nick Timiraos. (March 10, 2015). GOP to stick to sequester spending limits in 2016 Budget. *Wall Street Journal*. Available at: <http://www.wsj.com/articles/gop-to-stick-to-sequester-spending-limits-in-2016-budget-1426018538>

Pierog, Karen. (April 15, 2013). Some cities ditch Build America Bonds as sequester hits stimulus. *Reuters*. Available at <http://www.reuters.com/article/municipals-babs-redemptions-idUSL2N0CZ24120130415>

Sabol, Patrick and Robert Puentes. 2015. "Building Better Infrastructure with Better Bonds." Brookings Institution Accessed at: <https://www.brookings.edu/research/building-better-infrastructure-with-better-bonds/>

## APPENDIX

**APPENDIX 1**  
**ALL BUILD AMERICA BONDS ISSUES**  
**SOLD BY ILLINOIS GOVERNMENTS**  
*(245 Bond Issues; \$11.362 Billion in Bonds)*

<b>Date</b>	<b>Bond Issuer</b>	<b>Bond Issue Purpose</b>	<b>Bond Amount (\$ in millions)</b>
1/28/2010	State of Illinois	Transit improvements	1,000
7/14/2010	State of Illinois	Transit improvements	900
4/20/2010	State of Illinois	School/transit improvements	700
8/11/2009	Chicago Metropolitan Water Reclamation District-Greater Chicago	Water utility/sewer improvements	600
4/15/2010	City of Chicago	Port-airport-marina improvements; refunding notes	578
9/10/2009	Chicago Board of Education	School improvements	518
3/24/2010	Chicago Transit Authority	Transit improvements	505
5/12/2009	State of Illinois Toll Highway Authority	Highway improvements	500
4/6/2010	State of Illinois	School improvements	345
6/11/2010	County of Cook	Public improvements	309
6/17/2010	State of Illinois	Transit improvements	300
7/15/2009	State of Illinois Municipal Electric Agency	Electric light & power improvements	295
11/24/2009	Illinois State Toll Highway Authority	Highway improvements	280
6/18/2009	Cook County	Health-hospital-nursing home improvements	251
10/26/2010	City of Chicago	Sewer improvements	250
11/4/2010	City of Chicago	Water utility improvements	250
12/1/2010	City of Chicago	Transit/school improvements	214
11/18/2010	Illinois Municipal Electric Agency	Electric light & power improvements	140
12/9/2010	Northern Illinois University	Higher education improvements	126
10/14/2010	Chicago Board of Education	School improvements	125
8/6/2009	Northern Illinois Municipal Power Agency	Electric light & power improvements	120
1/7/2010	Regional Transportation Authority	Transit improvements	113
1/14/2010	City of Chicago	Transit improvements; refunding notes	98
9/23/2009	Eastern Illinois University	Higher education improvements	85
10/21/2009	Cook County Community Consolidated School District No. 62	School improvements	84
7/15/2009	Will Grundy Community College District No. 525	Higher education improvements	82
11/30/2010	Northern Illinois Municipal Power Agency	Electric light & power improvements	72
2/5/2010	Champaign County Community School District No. 004	School improvements	71
4/22/2009	Du Page, Cook, & Will Counties Community College District No. 502	Higher education improvements	62
5/4/2010	County of Will	Public improvements	61
8/19/2010	City of Chicago	School improvements	58
11/15/2010	Sangamon County School District No. 186	School improvements	56
5/7/2009	Southern Illinois University	Higher education improvements	54
7/8/2010	Lake County Forest Preserve District	Public improvements	40
11/9/2010	Kane, Cook & DuPage Counties Community College District No. 509	Higher education improvements	40
12/8/2009	Kane Cook & Du Page Counties Community College District No. 509	Higher education improvements	40
8/10/2010	Kane, Cook & DuPage Counties Community College District	Higher education improvements	39
10/14/2009	Springfield Metropolitan Sanitation District	Sewer improvements	39
4/8/2010	Springfield Metropolitan Sanitary District	Sewer improvements	37
10/27/2009	De Kalb County Community School District No. 428	School improvements	35
1/11/2010	Lake County Forest Preservation District	Public improvements	35
8/20/2010	Village of Oak Lawn	Sewer/water utility improvements	34

8/5/2009	Du Page & Will Counties Community Unit School District No 203	School improvements	33
12/9/2010	Kendall Kane & Will Counties School District No. 308	School improvements	32
12/8/2010	Du Page County School District No. 33	School improvements	32
11/19/2009	Cook County High School District No. 214	School improvements	30
12/17/2009	Peoria Public Building Commission	School improvements	30
4/2/2010	Village of Glendale Heights	Recreational facility/water utility improvements	30
12/7/2010	Lake County School District No. 56	School improvements	29
3/3/2010	City of Champaign	Recreational facility/sewer improvements	26
2/4/2010	Chicago Housing Authority	Housing	25
6/29/2009	Sangamon County School District 186	School improvements	25
7/27/2010	Western Illinois University	Higher education improvements	25
12/10/2010	County of Peoria	Recreational facility improvements	24
1/20/2010	Cook County School District No. 105	School improvements	24
11/6/2009	Village of Itasca	Sewer/water utility improvements	24
8/4/2009	St. Clair County Illinois School District No. 119	School improvements	24
11/9/2010	City of Crest Hill	Sewer/water utility improvements	24
4/29/2009	Lake County-Warren Township High School District No. 121	School improvements	24
10/19/2009	County of Kane	Public improvements	24
9/17/2010	South Sangamon Water Commission	Water utility improvements	24
12/16/2009	Winnebago Boone Etc Counties Community College District No. 511	Cash flow management	23
9/10/2009	Cook County School District No. 099	School improvements	22
3/18/2010	City of Naperville	Public improvements	21
9/13/2010	County of Lake	Sewer/water utility improvements	20
4/14/2010	County of Williamson	Correctional facility/parking facility improvements	19
8/10/2010	Village of Palatine	Public improvements	19
7/13/2009	Williamson County School District No. 5	School improvements	19
7/29/2009	City of Skokie	Public improvements	18
12/7/2010	Bartlett Park District	Recreational facility improvements	18
2/9/2010	Madison-Macoupin Counties Community College District No. 536	Higher education improvements	18
7/20/2010	Village of Carpentersville	Public improvements	18
10/28/2010	Washington County Community Unit School District No. 10	School improvements	18
3/4/2010	Henry Hospital District	Health-hospital-nursing home improvements	17
10/16/2009	County of Kane	Public improvements	16
12/16/2009	Village of Tinley Park	Recreational facility improvements	16
4/8/2010	Will County Township High School District No. 204	School improvements; cash flow management	16
2/24/2010	St Charles Park District	Recreational facility improvements	16
8/19/2009	City of Aurora	Public improvements	15
11/3/2010	DuPage County School District No. 2	School improvements	15
5/19/2010	McHenry County Community School District No. 047	School improvements	15
12/29/2009	City of Markham	Public improvements; retirement facilities	14
9/28/2010	Carol Stream Park District	Recreational facility improvements	14
12/7/2010	Village of Tinley Park	Utility/recreational facility improvements	14
11/3/2010	Dundee Township Park District	Recreational facility improvements	14
6/29/2010	DuPage County School District No. 2	School improvements	13
6/15/2010	Village of Elk Grove Village	Sewer improvements	13
9/20/2010	County of Union	Public improvements	13
11/1/2010	Village of Deerfield	Sewer improvements	13
9/16/2009	City of Crystal Lake	Utility/recreational facility improvements	12

10/18/2010	Cook County Community Consolidated School District	School improvements	12
2/24/2010	Western Illinois University	Higher education improvements	12
12/14/2010	Winnebago-Boone Counties Community College District No. 511	NA	12
12/14/2010	Peoria County Community School District No 323	School improvements	12
9/15/2009	City of Barrington	Sewer/water utility improvements	11
7/9/2009	Cook County Community High School District No. 234	School improvements	11
3/30/2010	Crawford Hospital District	Health-hospital-nursing home improvements	10
8/25/2009	Williamson Jackson Etc. Counties Community School District No. 4	School improvements	10
6/23/2010	Cook County Township High School District No. 225	School improvements	10
9/24/2010	County of De Kalb	Correctional facility improvements	10
12/15/2009	Cook County Community Consolidated School District No. 65	School improvements	10
1/27/2010	Du Page County School District No. 058	School improvements	10
2/9/2010	St Clair County Community School District No. 19	School improvements	10
4/15/2010	Village of Hanover Park	Public improvements	10
7/27/2010	Peoria County Community Unit School District	NA	10
8/12/2010	Will County Forest Preservation District	Public improvements	10
6/11/2010	Sangamon County Community Unit School District No. 5	School improvements	10
5/18/2009	City of O Fallon	Recreational facility improvements	9
7/6/2010	Village of Glenwood	Recreational facility/utility improvements	9
6/16/2010	Rock Island County Metropolitan Mass Transit District	Transit improvements	9
11/10/2010	Southwestern Illinois Development Authority	Public improvements	9
8/19/2009	Village of Oswego	Sewer/water utility improvements	9
12/14/2009	Fox Valley Park District	Recreational facility improvements	9
1/28/2010	Cook County Community High School District No. 218	School improvements	9
2/17/2010	Wheaton Park District	Recreational facility improvements	9
2/17/2010	City of Highland	Electric light & power improvements	9
8/7/2009	Village of Glendale Heights	Public improvements	9
11/16/2010	Wheeling Park District	Recreational facility improvements	9
11/20/2009	Fountaindale Public Library District	Public improvements	9
12/17/2009	City of Sarasota	School improvements	9
9/21/2009	Village of Palatine	Parking facility improvements	9
6/15/2010	Fox Valley Park District	Recreational facility improvements	9
10/25/2010	City of Sullivan	Utility/recreational facility improvements	8
3/2/2010	Champaign County School District	School improvements	8
6/23/2010	Rock River Water Reclamation District	NA	8
4/17/2009	Plainfield Fire Protection District	Public improvements	8
3/16/2010	Village of Morton Grove	Sewer/water utility improvements	8
10/27/2010	County of Du Page	Correctional facility improvements	8
11/10/2009	Kane & De Kalb Counties Community School District No. 302	School improvements	8
3/25/2010	Peoria County Community Unit School District	School improvements	8
8/14/2009	Village of Alsip	Parking facility improvements	8
4/20/2010	Warren-Newport Public Library	Public improvements	8
6/9/2010	Urbana Park District	Recreational facility improvements	7
10/18/2010	City of Rock Island	Water utility improvements	7
10/14/2010	Lisle Park District	Recreational facility improvements	7

9/20/2010	Sangamon & Christian Counties School District No. 3A	School improvements	7
8/23/2010	City of Pekin	Sewer improvements	7
12/7/2010	Cook County School District No. 151	NA	7
6/16/2009	City of Palatine	Public improvements	7
5/11/2009	City of Villa Park	Public improvements	7
6/30/2009	Will Grundy Community College Dist. No. 525	Higher education improvements	7
2/23/2010	McHenry County Community School District No. 200	School improvements	7
3/30/2010	Carroll-Stephenson & Ogle Counties School District No. 308	School improvements	7
10/14/2010	County of Peoria	Public improvements	7
12/21/2010	Hoffman Estates Park District	Recreational facility improvements	7
9/23/2009	City of Heyworth	Sewer/water utility improvements	7
5/12/2010	Madison-Macoupin Etc Counties Community College District No. 536	NA	7
12/20/2010	Warren Mercer & Knox Counties Community School District	School improvements	6
12/1/2010	Champaign County Community School District No. 116	School improvements	6
11/19/2010	Champaign County Community School District No. 1	School improvements	6
10/15/2010	Pekin Park District	Recreational facility improvements	6
6/11/2010	Mercer County Public Building Commission	Correctional facility improvements	6
8/19/2010	Northeastern Illinois University	Higher education improvements	6
12/15/2009	Peoria County School District No. 150	School improvements	6
8/11/2010	Kane Cook & DuPage Counties Community College District No. 509	Higher education improvements	6
11/4/2010	Downers Grove Park District	Recreational facility improvements	6
7/17/2009	City of Normal	Parking facility/water utility improvements	6
8/31/2009	Village of Burr Ridge	Public improvements	6
11/8/2010	Rock Island County School District No. 40	Refunding notes	6
8/30/2010	City of McHenry	Public improvements	6
8/17/2010	City of Mount Vernon	Sewer/water utility improvements	6
1/21/2010	Monroe & St Clair Counties School District No. 4	School improvements	6
7/8/2009	City of Minooka	Public improvements	6
2/18/2010	Cook County School District No. 102	Cash flow management	6
11/22/2010	Lawrence & Crawford Counties School District No. 20	School improvements	6
9/25/2009	Village of Dolton	Parking facility/utility improvements	5
4/19/2010	City of Lake Forest	Public improvements	5
8/10/2009	North Barrington Special Service Area No 17	Sewer improvements	5
1/18/2010	Byron Forest Preserve District	Public improvements	5
9/24/2009	Cook County Community College No. 527	Higher education improvements	5
5/12/2010	Cook County School District No. 151	NA	5
11/17/2009	Village of Hodgkins	Public improvements	5
11/18/2010	Village of Hanover Park	Public improvements	5
12/14/2010	Village of Lemont	Sewer/water utility improvements	5
12/16/2010	Tazewell County School District No. 108	School improvements; cash flow management	5
12/17/2010	Village of Milan	Sewer improvements	5
7/20/2010	Stephenson County School District	School improvements	5
2/10/2010	Cook County School District No. 163	NA	5
8/19/2010	Braidwood Fire Protection District	Public improvements	5
2/3/2010	Cook County School District No. 063	Cash flow management	4
11/18/2010	Will County Township High School District No. 205	School improvements	4
10/28/2009	Will County Forest Preservation District	Recreational facility improvements	4



4/22/2010	Effingham Community Unit School District No. 40	Public improvements	4
11/1/2010	Du Page & Will Counties Community School District No. 204	School improvements	4
11/23/2009	City of Chicago Heights	Public improvements	4
2/19/2010	Cook County School District No. 057	School improvements	4
12/9/2010	Village of West Dundee	Water utility improvements	4
6/22/2010	City of Carbondale	Public improvements	4
4/9/2010	Village of Roselle	Public improvements	4
12/6/2010	Champaign County Township High School District No. 193	School improvements	4
7/28/2009	Round Lake Beach	Public improvements	4
9/22/2009	City of Sycamore	Public improvements	4
9/11/2009	County of Kankakee	Public improvements	4
5/19/2010	Village of Westchester	Public improvements	4
12/8/2010	DuPage County Community Consolidated School District No. 93	Cash flow management	4
6/11/2009	Jackson County School District No. 186	School improvements	3
10/14/2010	Village of Fisher	Public improvements	3
6/19/2009	South Elgin	Sewer improvements	3
12/11/2009	Joliet Park District	Recreational facility improvements	3
12/15/2010	Cook County School District No. 105	School improvements	3
11/24/2009	City of Monticello	Recreational facility improvements	3
9/29/2009	Lockport Township Park District	Recreational facility improvements	3
4/8/2010	Village of Fox River Grove	Public improvements	3
12/9/2009	Village of Glen Ellyn	Public improvements	3
11/22/2010	Wayne County Public School District No. 12	School improvements	3
10/19/2009	McHenry & Boone Counties School District No. 50	School improvements	3
8/20/2009	De Kalb-Ogle-Boone Counties School District No. 426	School improvements	3
12/2/2009	Village of Mount Prospect	Public improvements	3
5/17/2010	Sterling Park District	Recreational facility improvements	3
10/8/2009	Channahon Fire Protection District	Public improvements	3
12/15/2009	Hickory Hills Park District	Recreational facility improvements	2
5/29/2009	City of Oswego	Public improvements	2
10/8/2009	Crete Township Fire Protection District	Public improvements	2
1/28/2010	Mill Creek Water District	Water utility improvements	2
2/9/2010	Township of Campton	Public improvements	2
7/22/2010	Lake County Community Consolidated School District	Cash flow management	2
5/26/2010	County of Knox	Public improvements	2
6/3/2010	Village of Mokena	Public improvements	2
5/3/2010	Village of Lakewood	Sewer/water utility improvements	2
11/22/2010	Town of Normal	Transit improvements	2
9/17/2009	Grant Park Fire Protection District	Public improvements	2
11/1/2010	DuPage County High School District No. 87	School improvements	2
12/27/2010	Village of Diamond	Water utility improvements	2
6/24/2009	Cook County High School District No. 214	School improvements	2
9/13/2010	Village of Mount Zion	Parking facility improvements	2
5/18/2010	Village of Westchester	Sewer/water utility improvements	2
2/11/2010	Whiteside County Community School District No. 6	School improvements; cash flow management	2
11/12/2009	Village of St. Joseph	Sewer improvements	2
10/25/2010	City of Monticello	Water utility improvements	2
7/9/2009	Round Lake Park	Sewer/water utility improvements	2
9/22/2009	Village of Palatine	Public improvements	2
4/12/2010	City of Marengo	Public improvements	2
12/22/2010	County of Jackson	Correctional facility improvements	1
12/21/2010	Village of Cambridge	Sewer/water utility improvements	1
11/9/2010	Lemont Fire Protection District	Public improvements	1

10/13/2009	County of Lake	Water utility improvements	1
9/14/2010	Grayslake Fire Protection District	Public improvements	1
3/8/2010	City of Morrison	Public improvements	1
4/13/2010	City of Sumner	Water utility improvements	1
7/15/2009	Cook County School District No. 156	School improvements	1
11/4/2010	City of Highwood	Sewer/water utility improvements	1
12/13/2010	City of Silvis	Water utility improvements	1
12/27/2010	City of Wenona	Water utility/sewer improvements	1
11/22/2010	City of Altamont	Water utility improvements	1
9/24/2009	Kankakee County Community High School District No. 307	Cash flow management	0
<b>Total</b>			<b>11,362</b>
<i>Source: US Treasury Department</i>			

*The Fiscal Futures Project* began in 2008 out of concern that the state of Illinois lacked sufficient capacity to project its fiscal demands and revenue streams into the future. A longer term perspective is needed due to: (1) The structural deficit: state expenditures have been growing faster than revenue (2) The serious consequences of making policy choices while ignoring the impact on the budget in future years (3) The relentless pressure on future budgets from an aging population and continuing increases in the cost of health care.

The Institute of Government and Public Affairs (IGPA) is a public policy research organization at the University of Illinois. IGPA seeks to improve public policy discussion through non-partisan, evidence-based research and public engagement in Illinois. [igpa.uillinois.edu](http://igpa.uillinois.edu) • @IllinoisIGPA

UNIVERSITY OF ILLINOIS SYSTEM  
  
 INSTITUTE *of* GOVERNMENT  
 & PUBLIC AFFAIRS