

BPG Fixed Income

Funding the Infrastructure Gap

Fully appreciating the condition of the nation's infrastructure is not for the faint of heart. For example, in New York State, of the 17,461 bridges, 1,990 are classified as structurally deficient including the Brooklyn Bridge, one of the most utilized bridges in the country (Source: U.S. DOT). Another 4,698 bridges are considered functionally obsolete. This problem is not only in New York but a crisis that spans across the country into more than just roads and bridges. In some cases, neglected decaying infrastructure, over a century old, is posing risks to public safety and the economy.

However, we are seeing signs of optimism for the future. In fact, we believe the U.S. is in the early midst of a multi-year infrastructure boom driven by stabilizing finances at the state and local level, increased federal support for project spending, low borrowing costs, and greater usage of alternative financing structures. For the municipal market, we expect this to translate into greater new money bond issuance for infrastructure related projects. We believe this should provide opportunities for investors. However, sound credit research evaluating necessity, demand characteristics, and sources of pledged revenues will be paramount for each project.

Aging Infrastructure

Today, the need to invest in infrastructure projects has never been more critical. Decades of chronic underinvestment in areas such as transportation, water treatment, airports, power grids, and schools are starting to catch up. According to the American Society of Civil Engineers, the nation's infrastructure is graded 'D+'. In their report, the investment needed to bring it back to a state of good repair or a 'B' rating, requires an estimated \$3.6 trillion in spending between 2013-2020 (Figure 1). The funding shortfall is substantial totaling \$1.6 trillion over that period or \$201 billion annually. The largest funding needs are in surface transportation making up 52.5% of the funding gap.

Figure 1. Infrastructure Spending Needs in the US through 2020 (\$ billions)

Infrastructure Type	Total Needs	Estimated Funding	Funding Gap
Surface Transportation	\$1,723	\$877	\$846
Water/Wastewater	\$126	\$42	\$84
Electricity	\$736	\$629	\$107
Airports	\$134	\$95	\$39
Inland Waterways & Marine Ports	\$30	\$14	\$16
Dams	\$21	\$6	\$15
Hazardous & Solid Waste	\$56	\$10	\$46
Levees	\$80	\$8	\$72
Public Parks & Recreation	\$238	\$134	\$104
Rail	\$100	\$89	\$11
Schools	\$391	\$120	\$271
Total Funding	\$3,635	\$2,024	\$1,611
Annual Investment Needed	\$454	\$253	\$201

Source: American Society of Civil Engineers. Funding requirements are for the periods 2013-2020.

It is important for government leaders to recognize that infrastructure spending is critical to maintaining public safety and a competitive edge in the global markets. According to the IMF, a 1.0% increase in spending on infrastructure leads to an

PUBLISHED:

October 2016

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average of 1.5% in Gross Domestic Product (GDP) growth over four years. Regrettably, Federal, State, and Local government officials have too often missed the message.

Tides Are Turning For Federal Infrastructure Spending

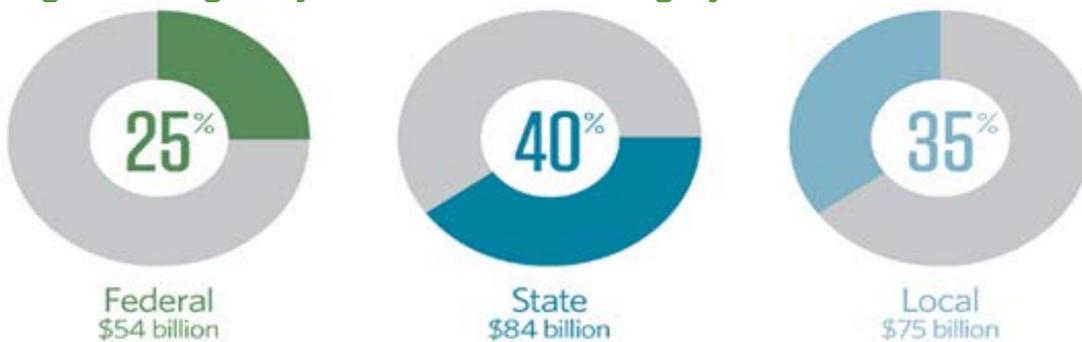
In many ways, the poor state of the nation’s roads and bridges are reflective of the federal government’s lack of leadership in promoting infrastructure spending. Permanent funding has been an elusive political priority and devastating to the support of large capital intensive multi-year project investment. Take, for example, the Highway Trust Fund, which is tasked with providing federal funding to the nation’s highway and mass transit projects. In recent years, the Trust Fund teetered on the brink of insolvency with inadequate funding from a legacy 18.4 cent gas tax, unchanged since 1993. The Trust Fund has been reliant on last-minute, short-term funding extensions from the federal government to cover shortfalls since the prior funding authorization expired in 2014 (Source: Congressional Budget Office).

The tides may be finally turning. To provide a longer term solution for the Highway Trust Fund, President Barack Obama signed into law in 2015 a five-year, \$305 billion highway improvement plan that will provide a boost of approximately 15% in highway funding and an 18% boost in transit funding through 2020. Funding is provided from both the federal gas tax and general fund transfers. Whoever the next president will be, infrastructure spending will be a key focus. For example, under Hillary Clinton’s plan, Federal spending on infrastructure would increase by another \$500 billion over five years. This is divided between \$275 billion in direct Federal funding with another \$225 billion in direct loans and loan guarantees. While details on Donald Trump’s plan are limited, he is touting a plan that would double Mrs. Clinton’s projections.

State and Local Infrastructure Spending Have Been Slashed

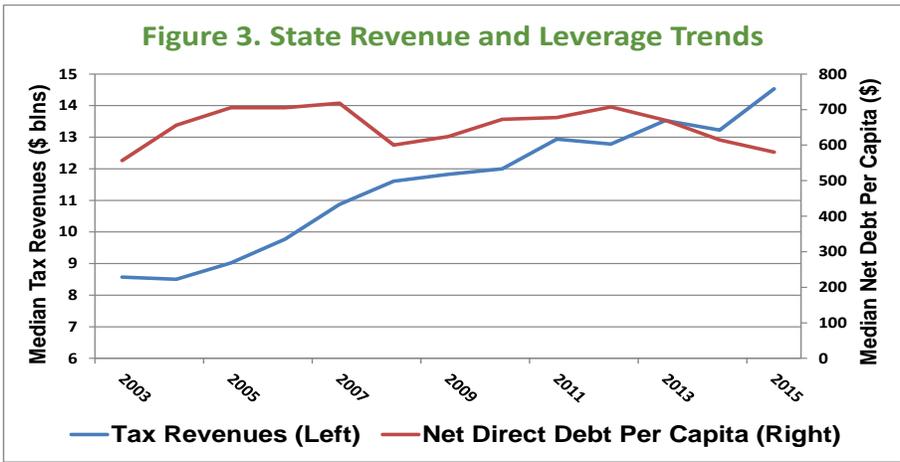
Surprising to many, state and local governments are funding the majority of the nation’s infrastructure needs, not the Federal government. From 2008 to 2012, state and municipal governments funded approximately 75% of all spending for highways and transit projects (Figure 2). However, since then spending levels have dropped off due to sluggish tax collections and pension funding pressures.

Figure 2. Highway and Transit Funding by Level of Government

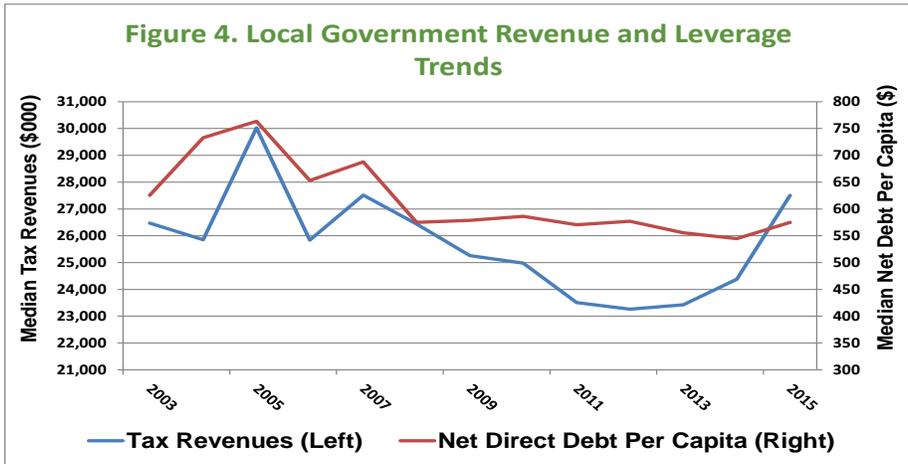


Source: The Pew Charitable Trust. Data represents the average annual spending by government for 2008-2012.

Infrastructure needs are now approaching a critical nature and in many cases upgrades can no longer be deferred. With fiscal outlooks generally improving, we expect state and local government infrastructure spending to shift higher. In 2015, median state tax revenues were at record levels growing 10% year over year (Figure 3). For municipal governments, tax revenues started to rebound in 2013 and increased a strong 13% in 2015 year over year. In 2015, median debt per capita was at the lowest level since 2003 for both state and local governments (Figure 3 and 4).

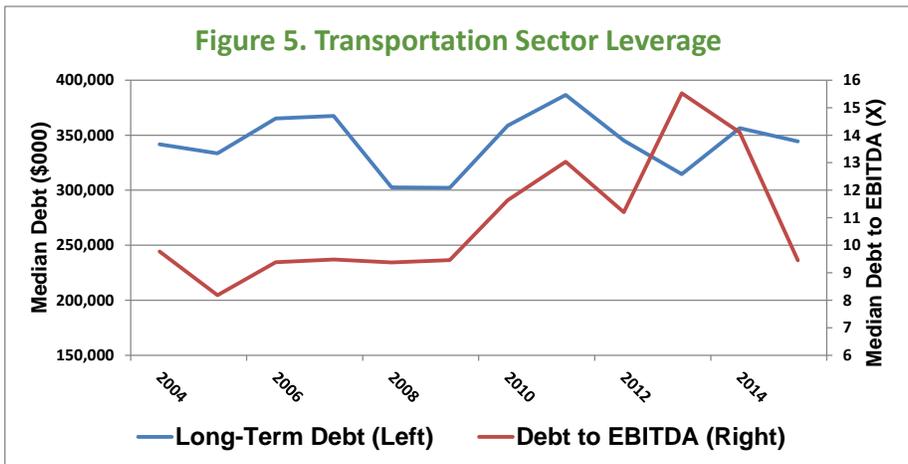


Source: Ziegler BPG Group; Merritt Research Services.



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Furthermore, toll road systems, which are responsible for constructing and maintaining some of the nation's highway corridors, are also seeing stronger financial results. Median leverage ratios for the sector in 2015 are at the lowest levels since 2008 (Figure 5). The median outstanding debt for toll roads in 2015 is unchanged from 2004 levels.



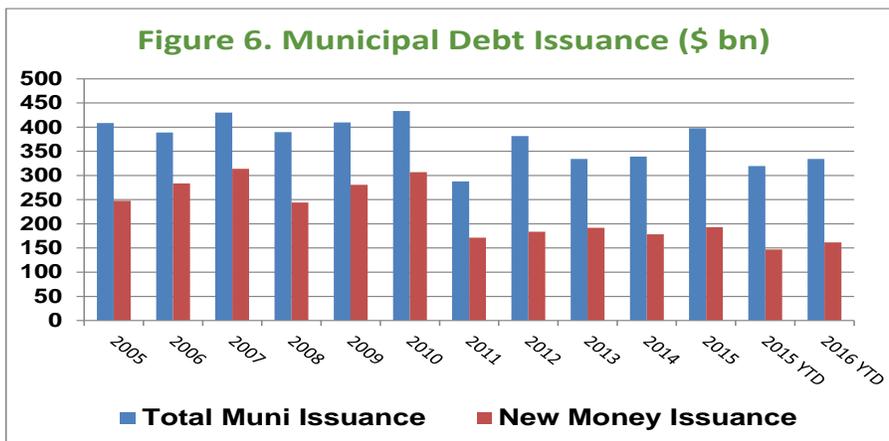
Source: Ziegler BPG Group; Merritt Research Services.

Public Private Partnerships (P3s) are Essential to Funding the Gap

Unfortunately, funding from Federal, State, and Local sources just isn't enough. Increasingly, government officials are recognizing the need for private sector involvement in addressing the large costs of infrastructure needs. For instance, alternative financing structures, such as Public-Private-Partnerships or P3s, are being utilized by municipal governments as a way to leverage private sector capital and expertise. Under a P3, private developers/operators, in coordination with government entities, are responsible for equity funding, constructing, and managing the projects when completed. When structured correctly, the private corporation is financially incentivized to complete construction of the infrastructure project on time and on budget, and to manage the project efficiently after completion. Ultimately, P3s help reduce the financial/operational risks borne by the government entity.

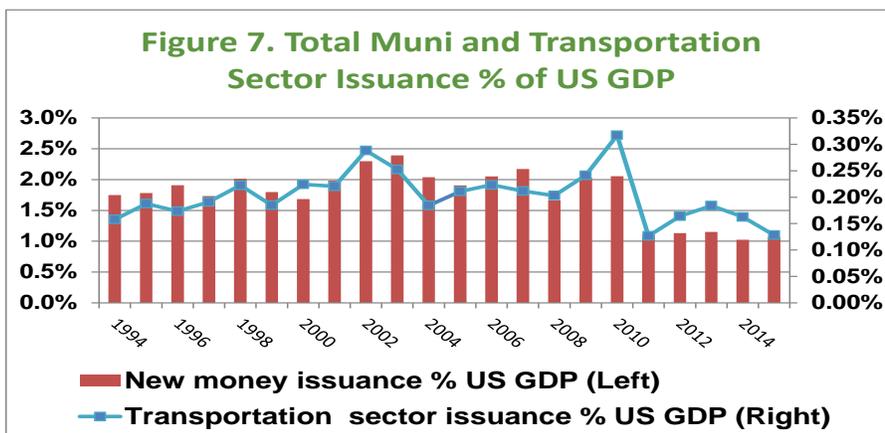
Surge in New Money Issuance Likely to Continue

As states and municipalities play catch-up in their infrastructure spending, we expect the tax exempt market to shift to a level of heavier new money issuance volume where borrowers go to market to fund their capital investment. The signs of growth are beginning. For the month of September, new money bonds increased a significant 72.6% compared to the same month last year. Year to date through the nine months of 2016, new money issuance grew 10.1% over the same period last year. This is on top of an 8.3% increase in new money for the prior year.



Source: Ziegler BPG Group; Bondbuyer. Year-to-date through the nine months ended September 30, 2016.

Despite the recent uptick in supply, overall new money and transportation sector issuance remains well below pre-2011 levels as a percentage of GDP (Figure 7). With borrowing costs at all-time lows, we expect new money issuance for infrastructure projects will continue to be robust entering next year. Nationally, there are \$200 billion of transit-related ballot measures going before voters in November, the highest in recent memory.



Source: Ziegler BPG Group; Bondbuyer; Bureau of Economic Analysis.

New York at Forefront of Infrastructure Boom

In 2014, one of the nation's busiest airports was brought to the national spotlight when Vice President Joe Biden famously said, "If I took you and blindfolded you and took you to LaGuardia Airport in New York, you'd think, 'I must be in some third-world country'" (Source: CNN). Although, embarrassing, this offhand comment provided a key impetus to modernize LaGuardia. Just two years later, the airport has completed a \$4 billion bond financing to replace one terminal and prepared future plans to replace another. It is one of many major infrastructure projects planned under Governor Andrew Cuomo's \$100 billion infrastructure program. In fact, it represents one of New York's largest infrastructure building plans since the 1960s.

Both the Port Authority of NY/NJ (the Port Authority) and Metropolitan Transportation Authority (MTA) feature prominently in the State's infrastructure plan. Besides LaGuardia, the Port Authority plans to rebuild its main bus terminal and construct two new tunnels under the Hudson River. These are on top of current projects underway including the completion of the World Trade Center site redevelopment, replacing of the Goethals Bridge, and raising of the Bayonne Bridge. The MTA plans are just as ambitious with a capital plan totaling \$29.5 billion for 2015-2019, a 21% increase from the prior five year capital plan. Major projects include expanding commuter rail links between Grand Central Station and Queens, further expansion of the 2nd Avenue subway line, redevelopment of Penn Station, and Hudson Rail Yards project. Additionally, the State is in process of replacing the Tappan Zee Bridge over the Hudson River north of New York City.

Fundamental Analysis Essential for Each Project as Credit Risk Vary

For investors, fundamental credit research is essential to evaluate the risks for each project. Infrastructure projects are inherently exposed to potential cost overruns, construction delays and slower-than-expected ramp-up revenues. For each project, demand characteristics, essentiality, construction risk, ongoing disclosure, sources of revenues, and the commitment of financial/political support from various levels of government must be closely evaluated.

It goes without saying, the costs of major infrastructure projects are significant with construction stretching over many years. Confidence in the plan of finance, which spells out the sources and uses of funding, is a key element for success. For many projects, funding will come from a combination of Federal, state, municipal, and local agency sources. Increasingly, private capital and expertise through the use of P3 models is a growing method for financing. However, P3 structures are more nuanced and complex with a greater reliance on a private entity partnership. It is essential for the investor to fully understand the risks/obligations borne by the private developer and government entity sponsoring the project. The financial strength, experience in construction, and long-term commitment are critical in evaluating the private partner with P3s.

Conclusion

After years of deferred capital spending, infrastructure needs are now approaching a critical nature exposing risks to public safety and future economic growth. Deferred capital spending is no longer an option. In order to fund the infrastructure gap, the U.S. needs a four-pronged approach with funding sources coming from Federal, state, municipal, and the private sector. We think this concerted effort is starting to take hold, which we expect to help drive a multi-year infrastructure boom. For the municipal market, we expect this to translate into greater new money bond issuance for infrastructure-related projects. We believe this should provide opportunities for investors to enhance portfolio return. However, robust credit due diligence and monitoring into the necessity, construction risks, and the expected ramp up in revenues will be paramount for each project.

The BPG Group at Ziegler Capital Management, LLC actively manages Core Municipal, Tax-Responsive, and Core Taxable Strategies. Our approach balances a client's objectives – income, risk, capital preservation, and appreciation – rather than focusing on an income target without measurement of relative risk.

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Document Number 16-09051