

Can Public Infrastructure Banks Improve Highway Funding?

By

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Many politicians have expressed concern over the condition of U.S. highways. They contend that a significant increase in federal highway spending is needed to improve highway performance. One suggestion is to create a national infrastructure bank that could direct additional resources toward highway construction. President Obama has proposed establishing just such an institution. Now, Democratic presidential nominee Hillary Clinton has promised, if elected, to establish a national infrastructure bank.¹

Establishing a national infrastructure bank would expand the role the federal government plays in highway construction. While the federal government does have a role to play in the national transportation system, it would be a mistake to expand that role. It's not a matter of simply building more roads to have an effective transportation system, but instead, channeling dollars toward projects that have a high return. These decisions are better done at the state and local level. Establishing a national infrastructure bank will further concentrate transportation infrastructure decision-making in Washington, and would do little to improve how we use transportation dollars.

Public infrastructure banks are government institutions designed to lend funds to municipalities and private firms to finance the construction of highways and other infrastructure projects. As loans are repaid, the recycled funds are used to finance

additional lending. The goal is to provide a sustainable source of funds for infrastructure investment, reducing the need to use general funds.

This paper explains how infrastructure banks operate and points out their limitations. In order to make the idea of an infrastructure bank more concrete, the paper reviews some issues surrounding state infrastructure banks already in operation. The paper concludes with some suggestions as to how the U.S. could improve highway funding and performance.

A National Infrastructure Bank

A national infrastructure bank is intended to expand funding and provide a more sustainable source of funds for infrastructure investment. It would also expand Washington's role in project selection. Under President Obama's proposal, the federal government would provide \$10 billion to capitalize a national infrastructure bank. The bank would make loans at Treasury bond interest rates on projects costing at least \$100 million (\$25 million for rural projects). The bank would finance up to fifty percent of a project. The remaining sources of funding would come from city and state governments or the private sector. Loan repayments would serve as a source of funds to finance future infrastructure projects. Hillary Clinton's plan is similar except that it calls for an initial capitalization of \$25 billion.²

There are a number of issues associated with establishing a national infrastructure bank. The federal government already has several lending programs, so establishing the bank is redundant. The Transportation Infrastructure Finance and Innovation Act authorizes the Department of Transportation to provide loans, loan

guarantees, and standby lines of credit that can be used to finance highway and mass transit infrastructure projects. To date, the program has provided \$23 billion in credit assistance for 61 major projects in 20 states. The Fixing America's Surface Transportation Act approved last year provides the program with \$1.435 billion of funds over the next five years. In addition, the Railroad Rehabilitation and Improvement Financing program provides similar credit facilities to railroads.³ Neither the President's nor Secretary Clinton's proposals provide a justification for adding an additional agency given the existence of these federal lending programs.

The President's plan called for funding projects that provide "... clear benefits to taxpayers."⁴ The lending decisions are to be made by a seven member bi-partisan board of directors chosen by the President. Given this selection process, we cannot expect the board of directors to make loan decisions independent of political pressure from the White House.

The board is likely to pressure staff to bias project evaluations toward politically favored projects, as in states with close elections. Studies have found this to be the case for discretionary job training funds and the state spending pattern in the American Recovery and Reinvestment Act of 2009.⁵

An additional complication is that cost-benefit analysis of large infrastructure projects of the type a national infrastructure bank would finance is notoriously misleading, suggesting that even if we can remove politics from the final selection decision, political forces will bias the analysis fed into the choice process.

Forecasting a proposed project's construction cost and usage is difficult. On average, if analysts are objective in their estimates, we would expect forecast errors to be unbiased with unpredictable errors. Bent Flyvbjerg et al. examined estimates of large infrastructure project costs and benefits across an international sample of projects. They found systematic under-estimation of costs and over-estimation of benefits. Flyvbjerg et al. conclude political pressure on analysts results in a systematic bias to paint a rosy picture of costs and benefits. Another example of this kind of behavior can be seen in the optimistic economic forecasts produced by the White House Office of Management and Budget. In contrast, forecasts made by the Congressional Budget Office are similar to private sector projections.⁶ In other words, the errors are deliberate and result from pressure to achieve political goals.⁷

Infrastructure investments impose costs on and provide benefits to the community in which they are located. So, by their very nature, infrastructure investment decisions are highly political and supported by local unions and construction companies. Politicians love to be at ribbon cutting ceremonies. Because of this, there is pressure to overstate the net benefits of a project. Unlike private lenders who seek the highest risk-adjusted return on projects they fund, public decision makers in government, or at a government infrastructure bank, are likely to be influenced by politics as much as hard economic facts. There is no reason to conclude that a national infrastructure bank would allocate funds to higher return projects.

Using federal funds to subsidize what is mostly a state or local function, as would be the case with a federal infrastructure bank, distorts decision making. The federal contribution encourages states and municipalities to take on infrastructure projects that

could not stand on their own. The California bullet train is an example. Because the local community does not pay the full cost of a project, non-economic projects, where total costs exceed total benefits, are often built. Although it cannot be eliminated, the primary way to reduce the role of politics in project selection is to shift funding responsibility back to state and local governments. Many infrastructure projects would not be built if the community had to pay the full cost, resulting in better project selection.⁸

Another drawback is that a national infrastructure bank would continue the focus on building new projects rather than maintaining existing highways and roads. Maintenance has a bigger impact on the economy, providing a higher rate of return, than new highway construction.⁹ Furthermore, the rate of return on new construction has been declining and is generally less than the return on private investment.¹⁰ Unfortunately, infrastructure banks direct funds to new construction.

Creating a national infrastructure bank would expand the transportation bureaucracy in Washington, encourage the construction of projects that don't pass cost-benefit analysis, and increase project selection power in Washington. While there are infrastructure investments that have a multi-jurisdictional impact, such as a seaport, Washington already has more than enough power and funds to handle these projects. A national infrastructure bank is the wrong kind of policy reform because it will make it more difficult to shift highway funding responsibilities back to the state and local level, where better project selection is possible.

State Infrastructure Bank Experience

Many states have set up infrastructure banks (SIBs) as part of a pilot program created by the National Highway System Designation Act of 1995. Initial capitalization relied on both federal and state funds. At least 20 percent of the funding had to come from the state. The plan was for state infrastructure banks to make loans or provide credit enhancements, such as loan guarantees, to expand infrastructure investment in the state. Loans would be made at below-market interest rates and could generally be used to finance highway or mass transit construction. Because federal dollars were involved, selected projects were subject to federal regulations, such as requiring contractors to pay prevailing wages. The program was extended in the 1998 transportation funding bill and made permanent in 2005. Figure 1 shows the thirty-four states that have established SIBs.¹¹

Robert Puentes and Jennifer Thompson estimate state infrastructure banks made 1,134 agreements worth about \$7.4 billion with municipal governments between 1995 and 2012. States spent approximately \$1.4 trillion on infrastructure over the 1996 to 2010 period, so SIB lending remains relatively small, about 0.5 percent of the total. Per capita lending is less than \$100 for all SIBs except Wyoming and South Carolina at \$329 and \$601 respectively. Seventy percent of the agreements supported road construction. Other major areas financed included aviation (6.5 percent), water (4.4 percent), and transit (4.1 percent). Some agreements supported social and redevelopment projects.

Three quarters of the SIB agreements are in eight states, suggesting many banks are not very active. One troubling fact is that 28 percent of the loans were

interest free. This limits the sustainability of the bank because there is no repayment over time, reducing bank capital.

SIBs have the option to leverage the initial public capital by borrowing at market interest rates. This enables SIBs to fund more projects. However, it can create long-term financial viability problems. For SIB loans to be attractive to municipalities, the interest rate must be below the rate at which municipalities can borrow on their own, the municipal bond rate.¹² If SIBs banks borrow at market interest rates and lend at below-market rates, the capital of the SIB will erode over time. In addition, to further protect bank capital, the SIB loan rates should be greater than the inflation rate.¹³ The establishment and leveraging of a SIB should be decided by voters because these types of institutions could be used as a means to avoid state borrowing limits.¹⁴

Another issue is whether SIB lending is used to support high-return projects. Most SIBs are managed by the state departments of transportation. With directors appointed by the legislature or governor, it is likely that special interests influence the project selection process.¹⁵ To the extent this is the case, SIBs fail to direct funds to high return projects, resulting in an inefficient use of taxpayer dollars.

Conclusions

Politicians have been toying with the idea of a national infrastructure bank since the 1990s. The principle goal of the institution would be to expand infrastructure spending. The establishment of such a bank would be a mistake. It would further centralize transportation decision-making in Washington resulting in a less efficient use of limited tax revenues.

Instead, greater funding and decision-making powers belong with state and local governments, since highways, roads, and urban transit are primarily a state and local responsibility. To achieve such a shift, the federal gasoline tax can be replaced by higher state-determined gasoline taxes. Each state could then decide on the appropriate level of funding based upon its transportation needs. Local decision making will improve the project selection process. Communities that benefit from a project most should pay the full (or most) of the cost. The federal government would still play a role in multijurisdictional projects, such as a seaport.

It is important to place most funding responsibilities on state and local governments in order to provide incentives to fund projects with high net benefits. The attraction of a SIB is the ability to finance additional infrastructure as loans are repaid. However, taxpayers should be aware that it is tempting for SIBs to borrow in financial markets to expand lending. If the SIB loan rate is below the market interest rate, or less than the inflation rate, the bank's capital will contract. Rather than being self-financing, the SIB would require continued state funding.

Expanding the federal government's role in infrastructure planning assumes that the U.S. does not spend enough on infrastructure, so as a result, our highways and bridges are deteriorating. This is not the case. The quality of the national highway system is stable. The most recent data suggest the quality of bridges in the U.S. has improved.¹⁶ This does not mean there are no projects worth undertaking, only that government officials need to be selective in projects they fund. It would make sense to focus on maintenance and to build new capacity in areas where population and economic activity has expanded. Finally, most road quality issues are at the local level,

which is a municipal government responsibility. A national infrastructure bank would focus on building new infrastructure capacity rather than maintaining existing roads. It would not accelerate the filling of potholes on local streets.¹⁷

¹ See Darren Samuelson, 2015, "Bank of Asphalt," *Politico*, <http://www.politico.com/agenda/story/2015/07/infrastructure-americas-roads-bridges-000155>, and <http://www.hillaryclinton.com/speeches/remarks-investing-infrastructure-during-first-100-days-office/>,

² Compton, Matt, 2011, "Five Facts About a National Infrastructure Bank," http://www.whitehouse.gov/blog/2011/11/03/five_facts_about_national_infrastructure_bank and https://www.hillaryclinton.com/briefing/factsheets/2015/11/30/clinton_infrastructure_plan_builds_tomorrows_economy_today/.

³ <http://www.transportation.gov/tifia> and <http://www.transportation.gov/rrif>

⁴ See Compton, 2011.

⁵ Marcal, Leah and Shirley Svorny, 2002, "The Allocation of Federal Funds to Promote Bureaucratic Objectives: An Empirical Test," *Contemporary Economic Policy*, 20(3):209-220, Young, Andrew T. and Russell S. Sobel, 2013, "Recovery and Reinvestment Act Spending at the State Level: Keynesian Stimulus or Distributive Politics," *Public Choice*, 155(3-4): 449-468, Knight, Brian, 2004, "Parochial Interests and the Centralized Provision of Local Public Goods: Evidence from Congressional Voting on Transportation Projects," *Journal of Public Economics*, 88(3): 845-866 and Krol, Robert, 2015, "Political Incentives and Transportation Funding," *Mercatus Research*, Mercatus Center, George Mason University, Arlington, VA 22201, <http://www.mercatus.org/publications/political-incentives-and-transportation-funding>.

⁶ Krol, Robert, 2014, "Forecast Bias of Government Agencies," *Cato Journal*, 34(1): 1-14.

⁷ Flyvbjerg, Bent, Nils Bruzelius, and Werner Rothengarter, 2003, *Megaprojects and Risk: An Anatomy of Ambition*, Cambridge University Press, Cambridge, U.K.

⁸ Krol, Robert, 2015, "Political Incentives and Transportation Funding," *Mercatus Research*, Mercatus Center, George Mason University, Arlington, VA 22201, <http://www.mercatus.org/publications/political-incentives-and-transportation-funding>

⁹ Kalaitzidakis, Pantelis and Sarantis Kalyvitis, 2004, "On the Macroeconomic Implications of Maintenance in Public Capital," *Journal of Public Economics*, 88(3-4): 695-712 and Kalyvitis, Sarantis and Vella, Eugenia, 2011, "Public Capital Maintenance, Decentralization, and U.S. Productivity Growth," *Public Finance Review*, 39(6): 784-809.

¹⁰ Shirley, Chad and Clifford Winston, 2004, "Firm Inventory Behavior and the Returns from Highway Infrastructure Investments," *Journal of Urban Economics*, 55(2): 398-415, Melo, Patricia C., Daniel J. Graham, and Ruben Brage-Ardao, 2013, "The Productivity of Transport Infrastructure Investment: A Meta-Analysis of Empirical Evidence," *Regional Science and Urban Economics*, 43(5): 695-706, and Congressional Budget Office, 2016, "The Macroeconomic and Budgetary Effects of Federal Investment," Washington D.C.

¹¹ Puentes, Robert and Jennifer Thompson, 2012, "Banking on Infrastructure: Enhancing State Revolving Funds for Transportation," Brookings-Rockefeller Project on State and Local Innovation, Washington D.C.

¹² There is evidence that this is the case. See Yusuf, Juita-Elena, Lenahan O'Connell, Merl Hackbart, and Gao Liu, 2010, "State Infrastructure Banks and Borrowing Costs for Transportation Projects," *Public Finance Review*, 38(6): 682-709.

¹³ Holcombe, Randall G., 1992, "Revolving Fund Finance: The Case of Wastewater Treatment," *Public Budgeting and Finance*, 12(3): 50-65.

¹⁴ Bunch, Beverly, 1991, "The Effect of Constitutional Debt Limits on State Government's use of Public Authorities," *Public Choice*, 68(1-3): 57-69.

¹⁵ See Krol (2015).

¹⁶ Krol, Robert (2015), "America's Crumbling Infrastructure," *Inside Sources*, https://www.mercatus.org/expert_commentary/america-s-crumbling-infrastructure, David Harrison, (August

25,2016), "Road Funding Gap Hurts Local Drivers," *Wall Street Journal*, A3, and GAO, (2015) "Transportation Infrastructure: Information on Bridge Conditions," Washington D.C.

¹⁷ Renn, Aaron M., 2015), "Beyond Repair? America's Infrastructure Crisis Is Local," Issue Brief 41, Manhattan Institute, NY, NY.