

Creating a National Infrastructure Bank and Infrastructure Planning Council

How Better Planning and Financing Options Can Fix Our Infrastructure and Improve Economic Competitiveness

Keith Miller, Kristina Costa, and Donna Cooper September 2012



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Introduction and summary

Infrastructure forms the foundation of the U.S. economy. Without highways, power grids, railroads, dams, levees, and water systems, businesses could not transport their goods, homes would be without electricity or drinkable water, parents could not get their kids to school, and the United States would cease to be a world leader in productivity and innovation. But despite our infrastructure's clear indispensability, decades of negligence and underinvestment have allowed much of it to fall into a shameful state of disrepair.

Inefficiencies in our infrastructure affect all aspects of American life. Commuters on our highways now lose more than \$100 billion every year in time spent and fuel burned due to ever-increasing congestion on their way to and from work.¹ U.S. ports are struggling to handle increased ship sizes and cargo volumes. Lock systems on inland waterways are crumbling, causing tens of thousands of hours of delays every year. And leaking pipes lose an estimated 7 billion gallons of clean drinking water every day.² Together, these failures jeopardize public health, contribute to environmental degradation, and make American businesses less competitive, forcing them to pass additional costs on to consumers.

At the same time, our closest competitors have dramatically stepped up their investment in infrastructure and adopted ambitious plans for additional development. The United States fell to 24th place in overall infrastructure, down from ninth in 2008, according to a 2011 annual survey conducted by the World Economic Forum.³ What's worse, under current levels of investment, this ranking will likely only continue to fall. A recent Center for American Progress report on America's infrastructure funding gap estimated that the federal government is underinvesting in infrastructure by approximately \$48 billion per year, assuming a goal of adequately maintaining existing infrastructure and preparing for projected economic and population growth.⁴

But our situation is not hopeless. By coupling increased investment with a number of commonsense reforms, the United States could make great progress toward

bringing its infrastructure up to modern standards. The establishment of both a national infrastructure bank and a national infrastructure planning council represents an innovative and promising way in which we could finance and plan infrastructure projects. That is the subject of this report.

By establishing a centralized federal lending authority in the form of an infrastructure bank, the United States could:

- Increase public investment in infrastructure
- Leverage billions in additional private investment
- Streamline existing federal lending initiatives
- Increase the share of federal money that flows to projects meeting rigorous costbenefit criteria

With a relatively modest investment, the federal government could enable the completion of numerous large-scale projects of critical economic importance throughout our country, potentially producing thousands of jobs in the process.

Forming a national infrastructure planning council would also help better coordinate federal investments in infrastructure. This would go a long way toward resolving the siloed decision-making process that currently prevents crucial project integration and encourages inefficient spending across government agencies, as each agency attempts to independently address single components of a complex, interdependent infrastructure system. Better coordination would allow the United States to finally develop a comprehensive national infrastructure plan on par with those implemented by both industrialized and developing nations, while also encouraging the adoption of the best investment and planning practices at all levels.

Congress and the Obama administration should be praised for taking a significant step toward better investment coordination and improved due diligence by expanding the Department of Transportation's Transportation Infrastructure Finance and Innovation program, included in the recently passed Moving Ahead for Progress in the 21st Century Act. Increasing this program's funding from \$122 million in fiscal year 2012 (which began in October 2011) to a combined \$1.7 billion for FY 2013 through FY 2014 will help it achieve a considerably greater impact. The program provides low-interest loans, loan guarantees, and lines of credit to public and private investors undertaking large-scale surface transportation projects. Although the program's limited surface-transportation-only focus and known funding horizon of only two years means it alone cannot shoulder the

burden of America's infrastructure needs, the designers of any future infrastructure bank should look to this program as an example of how to successfully operate a federal infrastructure lending initiative.

This report will detail the need for both a national infrastructure bank and a planning council, explain how they each would work, and examine how they would address the specific failings of our current system of infrastructure investment. We will consider existing policy proposals for creating an infrastructure bank and will note which facets of these plans still require significant attention from policymakers. Finally, we will put forward a number of suggestions for immediate action to lay the groundwork for a national infrastructure bank and an infrastructure planning council.

The United States simply cannot wait any longer to address our crumbling infrastructure. If we take action now to better plan, finance, and coordinate critical investments in our national infrastructure, we can ensure continued prosperity for future generations, while immediately helping the American economy get back on its feet.

The need for an infrastructure bank and planning council

The overwhelming scale of the challenges facing U.S. infrastructure cannot be adequately addressed by individual state and local efforts or piecemeal federal support. Our myriad overlapping and competing funding streams, programs, and initiatives have repeatedly proven to be inadequate, and the need for central entities to plan, coordinate, and finance projects of national importance could not be more apparent.

In this section, we examine the four greatest failings of our current infrastructure investment system and illustrate their detrimental effect on the U.S. economy:

- Failure to provide sufficient public funds
- Failure to attract private investment
- Failure to coordinate investments
- Failure to allocate funds efficiently

Let's examine each of these failures in turn.

Failure to provide sufficient public funds

Despite a large number of independent funding streams and initiatives for infrastructure development already in the federal government, the United States is failing—by a large margin—to adequately invest in its infrastructure. These existing funding streams include multiple federal loan programs, a far greater number of grant opportunities, and many additional layers of programs at the state and local level. A recent Center for American Progress report estimated that bringing America's infrastructure into a state of good repair and adequately preparing it for projected growth would require the federal government to invest at least an additional \$48 billion per year on top of current infrastructure spending levels, which in FY 2010 totaled roughly \$92 billion in grants, credit subsidies, and tax expenditures.⁵

Even then, this spending could only be considered sufficient if it triggered \$11 billion annually in additional state spending and was accompanied by a \$10 billion increase in annual federal loan authority. The United States is simply not investing enough to repair and maintain our most critical infrastructure, let alone expand and upgrade it to enable future economic growth.

This lack of sufficient funding and political will means we are not only underfunding local water-treatment systems and roadway investments but also perpetually neglecting large-scale regional projects. Such cross-state "megaprojects" have the potential to produce massive economic returns but frequently go unfunded or unconsidered because they are simply too large for states, localities, or limited federal programs to finance. While the Transportation Infrastructure Finance and Innovation program and similar initiatives may seek to support large-scale undertakings, it simply does not have the funds to provide the level of capital required for such megaprojects and is generally limited to funding projects that fall into a specific sector—such as surface transportation—instead of integrated, cross-sector proposals.

This problem is evident, for example, in ongoing efforts to replace the functionally obsolete Brent Spence Bridge that connects Cincinnati, Ohio, with Covington, Kentucky, carrying traffic from two large interstate highways across the Ohio River. Despite its critical importance to regional commerce and the economic vitality of both cities, project planners have not been able to find a funding source for the \$2.4 billion needed to begin work.⁶ Even with combinations of grants, municipal bonds, and private investment, such projects often require an additional source of funding to make it out of the concept stage.⁷ Currently this source of funding does not exist, which means the very projects that hold the greatest potential to spur lasting economic growth are the most frequently abandoned.

These problems are further compounded by a congressional appropriations process that allocates some infrastructure funds on a year-to-year basis and legislators who are sometimes reluctant to commit resources over the longer time frames required to complete most infrastructure projects. The recently passed Moving Ahead for Progress in the 21st Century Act surface-transportation bill provides program allocations for only two years—well short of the five-year timeframe of most of its predecessors. This leaves states, localities, and private investors struggling to make long-term plans under the uncertainty of future federal support.

Additionally, this annual appropriations process can encourage state and local policymakers to delay necessary projects in the hope of securing federal funding

The United States is simply not investing enough to repair and maintain our most critical infrastructure, let alone expand and upgrade it to enable future economic growth.

in the next election cycle, both delaying benefits and potentially increasing costs, as required repairs become more significant.⁸

Failure to attract private investment

Private investors can be valuable and innovative partners in maintaining and modernizing critical infrastructure. Our current system of financing, however, has often failed in its attempts to forge viable partnerships with private investors.

While the traditional American method of attracting private capital by offering tax-exempt municipal bonds has been successful in many instances and will remain a valuable tool for infrastructure investment, it often leaves many large potential investors sitting on the sidelines. The reason: These groups are either already exempt from taxes, as in the case of pension funds, or have no state tax liability to begin with, as is the case with international investors. These characteristics have historically made tax-exempt bonds far less attractive to these groups, resulting in extremely limited purchases.

In the wake of the Great Recession of 2007–2009, however, many of these institutional investors now say they are eager to diversify their portfolios by investing in infrastructure. The California Public Employees' Retirement System, for example, has already allotted \$4 billion to be invested in U.S. infrastructure projects over the next three years.⁹

The success of so-called Build America Bonds has demonstrated that alternatives to traditional municipal bonds can have success in attracting pension funds and international investors. The program, initiated in 2009, issued an estimated \$117 billion in taxable state and local bonds for which the federal government directly subsidized a portion of the interest costs. ¹⁰ This made the bonds significantly more attractive to private investors, eliminating inefficiencies in the system of federal bond subsidization that cost the federal government billions of dollars every year. ¹¹ Unfortunately, the program was allowed to expire in 2010 and has not yet been renewed.

Public-private partnerships offer shareholders a direct stake in projects, and the potential for greater returns are also extremely attractive to these types of private investors. Unfortunately, states and the federal government have not yet fully taken advantage of these new types of investment vehicles. While 25 states have passed legislation expressly aimed at encouraging public-private partnerships, relatively few projects have actually been launched.¹²

This is largely because our infrastructure financing system lacks the experience and tools to quickly identify viable investment opportunities and match private investors with public partners. Without improved coordination, transparency, and financial assistance, billions of dollars more in potential investment may go unrealized despite the existence of numerous willing investors. In contrast, Europe has a fully functioning infrastructure finance program up and running. (see box)

Lessons from the European Investment Bank

While the United States struggles to develop a national infrastructure investment plan, the European Union has been operating a transnational, publically chartered infrastructure bank for longer than half a century. Founded in 1957, the European Investment Bank funds critical projects throughout Europe and in developing nations worldwide to the tune of tens of billions of dollars every year.

The bank is capitalized by funds from its 27 member states but also raises a large portion of its capital from issuing bonds. These funds are used to offer low-interest, long-term loans to both public and private entities, as well as loan guarantees and technical assistance. The bank is able to offer such attractive rates because it is large, nonprofit, has a AAA credit rating, and is fully backed by member governments.¹³

In 2010 the bank loaned out more than \$100 billion, the vast majority of which (87.5 percent) went to projects in EU countries. ¹⁴ This included

\$5 billion in high-speed rail projects; \$3 billion in road and bridge improvements; \$12 billion in sustainable urban transit; and \$134 million in inland waterway improvements. 15 Overall, the bank financed 460 "large projects" in 72 countries in 2010 alone, and this was all on top of the investments made independently by individual member states. 16

The European Investment Bank should serve as both a useful example for policymakers and as a harsh reminder of how the United States is continuing to fall further behind our international competition. Any U.S. infrastructure bank must learn from the successes and failures of its international predecessors and must do so quickly if we are to keep pace in the decades ahead.

* This report uses 2010 data to allow for easy comparison between European Investment Bank investment levels and federal U.S. loan authorities for infrastructure. (see Figure 1)

Failure to coordinate investments

The uncoordinated and siloed fashion in which federal dollars are allocated also hampers efforts to modernize U.S. infrastructure. Despite the interdependence of America's electricity, water, transport, and telecommunications networks, the vast majority of federal funds are dispersed by sector-specific programs that do not take into consideration the impact of their initiatives on other infrastructure systems.

The Department of Transportation, for example, does not fully consider how increased investment in passenger or freight railways might alleviate the need for additional road and highway expenditures, and does not coordinate the landside port improvements it funds with Army Corps of Engineers waterside investments at the very same ports. Indeed, according to a recent Center for American Progress analysis, integrated transportation spending accounts for only about 2 percent of the Department of Transportation's investments—a distressing figure for those concerned with maximizing efficiency and minimizing costs.¹⁷

Exacerbating this problem is the inherently reactive nature of the many federal agencies responsible for various aspects of our nation's infrastructure. Nearly all of the projects that agencies consider are brought to them by localities, states, or Congress. They are almost never asked to propose projects based on their own analysis of national needs or to take on the role of integrating multiple small-scale proposals. Instead, they are only given the responsibility of evaluating individual pitches from policymakers primarily concerned with their own limited constituencies. Consequently, the United States has no national goods movement, water, or energy plans to match those of other rapidly developing nations, and our economic competitiveness and prospects for growth are suffering as a result.

Failure to allocate funds efficiently

Despite inadequate funding levels and limited program coordination, the United States still allocates tens of billions of dollars annually to a multitude of projects across the nation. Such investment could go further toward upgrading America's infrastructure if it were spent more efficiently.

The vast majority of funds for infrastructure projects in the United States are not disbursed on the basis of a rigorous comparison of projects' economic costs and benefits. Instead, they are allocated by formula or annual congressional appropriations that place more emphasis on geographic political considerations than on return on investment. For decades, highway funding has been distributed by formulas that heavily weigh vehicle miles of road over the actual need for repair or extension. As a result, Alabama has in the past received more funds than Massachusetts, Florida more than New York, and Georgia more than Michigan. This inefficient process is only getting worse, as the recently passed surface transportation bill actually increased the percentage of funds apportioned by formula from 83 percent to 92.6 percent. 19

Highway spending, however, is not the only area where money is allocated in this fashion. According to the Congressional Research Service, the nation's 20 busiest ports handle 80 percent of arriving oceangoing ships but account for less than 40 percent of federal Harbor Maintenance Trust Fund expenditures.²⁰ In the allocation of funds for drinking water projects, millions of dollars are allotted every year just to ensure that every state receives at least 1 percent of the funds available.²¹ Such processes virtually ensure a suboptimal distribution of investment, as money is directed according to arbitrary legal requirements not potential impact.

America's present system of infrastructure financing is failing on multiple fronts and falling well short of providing the levels of coordinated and expertly directed investment required to rebuild and modernize our aging bridges, electrical grids, and highways. It is clear that if the status quo is maintained, the United States will only continue to fall further behind its neighbors and competitors—with significant and damaging repercussions for the future health of the U.S. economy.

How would an infrastructure bank and planning council help?

The establishment of a national infrastructure bank and national planning council would go a long way toward making the existing system of infrastructure financing more rational, efficient, and transparent. In this section, we lay out the potential benefits offered by both institutions and illustrate how they can immediately help remedy the failures of the status quo. Americans deserve an infrastructure network befitting the largest and most innovative economy in the world, and creating a national infrastructure bank and national planning council will do much to achieve that goal.

National infrastructure bank

A national infrastructure bank would help spur more infrastructure investment by creating a strong federal lending authority capable of financing and coordinating high-value infrastructure investments throughout the country. It could provide low-interest loans and loan guarantees to state, local, and private investors, and help stakeholders connect available capital with financially viable projects and willing partners. Because all of the funds distributed by the bank would be paid back with interest by borrowers following the completion of their projects, the costs to the federal government following the initial capitalization of the bank would be remarkably low. Every federal dollar put into the bank would be able to achieve an impact well beyond its face value by supporting project after project as long as the bank continued operation.

Despite its low costs, however, a national infrastructure bank could put a substantial dent in the infrastructure funding gap by attracting billions of dollars in additional public and private investment. By providing the final financial piece that many large projects require to get off the ground, federal infrastructure loans and loan guarantees could enable hundreds of otherwise-abandoned projects to move forward. An infrastructure bank proposal put forward by Sens. John Kerry (D-MA), Kay Bailey Hutchison (R-TX), Mark Warner (D-VA), and Lindsey Graham (R-SC) estimates that an initial \$10 billion endowment could provide

up to \$160 billion in financial assistance over the next decade, pulling in between \$320 billion and \$640 billion in additional nonfederal spending.²² Such levels of investment would pour billions of dollars into some of the economic sectors hit worst by the recession, among them the construction industry and heavy manufacturing, and could help put thousands of unemployed Americans back to work on projects with guaranteed economic and social returns.

An infrastructure bank could be particularly effective at leveraging additional investment because it would be able to make such investment more attractive to private investors. A federal bank could help inexperienced states and localities develop attractive public-private partnerships and could connect willing private partners with these investment opportunities. Providing a single "home" for such project proposals would eliminate the need for investors to make redundant pitches to multiple federal, state, and local agencies, making the entire process of linking private capital with critical infrastructure projects both more efficient and user-friendly. Federal oversight and guidance could also perform the important task of promoting models that protect wages and collective bargaining rights. For all of these reasons, both the U.S. Chamber of Commerce and the American Federation of Labor and Congress of Industrial Organizations see significant benefits for their members should a national infrastructure bank be created, and both have jointly come out in strong support of establishing such a bank.²³

An infrastructure bank would also help overcome the many problems associated with the annual appropriations process and could provide the types of financial assistance that are most useful for infrastructure projects. By providing long-term loans and loan guarantees, the new bank would make year-to-year federal support significantly more predictable. Short-line railroad owners could hire employees, and clean energy operations could plan for expansion without being constrained by the uncertainty of not knowing whether the critical federal loan programs that support them will exist in a year's time.

Additionally, by building delayed-repayment mechanisms into these loans, many crucial projects could be undertaken even if they may take time to begin generating sufficient user fees or savings to begin repayment. Public and private investors alike frequently find it difficult to acquire financing of this kind, but by filling this void, a national infrastructure bank could further enable billions of dollars in investment.

Furthermore, introducing a centralized federal lending authority could help dramatically improve coordination between federal agencies and the multiple lending

Both the U.S. Chamber of Commerce and the American Federation of Labor and Congress of Industrial Organizations see significant benefits for their members should a national infrastructure bank be created.

initiatives they oversee. A recent Center for American Progress analysis estimated that in FY 2010, just under \$124 billion in total federal lending authority for infrastructure projects was spread out over six different programs in three different departments. (see Figure 1) It would likely be more efficient for an infrastructure bank to assimilate these existing federal loan schemes. Such changes would eliminate redundancies, build capacity to plan intermodal projects, and further improve due diligence in project selection.

Energy is a major cost driver when it comes to getting water to the tap and treating wastewater, but our current system does not adequately account for energy needs when planning water-system improvements. A federal lending authority, however, could allow for drinking and clean water infrastructure investments to be coordinated with the expansion of electrical capacity required to support them. Or it could arrange for channel deepening at ports to be planned alongside the bridge replacements required to ensure new and larger freight vessels can access harbors. Bank experts would be able to actively seek out opportunities for cross-state and cross-sector cooperation, and encourage policymakers and private investors to undertake the kinds of visionary and integrated projects that are the most beneficial to economic growth.

Finally, more efficiency-driven project selection could possibly deliver the greatest gains. An independent bank with a professional staff could rank project proposals by expected economic and social returns, and allot funds accordingly. They would not have to be constrained by outmoded formulas or arbitrary allocation processes, and could instead ensure that each dollar lent out achieves the greatest possible impact for the greatest number of people. With funding for projects of all kinds becoming increasingly difficult to come by and with infrastructure needs growing daily, we cannot afford to continue being inefficient with our spending. A national infrastructure bank could help reduce such waste, while making the most of limited resources to effectively promote valuable economic, social, and environmental goals.

The creation of a national infrastructure bank would thus help increase public investment, attract private investment, improve investment coordination, and ensure investment efficiency. As the United States becomes more integrated into an increasingly competitive global economy, we have no choice but to pursue these goals, and we must do so with the greatest possible urgency. Indeed, the idea of an infrastructure bank is not new to policymakers. (see box on following page)

A brief history of state infrastructure banks

The idea of establishing infrastructure banks to help finance needed investment is not new to the United States. As of 2010, 32 states and Puerto Rico already had state infrastructure banks in operation, using them to enter into more than 700 loan agreements worth \$6.5 billion.24

A handful of banks were established in the 1990s as part of a limited federal pilot program, which was expanded in 2005 to include all states. Since then, most state infrastructure banks have been capitalized using a combination of federal and state funds, although a few have used only state monies to avoid certain federal regulations.

While these banks have helped finance hundreds of projects, their results have been somewhat mixed. Almost the entirety of the \$6.5 billion allotted in loans comes from only eight states. South Carolina—one of the first participants in the bank pilot program and

which raises significant additional funds by allowing its bank to sell bonds—is alone responsible for more than \$3 billion of that investment. Many states have barely made use of their banks at all.²⁵

Just as importantly, almost all of these banks provide funding only for surface-transportation projects, ignoring other critical types of infrastructure. Due to their relatively small size, they also do not have the funds or expertise necessary to handle regional megaprojects and generally avoid complex multimodal undertakings.²⁶

State infrastructure banks will play an important role in meeting future infrastructure needs, but they would be more effective working alongside an equivalent federal institution. Such a national bank would be capable of taking on projects that state banks cannot and providing the expertise, coordination, and leadership currently lacking in our infrastructure-investment system.

National infrastructure planning council

While structuring financing packages for vital projects is among the most important roles the federal government plays in infrastructure investment, its activities extend well beyond this role and into research, issuing regulations, awarding grants, environmental protection, and even directly operating and maintaining locks, dams, bridges, and utilities throughout our country. To coordinate all of these activities and maximize the efficiency of federal infrastructure programs, we need a national infrastructure planning council. Such a council would unite the disparate federal initiatives currently attempting to individually tackle our national infrastructure crisis, thereby making the jobs of federal agencies easier and dramatically improving program effectiveness.

Such a council would help federal agencies establish a common understanding of the scope and breadth of the federal government's investment in our nation's infrastructure. By sharing current and pending project inventories, synergistic opportunities can more easily be identified and acted upon. Investments in locks and dams on

inland waterways could be coordinated with landside improvements at the seaports they service, while the impact of the information technology revolution on commuting patterns could be taken into consideration when allotting highway funding.

A national infrastructure council should also be tasked with collecting and disseminating best practices pertaining to project selection, preventative maintenance, and construction cost reduction. It would also promote the use of common objective measures to evaluate the progress of ongoing and completed infrastructure projects. The council would work to identify opportunities for innovation and help develop new mechanisms for leveraging private investment. A national infrastructure council would also work in close coordination with a national infrastructure bank, as the council could coordinate federal activities with nonfederal and private initiatives to ensure that the bank did not unnecessarily duplicate existing federal expert capacity.

With all relevant authorities sitting at a single table, we can finally develop and pursue coordinated approaches to overarching national problems such as road congestion and electrical grid reliability. A national infrastructure planning council would help the United States begin to close the gap between our level of investment and that of our international competitors—whose levels of infrastructure investment have surpassed that of the United States for years—and would help spur economic growth in both the short term and the long term.

What might a national infrastructure bank look like?

Multiple serious proposals for a national infrastructure bank have been put forward at the Congressional level in just the past five years, beginning with the bipartisan Dodd-Hagel National Infrastructure Bank Act of 2007.²⁷ More recent proposals include the 2011 Building and Upgrading Infrastructure for Long-Term Development, or BUILD Act, sponsored by Sens. Kerry, Hutchison, Warner, and Graham, and the National Infrastructure Development Bank Act, sponsored by Rep. DeLauro (D-CT). The BUILD Act also served as the basis for infrastructure bank proposals recently put forward by the Obama administration, including those found in the proposed American Jobs Act of 2011 and the president's proposed 2013 federal budget.²⁸

These various proposals share many common elements but also differ on several key institutional attributes. In this section we consider which features are almost certain to be incorporated into any future infrastructure bank, as well as components which still require significant attention from policymakers to ensure any proposed institution is as efficient and effective as possible.

The fundamentals of an infrastructure bank: Where most plans agree

Most infrastructure bank proposals envision a wholly government-owned corporation led by a board selected by the president and subject to some form of congressional approval. Although the board's size and composition vary among plans, all plans agree that rules must be put in place to ensure the board is not dominated by a single party's partisan appointees and that its members have sufficient and relevant expertise in infrastructure development and financing. An important balance will also have to be struck between ensuring adequate oversight of the bank and enabling it to operate independent of political pressure, lest its project-selection process simply become another extension of existing, politically motivated allocation methods.

The majority of proposals permit an infrastructure bank to offer long-term loans and loan guarantees of up to about 35 years, with the potential for flexible repayment schedules that would allow investors the time required to complete large-scale projects and begin recouping their costs via user fees, tolls, or other revenue sources. Entities eligible to receive financing would include state and local governments, private investors, or public-private partnerships. Eligible project areas vary somewhat between the plans but would almost certainly include energy, transportation, and water projects, possibly alongside environmental and telecommunications undertakings.

A successful example of such lending practices can be seen in the aforementioned Transportation Infrastructure Finance and Innovation program. Over the past 14 years, this program has used \$9.2 billion in federal funding to provide attractive long-term loans, loan guarantees, and lines of credit that have leveraged more than \$36.4 billion in private and public capital, helping undertake 27 major transportation projects across the nation.²⁹ Among the reasons the program has been so successful is its ability to offer loans of up to 35 years and the flexibility of its repayment schedule. Recipients of this program's loans can wait up to five years after substantial project completion to begin paying back their loans so as to allow time for facility construction and ramp-up.³⁰ The designers of an infrastructure bank would be wise to use these elements of the Transportation Infrastructure Finance and Innovation program as a model.

To ensure that a future infrastructure bank accomplishes its goal of attracting significant additional nonfederal and private investment, a cap on the percentage of a project's financing which can be covered by loans from the bank may also be required. The bipartisan BUILD Act proposal—as well as the most recent administration proposals—set this cap at 50 percent. This would ensure that the federal government never foots the majority of the bill for any project and maximizes the commitments of its public and private partners.

Importantly, most existing plans also avoid establishing specific criteria for project selection and leave this process up to the bank's board. They do, however, emphasize that project selection should take into account all economic, social, and environmental costs. The board should also prioritize projects that lead to economic growth and job creation or are of particular national or regional importance. If an infrastructure bank is properly structured and appropriate selection criteria are adopted, then it could not only help construct new and valuable national assets but also create thousands of jobs and promote environmentally sustainable development.

Over the past 14 years, the Transportation Infrastructure Finance and Innovation program has helped undertake 27 major transportation projects across the nation

An infrastructure bank proposal from Sens. John Rockefeller (D-WV) and Frank Lautenberg (D-NJ) includes an even greater emphasis on breaking down modal silos in the Department of Transportation. The Rockefeller-Lautenberg proposal also includes a requirement for an infrastructure bank to consider the long-term fiscal and competitiveness impacts of their decision making. Some experts advocate including such proposals from the Democratic infrastructure bank bill in the larger bipartisan BUILD Act.³¹

Variability in bank plans: Important features still to be considered

There is a great deal of consensus about what should be included in the creation of an infrastructure bank. But there also is disagreement about certain components.

Among the first features of any potential infrastructure bank that remain open for consideration is whether or not a floor should be placed on the size of projects eligible for financing. The proposed BUILD Act and the president's 2013 federal budget both mandate that estimated project costs be at least \$100 million—or, in the BUILD Act, \$25 million if the project is in a rural area—in order to receive bank support. The goals of such provisions include ensuring only large projects with substantial returns are financed and keeping bank funds away from smaller projects that could be capable of raising sufficient capital on their own.

Such limits, however, may also make it more difficult for the bank to take on the duties of smaller federal lending initiatives such as the Railroad Rehabilitation and Improvement Financing loan program or the Department of Energy's 1703 and now-defunct 1705 loan programs. These programs support valuable investment in regional rail revitalization and clean energy technologies but generally make relatively small loans to individual companies or local governments. If cost floors exist, policymakers will have to carefully weigh the benefits of streamlining federal investment in infrastructure by assimilating such programs against the costs of cutting support for smaller but still valuable projects.

Second, architects of any future bank will have to determine how administrative costs will be covered. These year-to-year costs could simply be taken from the funds used to initially capitalize the bank, although this would diminish its lending authority over time. Yearly congressional appropriations could also be used, but this would then sacrifice the self-sustaining nature of the bank.

To circumvent these problems, the BUILD Act proposed allowing the bank to charge fees—such as application and transaction fees—or make interest rate adjustments to ensure a balanced bottom line. This would ensure the fiscal independence of the bank and avoid depleting its loanable funds, but it could make borrowing from the bank slightly less attractive. Regardless of the solution chosen, however, such costs will have to be planned for if the bank is to prove sustainable in the long term.

The bank's ability to increase its pool of loanable funds by issuing bonds or borrowing on global capital markets is also of great importance. The DeLauro proposal includes provisions allowing the bank to do both with the goal of maximizing the amount of money the bank would have on hand to support critical investment. Some state infrastructure banks employ similar practices—including those in Florida and South Carolina—as does the European Investment Bank (described in the box above). But this practice requires attaching higher interest rates to loans issued by the bank since it must subsequently raise more funds to pay back bond buyers.³² Consequently, policymakers will have to evaluate whether the benefits of such debt issuance outweigh the potential for higher rates that could ward off borrowers.

Finally, the size of the bank's initial capitalization and whether it will be a permanent institution are both critical and undecided issues. A permanent institution could help ensure infrastructure investment does not again fall so far below required levels as it has in recent years and would help spur economic growth for decades instead of only in the near term. And if the bank is appropriately structured and fees set at a sufficient rate, then it could become an entirely self-sustaining entity that could operate for decades with virtually no need for additional federal funding. The BUILD Act calls for a permanent bank to be established and capitalized with \$10 billion. The DeLauro proposal, in contrast, calls for a temporary bank—to exist for only 15 years—but which would be capitalized with \$5 billion annually from FY 2012 through FY 2016.

While these are still important features to be decided, there are a number of steps that can be taken to spur the establishment of a national infrastructure bank, as the next section explains.

Getting started

Neither a national infrastructure bank nor a national infrastructure plan will be created overnight. But there are a number of actions that can be undertaken immediately to move the United States in the right direction. In this section, we will detail the steps that should be taken by policymakers right now to help get these ideas off the ground and help get America's infrastructure working again. Specifically:

- Creating the national infrastructure planning council
- Establishing a federal infrastructure bundling entity
- Expanding and better utilizing existing federal loan programs in the short term

Let's look at each step in turn.

Creating the national infrastructure planning council

We should immediately create a federal interagency planning council to ensure we develop a coordinated and comprehensive approach to national infrastructure investment as quickly as possible. The Center for American Progress recommends that the council include, at a minimum, the secretaries or their designees of the following departments, commissioners of the following agencies, and the directors of the following federal offices:

- Department of Agriculture, Office Rural Development
- Department of Agriculture, Natural Resources Conservation Service
- Department of Defense, Army Corps of Engineers
- Department of Energy, Office of Electricity Delivery and Reliability
- Department of the Interior, Bureau of Reclamation
- Department of Transportation, Federal Aviation Administration
- Department of Transportation, Federal Highway Administration
- Department of Transportation, Federal Railroad Administration
- Department of Transportation, Federal Transit Administration

- Department of Transportation, Maritime Administration
- Environmental Protection Agency, Office of Ground Water and Drinking Water
- Environmental Protection Agency, Office of Wastewater Management
- Federal Communication Commission
- Federal Emergency Management Agency
- Federal Energy Regulatory Commission

Leadership will be critical to the council's success. The president should select a knowledgeable and trusted neutral party to lead the council—someone who has experience in both infrastructure investment and interagency coordination. With such a council in place operating with the strong support of the executive branch, departments will be able to have a fuller understanding of each agency's investments in the nation's infrastructure and will be better able to identify and take advantage of opportunities for interagency cooperation. This will help ensure the federal government makes the most efficient use of its limited resources and is able to strategically confront the challenges ahead.

Establishing a federal infrastructure bundling entity

Given existing partisan gridlock in Congress and lawmakers' hesitance to undertake large new projects, it may take some time to establish a national infrastructure bank. But in the meantime we can move toward establishing a bank while also yielding immediate benefits by creating a federal infrastructure bundling entity.

This body—which could be thought of as phase one of a national infrastructure bank—would provide intermediary services between public infrastructure projects and willing private investors but would not distribute loans or loan guarantees. It would identify large financeable projects and prepare them for pairing with interested partners, filling a critical void that is presently preventing millions of potential investment dollars from reaching critical projects due to a lack of viable investment options.

This bundling entity would be similar in function to the recently announced Chicago Infrastructure Trust but would operate on a national scale and concentrate on larger-scale and more complex projects. The estimated \$1.7 billion in investment commitments the Chicago Infrastructure Trust already expects from investors such as JPMorgan Chase & Co. and Citibank, Inc. demonstrates that a national bundling entity could produce immediate benefits.³³

To ensure effectiveness, an infrastructure bundling entity should:

- Be able to enter into contracts with experts in infrastructure finance, who can work directly with project sponsors
- Be able to solicit projects for review and to work with federal agencies to explore
 creative options for bundling projects such that they may tap public loan programs, as well as private investors
- Be required to seek out large-scale, financeable projects in every region of the nation

Creating an infrastructure bundling entity would by no means obviate the need for a full-strength infrastructure bank with lending authority, and it would not be able to leverage nearly as much investment. But a bundling entity would produce immediate benefits and help lawmakers recognize the beneficial role a full-fledged bank could provide. CAP recommends that Congress take action to create this entity as soon as possible and appropriate \$10 million to fund its operation.

Expanding and better utilizing existing federal loan programs in the short term

While getting a national infrastructure bank off the ground may take time, there are still hundreds of vital projects throughout the country that need public debt financing. The recent allocation of \$1.7 billion to the Transportation Infrastructure Finance and Innovation program over the next two years in the new surface transportation bill is certainly a significant step in the right direction but is insufficient on its own to meet national demand.

As a result, CAP recommends restoring the Department of Energy's 1705 loan program, which invested \$25 billion mostly in clean energy projects over two years before expiring in 2011.³⁴ The program should be extended for another 10 years and enabled to support \$4 billion in lending authority. This could mobilize up to \$40 billion in additional investment, a CAP analysis found.³⁵

Additionally, other underutilized loan programs should be encouraged to streamline their application and awards processes and utilize a greater percentage of their lending authority to put the highest rate of available funds to work. Of the nearly \$124 billion available in FY 2010 for federal loans, loan guarantees, and lines of credit, a recent CAP analysis found that only approximately \$44 billion was actually disbursed.³⁶ One particular example of such underutilization can be seen in

the Railroad Rehabilitation and Improvement Financing program, which has only allocated a total of \$1.3 billion in loans since its lending authority was extended to \$35 billion in 2005.37

Certainly, accountability and good judgment in the allocation process must be maintained. In any given year it may not be feasible or responsible to disburse the entirety of the funds legally available. But there is significant room for improvement, and our existing system of infrastructure investment is far from tapping its full potential. By expanding and better utilizing existing federal loan programs, at least some progress can be made in repairing and modernizing America's infrastructure before a national infrastructure bank is established.

Conclusion

For decades the United States has categorically underinvested in its infrastructure, and it should come as no surprise that the consequences of this negligence are finally coming home to roost. Locks and dams on inland waterways are falling apart. Commuters and businesses alike are losing billions of dollars on congested highways. And the nation's electrical grids and drinking water systems are aging to the point of failure.

Meanwhile, our competitors in the global economy have only ramped up infrastructure investment and adopted ambitious national plans and targets. If the United States is to remain internationally competitive, and our economy is to return to its previous growth rates, then we have no choice but to repair and modernize our creaking infrastructure. Establishing a national infrastructure bank and planning council could immediately help accomplish these goals.

To be sure, some commentators—including the Congressional Budget Office, in a recent report—express concerns that there may not be enough suitable projects for an infrastructure bank to finance, particularly in the realm of surface transportation. The same report also notes that surface transportation support through an infrastructure bank may ultimately be duplicative of existing federal loan and loan guarantee programs. But as we have established in this report, an infrastructure bank could have an enormous impact in planning and financing the kinds of large-scale, multimodal projects that create jobs and increase our economic competitiveness, but which struggle to attract federal funding or leverage sufficient private funds.

Rather than focusing solely on surface transportation—long a priority in congressional appropriations—a national infrastructure bank would ideally be able to finance complex investments that integrate transportation systems and enable our ports, rails, roads, and waterways to operate more efficiently. Moreover, such investments would leverage productivity gains throughout the economy by better connecting improvements in related infrastructure sectors—energy and water infrastructure, for instance.

While the Congressional Budget Office report expresses concern that a sufficient pipeline of such projects may not exist in the short term, Robert Puentes of the Brookings Metropolitan Policy Program respectfully disagrees. In 2011 Brookings "challenged public and private leaders to send us their ideas for innovative, transformative investments. And the response was tremendous," Puentes writes in *The* New Republic.³⁹ He points out, rightly, that not every project would make sense for financing through a national infrastructure bank, but creating a national bank sends a clear signal to the private sector and the rest of the world that the United States is making bigger, smarter choices about infrastructure. A national infrastructure bank is the missing link needed to connect private capital to the kinds of infrastructure megaprojects most needed to boost economic activity and competitiveness.

Working in concert, a national infrastructure bank and planning council would help increase and coordinate public investment and ensure that federal dollars go only to deserving projects with substantial potential returns. By helping bridge the gap between private investors and critical infrastructure projects, these institutions could also attract billions of dollars in additional investments and help get promising but complex projects off the drawing board. It is time to stop wasting taxpayer dollars on a system characterized by inefficient formulas and disconnected decision making. It is time to finally create institutions capable of providing Americans with the infrastructure they need to compete, create jobs, and innovate.

Establishing a national infrastructure bank and national infrastructure planning council makes economic sense and offers taxpayers the opportunity to multiply a relatively modest investment into massive and meaningful gains nationwide. Only by investing today can we hope to improve our prospects for tomorrow, and only by establishing such institutions can we ensure that our investment achieves its maximum potential. The stakes are simply too high to accept the status quo, and it is past time for us to stop neglecting the very foundation of our economy.

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Endnotes

- Texas Transportation Institute, "2011 Urban Mobility Report" (2011), available at http://tti.tamu.edu/documents/mobility-report-2011.pdf.
- Jennifer Levitz and Cameron McWhirter, "Old Locks Jam River Traffic," The Wall Street Journal, January 6, 2011, available at http://online.wsj.com/article/SB100014240 52748704735304576057903661752050.html#; American Society of Civil Engineers, "America's Infrastructure Report Card: Drinking Water" (2009), available at http:// www.infrastructurereportcard.org/sites/default/files/ RC2009_drinkwater.pdf.
- World Economic Forum, "The Global Competitiveness Report, 2011-12" (2011), available at http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf; World Economic Forum, "The Global Competitiveness Report, 2008-2009" (2008), available at http://www3.weforum. $org/docs/WEF_Global Competitiveness Report_2008-09.$ pdf.
- Donna Cooper, "Meeting the Infrastructure Imperative" (Washington: Center for American Progress, 2012), available at http://www.americanprogress.org/issues/2012/02/pdf/infrastructure.pdf.
- Ibid.
- Associated Press, "No funding source identified to replace Brent Spence Bridge," Kentucky.com, July 10, 2012, available at http://www.kentucky. com/2012/07/10/2253722/no-funding-source-identified-to.html; "Brent Spence Bridge Replacement/Rehabilitation Project: About the Project" available at http:// www.brentspencebridgecorridor.com/AboutProject. html (last accessed July 2012).
- William Mallett, Steven Maguire, and Kevin Kosar, "National Infrastructure Bank: Overview and Current Legislation" (Washington: Congressional Research Service, 2011), available at http://www.fas.org/sgp/crs/ misc/R42115.pdf.
- 8 Everett Ehrlich, "A National Infrastructure Bank: A Road Guide to the Destination" (Washington: Progressive Policy Institute, 2010), available at http://www.progressivefix.com/wp-content/uploads/2010/09/09.2010-Ehrlich A-National-Infrastructure-Bank.pdf.
- 9 Arleen Jacobius, "What Chicago's infrastructure trust means to institutional investors," Pensions & Investments, March 20, 2012, available at http://www.pionline.com/ article/20120320/REG/120329999.
- 10 Cooper, "Meeting the Infrastructure Imperative."
- Jordan Eizenga and Seth Hanlon, "Bring Back BABs" (Washington: Center for American Progress, 2011), available at http://www.americanprogress.org/wpcontent/uploads/issues/2011/04/pdf/build_america_ bonds.pdf.
- 12 Jacobius, "What Chicago's infrastructure trust means to institutional investors."
- 13 Mallett, Maguire, and Kosar, "National Infrastructure Bank: Overview and Current Legislation"; Congressional Budget Office, "Issues and Options in Infrastructure Investment" (2008), available at http://www.cbo.gov/ sites/default/files/cbofiles/ftpdocs/91xx/doc9135/05-16-infrastructure.pdf.
- 14 Mallett, Maguire, and Kosar, "National Infrastructure Bank: Overview and Current Legislation."

- 15 Cooper, "Meeting the Infrastructure Imperative."
- 16 Mallett, Maguire, and Kosar, "National Infrastructure Bank: Overview and Current Legislation."
- 17 Cooper, "Meeting the Infrastructure Imperative."
- 18 Ibid.
- 19 "Map-21 Major Programmatic and Policy Changes," available at http://www.cmap.illinois.gov/movingforward-in-detail/-/asset_publisher/Q4En/blog/map-21-major-programmatic-and-policy-changes/276584?is MovingForward=1 (last accessed July 2012).
- 20 John Frittelli, "Harbor Maintenance Trust Fund Expenditures" (Washington: Congressional Research Service. 2011), available at http://www.fas.org/sgp/crs/misc/ R41042.pdf.
- 21 "Drinking Water State Revolving Fund (DWSRF) Allotments: Basic Information for State Grants," available at http://www.epa.gov/ogwdw/dwsrf/allotments/basicinformation.html (last accessed July 2012).
- 22 "BUILD Act: Frequently Asked Questions," available at http://www.kerry.senate.gov/imo/media/doc/ BUILD%20Act%20Q&A.pdf (last accessed July 2012).
- 23 U.S. Chamber of Commerce, "U.S. Chamber, AFL-CIO Urge Infrastructure Bank," Press release, March 16, 2011, available at http://www.uschamber.com/press/releases/2011/march/us-chamber-afl-cio-urge-infrastructurebank.
- 24 Federal Highway Administration, State Infrastructure Banks (U.S. Department of Transportation, 2010), available at http://www.fhwa.dot.gov/ipd/pdfs/fact_ sheets/2_fs_tfi_sibs_final_2010.pdf.
- 25 The Council of State Governments, "Capitol Research: Transportation - State Infrastructure Banks" (2011), available at http://knowledgecenter.csg.org/drupal/ system/files/State_Infrastructure_Banks.pdf.
- 26 Yonah Freemark, "How to Pay for America's Infrastructure," The Atlantic, January 2, 2012, available at http:// www.theatlanticcities.com/politics/2012/01/solutionamericas-infrastructure-woes/845/#.
- 27 "S.1926 National Infrastructure Bank Act of 2007." available at http://www.opencongress.org/bill/110s1926/text (last accessed July 2012).
- 28 Mallett, Maguire, and Kosar, "National Infrastructure Bank: Overview and Current Legislation"; Office of Management and Budget, Fiscal Year 2013 Budget of the U.S. Government (2012), available at http://www.whitehouse.gov/sites/default/files/omb/budget/fy2013/ assets/budget.pdf.
- 29 U.S. Department of Transportation, "U.S. Transportation Secretary LaHood Launches Historic Expansion of Infrastructure Finance Fund," Press release, July 27, 2012, available at http://www.dot.gov/affairs/2012/dot8212. html.
- 30 Federal Highway Administration, TIFIA Defined (Department of Transportation), available at http://www.fhwa. dot.gov/ipd/tifia/defined/.
- 31 Michael Likosky, "Let's Reconcile: How to Merge the Senate Infrastructure Bank Bills," The Bond Buyer, July 29, 2011, available at http://www.bondbuyer.com/ webonly/-1029491-1.html.

- 32 Mallett, Maguire, and Kosar, "National Infrastructure Bank: Overview and Current Legislation."
- 33 Jason Keyser, "Chicago Infrastructure Trust a Model As More Mega-Projects Turn to Private Investors,"The Huffington Post, July 7, 2012, available at https://www.huffingtonpost.com/2012/07/08/chicago-infrastruc-ture-tr-0 n 1657348.html
- 34 Cooper, "Meeting the Infrastructure Imperative."
- 35 CAP's analysis indicates that \$1 in federal subsidies can leverage \$10 in private-sector energy investment. See: Jake Caldwell, "The Green Bank is Essential for a Clean-Energy Strategy" (Washington: Center for American Progress, 2009), available at http://www.american-progress.org/issues/green/news/2009/10/29/6773/the-green-bank-is-essential-for-a-clean-energy-strategy/.

- 36 Cooper, "Meeting the Infrastructure Imperative."
- 37 Federal Railroad Administration, Railroad Rehabilitation & Improvement Financing (RRIF) Program (Department of Transportation), available at http://www.fra.dot.gov/rpd/freight/1770.shtml#RPO.
- 38 Congressional Budget Office, Infrastructure Banks and Surface Transportation (2012), available at http://www.cbo.gov/publication/43361.
- 39 Robert Puentes, "What Would an Infrastructure Bank Really Do?", The New Republic, July 16, 2012, available at http://www.tnr.com/blog/the-avenue/105017/whatwould-infrastructure-bank-really-do.

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