National Infrastructure Bank: Overview and Current Legislation

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December 14, 2011

Congressional Research Service
7-5700
www.crs.gov
R42115

CRS Report for Congress
Prepared for Members and Committees of Congress

Summary

Several bills to establish a national infrastructure bank have been introduced in the 112th Congress. This report examines three such bills, the Building and Upgrading Infrastructure for Long-Term Development Act (S. 652), the American Infrastructure Investment Fund Act of 2011 (S. 936), and the National Infrastructure Development Bank Act of 2011 (H.R. 402). These proposals share three main goals:

- increasing total investment in infrastructure by encouraging new investment from nonfederal sources;
- improving project selection by insulating decisions from political influence; and
- encouraging new investment with relatively little effect on the federal budget through a mostly self-sustaining entity.

The federal government already uses a wide range of direct expenditures, grants, loans, loan guarantees, and tax preferences to expand infrastructure investment. A national infrastructure bank would be another way to provide federal credit assistance, such as direct loans and loan guarantees, to sponsors of infrastructure projects. To a certain extent, a new institution may be duplicative with existing federal programs in this area, and Congress may wish to consider the extent to which an infrastructure bank should supplant or complement existing federal infrastructure efforts.

It is unclear how much new nonfederal investment would be encouraged by a national infrastructure bank, beyond the additional budgetary resources Congress might choose to devote to it. The bank may be able to improve resource allocation through a rigorous project selection process, but this could have consequences that Congress might find undesirable, such as an emphasis on projects that have the potential to generate revenue through user fees and a corresponding de-emphasis on projects that generate broad public benefits that cannot easily be captured through fees or taxes.

As with other federal credit assistance programs, the loan capacity of an infrastructure bank would be large relative to the size of the appropriation. The bank is unlikely to be self-sustaining, however, if it is intended to provide financing at below-market interest rates. The extent to which the bank is placed under direct congressional and presidential oversight may also affect its ability to control project selection and achieve financial self-sufficiency.

More generally, Congress may wish to consider the extent to which greater infrastructure investment is economically beneficial. Advocates of increased investment in infrastructure typically assert that high-quality, well maintained infrastructure increases private-sector productivity and improves public health and welfare. Congress may want to weigh the benefit of the increased spending on physical infrastructure against the benefit generated by alternative types of spending.

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Introduction

The central policy objective of a national infrastructure bank is to increase investment in infrastructure. Greater investment is desired because high-quality, well maintained infrastructure is believed to increase private-sector productivity and improve public health and welfare. The magnitude of the increased productivity, however, is not settled, as empirical analysis does not always support the conjecture that greater infrastructure investment uniformly generates productivity gains.[1] The type of infrastructure and the type of investment are critical elements in such an assessment.

National infrastructure bank proposals would support infrastructure development by providing relatively low-interest loans and other types of credit assistance in such a way as to stimulate investment by state and local governments and private funding sources. A national infrastructure bank, moreover, could be complementary to direct federal investment in infrastructure.

Although no consensus definition exists, infrastructure is generally conceived of as the capital-intensive assets needed for the delivery of basic services.[2] Both public and private entities own and operate infrastructure. Some infrastructure is provided by public-private partnerships which mix, in a myriad of different ways, public and private rights and responsibilities. Funding for these expensive and long-lived assets most often comes from money borrowed on the capital markets. In some cases, however, capital asset purchases are financed with current revenues, government grants, loans, and private equity. For debt-financed assets, investors seek a rate of return commensurate with the associated risk. Debt incurred on wholly owned government projects may be repaid with taxes, user fees, or a combination of the two. For privately owned infrastructure, user fees are the main option, although debt may be repaid in other ways such as property rents.

Although the idea for a national infrastructure bank is not new, legislative proposals for creating a bank have drawn increased attention in the past few years. Proponents argue that an infrastructure bank offers three main advantages over traditional methods of federal support for infrastructure:

- A federal infrastructure bank could increase the total amount of investment in infrastructure by leveraging state, local, and private resources.
- It could accelerate construction of projects that may be slowed by the current need to await annual allocations of federal funds.
- It could promote the distribution of federal spending on the basis of anticipated returns to investment, rather than according to traditional allocation methods such as formulas, discretionary programs, and earmarking.

[1] Douglas Holtz-Eakin, "Public-Sector Capital and the Productivity Puzzle," *The Review of Economics and Statistics*, vol. 76, no. 1, February 1994, pp. 12-21. The potential macroeconomic benefits of additional infrastructure spending were explored in the following hearing: U.S. Congress, Joint Economic Committee, *Manufacturing in the USA: Paving the Road to Job Creation*, 112th Cong., 1st sess., November 16, 2011. Witnesses presented alternative perspectives on the relationship between infrastructure spending and job growth.

[2] For more on the definition of infrastructure see, CRS Report R40107, *The Role of Public Works Infrastructure in Economic Stimulus*, coordinated by Claudia Copeland.

This report begins with a discussion of the infrastructure bank concept and some examples of existing infrastructure financing mechanisms. The report then describes and analyzes selected legislative proposals for infrastructure banks, and concludes with an analysis of some advantages and disadvantages of creating a national infrastructure bank and alternative institutional structures. **Appendix A** describes the current federal role in financing infrastructure as context for the possible creation of a national infrastructure bank.

What Is an Infrastructure Bank?

Conceptually, an infrastructure bank is a government-established entity that provides credit assistance to sponsors of infrastructure projects. An infrastructure bank can take many different forms, such as an independent federal agency, a federal corporation, a government-sponsored enterprise, a state government entity, or a private-sector, nonprofit corporation, but is distinguished from a commercial bank or private-sector infrastructure fund by being government-established. Unlike government departments that mainly fund infrastructure through grants, an infrastructure bank would be expected mainly to provide credit assistance, typically loans, loan guarantees, and lines of credit.[3] As with a traditional commercial bank, infrastructure bank borrowers would be expected to repay their loans with interest, and may have to pay other fees associated with the bank's credit instruments. But unlike a commercial bank, an infrastructure bank takes no deposits and conducts no other "over-the-counter" transactions.

Examples of existing infrastructure banks are the European Investment Bank (EIB) and, in the United States, state infrastructure banks, and possibly the Export-Import Bank.[4]

The EIB was created by the European Union (EU) in 1957 to help finance infrastructure and other economic development projects. The bank is capitalized by funds from its 27 member countries, but most of its capital comes from issuing bonds. Member countries also agree to provide extra funds, known as "callable capital," if needed to cover loan defaults. The bank is overseen by a board of governors, comprised of the finance ministers of the member countries, and a board of directors that has a representative from each member country. Project appraisal reports, conducted by staff engineers, economists, and financial analysts, are provided to the board of directors for a financing decision.[5] Most of the EIB's work involves low-interest, long-term loans to public and private entities within the EU, although it has provided support for projects outside the EU. According to the Congressional Budget Office (CBO), the EIB can offer low-interest loans because it is large, is nonprofit, has a AAA rating, and is backed by member governments.[6] In addition to supporting transportation, energy, telecommunications, health and education, and environmental projects, the EIB has provided support to private industry, particularly small and

[3] The Obama Administration has proposed both a national infrastructure bank, limited to credit assistance, and a National Infrastructure Innovation and Finance Fund. The fund would be set up as an operational unit of DOT and would be able to provide loans and grants, or a combination of the two, to encourage nonfederal funding, including private sector capital. See CRS Report R41490, *Surface Transportation Funding and Finance*, by Robert S. Kirk and William J. Mallett, p. 29.

[4] Howard Schweitzer, Mark L. Alderman, and Evan Bayh, "We Already Have the Infrastructure Bank That We Need," Washington Post, September 29, 2011, at http://www.washingtonpost.com/opinions/we-already-have-the-infrastructure-bank-we-need/2011/09/27/gIQA59TI8K_story.html.

[5] See http://www.eib.org/projects/cycle/appraisal/index.htm?lang=-en.

[6] Congressional Budget Office, *Issues and Options in Infrastructure Investment*, Washington, DC, May 2008, p. 31, at http://www.cbo.gov/ftpdocs/91xx/doc9135/05-16-Infrastructure.pdf.

medium-sized enterprises, and for research and development. Initially, the EIB aided projects which governments or private lenders could not or would not finance.[7] However, today the EIB is "only one of a variety of providers" of funding for infrastructure in Europe.[8] In 2010, the EIB loaned €72 billion (87.5% in EU countries and 12.5% outside the EU) or approximately $100 billion.[9] As of the close of 2010, the EIB has total assets (mostly loans outstanding) of €420 billion ($583 billion). In 2010, the EIB financed 460 "large projects" in 72 countries.

Many state governments have established infrastructure banks to support projects in surface transportation. Most of these were created in response to a federal state infrastructure bank (SIB) program originally established in surface transportation law in 1995 (P.L. 104-59). According to the Federal Highway Administration (FHWA), 32 states and Puerto Rico had established federally authorized SIBs by December 2008.[10] No more recent data are available. At least four states, Florida, Georgia, Kansas, and Ohio, also have SIBs that are unconnected to the federal program.[11] As part of the federal transportation program, a state can use its allocation of federal surface transportation funds to capitalize an SIB. There are some requirements in federal law for SIBs connected with the federal program (23 U.S.C. 610), but for the most part their structure and administration are determined at the state level. Most SIBs are housed within a state department of transportation, but at least one (Missouri) was set up as a nonprofit corporation and another (South Carolina) is a separate state entity.[12] A number of SIBs also provide assistance to non-transportation projects. Most SIBs function as revolving loan funds, in which money is directly loaned to project sponsors and its repayment with interest provides funds to make more loans.[13] Some SIBs, such as those in Florida and South Carolina, have the authority to use their initial capital as security for issuing bonds to raise further capital as a source of loans. This is known as a leveraged SIB, and repayment of its loans is used to repay bondholders.[14] SIBs also typically offer project sponsors other types of credit assistance, such as letters of credit, lines of credit, and loan guarantees.

A third example is the Export-Import (Ex-Im) Bank.[15] This mostly self-sustaining government agency uses direct loans, loan guarantees, working capital guarantees, and export credit insurance

[7] Joseph Licari, "The European Investment Bank," *Journal of Common Market Studies*, vol. 8, no. 3, September 1969, pp. 193-194.

[8] Patrick Honohan, "The Public Policy Role of the European Investment Bank Within the EU," *Journal of Common Market Studies*, vol. 33, no. 3, 1995, p. 329.

[9] European Investment Bank Group, *Annual Report 2010, Volume 1, Activities*, Luxembourg, 2011, p. 3, at http://www.eib.org/attachments/general/reports/ar2010en.pdf.

[10] Federal Highway Administration, "SIB Loans Grow, New Programs Initiated," *Innovative Finance Quarterly*, Vol. 14. No. 1, Fall 2009, p. 8, http://www.fhwa.dot.gov/ipd/pdfs/finance/if_quarterly/ifq_fall_2009.pdf.

[11] American Association of State Highway and Transportation Officials (AASHTO), "State Infrastructure Banks," AASHTO Center for Excellence in Project Finance website, at http://www.transportation-finance.org/funding_financing/financing/credit_assistance/state_infrastructure_banks.aspx.

[12] Federal Highway Administration, *State Infrastructure Bank Review*, Washington, DC, February 2002, at http://www.fhwa.dot.gov/ipd/pdfs/finance/sib_complete.pdf.

[13] Under federal transportation law SIBs can provide assistance to any entity with an eligible project. A state may limit this to project sponsors of its choice (e.g., local governments).

[14] See Federal Highway Administration, "State Infrastructure Banks: Frequently Asked Questions," Innovative Program Delivery Website, at http://www.fhwa.dot.gov/ipd/finance/tools_programs/federal_credit_assistance/sibs/faqs.htm#12; Jonathan L. Gifford, *State Infrastructure Banks: A Virginia Perspective*, School of Public Policy, George Mason University, Research Paper, November 24, 2010, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1714466.

[15] The bank was established by Congress in 1945 (12 U.S.C. 635 et seq.).

to assist overseas purchasers of U.S. goods, often in cooperation with domestic or foreign financing firms.[16] Some Ex-Im transactions involve infrastructure-related technologies, such as power generating equipment (e.g., solar panels and wind turbines); passenger aircraft; and machinery used in the construction of roads, dams, and airports.[17] Although the purpose of the Ex-Im Bank is to provide financing to support U.S. exports of manufactured goods and services with the objective of creating domestic jobs, it has the general authority to lend money and perform other banking functions. However, Congress may need to amend the bank's charter and would likely need to expand the bank's resources if it wants Ex-Im Bank to support public and private entities wishing to invest in domestic infrastructure.

National Infrastructure Bank Bills

In keeping with recent history, several infrastructure bank bills are pending before the 112th Congress.[18] The three primary infrastructure bank bills discussed here are S. 652, S. 936, and H.R. 402. Two, S. 652 and H.R. 402, would create a wholly owned federal government corporation. In contrast, S. 936 would create a "fund" within the Department of Transportation (see **Table 1** for a brief summary of the legislation).

There are several additional infrastructure bank bills pending that are not separately addressed in this report as they are all very similar to the three analyzed. The discussion of S. 652 can generally be applied to S. 1549 and S. 1769.[19] And S. 1550 (and its House companion, H.R. 3259) would create an "independent establishment" called the "National Infrastructure Bank."[20]

The remainder of this section provides more detail on each of the infrastructure bank bills listed in **Table 1**. Each bill is described focusing on the following topics: structure, eligible projects, project selection criteria, financing packages, and congressional funding (appropriations). **Table B-1** lists the various infrastructure project types identified in S. 652, S. 936, and H.R. 402.

[16] CRS Report 98-568, *Export-Import Bank: Background and Legislative Issues*, by Shayerah Ilias.

[17] The Export-Import Bank's activities are described in its annual reports, which are available at http://www.exim.gov/about/reports/ar/index.cfm.

[18] Numerous proposals for an infrastructure bank have been introduced in Congress in recent years. For example, in the 110th Congress, see H.R. 3896, the National Infrastructure Development Act, (DeLauro), S. 1926, the National Infrastructure Bank Act, (Dodd), and S. 2021, the Build America Bonds Act, (Wyden). For the 111th Congress, see H.R. 2521, the National Infrastructure Development Act, (DeLauro) and S. 238, the Build America Bonds Act of 2009, (Wyden).

[19] S. 652 was included, with minor modifications, in S. 1549 and S. 1769. S. 1549 was essentially the language suggested by the President in his "American Jobs Act." Legislatively, on November 3, 2011, S. 1769, which included the S. 1549 language, did not achieve in the Senate the necessary 60 votes on a motion to proceed to consideration.

[20] The National Infrastructure Bank Act of 2011, S. 1550 would create a national infrastructure bank as a wholly governmental entity, being deemed by the legislation an "independent establishment of the executive branch." The President would appoint its five-person board of directors, and the bank would be funded with $5 billion in appropriations each year from enactment until FY2015. The bank's activities would be limited to loans and loan guarantees for a variety of purposes, including low income housing.

Table 1. Proposed Infrastructure Bank Bills

	S. 652	S. 936	H.R. 402
Name	American Infrastructure Financing Authority	American Infrastructure Investment Fund	National Infrastructure Development Bank
Type	"wholly owned Government corporation"[a]	"fund"	"wholly owned Government corporation"[b]
Institutional Location	unclear[c]	DOT	unclear[d]
Presidential appointees	All seven board members and CEO; President designates board chairperson	Executive director;[e] all of the five to seven Fund Advisory Committee members	All five board members; President designates board chairperson and vice-chairperson
Funding	$10 billion appropriation; fees; sale of loans	$10 billion appropriation	$25 billion appropriation; callable capital; may issue bonds

Source: S. 652/S. 1549, S. 936, and H.R. 402, 112th Congress.

a. S. 652 exempts AIFA from the Government Corporation Control Act (31 U.S.C. 9101-9110).

b. H.R. 402 would make NIBD subject to the Government Corporation Control Act (31 U.S.C. 9101-9110).

c. The Treasury inspector general would be the AIFA inspector general for five years, then AIFA would have its own IG. Otherwise, AIFA would not appear to be associated with any federal department or agency.

d. The Treasury Secretary would have some authorities over the NIDB, such as the power to audit the bank. Otherwise, the institutional location is not clear.

e. Three of the seven BOD members would be the Secretaries of Commerce, Energy, and Treasury. The remaining four BOD members would be DOT employees appointed by the DOT Secretary.

S. 652 "Building and Upgrading Infrastructure for Long-Term Development"

Introduced on March 17, 2011, by Senators Kerry, Hutchison, Warner, and Graham, S. 652 would create a relatively independent infrastructure bank. This legislation may have provided the foundation for the infrastructure bank component of the President's "American Jobs Act," which was introduced in the Senate as S. 1549 by Senator Reid.[21] However, the front matter from S. 652 reproduced here is not in S. 1549. Otherwise, the infrastructure bank proposal in S. 1549 is virtually identical to S. 652.

Structure

The legislation would establish the American Infrastructure Financing Authority (AIFA), a wholly owned government corporation with a seven-member board of directors appointed by the President with the advice and consent of the Senate. The President would select the board's chairperson, and the board would appoint AIFA's chief executive officer, who would be a non-voting member of the board. The board could not have more than four members from the same political party. AIFA would not be required to submit a budget to the President, and the chief

[21] S. 652 is a stand-alone infrastructure bank proposal. S. 1549 is a much broader bill that includes a variety of other proposals in addition to an infrastructure bank.

executive officer would be compensated without regard to the general schedule applicable to other government employees (5 U.S.C. 51 and 53).

Eligible Projects

Entities eligible for AIFA financing would include private individuals, corporations, partnerships, or nonfederal government. AIFA would help finance, through direct loans and loan guarantees, the following types of infrastructure projects: (1) transportation, (2) water, (3) energy, or (4) an aggregation of such projects. The estimated cost of individual projects would have to be at least $100 million or, for rural infrastructure projects, $25 million.[22] The legislation identifies specific types of projects within each broad category, which are listed in **Table B-1**. States are defined to include Puerto Rico, the District of Columbia, and all of the territories (American Samoa, Guam, Commonwealth of the Northern Marianas, and the U.S. Virgin Islands).

Project Selection Criteria

The legislation does not include specific instructions for the selection of projects.[23] Instead, the AIFA chief executive officer is required to submit to the board policies for the loan application and approval process, including guidelines for selection and specific criteria for determining eligibility. Section 201 provides that the bank's selection criteria must require that (1) only projects with a clear public benefit are eligible, (2) financial aid may not be used to refinance existing projects, and (3) projects must be infrastructure as defined by the bill.

Financing Packages

AIFA would provide loans and loan guarantees. During the first two years, the aggregate amount of direct loans and guarantees made by AIFA could not exceed $10 billion in each year. For years three through nine, AIFA could not provide more than $20 billion in new loans or guarantees each year. Thereafter, the annual new loan and guarantee limit would be $50 billion.

AIFA loans would be repaid from (1) tolls, (2) user fees, or (3) other dedicated state and/or local government revenue sources. The legislation also would require additional security such as a "rate covenant" or similar security feature that would back the project obligations. The loan repayments would be required to begin not later than five years after the date of substantial completion of the project.

The rate on loan guarantees would have to be consistent with direct loans and is subject to the Federal Credit Reform Act of 1990 (FCRA).[24] The interest rate on the loans could not be less than the yield on U.S. Treasury securities of similar maturity. AIFA would charge a "credit fee" in addition to the base interest rate. The term of the loans cannot exceed 35 years.

[22] §201(d) of S. 652.

[23] One condition is that the projects must have an investment grade rating of BBB minus, Baa3, or higher to be considered for assistance.

[24] For more, see CRS Report RL30346, *Federal Credit Reform: Implementation of the Changed Budgetary Treatment of Direct Loans and Loan Guarantees*, by James M. Bickley.

Funding of AIFA

The chief executive officer would be tasked with setting fees sufficient to cover all the federal government's administrative costs to operate AIFA. The options would include an application fee, a transaction fee, and an interest rate adjustment.

Congress would provide AIFA with a $10 billion startup appropriation. Administrative costs would be limited to $25 million in 2012 and 2013 and $50 million in 2014. Not more than 5% of the total appropriation ($500 million) could be used to offset the subsidy costs associated with rural infrastructure projects. The subsidy cost is "the estimated long-term cost to the government of a direct loan or a loan guarantee, calculated on a net present value basis, excluding administrative costs."[25] The intent of this provision may be to limit the federal exposure to potential losses from rural infrastructure projects.

S. 936 "American Infrastructure Investment Fund Act of 2011"

Introduced on May 10, 2011, by Senator Rockefeller and cosponsored by Senator Lautenberg, S. 936 would create a special fund housed and managed as part of the Department of Transportation. A fund within the Department of Transportation would not be a typical infrastructure bank as described previously.

Structure

The legislation would establish the American Infrastructure Investment Fund (AIIF) as a part of the Department of Transportation. This contrasts with S. 652, which would organize a mostly independent government corporation. Thus, the structure proposed in S. 936 is intended to be an augmentation of existing transportation financing programs rather than a stand-alone "infrastructure bank." AIIF's primary objective would be to invest in transportation infrastructure projects. A secondary objective would be funding for projects that have been difficult to finance because of their multijurisdictional nature or the existence of multiple transportation modes. As with AIFA, the AIIF portfolio must maintain an investment grade rating.

Within one year of creation, AIIF is to publish a detailed explanation of the factors and formula used to determine an eligible project qualification score.

The President would appoint, with the advice and consent of the Senate, an executive director who would also serve as the chief executive officer. The term of the executive director is five years. The fund also would have a board composed of seven individuals, including three permanent members (the Secretaries of Treasury, Commerce, and Energy) and four executives from the Department of Transportation appointed by the Secretary of Transportation. These latter four executives could not serve for more than two years.

The President also would establish a "Fund Advisory Committee" (FAC) composed of five to seven members who would serve three-year terms. The FAC would be bipartisan and geographically balanced. The FAC would advise the board and Secretary of Transportation on the prospects for the extension of AIIF's activities to non-transportation infrastructure sectors such as

[25] FCRA of 1990 Section 502(5A).

renewable energy generation, energy transmission and storage, energy efficiency, drinking water and wastewater systems, and telecommunications systems. The FAC would be subject to the requirements of the Federal Advisory Committee Act, including public access to meetings (5 U.S.C. Appendix).

In addition to establishing AIIF, the legislation would specify that passenger and freight transportation projects and port infrastructure projects are eligible for funding from money apportioned under the federal surface transportation program.

Eligible Projects and Types of Financing

The legislation would offer loans, loan guarantees, and grants. Eligible recipients would include sub-national governmental entities and nongovernmental entities such as corporations, partnerships, and joint ventures. The nongovernmental recipients would be eligible only if there were a sub-federal governmental cosponsor of the eligible project.

An eligible project would be "comprised of activities included in a regional, State, or national plan" and "transportation related."

In addition to loans and loan guarantees, the legislation would also establish a competitive investment grant program for a wide swath of transportation-related projects (see **Table B-1**). As proposed, this "National Infrastructure Investment Grant (NIIG)" program would (1) leverage federal investment by encouraging nonfederal contributions to the project, including contributions from public-private partnerships; (2) improve the mobility of people, goods, and commodities; (3) incorporate new and innovative technologies, including intelligent transportation systems; (4) improve energy efficiency or reduce greenhouse gas emissions; (5) help maintain or protect the environment, including reducing air and water pollution; (6) reduce congestion; (7) improve the condition of transportation infrastructure, including bringing it into a state of good repair; (8) improve safety, including reducing transportation accidents, injuries, and fatalities; (9) demonstrate that the proposed project cannot be readily and efficiently realized without federal support and participation; and (10) enhance national or regional economic development, growth, and competitiveness. A grant for the federal share of the NIIG project could not exceed 80% of the net project cost. Sub-national governments and government-sponsored corporations would be eligible for this program. Appropriations of $600 million in each of 2012 and 2013 would be made available to carry out the NIIG program.

A project seeking a loan or loan guarantee would need to be at least $50 million in total cost, or $10 million if located entirely in a rural area. The legislation defines a "rural area" as all population and territory not within an urbanized area.

AIIF Project Selection Criteria

AIIF would be required to consider the following when evaluating projects: (1) federal budgetary resources included, (2) percentage of federal grants included in the investment plan, (3) the level of uncertainty in the project benefits, and (4) the percentage of eligible project cost to be funded through nonfederal resources pledged by the applicant. A qualification score would be required to equal the ratio between the present value of benefits to the present value of costs reasonably expected to result from the funding of the project or projects proposed in the application. The

ratio should include probabilistic bands of both benefits and costs when determining the qualification score.

Projects would be subject to the Davis-Bacon Act (40 U.S.C. 3141).[26] The Davis-Bacon Act requires that projects pay the prevailing local area wage. The DOT would lead the environmental review process for each proposed project.

Financing Packages

The applicants for assistance also would have to submit an "investment plan" that provides and outlines the financial commitment of AIIF to the eligible project. AIIF financial assistance may include loan guarantees and lines of credit (i.e., direct loans).

A direct loan could be made by AIIF only if necessary "to alleviate a credit market imperfection," or "necessary to achieve specified Federal objectives by providing credit assistance" and "is the most efficient way to meet such objectives."[27] In addition, loans could not be subordinated (meaning that in the event of financial stress, these loans would be part of the first tier of creditors to be repaid) and the rates must be set "by reference to a benchmark interest rate on marketable Treasury securities" of similar maturity.

The loans and guarantees must include appropriations of budget authority as required under Section 504 of the Federal Credit Reform Act of 1990.[28] The FCRA requires that the subsidy cost of a credit program be accounted for in the fiscal year of the commitment. The subsidy cost is "the estimated long-term cost to the government of a direct loan or a loan guarantee, calculated on a net present value basis, excluding administrative costs."[29]

Loans may be up to 70% of the eligible cost less any other spending supported by federal assistance. Repayment terms should be based on the projected cash flows or other repayment sources. The term of the loans may not exceed 90% of the estimated useful economic life of the asset being financed. A loan guarantee may not exceed 80% of the loss of the loan. Less risky borrowers would receive a lower guarantee percentage.

Funding of AIIF

AIIF would be allowed to establish and collect fees from funding participants. Additionally, the legislation would authorize the appropriation of $5 billion in each of FY2012 and FY2013. Administrative expenses could not exceed $50 million in 2012 and $51 million in 2013.

[26] For more on the Davis-Bacon Act, see CRS Report 94-908, *Davis-Bacon: The Act and the Literature*, by William G. Whittaker.

[27] The new §364(d)(1)(C)(i).

[28] The Federal Credit Reform Act was included in the Omnibus Budget Reconciliation Act of 1990, P.L. 101-508, 104 Stat. 143.

[29] FCRA of 1990 Section 502(5A). For more, see CRS Report RL30346, *Federal Credit Reform: Implementation of the Changed Budgetary Treatment of Direct Loans and Loan Guarantees*, by James M. Bickley.

H.R. 402 "National Infrastructure Development Bank Act of 2011"

On January 24, 2011, Representative DeLauro, along with many other cosponsors, introduced H.R. 402. The legislation would create a wholly owned government corporation that would issue public benefit bonds (PBBs) to help finance infrastructure through grants, loans, and loan guarantees.

Structure

The legislation would establish the National Infrastructure Development Bank (NIDB), which would be subject to the Government Corporation Control Act (GCCA; 31 U.S.C. 9101-9110).[30] The bank would issue PBBs, subject to the approval of the Secretary of the Treasury. These bonds would not be subject to any nonfederal governmental taxation. The PBBs would not be guaranteed by the full faith and credit of the U.S government. The PBBs, however, could be bought and sold by the Federal Reserve (the Fed) as if they were U.S. obligations.

The bank would have a board consisting of five members appointed by the President. Two of the members would be required to have public sector experience and three would need to have private sector experience. All would serve six-year terms.

The board would have authority to (1) issue public benefit bonds and to provide financing to infrastructure projects from the proceeds; (2) make loan guarantees; (3) borrow on the global capital market and lend to regional, state, and local entities, and commercial banks for the purpose of funding infrastructure projects; (4) purchase in the open market any of the bank's outstanding obligations; and (5) monitor and oversee infrastructure projects financed, in whole or in part, by the bank.[31]

The NIDB also would have a nine-member executive committee composed of professionals with experience in a range of disciplines including economic development and finance (both private and public). The bank would include a five-member risk management committee composed of risk managers within the bank and also would have a five-member audit committee.

Eligible Projects

The NIDB would help finance the construction, reconstruction, rehabilitation, replacement, or expansion of infrastructure. An infrastructure project would be defined as "any energy, environmental, telecommunications, or transportation infrastructure project" (see **Table B-1**). Assistance could be provided to states. States are defined to include Puerto Rico, the District of Columbia and all of the territories (American Samoa, Guam, Commonwealth of the Northern Marianas, and the U.S. Virgin Islands). All projects would be subject to the Davis-Bacon Act wage requirements.

[30] The GCCA standardizes budget, auditing, debt management, and depository practices for government corporations. Other government corporations include the Export-Import Bank, the Overseas Private Investment Corporation, and the Pension Benefit Guaranty Corporation. On government corporations and the GCCA, see CRS Report RL30365, *Federal Government Corporations: An Overview*, by Kevin R. Kosar.

[31] Summary of Section 5(k) of H.R. 402.

Project Selection Criteria

The board would be tasked with creating project selection criteria. In general, the "Bank shall conduct an analysis that takes into account the economic, environmental, social benefits, and costs of each project under consideration for financial assistance under this Act, prioritizing projects that contribute to economic growth, lead to job creation, and are of regional or national significance." The criteria should provide for the consideration of the following: (1) the financial terms and conditions including the maximization of outside revenue sources and (2) the likelihood a project would advance more promptly than would have been the case absent assistance. Notably, the legislation does not include a minimum project size requirement.

The legislation also would provide additional considerations for specific types of infrastructure. For example, for transportation infrastructure, the criteria should consider the potential for job growth, reducing congestion, alleviating poverty, and reductions in carbon emissions. Other types of infrastructure, such as environmental, energy, and telecommunication projects, have similar suggested criteria.

Financing Packages

The legislation does not provide descriptions of specific financing packages.

Funding of NIDB

The NIDB would be capitalized with $5 billion in each of FY2012 through FY2016. The total would be 10% of the total subscribed capital of the bank. Up to 90% of the subscribed capital is callable by the Treasury Secretary. The total loans outstanding may not exceed 250% of the subscribed capital, and the bank shall cease to exist 15 years after creation.[32]

Issues for Congress

As Congress debates the various infrastructure bank proposals, it will face a number of issues with respect to the scale, powers, organization, and potential impact of the proposed institution

Will a bank increase infrastructure investment?

One of the main arguments for creating a national infrastructure bank is to encourage investment that would otherwise not take place. This investment is especially thought to be lacking for large, expensive projects whose costs are borne locally but whose benefits are regional or national in scope.[33] A national infrastructure bank might help facilitate such projects by providing large amounts of financing on advantageous terms.[34] For instance, an infrastructure bank could provide

[32] The intent of this provision is unclear and may adversely impact debt issued to finance infrastructure projects if the maturity exceeds the 15-year life of the bank.

[33] Such projects are sometimes described as "projects of national and regional significance."

[34] U.S. Congress, House Committee on Transportation and Infrastructure, Subcommittee on Water Resources and Environment, *Testimony of Chips Barry*, Hearing on Financing Water Infrastructure, 111th Cong., 1st sess., July 15, 2009.

loans with very long maturities and allow repayment to be deferred until a facility is up and running.

Whether this would lead to an increase in the total amount of capital devoted to infrastructure investment is unclear. One purported advantage of certain types of infrastructure banks is access to private capital, such as pension funds and international investors. These entities, which are generally not subject to U.S. taxes, may be uninterested in purchasing the tax-exempt bonds that are traditionally a major source of project finance, but might be willing to make equity or debt investments in infrastructure in cooperation with a national infrastructure bank. If this shift were to occur, however, it could be to the detriment of existing investment, as the additional investment in infrastructure may be drawn from a relatively fixed amount of available investment funds.

Even if it were to increase the total amount of infrastructure investment, an infrastructure bank may not be the lowest-cost means of achieving that goal. The Congressional Budget Office has pointed out that a special entity that issues its own debt would not be able to match the lower interest and issuance costs of the U.S. Treasury.[35]

Will an infrastructure bank duplicate existing programs?

The federal government already has a number of programs to support infrastructure projects (see **Appendix A** for a discussion of these). Drinking water and wastewater infrastructure projects, for instance, can receive low-interest loans for up to 20 years from the state revolving loan fund program, and repayment does not begin until the facility is operating, although these loans tend to be relatively small. The Transportation Infrastructure Finance and Innovation Act (TIFIA) program provides large low-interest loans of up to 35 years from the substantial completion of a project (see the box below). For these and other reasons, some argue that TIFIA already functions as an infrastructure bank for transportation projects.[36]

Only transportation projects are eligible for TIFIA assistance, which has generated interest in creating similar programs in other infrastructure areas. For example, there have been proposals for the creation of a WIFIA, a Water Infrastructure Financing and Innovations Authority, to support infrastructure for drinking water and wastewater systems.[37]

If it were to create a national infrastructure bank, Congress would need to consider the fate of these other programs. One option would be abolish the programs that appear to have the same objectives as the infrastructure bank, such as TIFIA, but keep the programs that are primarily aimed at providing assistance to smaller projects, such as the Wastewater and Drinking Water SRFs and the State Infrastructure Bank program. Another option would be to create the national infrastructure bank as an added mechanism for credit assistance, with the possible duplication of effort this entails. All existing national infrastructure bank proposals take this latter approach.

[35] Congressional Budget Office, "Issues and Options in Infrastructure Investment," May 2008, p. 28, at http://www.cbo.gov/ftpdocs/91xx/doc9135/05-16-Infrastructure.pdf.

[36] U.S. Congress, House Committee on Transportation and Infrastructure, Subcommittee on Highways and Transit, *Testimony of Geoffrey S. Yarema*, Hearing on National Infrastructure Bank: More Bureaucracy and More Red Tape, 112th Cong., 1st sess., October 12, 2011.

[37] For example, see American Water Works Association and Water Environment Federation, "A Water Infrastructure Financing Innovations Authority (WIFIA) and Other Infrastructure Financing Tools," at http://www.awwa.org/files/GovtPublicAffairs/PDF/2011WIFIA.pdf.

The Transportation Infrastructure Finance and Innovation Act (TIFIA) Program

TIFIA was enacted in 1998 as part of the Transportation Equity Act for the 21st Century (TEA-21; P.L. 105-178). TIFIA provides federal credit assistance up to a maximum of 33% of project costs in the form of secured loans, loan guarantees, and lines of credit (23 U.S.C. 601 et seq.). Transportation projects costing at least $50 million (or at least $15 million in the case of Intelligent Transportation Systems projects) are eligible for TIFIA financing. The TIFIA program is administered by the Department of Transportation (DOT). Project selection authority rests with the Secretary of Transportation, who is advised by a 13-member Credit Council comprised of senior DOT officials.

The volume of loans and other types of credit assistance that TIFIA can provide is determined by the size of congressional appropriations and calculation of the subsidy cost.[38] The subsidy cost largely determines the amount of money that can be made available to project sponsors.[39] DOT noted that for FY2010, after administrative costs and other deductions, it could apply approximately $110 million to covering loan subsidy costs. DOT estimated that the $110 million made available in FY2010 would support about $1.1 billion in TIFIA credit assistance, a subsidy cost of 10% ($110 million divided by 10% equals $1.1 billion).[40] Due to DOT's higher estimate of expected losses on more recent loans, the subsidy cost has been higher in recent years, thereby lowering the amount of credit assistance available.[41]

The demand for TIFIA credit assistance appears to be higher than program funding can support. In FY2010, according to DOT, there were requests for almost $13 billion in TIFIA credit assistance, much more than the approximately $1.1 billion available.[42] It is not clear, however, how many of these requests fulfill the requirements of the TIFIA program, nor what the subsidy cost of each project would be in comparison with the historical average. Nevertheless, recent House and Senate committee outlines of surface transportation reauthorization have expressed interest in raising the annual appropriation for TIFIA from the current $122 million to $1 billion.[43]

[38] According to the Federal Credit Reform Act of 1990, the subsidy cost is the "estimated long-term cost to the Government of a direct loan or loan guarantee, calculated on a net present value basis, excluding administrative costs" (104 Stat. 1388-610). The Federal Credit Reform Act of 1990 was enacted as part of the Omnibus Budget Reconciliation Act of 1990 (P.L. 101-508).

[39] Douglas J. Elliott, *Budgeting for Credit Programs: A Primer*, Center for Federal Financial Institutions, April 2004, at http://www.coffi.org/pubs/Budgeting%20Primer.pdf.

[40] Department of Transportation, "Notice of Funding Availability for Applications for Credit Assistance Under the Transportation Infrastructure Finance and Innovation Act (TIFIA) Program; Clarification of TIFIA Selection Criteria; and Request for Comments on Potential Implementation of Pilot Program To Accept Upfront Payments for the Entire Subsidy Cost of TIFIA Credit Assistance," 74 *Federal Register* 63497-63501, December 3, 2009, at http://www.fhwa.dot.gov/ipd/pdfs/tifia/fy2010_tifia_nofa.pdf.

[41] Department of Transportation, *Transportation Infrastructure Finance and Innovation Act, Report to Congress 2008*, Washington, DC, September 2008, http://www.fhwa.dot.gov/ipd/pdfs/tifia/tifia_2008_rtc.pdf.

[42] "TIFIA Loan Applications Total $13 Billion," *AASHTO Journal*, April 2, 2010. See also, Testimony of Christopher Bertram, Assistant Secretary for Budget and Programs and Chief Financial Officer, U.S. Department of Transportation, U.S. Congress, House Committee on Transportation and Infrastructure, Subcommittee on Highways and Transit, *Hearing on Using Innovative Finance to Deliver Highway and Transit Projects*, 111th Cong., 2nd sess., April 14, 2010, at http://transportation.house.gov/Media/file/Highways/20100414/Bertram.pdf.

[43] House Committee on Transportation and Infrastructure, "A New Direction: Transportation Reauthorization Proposal," at http://republicans.transportation.house.gov/Media/file/112th/Highways/Reauthorization_document.pdf, July 11, 2011; and Senate Committee on Environment and Public Works, "Summary of Moving Ahead for Progress in the 21st Century (MAP-21, S. 1813)," November 9, 2011, at http://epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=6d1e2690-6bc7-4e13-9169-0e7bc2ca0098.

Will a national infrastructure bank accelerate investment?

Once established, a national infrastructure bank might help accelerate worthwhile infrastructure projects, particularly large projects that can be slowed by funding and financing problems due to the degree of risk. These large projects might also be too large for financing from a state infrastructure bank or from a state revolving loan fund.[44] Moreover, even with a combination of grants, municipal bonds, and private equity, mega-projects often need another source of funding to complete a financial package. Financing is also sometimes needed to bridge the gap between when funding is needed for construction and when the project generates revenues.

Although a national infrastructure bank might help accelerate projects over the long term, it is unlikely to be able to provide financial assistance immediately upon enactment. In several infrastructure bank proposals (e.g., S. 652 and S. 936), officials must be nominated by the President and approved by the Senate. The bank will also need time to hire staff, write regulations, send out requests for financing proposals, and complete the necessary tasks that a new organization must accomplish. This period is likely to be measured in years, not months. The example of the TIFIA program may be instructive. TIFIA was enacted in June 1998. TIFIA regulations were published June 2000, and the first TIFIA loans were made the same month.[45] However, according to DOT, it was not until FY2010 that demand for TIFIA assistance exceeded its budgetary authority.[46]

What are the federal budgetary implications?

One attraction of the national infrastructure bank proposals is the potential to encourage significant nonfederal infrastructure investment over the long term for a relatively small amount of federal budget authority. Ignoring administrative costs, an appropriation of $10 billion for the infrastructure bank could encourage $100 billion of infrastructure investment if the subsidy cost were similar to that of the TIFIA program.[47] The critical assumption, however, centers on the estimated risk of each project. The current methods used to budget for federal credit programs generally underestimate the potential risk and thus the federal commitment (as measured by the "subsidy cost").[48] Increasing the estimated subsidy cost would result in a significant reduction in the amount available for investment. For example, doubling the average subsidy cost from 5% to 10% would reduce available loan capacity by half, as the loans are expected to cost the government twice as much.

The budgetary implications of H.R. 402 are somewhat different from those of the other pending infrastructure bank proposals. This bill proposes to capitalize an infrastructure bank with

[44] State infrastructure banks have tended to provide relatively small amounts of project financing.

[45] For example, the Washington Metropolitan Airports Authority (WMATA) had a TIFIA loan guarantee some months before this time.

[46] On December 3, 2009, DOT announced that it would no longer have an open application process, but rather would have a fixed-period solicitation in which applications could be evaluated against one another. See http://www.fhwa.dot.gov/ipd/pdfs/tifia/fy2010_tifia_nofa.pdf.

[47] As noted earlier, according to the Federal Credit Reform Act of 1990 the subsidy cost is the "estimated long-term cost to the Government of a direct loan or loan guarantee, calculated on a net present value basis, excluding administrative costs" (104 Stat. 1388-610).

[48] See, for example, Congressional Budget Office, "Estimating the Value of Subsidies for Federal Loans and Loan Guarantees," August 2004, at http://www.cbo.gov/ftpdocs/57xx/doc5751/08-19-CreditSubsidies.pdf.

appropriations of $25 billion and to provide another $225 billion in "callable capital," which would be made available from the Treasury only if it is needed by the bank to meet its obligations. Under this proposal, the bank would be permitted to issue bonds up to 250% of the bank's total capital (capital plus callable capital). This means the bank could support up to $625 billion of bonds, which would be backed by the full faith and credit of the U.S. Treasury. In addition to the $25 billion, the callable funding of $225 billion would likely be scored as an appropriation.

Can a national infrastructure bank be financially self-sustaining?

All pending infrastructure bank proposals have the objective of increasing investment in infrastructure while maintaining financial self-sustainability. These two objectives may not be compatible.

Traditional banks are self-sustaining because they borrow from depositors at a low rate (and typically short term) and lend at a higher rate (and typically long term). In addition, they impose fees and charge for a variety of services beyond lending. An infrastructure bank's self-sustainability, in contrast, would depend almost exclusively on its capacity to lend at a higher rate than its cost of capital. If the infrastructure bank were to rely mainly on private capital (either equity or credit), it would have to provide those investors with a rate of return comparable to that available on investments with a similar risk and time profile to those in the bank's portfolio. If the federal government bears some of the risk, then investors would not require as much compensation as they would if not for the federal guarantee. Federal budgeting rules, however, would require that the value of the risk shifted from the private sector to the federal government be accounted for in the federal budget.[49]

The other constraint on sustainability is the need to keep the nonfederal share of projects attractive to investors. Currently, state and local governments can finance infrastructure with relatively low-cost capital by issuing tax-exempt bonds. If the infrastructure bank must compensate investors to attract capital, and no federal tax advantages are conferred upon these investors, it seems unlikely that the bank will be able to match the low interest rates available with tax-exempt bonds.

The infrastructure bank proposed in S. 652 and S. 1549 would be allowed to charge fees for loans and loan guarantees, which could move the bank closer to sustainability. However, the additional transaction fees or interest rate adjustments would make financing through the infrastructure bank more expensive. The higher these fees go, the less advantageous it will be for a project sponsor to seek infrastructure bank assistance.[50]

[49] Congressional Budget Office, "Estimating the Value of Subsidies for Federal Loans and Loan Guarantees," August 2004, at http://www.cbo.gov/ftpdocs/57xx/doc5751/08-19-CreditSubsidies.pdf.

[50] The Rockefeller-Lautenberg bill (S. 936) takes a very similar approach to the BUILD Act by appropriating $10 billion to an infrastructure bank, known as the American Infrastructure Investment Fund, and permitting the bank to collect fees.

How will projects be selected?

A frequent criticism of current public infrastructure project selection is that it is often based on factors such as geographic equity and political favoritism instead of the demonstrable merits of the projects themselves.[51] In many cases, funding goes to projects that are presumed to be the most important, without a rigorous study of the costs and benefits. Proponents of an infrastructure bank assert that it would select projects based on economic analyses of all costs and benefits.[52] Furthermore, a consistent comparative analysis across all infrastructure sectors could yield an unbiased list of the best projects.

Selecting projects through an infrastructure bank has possible disadvantages as well as advantages. First, it would direct financing to projects that are the most viable financially rather than those with greatest social benefits. Projects that are likely to generate a financial return through charging users, such as urban water systems, wastewater treatment, and toll roads, would be favored if financial viability is the key element for project selection. Conversely, projects that offer extensive spillover benefits for which it is difficult to fully charge users, such as public transit projects and levees, would be disfavored.[53]

Second, selection of the projects with the highest returns might conflict with the traditional desire of Congress to assure funding for various purposes. Rigorous cost-benefit analysis might show that the most attractive projects involve certain types of infrastructure, while projects involving other types of infrastructure have less favorable cost-benefit characteristics. This could leave the infrastructure bank unable to fund some types of projects despite local support.

Third, financing projects through an infrastructure bank may serve to exclude small urban and rural areas because large, expensive projects tend to be located in major urban centers. Because of this, an infrastructure bank might be set up to have different rules for supporting projects in rural areas, and possibly also to require a certain amount of funding directed to projects in rural areas. For example, S. 652 proposes a threshold of $25 million for projects in rural areas instead of $100 million in urban areas. Even so, the $25 million threshold could exclude many rural projects.

A fourth possible disadvantage is that a national infrastructure bank may shift some decision making from the state and local level to the federal level. Although the initiation of projects will come from state and local decision-makers, a national infrastructure bank will make the final determination about financing. Some argue that this will reduce state and local flexibility and give too much authority to centralized decision-makers divorced from local conditions.[54]

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[51] Everett Ehrlich, *A National Infrastructure Bank: A Road Guide to the Destination*, Policy Memo, Progressive Policy Institute, October 2010, at http://www.progressivefix.com/wp-content/uploads/2010/09/09.2010-Ehrlich_A-National-Infrastructure-Bank.pdf.

[52] The extent to which this would be done varies depending on the specific legislation. If Congress were to direct the bank to consider factors such as job creation and poverty reduction, as H.R. 402 does, then those requirements might constrain its ability to assist the most economically viable projects.

[53] For a discussion of this problem in transportation, see Lewis, D. and F.L. Williams, *Policy and Planning as Public Choice: Mass Transit in the United States* (Brookfield, VT, Ashgate, 1999).

[54] See, for example, John L. Mica, Chairman of the House Transportation and Infrastructure Committee, "States Will Have More Flexibility Without a National Infrastructure Bank," *Roll Call*, July 21, 2011.

How might an infrastructure bank be structured?

Congress has established numerous banking entities taking a wide range of institutional forms. To cite four examples:

- The National Credit Union Administration Central Liquidity Facility was established in 1978 through statute (12 U.S.C. 1795) as a **cooperative corporation** that is owned by federal credit unions. It is managed by the board of the National Credit Union Administration (12 U.S.C. 1751) and can borrow from the U.S. Treasury. Its purpose is narrow—to serve as a lender of last resort to credit unions needing liquidity due to unforeseen or unusual circumstances.[55]
- Government-sponsored enterprises, such as the Federal Home Loan Mortgage Corporation (Freddie Mac) and the Federal Agricultural Mortgage Corporation (Farmer Mac), are structured as **privately held, for-profit corporations** designed to serve a public purpose.[56] Some of these entities were designed to be investor owned, while others, such as the Federal Home Loan Bank System and the Farm Credit System, are owned cooperatively by their borrowers. The extent of direct federal involvement varies.
- The Rural Telephone Bank, established in 1971 (7 U.S.C. 941) to provide credit to telecommunications companies in rural areas, was designed as a **mixed-ownership corporation**. The federal government capitalized the bank by purchasing its dividend-yielding A class stock, and other classes of stock were sold to private investors. The bank liquidated itself in 2007.[57] The mixed-ownership structure was earlier used for the First Bank of the United States, which was chartered by Congress in 1791 (1 Stat. 192 Section 3) to stabilize the currency and provide a safe depository for funds and a source of credit. The bank's shares were owned by both the U.S. government and private shareholders.
- Congress has established many lending institutions that are **wholly owned government corporations**. The Export-Import Bank, mentioned earlier in this report, is an example, as is the Overseas Private Investment Corporation (OPIC; 22 U.S.C. 2191). OPIC was established in 1969, and it offers loans, loan and risk insurance, and other services to U.S. investors operating in overseas markets.[58] Like the Export-Import Bank, OPIC serves a governmentally defined purposes, and it supports its operations through commercial activities.

The three bills considered in this report, S. 652, S. 936, and H.R. 402, all would establish infrastructure banks that are wholly government owned.

[55] For further information see "Central Liquidity Facility," at http://www.ncua.gov/Resources/CLF/Index.aspx.

[56] GSEs (to varying degrees) issue capital stock and short- and long-term debt instruments, guarantee mortgage-backed securities (MBS), purchase loans and hold them in their own portfolio, fund related activities, and collect fees for guarantees and other services. See generally CRS Report RS21663, *Government-Sponsored Enterprises (GSEs): An Institutional Overview*, by Kevin R. Kosar.

[57] U.S. Department of Agriculture, "Rural Telephone Bank," at http://www.usda.gov/rus/telecom/rtb/index_rtb.htm.

[58] Generally, see CRS Report 98-567, *The Overseas Private Investment Corporation: Background and Legislative Issues*, by Shayerah Ilias.

How might an infrastructure bank be governed?

The three bills would locate the proposed infrastructure banks within the federal government and establish executive branch direction over them through presidential appointments (**Table 1**). Each bill would have the President appoint the board of the infrastructure bank, and S. 652 would have the chief executive officer be presidentially appointed rather than chosen by the board.[59]

An organization's institutional structure can affect its accountability to Congress and the President. The more tightly yoked to legislative and executive branch authorities an organization is, the more accountable and responsive to those authorities the organization can be expected to be. Hence, if organizations are considered as existing on a spectrum—with a wholly governmental agency on one end and a wholly private firm on the other—the former would tend to be the most accountable and responsive to federal oversight, while the latter the least.[60]

This organizational responsiveness to federal oversight comes through a number of means, such as executive and legislative involvement in the appointment of the organization's leadership, the organization's location within or outside the government, and the organization's reliance on appropriated funding.[61]

However, with accountability can come sensitivity to competing stakeholder demands. An agency charged with national responsibilities that feels the imperative to satisfy the demands of diverse overseers might not allocate all its efforts toward pursuit of its national objectives. It may apportion some resources to activities intended to satisfy overseers and stakeholders.

The infrastructure banks contemplated in the legislation discussed here all would be closely yoked to the federal government—especially S. 936, which would use appropriations to create a fund within the Department of Transportation. Each bill would have the President appoint the boards of the infrastructure banks, and S. 652 would have the CEO be presidentially appointed (rather than chosen by the board).[62] S. 936 would create an organization funded solely by appropriations, while S. 652 and H.R. 402 would reduce this dependency some degree by authorizing the infrastructure bank to seek funds from other sources, such as fees and bond issuance.

However, each bill also would require its infrastructure bank to pursue financial self-sufficiency as a private firm would. S. 652 and H.R. 402 both would establish government corporations,

[59] A CEO selected by the board could be removed by the board for inadequate performance or other reasons. A CEO appointed by the President could not be removed by the board. On the Appointments Clause (Article II, Section 2, Clause 2) and the removal of presidential appointees, see the *U.S. Constitution Annotated* at http://crs.gov/conan/default.aspx?mode=topic&doc=Article02.xml&t=3|4|1&s=2&c=2.

[60] Two caveats are warranted. First, this is a generalization and does not always hold true; second, an organization's accountability is partially a function of the level of active oversight. Hence, a federal agency that is not actively overseen might prove less accountable than a quasi-governmental entity that is consistently and actively overseen.

[61] There are other significant factors, such as the authorization for audits and investigations of the organization by an inspector general or the Government Accountability Office, and the applicability of various "open government" statutes such as the Freedom of Information Act. See generally CRS Report RL30795, *General Management Laws: A Compendium*, by Clinton T. Brass et al.

[62] A CEO selected by the board could be removed by the board for inadequate performance or other reasons. A CEO appointed by the President could not be removed by the board. On the Appointments Clause (Article II, Section 2, Clause 2) and the removal of presidential appointees, see the *U.S. Constitution Annotated* at http://crs.gov/conan/default.aspx?mode=topic&doc=Article02.xml&t=3|4|1&s=2&c=2.

entities explicitly designed to be both governmental and partially motivated by the prospect of financial gain. S. 936 would require the "fund" to maintain a highly rated infrastructure investment portfolio.

The imperative to be self-supporting could possibly counter-balance the distributive political pressures. A number of government corporations (e.g., Government National Mortgage Corporation, (12 U.S.C. 1717)) and other self-supporting federal entities (e.g., Patent & Trademark Office (35 U.S.C. 1)) have long records of operating independently. Yet, successful self-supporting federal entities often operate as monopolists; for example, only the Patent & Trademark Office may issue patents. Hence, it can be difficult to disentangle the positive organizational effects of the imperative to be self-sufficient from the advantages of being a monopolist. The infrastructure banks currently proposed would not be monopolists, as many other sources of infrastructure funding exist.

A fundamental policy tradeoff underlies the merits of a national infrastructure bank or similar entity. The desire for an equitable distribution of federal investment in infrastructure must be balanced against the often competing goal of an efficient allocation of federal resources. An infrastructure bank that finances projects yielding the highest public benefit (as measured from the national perspective) may yield an unsatisfactory redistribution of federal resources based on a subjective measure of equity. Further, current budget constraints, both federal and nonfederal, may limit public interest in new spending initiatives without accompanying spending reductions on other programs or higher taxes. Ultimately, the anticipated higher productivity and thus greater consumption in the future made possible by infrastructure investment today is not certain.

Appendix A. Background on Infrastructure Financing

The Federal Role

The federal government, state and local governments, and the private sector all invest in what might be defined as infrastructure. In 2008, the Congressional Budget Office (CBO) provided estimates of capital spending on infrastructure. These data show that government invests chiefly in transportation and water infrastructure whereas the private sector invests in energy and telecommunications infrastructure.[63] Within the public sector, state and local governments are typically responsible for a much larger share of infrastructure investment than the federal government. For example, about 25% of government spending on transportation and water infrastructure is from the federal government, with the other 75% from state and local government.[64]

The federal government assists in infrastructure investment in several ways. First, it spends directly on certain projects, such as the inland waterway system maintained and operated by the U.S. Army Corps of Engineers. Second, the federal government provides grants to state and local governments through a multitude of programs, such as those that provide funding for the maintenance, rehabilitation, and expansion of bus and transit rail systems. Third, the federal government provides credit assistance to state and local government and the private sector through direct loans, loan guarantees, and tax preferences. In 2010, direct federal spending on non-defense physical capital amounted to $48.1 billion and grants to state and local governments were another $93.3 billion.[65] Tax preferences were also significant. The amount of federal tax revenue foregone through tax-exempt bond financing for infrastructure was estimated to be $26.8 billion for 2010.[66]

Federal Credit Assistance Programs

As noted above, the federal government also has a number of existing programs that provide loans, loan guarantees, and other credit assistance for a wide spectrum of infrastructure projects, including the following:

- The Transportation Infrastructure Finance and Innovation Act (TIFIA) program (23 U.S.C. 601 et seq.). TIFIA provides federal credit assistance up to a maximum of 33% of project costs in the form of secured loans, loan guarantees, and lines of credit.

[63] Congressional Budget Office, Statement from Director Peter R. Orzag, *"Investing in Infrastructure,"* Testimony before the Committee on Finance, United States Senate, July 10, 2008.

[64] Congressional Budget Office, *Public Spending on Transportation and Water Infrastructure*, Washington, DC, November 2010, p. 7, http://www.cbo.gov/ftpdocs/119xx/doc11940/11-17-Infrastructure.pdf.

[65] Office of Management and Budget, *FY2011 Budget of the U.S. Government, Analytical Perspectives*, Table 21-1, p. 354. This includes grants for highways, airports, public transit, wastewater treatment facilities, community development, and other facilities.

[66] Joint Committee on Taxation, "Estimates of Federal Tax Expenditures For Fiscal Years 2010-2014," JCS-3-10, December 2010, p. 51.

- The Railroad Rehabilitation and Improvement Financing (RRIF) Program (45 U.S.C. 821 et seq.). RRIF, also originally established in TEA-21, provides loans and loan guarantees to freight railroads and Amtrak for rail infrastructure improvements.
- The Title XI Federal Ship Financing Program (46 U.S.C. Chapter 537). This program provides loan guarantees for improvements to U.S.-flagged commercial vessels and U.S. shipyards.
- Title XVII Loan Guarantee Program (42 U.S.C. 16511 et seq.). Enacted in the Energy Policy Act of 2005 (P.L. 109-58) and administered by the Department of Energy, the program provides loan guarantees for up to 80% of construction costs for energy projects that employ innovative technologies to reduce air pollutants and greenhouse gases. Eligible projects included renewable energy systems projects, such as nuclear power stations and electric power transmission systems.[67]
- The Telecommunications Infrastructure Loan Program (7 U.S.C. 930 et. seq.). This program provides loans and loan guarantees for the "purpose of financing the improvement, expansion, construction, acquisition, and operation of telephone lines, facilities, or systems to furnish and improve telecommunications service in rural areas."[68]
- Clean Water State Revolving Loan Fund (SRF) Program. Created in amendments to the Clean Water Act (P.L. 100-4), this program provides grants to states to capitalize loan funds (33 U.S.C. 1381-1387). States then may make low-interest loans and provide other types of credit assistance to help with the construction of publicly owned municipal wastewater treatment plants and for some other purposes.[69]
- Drinking Water State Revolving Loan Fund (SRF) Program. Created in the Safe Drinking Water Act Amendments of 1996 (P.L. 104-182), this program supports the financing of water system infrastructure (42 U.S.C. 300j-12). Like the Clean Water SRF, under this program states receive federal grants to capitalize loan funds to make low-interest loans. In this case, the loans are available to public and private water systems to help finance drinking water system infrastructure. These loans can be up to 20 years in length. Loan repayments are made to the states, making it possible to make new loans for further projects.[70]

Tax-Favored Infrastructure Bonds

Most of the state and local government bonds issued for infrastructure are tax-exempt. These bonds are either general obligation bonds (roughly one-third of issuance) or revenue bonds (two-

[67] See U.S. Department of Energy, Loan Programs Office, at http://lpo.energy.gov/.

[68] For more information, see U.S. Department of Agriculture, "Rural Development Loan Assistance," at http://www.rurdev.usda.gov/RD_Loans.html; see also CRS Report RL31837, *An Overview of USDA Rural Development Programs*, by Tadlock Cowan.

[69] For more information, see CRS Report RL30478, *Federally Supported Water Supply and Wastewater Treatment Programs*, coordinated by Claudia Copeland.

[70] Ibid.

thirds). The difference between the two is the "security" behind the bond. General obligation bonds are backed by the full faith and credit of the issuing government and are viewed by investors as the least risky of all tax-exempt bonds. Revenue bonds are secured by a future revenue stream, such as the tolls to be charged for use of a road financed by the bonds. Revenue bonds are less secure than general obligation bonds because the bondholder may be left with no financial recourse if the dedicated revenue is insufficient to service the bond.

In 2010, roughly $433 billion in debt was issued by state and local governments. Of this amount, almost two-thirds ($279.8 billion) was "new money" with the remainder used to refund outstanding debt. **Table A-1** provides recent data on purposes for which state and local governments issue debt.

In addition to the federal income-tax exemption of interest paid on state and local government bonds, the federal government subsidizes private debt issued for infrastructure that could have been issued by a government and considered a governmental bond. These bonds, called "private activity bonds," are usually not repaid with general state or local tax revenues but rather from user fees or facility-specific taxes. Qualified 501(c)(3) (non-profit) entities, for example, can issue tax-exempt, private activity bonds for projects that would in many cases be considered infrastructure.

An infrastructure bank would likely rely significantly on some or all of these tax tools for subsidization. For example, H.R. 402 exempts debentures issued by the bank from all state and local taxes.[71]

A common tool used in transportation finance is grant anticipation revenue vehicles, or GARVEE bonds. These tax-exempt bonds are similar to revenue bonds in that they are secured by future revenues, in this case, grants from the federal government.[72]

In addition to tax-exempt bonds, the American Recovery and Reinvestment Act (ARRA, P.L. 111-5) included a debt tool for infrastructure finance, Build America Bonds (BABs). The authority to issue BABs expired December 31, 2010. They were projected to generate a decline in federal revenues of $0.9 billion in 2010, increasing to $3.1 billion in 2012.[73] Unlike tax-exempt bonds, the interest payments to the holders of BABs are taxable, resulting in higher interest rates than those on tax-exempt bonds, but the federal government reduced the cost to issuers by paying BAB issuers a credit equal to 35% of the interest payment.[74]

[71] See Section 11 of H.R. 402.

[72] The Federal Highway Administration (FHWA) identifies two types of GARVEES, "Direct" and "Indirect." Direct GARVEEs require "FHWA Division Office approval of the project authorization and debt-service schedule." Direct GARVEEs are tied to specific federal-aid apportionment categories. In contrast, "Indirect GARVEES" are also secured by anticipated federal aid, but are not directly linked to a specific aid category. In addition, the FHWA does not approve the "Indirect GARVEE" projects and has no oversight responsibility. For more on GARVEEs, see the U.S. Department of Transportation, Federal Highway Administration website at http://www.fhwa.dot.gov/ipd/fact_sheets/garvees.htm.

[73] Ibid.

[74] For example, if the negotiated taxable interest rate is 8% on a $100,000 BAB, then the investor would receive $8,000 and the issuer would receive a $2,800 "credit" ($8,000 times 35%). The issuer chooses BABs if the net interest cost is less than traditional tax-exempt debt. The interest cost to the issuer is $5,200 ($8,000-$2,800). If the tax-exempt rate is greater than 5.20% (requiring an interest payment of greater than $5,200), then BAB is a better option for the issuer.

BABs were well received by investors and issuers, with the Securities Industry Financial Markets Association (SIFMA) reporting that almost $181.5 billion in BABs had been issued over the life of the program.[75] A U.S. Treasury Department report on BABs estimated that through March 2010 (when the study was released), the bonds had saved municipal issuers roughly $12 billion in interest costs.[76] The BAB program expired on December 31, 2010.

Public-Private Partnerships

Public-private partnerships (PPPs) are the primary way that the private sector can directly invest in public infrastructure.[77] Although estimates vary, it is widely believed that a substantial amount of private capital is available globally for infrastructure investment.[78] Owners of this capital seek the opportunity to own or lease assets that could have the potential for generating stable revenues over the long term. Revenues to pay off project loans or to pay dividends to private equity investors are typically generated through facility user fees such as a highway toll or water and sewer charges. In some cases, private-sector financing is backed by "availability payments," regular payments made by a government to the private entity based on negotiated quality and performance standards of the facility. For example, major improvements to I-595 near Fort Lauderdale, FL, are being made by a private company that will design, build, finance, operate, and maintain the facility for 35 years with availability payments made by the Florida Department of Transportation (FDOT). Toll rates on the new express lanes will be set by FDOT, and revenue collected will be retained by the state. The financing includes a federal TIFIA loan and state funds.[79]

PPPs are arrangements that involve more than traditional private sector participation in one or more activities involved with designing, building, financing, and operating infrastructure. There are many forms a PPP can take, some with modest amount of private sector involvement, such as operations and maintenance contracts, and others in which the private sector controls most facets of the project. Despite the formation of PPPs in a number of sectors, some believe that the environment for PPPs in the United States is inhospitable compared with other countries such as France, Spain, and Australia. A national infrastructure bank has been suggested as one tool for

[75] Securities Industry Financial Markets Association website at http://www.sifma.org/research/research.aspx?ID=12476.

[76] U.S. Treasury Department, "Treasury Analysis of Build America Bonds and Issuer Net Borrowing Costs," April 2, 2010.

[77] For more information on PPPs in surface transportation see, CRS Report RL34567, *Public-Private Partnerships (PPPs) in Highway and Transit Infrastructure Provision*, by William J. Mallett. See also Government Accountability Office, *Wastewater Infrastructure Financing: Stakeholder Views on a National Infrastructure Bank and Public-Private Partnerships*, GAO-10-728, June 2010, at http://www.gao.gov/new.items/d10728.pdf.

[78] One group of banks and investment firms has estimated $190 billion. See Sphere Consulting, "The Benefits of Private Investment in Infrastructure," at http://www.sphereconsulting.com/images/stories/benefits_of_private_investment_in_infrastructure.pdf. Former Secretary of Transportation Mary Peters estimates at least $400 billion of private sector capital available for infrastructure investment. Another commentator has suggested, even taking into account problems in global credit markets, funds available might range from $340 billion to $600 billion. See CRS Report RL34567, *Public-Private Partnerships (PPPs) in Highway and Transit Infrastructure Provision*, by William J. Mallett, p. 16.

[79] See Florida Department of Transportation, I-595 Express Corridor Improvement Project, at http://www.i-595.com/index.asp.

overcoming barriers to PPP formation and, as a corollary, for attracting new private sector funds to infrastructure investment.[80]

Table A-1. Total Annual Issuance of Long-Term State and Local Government Debt, 2009 Through August 2011

	2009		2010		Through August 2011	
	Amount	% of Total	Amount	% of Total	Amount	% of Total
Total Volume	$409,688,500	100.0%	$433,241,100	100.0%	$164,680,800	100.0%
By Purpose						
Education	91,470,300	22.3%	100,801,500	23.3%	50,850,100	30.9%
General Purpose	128,806,200	31.4%	119,460,300	27.6%	43,404,400	26.4%
Utilities	40,037,900	9.8%	44,562,600	10.3%	18,776,100	11.4%
Transportation	48,775,200	11.9%	66,885,300	15.4%	17,041,000	10.3%
Health Care	46,151,800	11.3%	31,400,400	7.2%	13,751,000	8.4%
Electric Power	16,126,300	3.9%	30,161,900	7.0%	6,904,800	4.2%
Housing	10,241,300	2.5%	9,908,500	2.3%	4,733,800	2.9%
Development	7,242,200	1.8%	10,969,300	2.5%	4,410,300	2.7%
Public Facilities	12,913,400	3.2%	11,306,700	2.6%	3,820,100	2.3%
Environmental Facilities	7,923,900	1.9%	7,784,600	1.8%	989,200	0.6%
By Tax Treatment						
Tax Exempt	323,442,400	78.9%	275,538,900	63.6%	139,888,500	84.9%
Taxable	84,666,700	20.7%	151,864,300	35.1%	20,086,000	12.2%
Minimum Tax	1,579,400	0.4%	5,837,900	1.3%	4,706,300	2.9%
By Type of Stimulus						
Build America Bonds	64,151,500	15.7%	117,347,100	27.1%	0	0.0%
Other Stimulus[a]	3,441,700	0.8%	16,787,800	3.9%	3,632,600	2.2%
New Projects vs. Refund of Existing Debt						
New Money	261,331,600	63.8%	279,801,400	64.6%	87,843,500	53.3%
Refunding	86,455,900	21.1%	98,457,500	22.7%	49,582,900	30.1%
Combined	61,901,000	15.1%	54,982,200	12.7%	27,254,400	16.5%
By Type of Security						
Revenue	254,710,800	62.2%	285,808,000	66.0%	99,340,800	60.3%
General Obligation	154,977,700	37.8%	147,433,100	34.0%	65,340,000	39.7%
By Type of Credit Enhancement						
Bond Insurance	35,401,200	8.6%	26,857,400	6.2%	8,385,600	5.1%

[80] Michael Likosky, Conference Sponsored by the New America on A Bank To Rebuild America, Comments made in the Session "How An Infrastructure Bank Could Work," Washington, DC, June 8, 2011, at http://newamerica.net/events/2011/a_bank_to_rebuild_america.

	2009		2010		Through August 2011	
	Amount	**% of Total**	**Amount**	**% of Total**	**Amount**	**% of Total**
Letters of Credit	20,434,400	5.0%	11,817,000	2.7%	4,466,400	2.7%
Standby Purchase Agreements	4,071,700	1.0%	3,469,300	0.8%	1,387,700	0.8%
Insured Mortgages	2,536,800	0.6%	2,185,900	0.5%	1,147,400	0.7%
Other Guarantees	8,120,300	2.0%	24,495,700	5.7%	12,630,800	7.7%
By Type of Issuer						
State Authorities	120,395,300	29.4%	125,935,600	29.1%	47,479,700	28.8%
Local Authorities	59,921,400	14.6%	86,569,700	20.0%	29,250,200	17.8%
Special Districts	50,145,700	12.2%	63,156,400	14.6%	28,822,100	17.5%
Cities & Towns	29,011,600	7.1%	56,406,600	13.0%	26,619,900	16.2%
State Governments	61,408,500	15.0%	52,595,300	12.1%	17,004,700	10.3%
Counties & Parishes	71,216,200	17.4%	29,047,400	6.7%	9,507,600	5.8%
Colleges & Universities	14,935,100	3.6%	14,646,900	3.4%	4,603,000	2.8%
Direct Issuers	2,577,500	0.6%	4,684,500	1.1%	1,325,800	0.8%
Electric Cooperative Utilities	0	0.0%	86,400	0.0%	67,800	0.0%
Tribal Governments	77,200	0.0%	112,300	0.0%	0	0.0%

Source: Data are courtesy of The Bond Buyer and SourceMedia Inc.

Notes: Percentage calculations are generated by CRS. The data for 2011 are through August 2011.

a. Other Stimulus includes other bond programs that could include but is not limited to: Qualified School Construction Bonds, Recovery Zone Economic Development Bonds, and Tribal Economic Development Bonds.

Appendix B. Projects Eligible for Financing Under Legislative Proposals

Table B-1. Projects Eligible for Assistance Under Infrastructure Bank Legislative Proposals

Project Type	S. 652	S. 936	H.R. 402
Transportation			
highway	x	x	x
road	x		x
bridge	x	x	x
mass transit	x		
inland waterway	x	x	x
commercial port	x		x
airports	x	x	x
air traffic control systems	x	x	
passenger rail	x	x	
high speed rail	x		x
freight rail	x	x	x
transmission or distribution pipeline		x	
public transportation systems or facility		x	
intercity passenger bus		x	
transit and intermodal system			x
Water			
water waste treatment facility	x		x
drinking water facility			x
storm water management facility	x		x
dam	x		x
solid waste disposal facility	x		x
levee	x		x
port or marine facility		x	
Energy			
pollution reduced energy generation	x		
transmission and distribution	x		x
storage	x		x
energy efficient enhancements for buildings (public and commercial)	x		x
renewable energy			x

Project Type	S. 652	S. 936	H.R. 402
Other			
open space management system			x
hazardous waste facility			x
industrial site clean-up			x
solid waste disposal facility			x
telecommunications			x

Source: The bills define individual project types differently. Hence, in instances it may be unclear exactly how certain types differ from one another as common definitions are not provided.

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