

Encouraging Private Infrastructure Investment

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to the Joint Economic Committee

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Mr. Chairman and members of the committee, thank you for inviting me to testify today. My comments will examine the federal role in infrastructure and discuss opportunities for greater private investment.

The importance of infrastructure investment for U.S. economic growth is widely appreciated. But policy discussions often get sidetracked by a debate over the level of federal spending. The more important issues for spurring growth are to ensure that investment is as efficient as possible and to properly allocate responsibilities between the federal government, the states, and the private sector.

Federal infrastructure spending often gets bogged down in mismanagement and cost overruns. And decades of experience show that many federal investments get misallocated to low-value activities because of politics. That's why we should tackle the nation's infrastructure challenges by decentralizing the financing, management, and ownership of investments as much as possible. State and local governments and the private sector are more likely to make sound investments without the federal subsidies and regulations that distort their decisionmaking.

My testimony will discuss the growing private sector involvement in financing, constructing, and operating infrastructure such as highways, bridges, and aviation facilities around the world. Privatization of infrastructure promises to improve economic efficiency, spur growth, and reduce financial burdens on governments and taxpayers. As such, policymakers should focus on removing federal barriers to privatization.

Federal Infrastructure in Perspective

Most of America's infrastructure is provided by the private sector, not governments. Indeed, private infrastructure spending—on factories, freight rail, pipelines, refineries, and other items—is much larger than federal, state, and local government infrastructure spending combined.

A broad measure of infrastructure spending is gross fixed investment, as measured in the national income accounts.¹ In 2012 private investment was \$2 trillion, which compared to federal, state, and local government investment of \$472 billion. Excluding defense, government investment was \$367 billion. Thus, private infrastructure investment in the United States is five times larger than total nondefense government investment.

One implication of the data is that if policymakers want to boost infrastructure spending, they should make policy reforms to spur private investment. Cutting the federal corporate income tax rate, for example, would increase the net returns to a broad range of private infrastructure, and thus spur greater investment.

Nonetheless, government infrastructure is certainly important to the economy. But I am skeptical of claims that the United States has an infrastructure crisis because governments are not spending enough. For one thing, government investment as a share of gross domestic product (GDP) in the United States is in line with the other nations of the Organization for Economic Cooperation and Development (OECD). In 2010 government gross fixed investment in the United States was 3.5 percent of GDP, which was a little higher than the OECD average of 3.3 percent.²

Another reason for skepticism that governments are underinvesting is that some measures of infrastructure quality have shown steady improvement. For example, Federal Highway Administration (FHWA) data show that the nation's bridges have steadily improved in quality.³ Of the roughly 600,000 bridges in the country, the share that are "structurally deficient" has fallen from 22 percent in 1992 to 11 percent in 2012, while the share that are "functionally obsolete" has fallen from 16 percent to 14 percent.

The surface quality of our interstate highways has also steadily improved. A study by Federal Reserve economists examining FHWA data found that "since the mid-1990s, our nation's interstate highways have become indisputably smoother and less deteriorated."⁴ And the economists concluded that the interstate system is "in good shape relative to its past condition."

Problems with Federal Infrastructure Spending

There are frequent calls for increased federal spending on infrastructure, but advocates usually ignore the problems and failures of past federal efforts. There is a history of pork-barrel politics and bureaucratic mismanagement of many types of federal investment. Here are some of the problems:

- ***Investment is misallocated.*** Federal investments are often not based on actual marketplace demands. Amtrak investment, for example, has long been spread around to low-population areas where passenger rail makes little economic sense. Most of Amtrak's financial losses come from long-distance routes through rural areas that account for only a small fraction of all riders.⁵ Every lawmaker wants an Amtrak route through their state, so investment gets misallocated away from where it is really needed, such as the Northeast corridor.
- ***Investments are utilized inefficiently.*** Government infrastructure is often utilized inefficiently because supply and demand are not balanced by market prices. The vast water infrastructure operated by the Bureau of Reclamation, for example, greatly underprices irrigation water in western United States. The result has been wasted

resources, harm to the environment, and a looming water crisis in many areas in the West.⁶

- ***Investment is mismanaged.*** Federal agencies don't have the strong incentives that private businesses do to ensure that infrastructure projects are completed and operated efficiently. Federal highway, energy, airport, and air traffic control projects, for example, have often suffered large cost overruns.⁷ The Big Dig in Boston—which was two-thirds funded by the federal government—exploded in cost to five times the original estimate.⁸ U.S. and foreign studies have found that privately financed infrastructure projects are less likely to have cost overruns than traditional government projects.⁹
- ***Mistakes are replicated across the nation.*** Perhaps the biggest problem with federal intervention in infrastructure is that when Washington makes mistakes it replicates them across the nation. High-rise public housing projects, for example, were a terrible idea that federal funding helped spread nationwide. Federal subsidies for light-rail projects have biased cities to opt for these expensive systems, even though they are generally less efficient and flexible than bus systems.¹⁰ High-speed rail represents another federal effort to induce the states to spend money on uneconomical infrastructure.¹¹
- ***Burdensome Regulations.*** A final problem with federal infrastructure spending is that it usually comes part and parcel with piles of regulations. Federal Davis-Bacon labor rules, for example, raise the cost of building state and local infrastructure. In general, federal regulations impose one-size-fits-all solutions on the states even though the states may have diverse infrastructure needs.

Global Trend Toward Privatization

The answer to America's infrastructure challenges is not greater federal intervention, but greater involvement by the private sector. There has been a worldwide trend toward infrastructure privatization. Since 1990 about \$900 billion of state-owned assets have been sold in OECD countries, about 63 percent of which has been infrastructure assets.¹² What spurred the trend? The OECD says that "public provision of infrastructure has sometimes failed to deliver efficient investment with misallocation across sectors, regions, or time, often due to political considerations. Constraints on public finance and recognized limitations on the public sector's effectiveness in managing projects have led to a reconsideration of the role of the state in infrastructure provision."¹³

Short of full privatization, many countries have partly privatized infrastructure through public-private partnerships ("PPPs" or "P3s"). P3s differ from traditional government contracting by shifting various elements of financing, management, operations, and project risks to the private sector. In a 2011 report, the OECD found a "widespread recognition" around the world of "the need for greater recourse to private sector finance" in infrastructure.¹⁴

Unfortunately, the United States “has lagged behind Australia and Europe in privatization of infrastructure such as roads, bridges and tunnels,” notes the OECD.¹⁵ About one fifth of public infrastructure spending in Britain is now through the P3 process, and in Canada P3s account for between 10 to 20 percent of public infrastructure spending.¹⁶

According to *Public Works Financing*, only 1 of the top 38 firms doing transportation P3s around the world are American.¹⁷ Of more than 700 transportation projects listed in the newsletter, only 28 are in the United States. Canada—a country with one-tenth of our population—has about the same number of P3 deals as we do.

Nonetheless, a number of U.S. states have moved ahead with P3s and privatization. Some projects in Virginia illustrate the opportunities:¹⁸

- *Capital Beltway*. Transurban and Fluor have built and are now operating new toll lanes along 14 miles of I-495. The firms used debt and equity to finance most of the project’s \$2 billion cost.¹⁹ The lanes were completed on time and on budget in 2012.
- *Dulles Greenway*. The Greenway is a privately owned toll highway in Northern Virginia completed in the mid-1990s with \$350 million of private debt and equity.²⁰
- *Jordan Bridge*. FIGG Engineering Group and partners financed and constructed a \$142 million highway bridge over the Elizabeth River between Chesapeake and Portsmouth. The bridge opened in 2012, and its cost will be paid back to investors over time with toll revenues.²¹

There are many advantages of infrastructure P3s and privatization. Most fundamentally, when private businesses are taking the risks and putting their profits on the line, funding is more likely to get allocated to high-return projects and completed in the most efficient manner.

U.S. and foreign experience indicate that P3s are more likely to be completed on time and on budget than traditional government contracts. An Australian study compared 21 P3 (or PPP) projects with 33 traditional projects and found: “PPPs demonstrate clearly superior cost efficiency over traditional procurement . . . PPPs provide superior performance in both the cost and time dimensions, and . . . the PPP advantage increases (in absolute terms) with the size and complexity of projects.”²²

Studies of British P3s have found similar positive results.²³ A government official overseeing the Capital Beltway P3 lauded the private firms in charge for their rapid and nonbureaucratic way of solving problems that arose during construction, which is “not the way government works typically,” he said.²⁴

The publisher of *Public Works Financing*, William Reinhardt, notes that “the design-build contracting approach used in a P3 guarantees the construction price and project completion schedule of large, complex infrastructure projects that often befuddle state and local governments, as was the case with Boston’s Big Dig.”²⁵ Reinhardt says that P3 projects typically experience capital cost savings of 15 to 20 percent compared to traditional government contracting.

A Brookings Institution study noted that the usual process of government investing decouples the construction from the future management of facilities, which results in contractors having little incentive to build projects that will minimize long-term costs.²⁶ P3s solve this problem because the same company both builds and operates new facilities. “Many advantages of PPP stem from the fact that they bundle construction, operations, and maintenance in a single contract. This provides incentives to minimize life-cycle costs,” notes the study.

Another reason why privatized infrastructure is efficient is that businesses can tap capital markets to build capacity and meet market demands, without having to rely on the instability of government budgeting. Our air traffic control (ATC) system needs major upgrades, but the Federal Aviation Administration (FAA) cannot count on a stable federal funding stream. The recent threatened disruptions to ATC from federal budget sequester cuts illustrate the hazards of having infrastructure depend on federal funding.

The solution in this case is to privatize the U.S. air traffic control system, as Canada did with its system in 1996 with very favorable results.²⁷ Canada’s ATC is run by the nonprofit corporation Nav Canada separate from the government. It raises revenues from its customers to cover its operational and capital costs. Nav Canada is a “global leader in delivering top class performance,” says the International Air Transport Association, which has given the company multiple awards.

Hurdles to Private Infrastructure Investment

Despite the benefits of private infrastructure investment, federal policies have long created hurdles for the states in pursuing privatization. Federal policymakers should free states from regulations and subsidies so that they can become “laboratories of democracy” for infrastructure. Here are some barriers to private infrastructure that policymakers should examine:

- ***Tax exemption on municipal bond interest.*** When state and local governments borrow funds to build infrastructure, the interest on the debt is tax-free under the federal income tax. That allows governments to finance infrastructure at a lower cost than private businesses, which stacks the deck against the private provision of infrastructure. Policymakers should consider phasing-out the tax exemption on state and local bond interest, perhaps in exchange for reducing overall tax rates on capital income.
- ***Income and Property Taxation.*** Government facilities don’t pay income taxes. While state-owned airports are tax-exempt, for example, a for-profit airport would have its net earnings taxed at both the state and federal levels.²⁸ Similarly, government-owned facilities are exempt from property taxes almost everywhere in the United States, while for-profit businesses often bear a heavy burden of property taxes on their land, structures, and machinery and equipment.²⁹ Note that by privatizing infrastructure and thus subjecting it to taxation, governments would be broadening the tax base. They

could use the added revenues from base broadening to reduce overall tax rates, which would spur greater investment of all types in the economy.

- ***Crowding Out.*** The existence of government infrastructure—which is often provided at artificially low prices to the public—deters potential private investments. Private highways, for example, face an uneven playing field because drivers on a private highway would have to pay the private tolls plus the gasoline taxes that fund the government’s “free” highways.
- ***Federal subsidies.*** The crowding out problem is exacerbated when federal subsidies tilt state and local decisionmakers in favor of government provision. Potential private airports, for example, are not eligible for most federal airport subsidies. Or consider that before the 1960s most urban bus and rail services in America were privately owned and operated. But that ended with the passage of the Urban Mass Transportation Act of 1964. The Act provided subsidies only to government-owned bus and rail systems, not private systems.³⁰ That prompted state and local governments across the country to takeover private systems, swiftly ending more than a century of private transit investment in America’s cities.
- ***Federal regulations.*** Federal regulations have restricted efforts to privatize state and local infrastructure. One issue has been that states receiving federal aid for their facilities have been required to repay the aid if the facilities are privatized. These rules have been liberalized over the years, but they may still create a disincentive to privatize in some cases.³¹ Another issue is that tolling has been generally prohibited on interstate highways, which prevented P3-style projects. However, the 2012 highway bill (MAP-21) allowed for the tolling of new capacity on the interstates, which is a step forward.³² Federal policymakers should work to eliminate remaining regulations that stand in the way of infrastructure privatization.³³
- ***Labor Unions.*** Privatization would undermine the power of the public-sector unions that often dominate government services, and so unions actively lobby against reforms. Unions lobby against contracting-out airport security screening operations.³⁴ The National Air Traffic Controllers Association lobbies against ATC privatization. And in the District of Columbia, unions are trying to block a proposal to allow private operation of some bus services.³⁵ One solution to the problem is to ban monopoly unions (“collective bargaining”) in the public sector, which is the rule in a number of states.³⁶
- ***Social Security.*** The structuring of Social Security as a pay-as-you-go system is a negative for privatized infrastructure. One of the fuels for the rise in P3s in other countries has been growing investment by pension funds. Infrastructure investment is a good fit for pension funds because it provides a return over a very long period of time, which matches the pattern of long-term liabilities of these funds. In Canada and Australia, the growth in P3s has been partly driven by the pools of savings created by reformed government retirement programs. In the United States, reforms to create

Social Security private accounts would create a large pool of long-term savings to help fuel private infrastructure investment.

Policymakers should reduce the hurdles to private investment so that we can attract more entrepreneurs to tackle the nation's infrastructure challenges. After all, private infrastructure is not a new or untried idea. Urban transit services used to be virtually all private.³⁷ And before the 20th century, private turnpike companies in America built thousands of miles of toll roads.³⁸ The takeover of much infrastructure by governments in the 20th century was a mistake, and policymakers here and abroad are now working to correct the overreach.

In sum, there is widespread agreement that America should have top-notch infrastructure to spur growth and compete in the global economy. The way forward is for the federal government to cut subsidies and reduce its control over the nation's infrastructure. State and local governments should be encouraged to innovate with privatization and P3s to the full extent possible.

Thank you for holding these important hearings.

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¹ U.S. Bureau of Economic Analysis, National Income and Product Accounts, Table 1.5.5, www.bea.gov.

² This is OECD data for government gross fixed capital spending. The data underlies Figure 2.1 in OECD, "Pension Funds Investment in Infrastructure: A Survey," September 2011.

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⁶ Chris Edwards and Peter J. Hill, "Cutting the Bureau of Reclamation and Reforming Water Markets," Cato Institute, February 2012, www.downsizinggovernment.org/interior/cutting-bureau-reclamation.

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⁸ For background, see the *Boston Globe's* "Easy Pass" series of reports by Raphael Lewis and Sean Murphy, www.boston.com/globe/metro/packages/bechtel.

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- ¹⁶ *Public Works Financing*, October 2011, p. 18, www.pwfinance.net.
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- ¹⁸ Details on Virginia's PPPs are available at www.vappta.org/projects.asp.
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