INFRASTRUCTURE INVESTMENT

Congress should

- privatize federally owned infrastructure, including passenger rail, electric utilities, and air traffic control;
- cut federal aid for highways, urban transit, airports, and other infrastructure owned by state and local governments;
- free the states from federal regulations that raise the costs of infrastructure projects; and
- reform federal laws that impede state and local privatization.

The importance of infrastructure investment to the U.S. economy is widely recognized. But policy discussions usually focus on the level of subsidies and ignore the efficiency of infrastructure investment and operation, which would increase if the federal role were reduced. State and local governments and the private sector are more likely to make sound infrastructure decisions without federal intervention.

Government Infrastructure in Perspective

The word "infrastructure" refers to long-lived fixed assets that provide a backbone for other activities in the economy. In the United States, most infrastructure is provided by the private sector, not by governments. In 2021, gross fixed private nonresidential investment was $3.1 trillion, according to the U.S. Bureau of Economic Analysis. That includes investment in factories, freight rail, pipelines, refineries, power plants, cell towers, satellites, and many other items.

By contrast, total federal, state, and local government infrastructure investment in 2021 was $802 billion. Excluding national defense, government investment was $606 billion. Thus, private investment in infrastructure is five times larger than government investment in nondefense infrastructure.

One implication of the data is that if policymakers want to strengthen the nation's infrastructure, they should enact reforms that spur private investment.

In particular, they should reduce regulations and business income tax rates, which would increase returns and boost investment for a broad range of infrastructure assets.

Although smaller than private investment, government investment in infrastructure is also important. Congestion on our highways, at airports and seaports, and with other infrastructure imposes substantial costs on the economy, as does inefficiency in the investment and operation of those facilities. The solution to these problems lies in state and local government reforms and in privatization, not in greater federal intervention.

Problems with Federal Intervention

Frequent calls to support infrastructure spending led to the passage of the Infrastructure Investment and Jobs Act of 2021. The law increased federal spending on infrastructure over five years by $550 billion. Unfortunately, the legislation did not tackle the distortions created by existing federal subsidies for infrastructure. Indeed, the law will increase distortions by expanding the scope of subsidies to include the broadband, electricity, and automobile industries. In turn, these new subsidies will likely encourage more private industries to lobby Washington for subsidies down the road.

Here are some of the distortions created by federal subsidies and interventions:

- **Investment is misallocated.** Federal investments are often based on pork barrel and bureaucratic factors rather than on marketplace demands. Amtrak investment, for example, is spread around to low-population regions where rail carries few passengers and is slower than intercity buses. Because lawmakers all want an Amtrak route through their state, investment gets steered away from where it is really needed, such as the Northeast Corridor.
- **Infrastructure is utilized inefficiently.** Government infrastructure is often used inefficiently because supply and demand are not balanced by market prices. The water infrastructure operated by the Bureau of Reclamation, for example, underprices irrigation water in the western United States. That wastes resources, harms the environment, and contributes to a looming water crisis in many areas in the West.
- **Projects are mismanaged.** Governments do not have strong incentives to construct infrastructure efficiently. Federally funded highway, transit, airport, and air traffic control projects often have large cost overruns. The budget for the Big Dig highway project in Boston—which was two-thirds funded by the federal government—exploded to five times the original

cost estimate. Similarly, the Army Corps of Engineers and the Bureau of Reclamation have built numerous projects that were financial boondoggles.

- **Mistakes are replicated.** When Washington makes infrastructure mistakes, it replicates them across the nation. High-rise public housing projects, for example, were a terrible idea that federal funding spread to cities nationwide in the mid-20th century. More recently, federal subsidies for light-rail projects have biased dozens of cities in favor of these expensive systems, even though they are usually less efficient and flexible than bus systems.
- **Regulations are costly.** Federal infrastructure spending comes tied to costly regulations. Federal Davis-Bacon rules, for example, inflate wage costs on highway projects by about one-fifth. President Biden added more bureaucracy to infrastructure projects with Executive Order 14063 in 2022, which imposes pro-union "project labor agreements" on federal construction contracts of more than $35 million. Also, federal environmental rules can impose costly delays on infrastructure projects. The number of environmental laws affecting transportation projects has risen from roughly 26 in 1970 to about 70 today.
- **Subsidies are not green.** The environmentally sound way of funding infrastructure is to charge the users of facilities. User charges for highways, bridges, airports, water systems, energy facilities, electric vehicle chargers, and other infrastructure limit consumer demand and minimize resource use. A problem with federal subsidies is that they replace user charges with funding from income taxes and debt. The Infrastructure Investment and Jobs Act of 2021 Act exemplified the problem with $550 billion in new spending financed by federal borrowing, not by efficient user charges that would limit demand.

The solution to all these problems is to privatize federally owned infrastructure, cut federal aid to the states, and reduce federal regulations so that the states can tackle their own infrastructure challenges in the most efficient manner.

Privatizing Federal Infrastructure

A privatization revolution has swept the world since the 1980s. Governments in more than 100 countries have transferred thousands of state-owned businesses worth more than $3 trillion to the private sector. Railroads, airports, seaports, energy utilities, and other infrastructure businesses have been privatized or partly privatized. Privatized infrastructure usually relies on funding from user charges, not subsidies, and thus tends to be more economically and environmentally sound than government infrastructure.

Unfortunately, some types of infrastructure that have been successfully privatized abroad remain in government hands in this country. Congress should study foreign reforms and proceed with privatizing the following infrastructure assets:

- **Air traffic control**. The Federal Aviation Administration has struggled to modernize our air traffic control (ATC) system. ATC is a high-technology industry, but we still run it as an old-fashioned bureaucracy. Meanwhile, Canada privatized its ATC system in 1996 as a self-funded nonprofit corporation. Today, the Canadian system is highly efficient and one of the safest in the world. The Canadians are on the leading edge of ATC technologies, and they sell their innovations worldwide.
- **Tennessee Valley Authority**. One of the largest utilities in the nation is owned by the federal government. The Tennessee Valley Authority (TVA) has a bloated cost structure and a poor environmental record, and it has wasted billions of dollars on its nuclear program. Electric utilities have been privatized around the world, so privatizing the TVA should be an obvious choice.
- **Amtrak.** The government's passenger rail company has a costly union workforce and a poor on-time record, and it loses about $2 billion a year. The bulk of the loss comes from running trains on low-ridership routes where intercity buses and air travel make more sense. Congress should privatize Amtrak and give entrepreneurs a crack at creating a downsized and more efficient system.
- **Power Marketing Administrations.** The federal government owns four Power Marketing Administrations (PMAs), which transmit wholesale electricity in 33 states. The power is mainly generated by hydroelectric plants owned by the Army Corps of Engineers and the Bureau of Reclamation. The PMAs receive numerous subsidies and sell most of their power at below-market rates. Congress should privatize the PMAs and the hydro plants.
- **Army Corps of Engineers.** The civilian part of the corps constructs and maintains water infrastructure, such as locks, waterways, and flood control structures. But the corps is filling roles that private engineering and construction companies could fill. When the states need to construct and maintain levees, harbors, beaches, inland waterways, and recreational areas, they should hire private companies to do the work. The Army Corps of Engineers should be privatized and compete for such work.
- **Bureau of Reclamation.** This agency builds and operates dams, canals, and hydro plants in the 17 western states. It is the largest wholesaler of water in the nation. The bureau subsidizes irrigation water, a practice which distorts the economy and causes environmental harm. The agency's facilities should be transferred to state government ownership or privatized.

States Should Lead on Infrastructure

When considering investments in highways and other assets, people often assume that Washington needs to lead the effort. But the great bulk of government infrastructure is owned by state and local governments, not the federal government, including the nation's highways, bridges, airports, seaports, and transit systems. The states can raise their own taxes or user charges to fund their transportation facilities anytime they want.

State and local governments should explore privatization and public-private partnerships (PPPs), which partially privatize infrastructure. PPPs shift some project financing, management, operations, and risks to the private sector. When businesses take the risks and put their profits on the line, investment is more likely to be allocated to high-return projects. Empirical studies have found that PPP projects are more likely to be completed on time and on budget than traditional government infrastructure projects.

The usual process of government contracting decouples construction from the future management of facilities, which results in contractors having little incentive to build projects that minimize long-term costs. PPPs solve this problem because the same company both builds and operates new facilities. Another advantage of PPPs is that businesses can tap capital markets to build capacity and meet market demands—thus avoiding the instability of government budgeting.

The United States lags Australia, Canada, and some other nations in using PPPs, but some states have pursued the approach. In Virginia, a private company built and now operates toll lanes along 14 miles of the Capital Beltway, I-495. The company used debt and equity to finance most of the project's $2 billion cost. The lanes were completed on time and on budget in 2012. Other PPPs in Virginia have been opened on 31 miles of I-95 and 8 miles of I-395.

Some state and local infrastructure can be fully privatized. In Virginia, the Dulles Greenway is a privately owned toll highway that was completed in the mid-1990s with $350 million of private debt and equity. Another private project in Virginia is the $142 million South Norfolk Jordan Bridge over the Elizabeth River, which was privately financed and constructed and has been operating since 2012. The construction costs of such private projects are paid back to investors over time from toll revenues.

In the United States, all major airports are owned by state and local governments, but many airports around the world have been privatized. A study by Airports Council International found that almost half the airports in the European Union are either "mostly" or "fully" private, and these airports carry about 75 percent of all passenger trips in the EU. Privatized airports fund their operations through passenger charges, airline charges, advertising, and revenues from airport retail and parking concessions.

Removing Barriers to Privatization

Why hasn't the United States kept pace with global trends in privatization? There are structural barriers to reform that deter policymakers from pursuing privatization:

- **Tax exemption on 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 can, which stacks the deck against the private provision of facilities such as airports.
- **Federal subsidies.** Federal subsidies tilt the states in favor of government-owned infrastructure. Most urban bus and rail services in America used to be privately owned and operated. But that ended with the passage of the Urban Mass Transportation Act of 1964, which provided subsidies to government-owned systems and prompted governments to take over private systems to access the subsidies. Similarly, in the early years of commercial aviation, many major U.S. airports were privately owned. But then the federal government began handing out regular subsidies to government-owned airports in the 1940s, and over time private airports were taken over by states and cities to access the federal aid.
- **Federal regulations.** Federal regulations can restrict state and local privatization. One restriction is that states that have received federal aid for facilities may be required to repay a portion of the past aid if facilities are privatized. Another restriction is that tolling is generally prohibited on interstate highways, although there are exceptions, such as projects that add new capacity.
- **Crowding out.** The existence of government infrastructure displaces or crowds out private investments, especially when government services are provided free to the public or at artificially low prices. Private facilities may also be at a disadvantage if their customers have to pay twice. Drivers using a private highway—such as the Dulles Greenway in Virginia—must pay the private tolls as well as the fuel taxes that fund the government's highways.
- **Income and property taxation.** Private facilities usually must pay taxes, which creates unfair competition with government facilities that do not. A for-profit airport, for example, would have to pay federal and state income taxes on its earnings. And government-owned facilities are nearly always exempt from property taxes, whereas for-profit businesses often bear a heavy burden of property taxes on their land, structures, and equipment.

To conclude, America should strive to have the world's best infrastructure, which would allow workers and businesses to better compete in the global economy. To pursue that goal, we should reduce federal intervention and devolve control over infrastructure to the states and private sector. Congress should repeal barriers to privatization, including the municipal bond tax exemption and federal aid to the states. The states should pursue PPPs and privatization for highways, airports, seaports, and other infrastructure that can be supported by user charges.

Suggested Readings

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