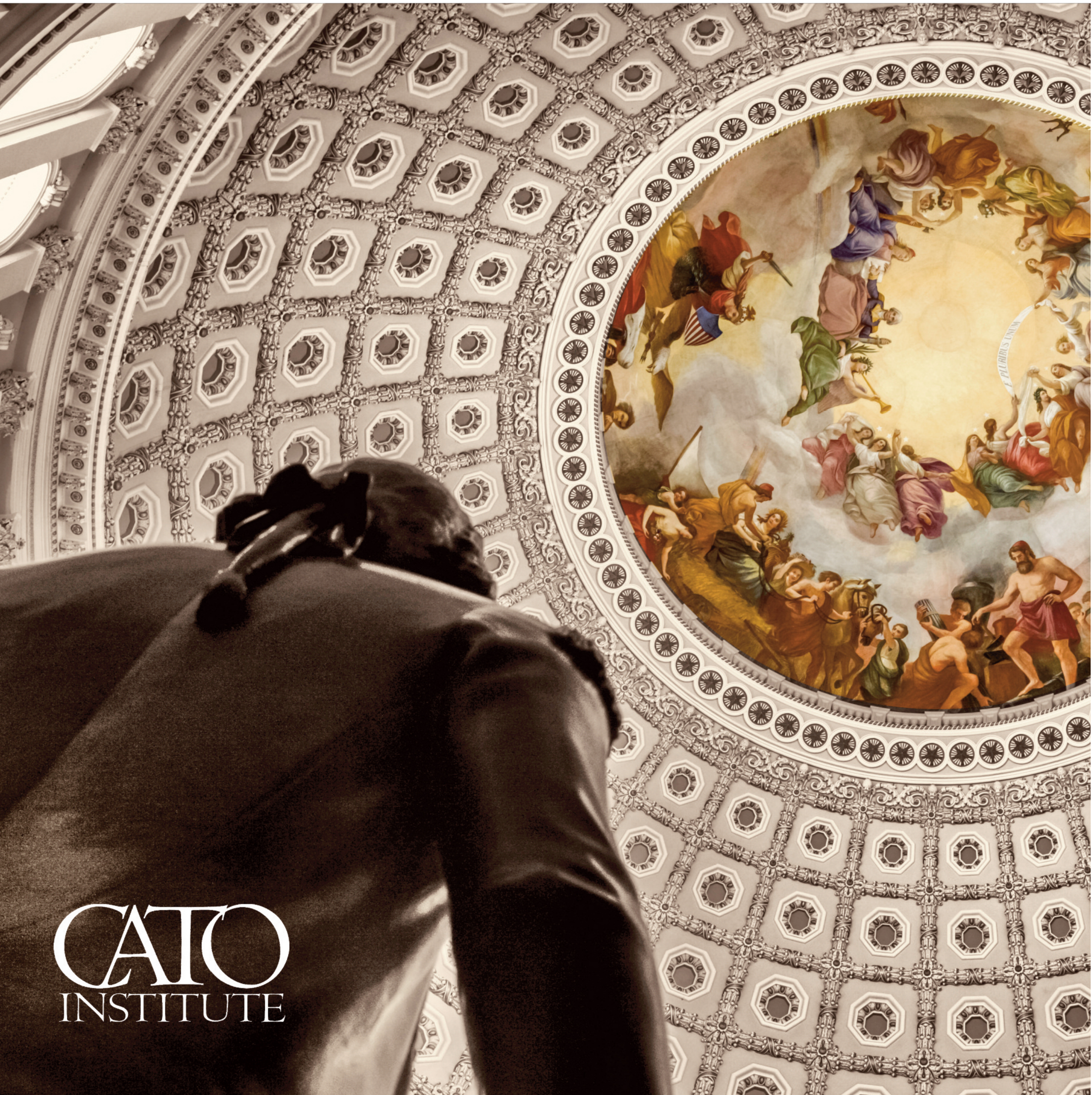
Cato Handbook *for* Policymakers

8TH EDITION



CATO INSTITUTE

33. Infrastructure Investment

Congress should

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

The importance of infrastructure investment to the U.S. economy is widely recognized. But policy discussions usually focus on the level of spending and ignore the efficiency by which investment is allocated and projects are built and operated. Efficiency and innovation 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 governments. In 2015, gross fixed private nonresidential investment was $2.3 trillion, according to the 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 2015 was $613 billion. Excluding national defense, government investment was $472 billion. Thus private infrastructure investment—broadly defined—is about five times as large as total nondefense government investment in 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 consider reductions in regulations and business tax rates, which would increase the net returns to a broad range of private infrastructure and thus spur greater investment spending.

Government investment in infrastructure, though smaller than private, is nevertheless important to the economy, and we should ensure that it is adequately funded. Many pundits say that America is underinvesting in public infrastructure and that our highways and bridges are crumbling. Such claims are off base. For one thing, government investment as a share of gross domestic product in the United States is similar to the average share among nations in the Organization for Economic Cooperation and Development (OECD). Over the past three years, the U.S. and OECD averages have both been 3.4 percent.

Also, rather than crumbling, some of our public infrastructure has steadily improved. Federal Highway Administration (FHWA) data on bridges show steady gains. Of the roughly 600,000 bridges in the country, the share that are "structurally deficient" has fallen from 22 percent in 1992 to 10 percent in 2015, while the share that are "functionally obsolete" has fallen from 16 percent to 14 percent.

Similarly, the surface quality of the interstate highways has improved. Examining FHWA data, Federal Reserve of Chicago economists found that "since the mid-1990s, our nation's interstate highways have become indisputably smoother and less deteriorated." They concluded that the interstate system is "in good shape relative to its past condition."

Nonetheless, America does face infrastructure challenges. Highway congestion imposes a large cost on the economy. Highways and bridges are aging. Our airports and seaports need investments to meet rising demands. State and local governments and the private sector—not the federal government—can best address these challenges.

Problems with Federal Intervention

There are frequent calls for increased federal spending on infrastructure, but advocates ignore the inefficiencies and failures of past federal efforts. Here are some of the problems:

- **Investment is misallocated.** Federal investments are often based on pork-barrel and bureaucratic factors rather than marketplace demands. Amtrak investment, for example, is spread around to low-population regions where passenger rail makes no economic sense. Lawmakers all want an Amtrak route through their state, so 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 vast water infrastructure operated by the Bureau of Reclamation, for example, underprices irrigation water in the western United States. The result is wasted resources, harm to the environment, and a looming water crisis in many areas in the West.
- **Projects are mismanaged.** Unlike private businesses, governments don't have strong incentives to ensure that projects are constructed efficiently. Federally funded highway, transit, airport, and air traffic control projects often have large cost overruns. The budget for the "Big Dig" in Boston—which was two-thirds funded by the federal government—exploded to five times the original cost estimate. And over the decades, the Army Corps of Engineers and Bureau of Reclamation have built numerous projects that were economic and environmental boondoggles.
- **Mistakes are replicated across the nation.** 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 nationwide. More recently, federal subsidies for light-rail projects have biased cities in favor of these expensive systems, even though they are generally less efficient and flexible than bus systems.
- **Burdensome regulations.** Federal infrastructure aid comes part and parcel with costly regulations. Federal Davis-Bacon rules raise the labor costs of building state and local infrastructure. The rules inflate wages on highway projects by about one-fifth. Federal environmental rules also impose costs on transportation projects. The number of environmental laws affecting transportation projects has risen from about 20 in 1970 to about 70 today, according to the FHWA.

The solution to 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 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.

Despite the global success of privatization, reforms have largely bypassed our own federal government. Infrastructure that has been privatized abroad remains in government hands in this country. Congress should study foreign reforms and privatize 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 TVA should be a no-brainer.
- **Amtrak.** The government's passenger rail company has a costly union workforce and a poor on-time record, and it loses more than a billion dollars a year. A lot of the losses come from running trains on routes with low ridership. Congress should privatize Amtrak and give entrepreneurs a crack at creating a better 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 Army 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 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. Reclamation subsidizes irrigation water, which distorts the economy and causes environmental harm. The agency's facilities should be transferred to state ownership or privatized.

States Should Lead on Infrastructure

When considering investments in highways and transit, people often assume that Washington needs to lead the effort. Many advocates support raising the federal gas tax to fund more highway and transit spending.

However, the nation's interstate highways, other highways, bridges, and transit systems are virtually all owned by state and local governments. The states can raise their own gas taxes to fund their transportation facilities anytime they want. Indeed, about half the states have raised their gas taxes or other transportation revenues over the past five years.

Furthermore, state governments have other options to finance their infrastructure. A growing trend around the world is partial privatization of infrastructure through public-private partnerships (P3s). P3s differ from traditional government contracting by shifting elements of financing, management, operations, and project risks to the private sector.

Infrastructure P3s have many advantages. When private businesses are taking some of the risks and putting their profits on the line, funding is more likely to be allocated to high-return projects and completed in an efficient manner. U.S. and foreign empirical studies find that privately financed infrastructure projects are more likely than traditional government projects to be completed on time and on budget.

Another issue is that the usual process of government contracting decouples construction from the future management of facilities. As a result, contractors have no incentive to build projects that minimize long-term costs. P3s solve this problem because the same company both builds and operates new facilities. Another advantage of P3s is that businesses can tap capital markets to build capacity and meet market demands—thus avoiding the instability of government budgeting.

P3s are a global trend, but the United States lags Australia, Canada, and other nations in pursuing this innovative approach. Nonetheless, some U.S. states have pursued P3s. In Virginia, a private partnership built and is now operating toll lanes along 14 miles of the Capital Beltway, I-495. The partnership 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.

P3s are a means to partially privatize, but full privatization is also possible for some infrastructure. In Virginia, the Dulles Greenway is a privately owned toll highway completed in the mid-1990s with $350 million of private debt and equity. Also in Virginia, the FIGG Engineering Group financed and constructed the $142 million Jordan highway bridge over the Elizabeth River. The bridge opened in 2012, and investors are being paid back over time from toll revenues.

Unfortunately, such private infrastructure projects are rare in the United States. Consider that dozens of major airports around the world have been privatized, yet virtually all commercial airports in this country are owned by state and local governments. A key problem is that the federal government creates barriers to state and local privatization.

Removing Barriers to State and Local Privatization

Despite the benefits of private infrastructure, federal policies create hurdles to private sector investments. Congress should address the following issues:

- **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 federal income tax rules. 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. Congress should repeal the tax exemption on state and local bond interest to level the playing field.
- **Federal subsidies.** Federal subsidies tilt state and local lawmakers in favor of government provision of infrastructure. Private airports, for example, are generally not eligible for federal airport subsidies. Or consider urban transit. Before the 1960s, most 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. That act provided subsidies only to government-owned bus and rail systems, not private systems. The change prompted governments across the

country to take over private systems, ending more than a century of private transit in our cities. Congress should end federal aid for state and local infrastructure.

- **Federal regulations.** Various federal regulations restrict state and local privatization. For example, states that have received federal aid for their facilities are generally required to repay the past aid if facilities are privatized. Another issue is that tolling is generally prohibited on existing interstate highways, a ban that has reduced the scope for P3 projects. Congress should eliminate these and other regulations that stand in the way of infrastructure privatization.

To conclude, America should strive for top-notch infrastructure in order to compete in the global economy. The best way forward is to reduce federal intervention and devolve control over infrastructure to the states and private sector. The states themselves should innovate with P3s and full privatization. Governments should encourage entrepreneurs to enter the fray with new ideas for meeting the nation's infrastructure demands.

Suggested Readings

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