

PUBLIC-PRIVATE PARTNERSHIPS

Brave New World

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Americans take millions of trips every day—to work, for pleasure, and from errand to errand. The nation's system of roads is one of the world's most impressive public investments and has contributed greatly to our economic success. At the same time, Americans are proud of our commitment to a market system that has afforded us a standard of living envied by the entire world. So why maintain the belief that only the public sector can provide for our transportation needs?

The source of this belief is certain assumptions made about who is responsible for delivering and maintaining the road system and who should pay for it. Roads are assumed to be a public good. A public good is a product or service that everyone needs and from which everyone benefits, but that private firms do not have sufficient incentive to produce; thus the market will supply either an insufficient quantity of the good or none at all. This stems from the fact that no one can be excluded from using or enjoying a public good, and that one person's use of such a good does not affect anyone else's use of it. The most common example of a public good is national defense. If one person benefits from having an air force or an army, everyone does.

The truth is that much of the nation's transportation system is commercially viable and should not be treated as a true public good. When transportation planners tell us that ridership on a particular strip of roadway is expected to increase dramatically, we know that the cost to maintain the road will increase as well. Adding one extra-heavy truck will put a strain on the system and decrease the life of our infrastructure investment. Moreover, many roads and bridges can be priced to benefit their intended users, allowing private firms to assess the commercial viability of under-

taking certain infrastructure projects. When highways, for example, are viewed as a public good, there is a tendency to treat them as a public charity, placing highway professionals in the position of being landlords instead of managers. Transportation is neither a true public good nor a purely private one.

Indeed, responsibility for transportation investment lies with a mix of public, public-private, quasi-public, and private entities. Responsibilities for the various transportation modes have shifted over time. Early roads in this country were private and were often toll roads. Bridges were private and tolled, and some such bridges still exist. The railroads were private for both freight and passengers; today rail freight is private, and passenger service is quasi-public. Subways in New York were initially private. Airports also started out private; some remain so, but most have shifted to local governments or quasi-public entities. To deal with these myriad levels of responsibility, various schemes have been devised for the relevant entities to finance their investments—from reliance on market forces to the imposition of user fees and tolls. Some have worked, while others have not.

Growing Interest in Private Involvement

The biggest driving force behind the new interest in private involvement in transportation has been the changing nature of the federal-state partnership. Our public capital represents investments made in the past that support our present standard of living.

America's transportation network is the largest and most complex system in the world. Construction and maintenance of this system requires massive amounts of public spending each year. Yet in

1993 total spending by all levels of government fell \$16.7 billion short of the investment needed just to maintain the current system and \$39.5 billion short of the amount required to improve conditions. The U.S. Department of Transportation estimates that approximately \$249 billion will be needed during the next 5 years simply to maintain the existing condition of the nation's highways. The Transportation Equity Act for the 21st Century (TEA-21), recently passed by Congress, does not meet the level of investment necessary to maintain the system or handle growing capacity demands. As we approach the 21st century, our ability to compete globally depends on our willingness to make critical domestic transportation investments.

Private-sector involvement in transportation is nothing new. Transportation agencies have used private firms extensively for construction, maintenance, design, and engineering services. Private firms have assisted governments in preparing designs for public works projects and providing utility services as regulated monopolies. But prior to recent federal legislation and several local initiatives, there were only a limited number of arrangements with private firms concerning ownership and operation of highway facilities.

As budget realities are brought to bear, all levels of government are looking for new ways to finance increased infrastructure investment. The gap between revenue and needs grows wider every year. Filling that gap typically falls on state and local governments, where fiscal pressures appear likely to continue for many years, independent of current budget surpluses. This trend shows no signs of abating, as demands on the road system increase while the need to limit government spending grows. Governments at all levels are seeking service-delivery approaches that can contain costs and improve the quality of services provided. Unfortunately, the gas tax is limited in its ability to finance the gaps (see article by Giglio and Williams in this issue), and the returns will diminish as we achieve other social goals, such as environmentally and energy-efficient automobiles, trucks, and buses. Thus we need to look at new opportunities.

Controlling costs and providing better services should be the public policy goals of any government agency, regardless of budgetary constraints. For many reasons, however, public agencies are not always able to deliver on these goals. Greater involvement of the private sector is one way to contain costs, improve service, and free up some room in government budgets for true public goods.

Public-Private Partnerships

Public-private partnerships offer the hope of enabling the transportation industry to increase the number and amount of transportation investments. Initial efforts, however, have not been promising. The public sector's approach is to use the private sector as a contractor, not as a partner. Contracting out work does not include the private sector in the investment, nor does it involve private equity, and thus the private sector has limited incentive to generate the best return for the project. The public sector monitors, inspects, and oversees the private sector to ensure that the project is accomplished correctly. The relationship between the participants is one of distrust.

An opportunity within public-private partnerships is the development of a real "equity partnership" approach. This approach cannot be used for all or even most projects, but it can be applied for some and often for larger projects. Under this approach, the public and private sectors share in both the risks and profits of the project over the long haul. Each brings its strengths to bear. For example, the public sector has the best resources for performing the up-front and high-risk work of project development, environmental assessment, community outreach, and condemnation. The private sector's contribution is efficiency and quality. Under the equity partnership approach, ensuring efficiency and quality is in the private sector's interest; therefore, the public sector need not worry about overhead rates, quality control, or inferior materials. Thus public-sector overhead costs can be lowered, thereby reducing the overall cost of the project. The public sector also shares in the project's profitability. This is especially relevant when the public sector takes the up-front risks.

Risk and Return

A key factor in any investment, whether public or private, is the assessment of risk and return. Simplistically, the return for the private sector is seen as monetary—either profits or increased market share/penetration that translates into profits. For the public sector historically, the return is not money, but various social or public goals, such as mobility access and economic development. Risk is also bifurcated. The private sector views risk as a threat that must be overcome by a larger opportunity for profits; for the public sector, risk is part of doing business to meet public goals.

These contrasting views have led to the idea that it is wrong for the public sector to earn a

monetary return on investments and for the private sector to make social goods equal to profits. This rigidity has led to a number of absurdities, particularly from the public side. For example, the building of the Interstate system has increased mobility and economic development in the United States. Throughout the nation, new businesses and investments cluster around Interstate interchanges. However, the public sector is not allowed to own the land around the interchange and share in the interchange's development. The public sector takes the risk and receives none of the economic development benefits associated with its investments. The result is that money is made, usage at the interchange increases, and the public sector has to maintain the interchange and often makes improvements to meet the increased demand.

These lost opportunities go beyond highways and extend to other modes as well. For example, transit is often the biggest victim of this public rigidity regarding profit. The transit infrastructure of New York City is essential for the city's economic vitality. However, transit is viewed as a financial sinkhole because it shares in none of the economic development profits. For example, the subway and PATH service into the World Trade Center complex allow that complex to exist profitably. However, none of the mall revenues or the office rentals in the complex are credited to transit. Consequently, PATH is a deficit operation of the Port Authority of New York and New Jersey, and the World Trade Center is viewed as a "cash cow."

Transportation investments, whether in highways or other modes, create value. The public sector should be able to capture all or some of that value to help finance and maintain the transportation investment and the overall transportation system.

Public or Private Sector?

We have in fact a surprising amount of leeway in deciding whether roads should be built and operated by the public or the private sector. The decision can be made on a road-by-road basis and comes down to which sector can deliver the best overall benefit to the public for the best value. How can a profit-seeking, tax-paying private company deliver services at lower cost than public agencies and still make a profit? At least five factors can enable private firms to deliver services less expensively or provide greater net benefit than public entities.

Greater Operating Efficiency

Greater operating efficiency means getting more return on one's investment. This results partly from good management, but managers must be free to exploit every opportunity to achieve greater efficiency—a luxury public agencies do not always enjoy.

Public agencies must make every effort to avoid the appearance of fraud or favoritism in their purchase of supplies and services. The result can be elaborate bidding procedures for purchase contracts, lengthy audits before bills are paid, and large amounts of time-consuming paperwork. Public agency managers rarely have the option of simply picking up the phone and choosing a supplier based on timely delivery, quality products, and attractive prices. They usually must restrict themselves to a small group of suppliers that have long-standing government contracts and can wait months to be paid. All of this means higher costs for every purchase contract.

The bottom-line focus of most private companies forces them to operate in a world in which elaborate procedures do not interfere with practical results. Private-sector managers can exploit the benefits of just-in-time inventory management, economies of scale in purchase orders, and meaningful measures of supplier performance to make their operations more efficient.

Greater efficiency in service delivery also means taking risks, including being aggressive in exploiting the potential of new technology to streamline production and reduce costs. Private managers are paid to accept and manage risk. Their public-sector peers, however, generally have no such incentives. Preferring not to "risk the public money" until technology has gained industry acceptance, for example, public agencies are usually last to adopt modern technology and end up with outdated systems.

Absence of Conflicting Goals

In theory, a public agency should have only one goal—to deliver effective services with maximum efficiency. In practice, however, this goal can often be complicated by others. These other goals may include various social benefits, such as providing more entry-level jobs for young people, higher community standards for wages and benefits, and improved opportunities for women and minorities. While important in their own right, these goals have the potential to conflict with an agency's service-delivery goal, and can result in higher costs for both public services and the social benefits they are intended to generate.

Politics also plays a big part in the administration of any public agency. Public-sector managers are frequently subjected to political interference, from which a private firm is generally free.

The marketplace can often provide a practical solution to these potentially conflicting goals. This can occur when public agencies and private firms are allowed to compete on price for contracts to deliver public services. In a surprising number of cases, such open competition has enabled public agencies to become as cost-efficient as the best private firms. In other cases, private firms have found it in their best interests to shave their profit targets in order to win service contracts. Either way, willingness to let the marketplace help choose a service provider leads to the kind of environment that results in better public service at less cost.

Easier Access to Low-Cost Capital

Most public services, including roads, require investments in capital facilities. First the roads must be built. Then they must be maintained and eventually rebuilt or expanded, depending on travel demand, and this requires capital investments over the life of the project. One factor enabling private participation in a way that provides the best overall package is the private sector's access to capital.

Public Agencies Subject to Debt Restrictions

State and local governments are often subject to restrictions on the amount of debt they can issue and for what purpose. In some cases, debt issues must be approved in advance by voters, and given the public's aversion to debt, such referendums are often difficult to pass. In still other cases, elaborate formulas may be built into state constitutions, linking the maximum amount of debt a county or city may have outstanding to a measure that approximates the locality's ability to support that debt, such as the value of taxable real estate. As a result, state and local governments may not be able to raise enough capital to build the roads and other public facilities required by today's economy.

While some states have tried to work around these debt-issue restrictions, the overall effect tends to be marginal. For example, a state turnpike authority may be able to issue an amount of debt equal to its toll revenue. Using an amendment to its charter (or simply a less rigid interpretation of its charter), the authority uses these new funds, supported by tolls, to build or expand toll-free roads that are expected to increase traffic on the toll road. There are several such means that

can be used to work around debt restrictions, but taxpayers' general aversion to increasing debt obligations will always limit the impact of such measures.

Over the years, the federal government has attempted to fill the capital gap through its various transportation programs. The present federal transportation legislation provides states with more flexibility in response to budget constraints. Current law allows federal dollars to fund up to 80 percent of the cost of an "eligible transportation project." While this sounds rather open-ended, the annual federal appropriations process, coupled with deficit-reduction guidelines, severely limits the amount of federal aid available.

The market for taxable debt dwarfs its tax-exempt counterpart. Because the private debt market is so much larger, private firms can bring a wealth of investment dollars into transportation finance. Projects that formerly had to compete for a limited amount of public funds thereby have access to a much larger pool of capital that comes with the involvement of the private firm.

Traditional finance theory argues that all debt should be self-financing. The capital facilities it creates should generate a new income stream to cover interest and principal payments by a comfortable margin. It may be fiscally prudent, however, to issue increasing amounts of debt in order to exploit whatever new economic opportunities are able to satisfy the self-financing mandate. The overall net benefit to a state transportation agency may be greater if the agency uses its scarce funds for projects that cannot be self-sustaining. At the same time, a role is carved out for private capital in those projects that can be self-sustaining.

Tax Subsidies to Private Firms

There is no shortage of capital-seeking investment opportunities. Large corporations, unencumbered by the fund-raising restrictions that limit government, have access to capital as long as they can demonstrate their ability to generate new revenue. Many corporations have relied on this open access to capital in order to finance the development of new products they expect to sell at a profit. What if these products happened to be roads or other public goods traditionally regarded as the exclusive purview of government? Allowing these firms to finance the development of public works would go a long way toward meeting the financial needs for the infrastructure upon which the nation's future prosperity depends.

While access to capital is an important consideration, keeping the cost of capital as low as possi-

ble is fundamental in determining how best to finance infrastructure needs. A state or municipal government can raise capital funds for its public agencies by issuing bonds whose interest payments are not subject to federal (and in some instances state) income taxes. Thus these tax-free bonds should enjoy lower interest rates than the taxable bonds issued by corporations, and they generally do. However, the federal government provides two subsidies to private companies that are not available to public agencies. Under the right circumstances, this can have a significant impact in reducing a private company's true cost of capital. When a private party issues the debt itself, one of these subsidies is the full deductibility of interest payments in determining the company's taxable income. For many profitable companies, this can result in out-of-pocket (or after-tax) interest costs that are competitive with tax-free debt. Since public agencies have no income tax liabilities, their normal interest costs are identical to their out-of-pocket costs.

The second federal allowance concerns a company's depreciation deduction—the prorated cost of a capital facility over the years of its useful life. Since all deductions for depreciation mean lower taxable profits, a company's actual profit (return on invested capital) is considerably higher than the profit it must report to the Internal Revenue Service.

These tax deductions for interest and depreciation flow directly into a firm's bottom line. In effect, they may reduce the company's cost of capital to levels that are comparable and competitive with tax-exempt debt issues of public agencies.

What Role Should the Public Sector Play?

While the private sector can provide real advantages by participating in transportation services, there will always be important functions more appropriately carried out by the public sector. In particular, the public sector is key to ensuring that:

- ◆ Service levels and standards are maintained.
- ◆ Social goals are achieved.
- ◆ The best financial package is used, whether that means private, public, or a combination of both.

Maintain Service Levels and Standards

Because substantial amounts of money are involved in many traditional transportation projects, there may be an incentive for the private sector to cut corners in order to lower costs and thus increase profits. Government must therefore

continue to set guidelines and enforce standards in order to maintain quality and ensure the safety and welfare of the public.

To protect quality, performance and/or incentive requirements are usually written into agreements with private firms. Besides a formal contract requiring the private partner to maintain a specified level of service, the government must have a mechanism in place for adequately monitoring the performance of the private firm. In addition, the government can reduce the possibility of corruption (kickbacks, fraud) by establishing sound but streamlined procurement procedures or, in the case of divestiture of responsibilities, instituting necessary regulations and oversight.

The public sector's oversight responsibility is different if the private and public sectors are true long-term equity partners. This is because the private sector can sustain long-term profits only when quality control and efficiencies are built into the beginning of a project.

Private entities may be more likely than the public sector to reduce or interrupt operations as a result of financial problems or strikes. Service interruptions can be of particular concern if they affect the safety and welfare of the general public. Government must therefore consider which of its operations are most critical to the needs of the public and if necessary, continue to provide these services on a public basis.

All levels of government, particularly federal, also have a role in ensuring the systemwide integration of the nation's transportation network. While states and localities should be free to pursue innovative means of transportation finance, each individual network must be consistent within the entire system. Imagine, for example, 50 or more different tolling mechanisms, one for each state, across the country. Public agencies must therefore play a critical role in establishing guidelines to promote consistency and efficiency within the system.

Achieve Social Goals

Because private firms are profit oriented, they will be tempted to avoid (or reduce) the level of service for those segments of the general public that are unable to pay for service and/or may be expensive to assist. All levels of government have a role and responsibility to aid the disadvantaged and ensure that their needs are met.

Use the Best Financial Packages

As noted earlier, there are opportunities for private firms to issue taxable debt that is competitive with government's tax-exempt equivalents. This

may not always be the case. In many instances, firms do not want to issue the debt or cannot raise sufficient funds for the project. This situation may stem from the level of risk involved in the project or uncertainty surrounding traffic volume.

While privately issued (taxable) debt usually requires 20 to 25 percent equity from the participants, public financing enables full 100 percent project financing because the municipal market is accustomed to such financing structures. Private participants may seek out an existing public authority to act as the bonding agent, ask the DOT (or state) to issue tax-exempt general obligation or revenue bonds, or offer to set up a special-purpose nonprofit corporation for the project's duration. Depending on the project, these special-purpose entities may also issue tax-exempt, nonrecourse revenue bonds. In this way, the public sector may play a key role in financing the project.

Overcoming Obstacles to Private Involvement

The ideas presented in this article represent a strategic shift from the traditional practices of transportation finance. No doubt these new approaches to highway financing will face opposition from defenders of the status quo in both the public and private sectors. Yet private-sector involvement can coexist along with more conventional financial arrangements, and a commitment to innovative methods can provide a transportation network capable of meeting the demands of the 21st century. First, however, several obstacles must be overcome.

Mind-Set

Probably the single largest impediment to greater use of the private sector for the delivery of transportation services is a lack of public experience with these alternative approaches. Not until we move beyond the current paradigms concerning the limits of public and private provision of such services can private involvement in transportation really work.

As discussed earlier, the government and private companies must be seen as natural partners in providing the wide range of public services our society needs if it is to prosper in the future. Government has the obligation (and the authority) to set stan-

dards for service delivery that is focused on the welfare of society as a whole, rather than the narrowly defined economic welfare of any particular company. The equity partnership arrangement thus requires competent, flexible public-sector managers to create efficient ground rules and design a regulatory framework. The private sector has the ability to meet these standards efficiently and to attract the capital funds necessary for the modern infrastructure that is essential for effective service delivery.

DOTs view themselves as landlords, building and occasionally maintaining their transportation systems. This paradigm must shift such that DOTs become managers of those systems. Transportation is a business, and its financing is part of management.

Institutional Barriers

Facilitating an alliance between the public and private sectors will take more than a few individuals championing a particular project. Governments will need to establish both an organizational and analytical framework for the process. Guidelines, organizational arrangements, and knowledgeable staff must be put in place to ensure the success of a public-private paradigm.

Although much work has already begun, a great deal more needs to be done. Important issues such as the type of program to implement, the degree of government financial support, and the required regulations should be considered. Approaches also must be tailored to particular political, economic, and labor environments. Several state governments, for instance, have established a governmentwide commission to identify public-private opportunities within the state's agenda and establish policies for the state's own initiatives.

Legislative and Political Barriers

Several opportunities for public-private partnership have been created by existing policy and legislation. Many states and localities, however, have yet to adopt enabling legislation for including the private sector. The latter can take place only when such legislation has the support of committed political leadership. Establishing this crucial support early on will sustain momentum for these arrangements and make it possible to address any concerns as they arise.