

A green highway sign with white text reading "PRIVATE ROADS, PUBLIC COSTS" is mounted on a metal structure. The sign is illuminated from below, casting a green glow. The background shows a night cityscape with lights and mountains under a dark sky.

PRIVATE ROADS, PUBLIC COSTS

The Facts About Toll Road Privatization
and How to Protect the Public

NCPIRG Education Fund

Private Roads, Public Costs

The Facts About Toll Road Privatization and How to Protect the Public

NCPIRG Education Fund

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Appendices B and C of this report, which provide detailed lists of completed and proposed privatization projects, can be downloaded from www.uspirg.org/road-appendix

Executive Summary

Road privatization is a growing issue in the United States as politicians and transportation officials grapple with budget shortfalls. Toll road privatization takes two forms: the lease of existing toll roads to private operators and the construction of new roads by private entities. In both instances, private investors are granted the right to raise and collect toll revenue, a right that can amount to billions of dollars in profits for the shareholders.

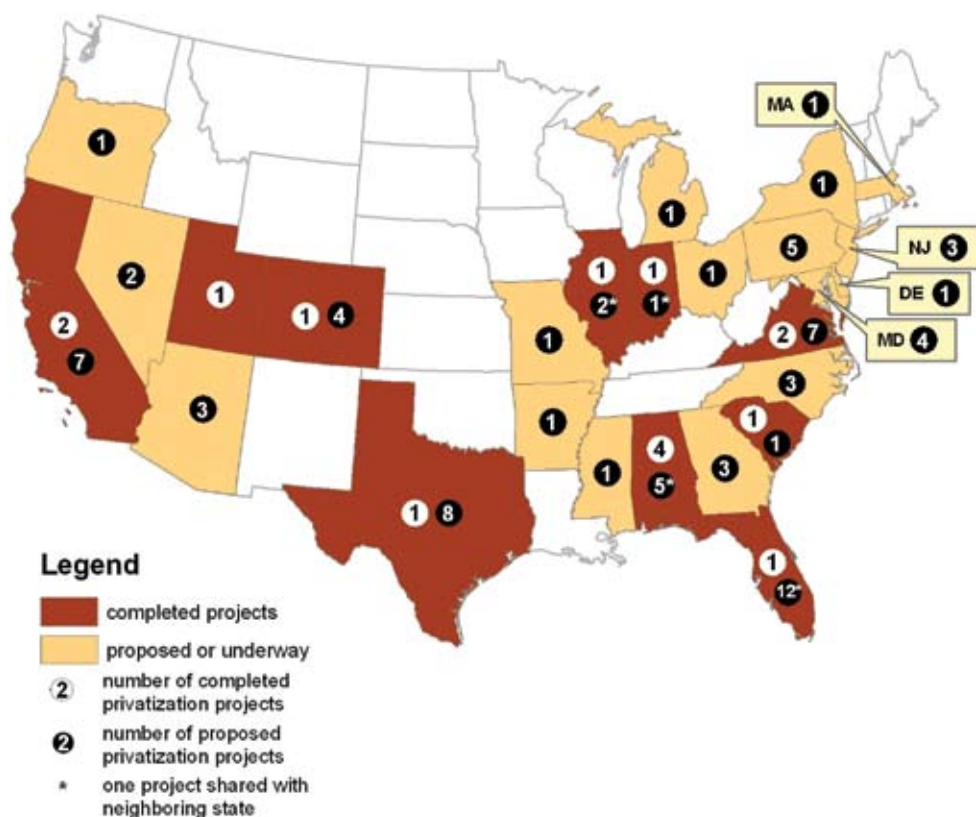
Though these privatization deals seem to offer state officials a “quick fix,” they often pose long-term threats to the public interest. By privatizing roadways, officials hand over significant control over regional transportation policy to individuals who are accountable to their shareholders rather than the public. Additionally, the economics of these deals are such that the upfront concession payments are unlikely to match the long-term value of the higher tolls that will be paid by future generations and not collected for public uses.

Public officials, therefore, should approach the idea of private toll roads with great caution, knowing that the short-term benefits are unlikely to outweigh the long-term costs.

Toll road privatization is becoming increasingly prevalent in the United States.

- Between 1994 and early 2006, \$21 billion was paid for 43 highway facilities in the United States using various “public-private partnership” models.
- By the end of 2008, 15 roads had been privatized in 10 different states – either through long-term highway lease agreements on existing highways or the construction of new private toll roads.
- Currently, approximately 79 roads in 25 states are under consideration for some form of privatization.
- A few prominent examples of privatized roads include:
 - The Indiana East-West Toll Road, which carries Interstate 90 approximately 150 miles across northern Indiana and is a critical link between Chicago and the eastern United States.

Figure ES-1. Privatization Projects Completed, Underway or Proposed, by State



For a detailed listing of completed and proposed privatization projects by state, please download Appendices B and C of this report, available at www.uspirg.org/road-appendix.

- o The Chicago Skyway, which links downtown Chicago with the Indiana Toll Road.
- o California’s SR 91 Express Lanes, which were originally built by a private entity to provide a speedier connection between Orange and Riverside counties.

Though privatization may offer short-term relief to transportation budget woes, it often has grave implications for the public.

- **The public will not receive full value for its future toll revenues.**

The upfront payments that states receive are often worth far less than the value of future toll revenue from the road. Analysis of the Indiana and Chicago deals found that private investors would recoup their investments in less than 20 years. Given that these deals are for 75 and 99 years, respectively, the public clearly received far less for their assets than they are truly worth.

- **The public loses control over transportation policy.** Private road concessions in particular result in a more fragmented road network, less ability to prevent toll traffic from being diverted into local communities,

and often the requirement to compensate private operators for actions that reduce traffic on the road, such as constructing or upgrading a nearby competing transportation facility.

- **Public officials cannot ensure that privatization contracts will be fair and effective** when leases last for multiple generations. No army of lawyers and accountants can fully anticipate future public needs. Transurban, for example, has control over the Pocahontas Parkway in Virginia for 99 years.

In order to protect the public interest, public officials must adhere to six basic principles in all road privatization agreements:

- The public should retain control over decisions about transportation planning and management.

- The public must receive fair value so future toll revenues are not sold off at a discount.
- No deal should last longer than 30 years because of uncertainty over future conditions and because the risks of a bad deal grow exponentially over time.
- Contracts should require state-of-the-art maintenance and safety standards instead of statewide minimums.
- There must be complete transparency to ensure proper public vetting of privatization proposals.
- There must be full accountability in which the legislature must approve the terms of a final deal, not just approve that a deal be negotiated.

Introduction

Debates about the privatization of public services often devolve into ideological squabbles about the proper role of government versus the private sector. Advocates of privatization point to examples of government waste and bureaucratic inertia to make the argument that the private sector can deliver services more efficiently. On the other side, opponents of privatization offer stories of corrupt contracting and the insensitivity of private entities to the broader public interest to argue for broader government involvement.

Yet, all but the most extreme advocates of privatization will acknowledge that there are *some* circumstances in which government must provide certain services directly. Few, for example, would feel comfortable taking bottom-line responsibility for the delivery of “justice” away from our court system and giving it to a private, for-profit corporation. Similarly, few opponents of privatization would insist that government should *never* contract out to the private sector – whether for maintenance of the copiers in government offices or the production of concrete for government buildings.

In other words, when it comes to the

question of public versus private provision of government services, it is a matter of where best to draw the line. There will always be a role for both public and private entities in meeting America’s transportation needs. It is up to elected officials to find the right balance to ensure that the public gets the value, efficiency and safety it deserves from its transportation network – particularly at a time when our transportation system is in dire need of repair and when resources are scarce.

The task of government officials and the public is to evaluate privatization proposals rigorously – without ideological blinders – to ensure that any such deals benefit the public interest.

Public officials must ask tough questions if they are to safeguard the public interest. In this paper, we evaluate one particular form of public-private partnership in transportation – toll-road privatization – and suggest a series of guidelines public officials should adopt to ensure that any potential private toll road deals benefit the public.

We hope this paper will help public officials navigate the difficult decisions surrounding toll-road privatization and make the right decisions to benefit the public.

What Is Toll Road Privatization?



Privatization: Clarifying the Term

Government, the media, and the private infrastructure industry use a variety of terms to describe efforts to transfer public services to the private sector. As one long-time scholar of infrastructure privatization at Harvard notes, privatization has been packaged under a variety of names.

Governments have experimented with many variants of privatization, often coining special terms—such as “peoplisation” (Sri Lanka), “capitalization” (Bolivia), or “equitization” (Vietnam)—to distinguish them from the standard fare. And many consultants now prefer to use the term “public-private partnerships” to emphasize that a wide variety of forms of public-private collaboration is possible. Such changes in terminology may be useful, but they do not eliminate

the basic problem of persuading the public that the terms of the partnership are fair.¹

The term “public-private partnership” is particularly ubiquitous, and woefully imprecise. Virtually all public programs have always involved some kind of partnership between public and private sectors. Medicare is a partnership between public financing and services by private medical providers, for instance. All government departments of transportation likewise have a long tradition of using private vendors for various kinds of service provision. Even transactions between two private companies involve some kind of partnership with the public sector to underwrite risks, define property rights, and enforce contracts. Since “public-private partnership” can mean virtually anything, the term is of little descriptive value.

The term “**privatization**” is more precise, denoting the transfer of traditionally public services or property to the private sector.



Practical Considerations: When Does Privatization Make Sense?

Practically speaking, privatization makes sense for the public when certain conditions are met.²

- First, privatization works best when private companies have a **proven comparative advantage over government agencies** in providing a particular good or service. For instance, at least before recycling programs were created, a variety of exhaustive studies concluded that because smaller municipalities lack economies of scale, those that used competitive contracting for household garbage collection had lower costs than comparable municipalities that used public agencies for collection.³
- Second, the services that are privatized must be **well defined, with clear criteria for the evaluation of success or failure**. It is less problematic, for example, to contract for private delivery of a ton of cement or for office windows to be washed each Friday than it would be to contract out “justice” from the courts.

- Third, privatization only succeeds when **private contractors’ performance is disciplined by ongoing competition**. There must be multiple contractors capable of submitting bids, and contracts must be for a short enough period to allow for unsatisfactory performers to be readily replaced.⁴
- Finally, privatization works best when the government officials making the decision to privatize can be **held accountable** for the results of a deal.



Defining Toll Road Privatization

In this report, we focus on evaluating proposals for toll road privatization to determine whether privatization of toll roads makes sense according to the criteria described above.

Private toll road deals can involve lesser or greater degrees of privatization. On the lesser side of the spectrum are small changes such as the hiring of private contractors to mow grass or operate toll-collection systems. On the other side of the spectrum is the construction of wholly privately owned and operated highways.

Toll road privatization: When an existing roadway is leased to a private company for a concession fee, or when a private entity finances new road construction in exchange for the right to operate and collect rising tolls on that road.

“Availability Payments” Versus Toll Concessions

By retaining the public’s right to set and collect tolls while more narrowly prescribing the private role, contracts that pay “availability payments” to private operators have a number of advantages over private toll concessions. The public retains greater control over transportation policy and will not be subject to non-compete clauses. Nor is the public liable to be sued for compensation when policies reduce toll traffic. Incentive clauses create a direct economic incentive to keep lanes available and in good repair.

Availability payment deals still have many potential problems. Higher private borrowing costs mean that deals will still tend to lose the public money over the long term; and contract incentives still cannot anticipate future public needs. The public interest protections listed in this report would also apply to deals that involve availability payments. Moreover, the payments should not be overly generous compared to what it would cost the public to make these lanes available themselves.

This paper focuses on two types of arrangements: when an existing roadway is leased to a private company for a concession fee; and when a private entity finances new road construction in exchange for the right to operate that route over a specified period of time. These arrangements share two characteristics. First, the government transfers rights tantamount to ownership to a private entity. Second, the private entity receives access to toll revenues and the right to raise tolls.

There are many types of arrangements that fall just outside of this definition of toll road privatization. For example, governments have signed contracts with private entities to perform virtually all of the services a government would perform in building and operating a highway – ranging from design to financing to ongoing maintenance – but without granting the private entities direct access to toll revenues. In these cases, government still maintains ownership of the road as well as a direct ability to withhold public funds from the private operator if the terms of the contract are not upheld.

One example of such a deal is an agreement reached between the state of Florida and the Spanish company, ACS, for the construction and operation of express toll lanes alongside I-595. Under the arrangement, Florida will make annual “availability payments” to ACS over a 35-year span to compensate the company for the cost of building and operating the highway. The payments to ACS are incentive-based, but the state of Florida retains the power to set toll rates and collect the revenue.⁵ The Florida deal, while clearly a “public-private partnership” with a strong private-sector component, does not fit strictly within the definition of toll road privatization used in this report.

Another complicating factor in defining privatization projects is the use of non-profit intermediaries to secure preferential treatment for privatization arrangements under the U.S. tax code, IRS Revenue Ruling 63-20. Local governments have traditionally issued tax-exempt debt in order to build schools, court houses or hospitals. Today, however, private companies establish these so-called “63-20”

non-profits so that privatized projects can achieve the same favorable credit terms as public agencies. In order to establish a 63-20, the local government must approve its charter and the issue of its debt, giving the government title to its assets after the debt is repaid. However, a loophole in the law allows an arrangement in which the government can then effectively disown the non-profit, which limits the government's ability to be involved in the operations of the company. By law, 63-20s cannot make a profit, but private companies can circumvent this restriction by receiving their compensation through development fees that are charged for consulting services. Though obviously an indirect way of earning a return on investment, this contrivance has nonetheless become a common way for private companies to seek publicly subsidized capital, and projects financed by

63-20s can fit into the definition of "privatization" used in this report.⁶

Describing proposed toll road privatization projects with exactitude is difficult because the precise relationship between a government and a private entity in operating a road may not be determined until a contract is finalized. As a result, while we have attempted in this paper to use a relatively narrow definition of privatization for completed projects, our list of proposed projects includes a much broader range of potential arrangements. While some of these roads may end up as fully privatized highways, others will not. Including the broad range of potential projects is valuable despite this problem because it conveys the variety of potential privatization projects across the country and the potential stakes involved for the public.

The Rise in Toll Road Privatization



The Current State of Privatization

Though rare only a decade ago, road privatization has become increasingly common in the United States. Currently, 24 states and Puerto Rico have legislation or regulations authorizing the use

of public-private partnerships in highway construction and operation.⁷

As of the end of 2008, 15 roads had been privatized, and approximately 79 roads were either in the process of being built by private entities or being considered for privatization. (See “Tallying Up the Number of Privatization Projects.”) This privatization activity represents a substantial amount of money: from 1994

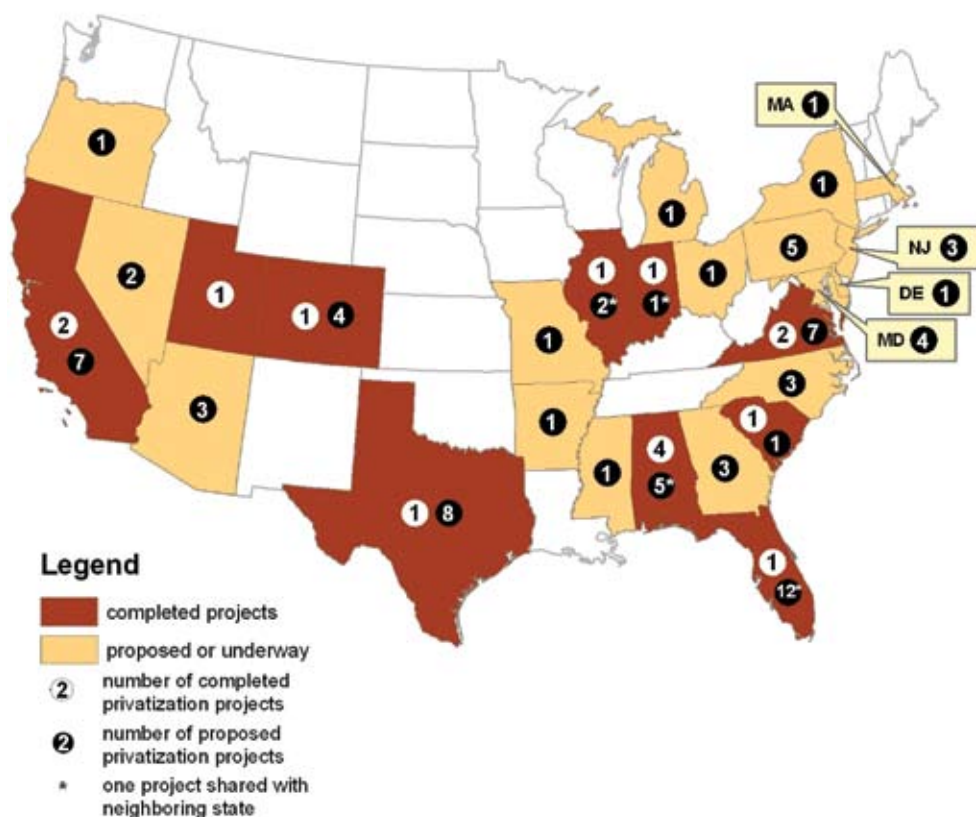
Tallying Up the Number of Privatization Projects

In counting the number of privatization projects across the United States, we attempted to be as inclusive as possible, including projects at every stage of consideration from idle discussion to full-fledged proposals. Information about privatization proposals was gleaned from a variety of sources, which are described in detail in Appendices B and C to this report, which can be downloaded from www.uspirg.org/road-appendix.

The privatization field is extremely fluid. Some proposed projects may have been dropped; others may have been put on hold. New projects may also have been proposed since the research for this paper was completed. Moreover, some proposals, particularly at the early stages, are vague about the role of private investment and involvement.

In other words, the number of privatization projects described here represents a snapshot in time and a relatively broad view of what constitutes a privatization project.

Figure 1. Privatization Projects Completed, Underway or Proposed, by State



For a detailed listing of completed and proposed privatization projects by state, please download Appendices B and C of this report, available at www.uspirg.org/road-appendix.

to early 2006, \$21 billion was paid during this time period for 43 highway facilities in the United States using various models (including models other than those considered in this report).⁸ These numbers may rise as more states attempt to overcome severe short-term budget deficits and meet unfunded transportation needs.⁹

Common in the less-developed world for the last couple of decades, infrastructure privatization had not taken root in the United States until recently.¹⁰ During the 1990s, infrastructure privatization became increasingly popular in East Asia and in Latin America, where Enron was a major investor. In those countries, unlike in the United States, access to long-term capital was a major problem for governments

seeking to build infrastructure. According to World Bank records, infrastructure privatization outside of the United States reached a peak of over \$110 billion per year in 1997 and 1998.¹¹

Many infrastructure privatization deals became high-profile failures. Two dozen private toll roads went bankrupt in Mexico after 1994. The Thai government seized one railroad that had been in private hands in 1993. Britain renationalized its rail system from Railtrack, the private company that had purchased the rail system, in 2001.¹² A World Bank study of over 1,000 infrastructure projects in Latin America and the Caribbean between 1982 and 2000 found that 55 percent of privatization contracts in transportation and 75

percent in water and sewer had been renegotiated, most during the first few years.¹³ Twenty-one toll road projects in Hungary, Indonesia, Mexico, and Thailand were subsequently taken over by the government.¹⁴ By the early years of the current decade, the volume of privatization deals had returned to the lower levels of the early 1990s.



Why Privatization Proposals Have Become More Common

Despite these experiences, privatization is becoming increasingly common in the United States as state governments attempt to overcome severe budget shortfalls. This trend has also been encouraged by federal policies meant to facilitate privatization agreements.

Budget Squeeze for Transportation

Roads across the country are under strain due to growing congestion and years of insufficient investment in maintenance. The American Society of Civil Engineers has graded the overall condition of the nation's infrastructure a "D," and predicts that \$200 billion per year must be spent to maintain and improve the quality of the nation's roads and bridges.¹⁵ This level of investment will put a tremendous strain on state budgets, already experiencing shortfalls due to declining revenue.

Part of the problem is perverse rules that discourage investment in maintenance while encouraging construction of new roads.¹⁶ For example, in Massachusetts, the funds for highway maintenance come from the Department of Transportation's

budget, while money for major repairs is taken from the Division of Capital Asset Management, a separate agency. This set-up clearly creates an incentive for the department of transportation to under-invest in road maintenance, because a separate agency will be responsible for repairs.¹⁷ Additionally, even when federal funds for maintenance are provided, public officials often divert them to the construction of new roadways, as a ribbon-cutting ceremony tends to carry more political weight than maintenance projects. The result is deferred maintenance which necessitates expensive repairs in the future.

State governments today face immediate budget crunches due to rising health, pension, and unemployment costs, coupled with declining revenue. State legislators, who have already closed \$40 billion in budget gaps, face an additional \$131 billion shortfall between now and the end of the 2010 fiscal year.¹⁸ According to William T. Pound, executive director of the National Council of State Legislatures, "These budget gaps are approaching those seen in the last recession, which were the worst since World War II, and show every sign of growing larger."¹⁹

Rising costs and declining revenues limit states' ability to use general revenue funds to address transportation needs. Meanwhile, gas taxes, the traditional mainstay of transportation funding, have not kept up with inflation. For example, states' gas taxes lost 43 percent of their value during the 1970s, 80s, and 90s.²⁰ The federal gas tax, last increased in 1993, has done only slightly better. To complicate matters, Americans have begun to drive less in the past year, further reducing gas tax revenue.

Furthermore, over the past few years, construction costs have been rising due to rapid inflation in the price of construction materials and the increased consolidation of the construction industry. Though the recent financial crisis has led to a deflation

in construction costs, the historical trends have contributed to the current shortfall in transportation budgets. Over the past five years, the cost of materials for highway and street construction, as measured by the Producer Price Index (PPI), has increased by 63 percent, a rate far higher than the general rate of inflation over the same period.²¹ In particular the cost of crude oil has led to very high costs for asphalt and diesel, two of the most basic construction materials used in highway and street construction.

While material costs have been increasing, the number of bids that states receive for contracts has been decreasing. While not as significant a factor as the cost of materials, there has been a noticeable trend among states indicating that fewer contractors are responding to requests for proposals. According to a survey of the nation's state transportation agencies, the reasons for this include 1) increased consolidation; 2) increased work with the same number of contractors; 3) downsizing of the construction workforce; and 4) increased technical requirements in contracts.²² As fewer contractors respond to competitive bid requests, states will be limited in their choices to find the best contractor for the lowest price, and prices will increase. Over time this could become a more serious factor behind highway construction cost inflation.

As a result of revenue shortfalls and historically rising costs, states are increasingly unable to build and maintain highways at traditional levels. According to the American Association of State Highway and Transportation Officials, the federal Transportation Trust Fund, used for state and local projects, is projected to run into shortfall during 2009 and will need to reduce payments by 42 percent the following year unless new revenues are obtained.²³ Many state-level transportation trust funds are also forecast to run into shortfall in coming years.²⁴

In the context of great investment needs and stagnant revenues, the huge upfront payouts of toll road privatization have obvious short-term appeal.

Political Benefits of Privatization

Privatization of roads offers elected officials political benefits beyond the ability to avoid potentially unpopular tax increases to pay for transportation. In the short term, privatization promises a huge budget windfall, especially for privatization of existing roads, which creates budget slack and an ability to dedicate resources to other favored projects. New private roads offer special opportunities for credit-taking and ribbon cutting ceremonies. In either case, the long-term financial downside, particularly the loss of toll funds and rising toll rates paid by drivers, often is overshadowed by the short-term windfall.²⁵ For instance, the Indiana Toll Road deal used a 75-year lease to finance a 10-year transportation plan. Whatever structural budget shortfalls Indiana faced before the deal will return in the 11th year, but the state will need to face these shortfalls without revenue from its toll road.

Privatization may also be attractive to elected officials because it gives them political cover for toll hikes they fear will be unpopular. Potential investors claim that by outsourcing toll collection to a private company, drivers' anger will not be directed at the politicians who authorized the toll hikes. Moody's bond rating agency, after conceding that governments can generate these same upfront payments by borrowing against future toll collections without privatization, offers the counterpoint that, "If they pursue the option [without privatizing], governmental authorities must take responsibility for their own toll raising decisions, rather than distancing themselves from these decisions through a long-term concession to a private entity."²⁶ Fitch bond rating service, similarly, lists as a merit of toll road privatization, the

ability to “distance government from toll increases.” The report explains that, “the political risk related to toll rate increases could be minimized by transferring the authority within an overall rate-setting framework to the private sector.”²⁷

Federal Rules Promote Privatization

Policies by the Internal Revenue Service and particularly the Department of Transportation (DOT) have also promoted road privatization.

The tax code encourages privatization in a number of often unintended ways. As discussed earlier, many private projects take advantage of the IRS 63-20 rule to utilize benefits meant for nonprofit organizations. The federal tax code also treats private

holders of road concession deals that last longer than the expected life of a road (normally 40 years or more) as owners for tax purposes and allows them to depreciate the value of those assets at an accelerated rate of 15 years. Senator Jeff Bingaman has described this as, “the tax tail wagging the dog: Exceptionally long leases in order to recover capital outlays on an accelerated schedule.”³¹ As an overview study by the Transportation Research Board of the National Academies concludes, “This amounts to a government subsidy to the concessionaire that may significantly reduce corporate taxes if the project proves profitable.”³²

The U.S. Department of Transportation also subsidizes private road projects in a number of ways. The Transportation

Aggressive Lobbying by the Private Toll Road Industry

Politicians across the country have been lobbied extensively by the toll road industry hoping to profit off the public’s infrastructure. These lobbyists have made sizeable campaign contributions to numerous politicians across the country, hoping to encourage the adoption of road privatization projects.²⁸ Though legal, these contributions raise the question of whether politicians can make an unbiased decision in the public’s interest when so much money is at stake. The following provides a sample of some of these contributions:

- Zachry Construction Corporation, a company competing for Trans Texas Corridor projects, contributed \$888,996 to Texas politicians from 2003 to 2008.²⁹
- A2 Transportation Partners, a consortium bidding to operate the Alligator Alley, contributed \$100,000 to the Florida Democratic Party in 2002, and another \$154,000 in 2008.
- Abertis Infrastructures, a Spanish based road management company, spent over \$250 million in 2007 and \$160 million in 2008 on lobbying efforts at the federal level.
- UBS, which was part of the financing team involved in the proposed bid for the Pennsylvania Turnpike, donated \$13,000 to Governor Ed Rendell of Pennsylvania.³⁰

Infrastructure Finance and Innovation Act (TIFIA), passed in 1998, established funds for the federal DOT to spend on secured (direct) loans, loan guarantees, and standby lines of credit to attract private investment in surface transportation infrastructure.³³ The TIFIA website lists \$5.8 billion in past or pending financing provided by the department as of February 2009, with most of it devoted to highway projects.³⁴ The DOT also publishes model legislation for states and a newsletter to encourage privatization of roads.³⁵

The biggest incentives are for private “green field” deals in which companies construct a new toll road and then operate it and collect tolls. The federal DOT allocates over \$2 billion per year in credit that can be used to subsidize private borrowing for highway and surface freight transfer projects by exempting private bonds from taxes. The DOT also grants private projects special federal waivers that suspend normal requirements on contracting, project finance, compliance with environmental requirements, and right-of-way acquisition. For example, Oregon and Texas both received federal waivers allowing them to begin negotiating contracts before the environmental review process had been completed.³⁶

In addition to passing favorable regulations, the federal DOT under the Bush Administration actively lobbied state governments to approve privatization agreements. Then-Secretary of Transportation Mary Peters traveled to numerous states to encourage their use of private investment, and tolling became an official key component of the DOT’s congestion mitigation initiatives. In one instance, the Federal Highway Administration (FHWA) even threatened Texas for pulling out of an agreement with a private company. The Texas Department of Transportation (TxDOT) initially accepted a proposal from Cintra, a private company, to construct and operate State Highway 121. However,

due to significant public opposition to the project, TxDOT eventually rejected the proposal in favor of a bid by the North Texas Toll Authority (NTTA), a public entity. The deal with the NTTA was estimated by some analysts to save the public \$2.3 billion versus the bid from the private vendor.³⁷ In response, the FHWA sent a letter to TxDOT threatening to withhold future federal funds for the project. FHWA argued that acceptance of NTTA’s bid violated federal regulations requiring a “fair and open” competitive process and rules prohibiting public entities from bidding against private companies. While the FHWA eventually backed down from its threat, many in Texas saw the exchange as an unjustified use of federal powers to influence state decisions.³⁸

In a more recent signal of its support for privatization, the Federal Highway Administration issued a rule in the Federal Register requiring any future reorganization of public agencies to be justified on market concession terms. What this essentially means is that any time a state agency attempts to reorganize or transfer authority over a toll road, it must first undergo an analysis to determine what price a private company would bid to operate the highway under a concession agreement. When this concession price is determined, the public entity would be required to charge that amount to the other agency that is taking over the roadway. Thus, if TxDOT wanted to transfer authority over a road to the NTTA because it thought the NTTA was better suited to operate that highway, TxDOT would be forced to charge NTTA an amount equivalent to what a private company would bid. After a large number of private agencies and other stakeholders voiced concern during the public comment period, the U.S. DOT revised the rule to give agencies wide latitude to determine the criteria for market valuation. While the immediate effect of this ruling has been muted, it nonetheless set a troubling

precedent by establishing private concession deals as the standard.

The Potential for Low-Risk Profits

In addition to the federal subsidies for green field deals, a number of factors make road privatization attractive to investors. One is the relative reliability of toll revenues. Compared to stocks and other investments, toll road privatization is considered a relatively secure source of long-term revenue. In addition, once a toll road concession is signed, it is very difficult to undo under U.S. contract laws. Toll profits reduce investors' portfolio risk as well, because the returns on these investments depend chiefly on traffic flow, which has historically been "recession-proof." Though there have been signs recently of reduced driving, toll roads are still considered a safe investment, especially in light of the current problems on Wall Street.

There is some evidence that the reputation of infrastructure investments as "safe" may be overstated. Many new private toll roads have underperformed, and there have

been accusations of conflicts of interest by companies which analyze these deals and prepare profit forecasts. In fact, a study of 10 private U.S. toll roads built since the mid-1990s found that half have not met their traffic projections.³⁹

Additionally, private infrastructure deals often involve heavily leveraged debt and the trading of long-term risk, much like the mortgage industry in recent years. Some analysts worry that such a model will not be sustainable.⁴⁰ A recent analysis by PricewaterhouseCoopers describes the destabilizing pattern of leveraging debt and selling the risk to others that characterize both the private infrastructure market and the now-infamous subprime mortgage industry:

In the early 2000s, an increasing number of large project finance lenders aggressively cut back on their project and infrastructure finance lending business or amalgamated them into their wider leverage finance business. This led to the now



Governor Corzine of New Jersey decided not to privatize or lease the Atlantic City Expressway, Garden State Parkway, and New Jersey Turnpike (pictured here). Governor Corzine previously served as CEO for Goldman Sachs, which advised structuring of the road privatization deals in Indiana and Chicago. (Photo: Mark Gordon)

well-practiced strategy of “originate and distribute,” often cycled through the dedicated securitization structures. ... These were initially used to demonetize a bank’s balance sheet but then took on a life of their own as they became conduits for banks to originate business, take a fee, and then sell on the exposure.⁴¹

Despite these concerns, there remains the perception that infrastructure investments are safe and sustainable.



Vast Amounts of Private Money Are Seeking Toll Road Investments

With all these factors favoring toll road deals, it is no surprise that private investors have been trying to take advantage of the profit opportunities. Private infrastructure

investment funds raised \$25 billion in 2008, up tenfold from just \$2.4 billion in 2004 (though down from the peak investment of \$34 billion in 2007).⁴² A total of 77 such funds were active in the market at the end of 2008, seeking \$92 billion in capital.⁴³

The recent financial crisis has caused investment in private infrastructure funds to dry up, and has eroded the stock prices of many funds. Yet, some fund managers believe that the financial crisis will be a boon to infrastructure investment in the long term. As Matthew Vickerstaff, the global head of infrastructure and asset based finance at Societe General in New York, explained in BNET Financial Services, “The current crisis is good for infrastructure funding because there will be increasing pressure on states, cities and provinces to balance their budgets. They will need to spend both for social and transportation infrastructure. They’ll need private money and private-public partnerships.”⁴⁴ Thus, the number of private road deals may increase as state and local governments become more desperate for short-term infusions of cash.

The Pitfalls of Road Privatization

The economics and governance of privatized roads are highly problematic. For existing roads, outsourcing borrowing against future toll revenue to a private entity is likely to generate less money than a public entity could produce with the same tolls. This is the case because a private toll road operator will have higher borrowing costs and must divert some revenues to shareholder profits. In addition to these fiscal problems, long-term road contracts pose other serious threats to the public interest. These include fragmentation and loss of public control over transportation policy, and the inability to plan for future public needs in contracts that stretch over multiple decades.



Loss of Public Control

Transportation policy has tremendous impacts on quality of life, health, and the cost of living. It determines the level of traffic congestion and air pollution, the safety and

quality of the roads, the many costs of driving and car ownership, the availability of high-quality and affordable public transit alternatives, and the development of future land-use patterns. What may seem beneficial from a narrow profit perspective does not necessarily benefit the broader public interest.⁴⁵ Public control of key toll roads is therefore necessary to ensure coherent transportation planning and policy making over long periods of time.

Any driver knows how events that take place on one road affect other connecting and alternative routes. Thus, toll rates, maintenance and safety standards, as well as congestion on a toll road affect the number of cars using alternative means of transportation, including local roads and public transit. Decisions about how to operate and manage major roadways actually create traffic policy for an entire jurisdiction.

New toll roads or additional lanes can have particularly profound consequences for future land-use and development practices as well as for a state's energy and environmental policies, including efforts to reduce oil dependence, improve air quality, and curb emissions of global warming pollution.

Road privatization experiences across the country have shown that a private operator's profit motives lead to different management decisions than government might pursue. Examples from recent road privatization projects illustrate these potential dangers.

Non-compete Clauses

Toll road investors want assurances that traffic levels will meet or exceed predictions, even in the event of toll increases. Some privatization contracts therefore explicitly limit states' ability to improve or expand nearby transportation facilities. The U.S. Department of Transportation, in its *Report to Congress on Public Private Partnerships* (December 2004), strongly supported the inclusion of such "non-compete" clauses to help attract private investment.

In Colorado, one deal went so far as to require adjacent municipalities to add stop lights and reduce speed limits on local roads as a way to reduce potential competition.⁴⁶ Though the operator of the road was technically a public entity, it was heavily financed by private investors who demanded protection of future revenues. California, which used a private concession deal to create new toll lanes in the median of State Road 91, was subsequently forced to buy back the road because non-compete clauses prevented the state from improving the corridor and led to high-profile litigation. Similarly, Indiana is prevented from building a four-lane, divided highway more than 20 miles long (or expanding a current highway to Interstate standards) within 10 miles of the East-West Toll Road for at least 55 years without providing compensation to the toll road operator for lost revenue.⁴⁷

Non-compete clauses are included in many privatization contracts to protect the investors. A report by the Texas Legislative Study Committee on Private Participation in Toll Contracts claims that non-compete

provisions are necessary for private entities to be able to sell bonds. If such a provision were not included, the state could easily build a free, competing roadway that would divert traffic from the private toll road, eventually forcing the company into bankruptcy. This actually occurred in New Jersey with the Beesley's Point Bridge. The private bridge was originally built in 1927, but in the 1950s a competing public bridge was constructed only 300 yards away. After the construction of the public bridge, revenues from the Beesley's Point Bridge plummeted, and the bridge was eventually closed to traffic in June 2004. Recently, Cape May County took over the bridge.⁴⁸

Even when privatization agreements do not include an explicit non-compete clause, there may be an understanding between the state and the private operator. For example, Virginia had an "understanding" with the private operator of the Dulles Greenway not to make improvements on competing roads ahead of schedule (though VDOT eventually reneged on this understanding).⁴⁹ Concession agreements in both South Carolina (Southern Connector) and Virginia (Pocahontas Parkway) include vague language that prohibits the state DOTs from pursuing activities that could be considered competitive in nature.⁵⁰

Compensation Clauses

In place of non-compete clauses, many agreements now include compensation provisions requiring the state to compensate the private operator if its actions negatively affect toll revenues. The Indiana deal, for example, requires the state to pay investors compensation for reduced toll revenue when the state performs construction, such as adding an exit or building a mass transit line down the median. This compensation would add significantly to the cost of construction, and the state could potentially not afford to do the work it would otherwise perform. As an added complication, the exact level of these fu-

ture payments might be subject to dispute and lawsuits. Already, the state of Indiana has had to reimburse the private operator \$447,000 for waiving toll collections to assist in evacuations from flooding in September 2008. Appendix A provides additional examples of these agreements.

These compensation clauses are inimical to comprehensive transportation planning. Transportation policy should be made according to what is best for the public, not conditioned by avoiding extra payments to a private operator.

Profit-Driven Transportation Planning

Some privatization deals include monetary incentives for the state to divert traffic to the toll roads or decrease safety standards in an effort to boost profits. Decisions to build new roads are supposed to be made in accordance with long-term regional plans. The Texas contract with Cintra-Zachry for SH-130 contains incentives for the state to raise the speed limit on the private road. The contract says that if the speed limit remains at 70 mph, the state will receive 4.65 percent of revenue up to a certain threshold. However, if the state raises the speed limit to 80 mph, it would receive 9 percent of the revenues.⁵¹ Though state officials have maintained they will not base speed limit decisions on monetary gain, this clause does create a strong incentive for the state to toss aside safety, energy, and environmental policy in favor of cash.

Dangerous and Costly Traffic Diversions

The goal of private toll operators is to find the right balance of toll rates and traffic to produce the maximum amount of revenue.⁵² Private toll operators can generally increase revenues by raising toll rates, even though the higher rates will cause some truck and car drivers to choose alternative routes. For the private operator, the additional toll rates may more than make up

for income lost from diverted vehicles. But from the public perspective, the diverted traffic may clog local roads, increasing congestion and pollution in local communities. There was substantial traffic diversion, particularly of trucks, after the 1991 New Jersey Turnpike toll hike. New Jersey responded by rolling back some of the toll hike for trucks to entice them back onto the Turnpike, a move that would not have been possible under privatization, at least not without paying the private firm for the lost projected revenue. From a private toll road operator's perspective, gridlock and pollution on local roads may actually be desirable because drivers will be more likely to pay still-higher tolls. A study by researchers at Penn State University and Wayne State University found that the private operation of toll roads could lead to increased accidents and maintenance on nearby public roads and lower quality of life for residents on parallel roadways. The study also found large economic losses to nearby communities associated with diversion of truck traffic.⁵³

It is important to recognize just how much control over transportation policy is granted to private operators through toll hike schedules for private operators. If the rules for increasing toll rates under the Chicago Skyway toll road deal had applied to New York's Holland Tunnel since its inception, that roadway could presently charge a one-way toll of more than \$180.⁵⁴ As a practical matter, an operator would be unlikely to charge that price because nearly all drivers would instead take alternate routes. But the operator would be free to charge whatever the market would bear to maximize profits. Most agreements allow toll increases to match inflation or GDP, whichever is higher. This may not sound excessive. But according to Professors Peter Swan and Michael Belzer, nominal GDP has increased an average of over 7 percent for the past 50 years. Thus, with this average GDP growth, truck tolls could

increase 3,976 percent over the life of the roadway under the terms of the Indiana Toll Road agreement.⁵⁵ Moreover, in order to maximize profits, the toll operator can also offer discounts to particular types of motorists and encourage traffic between certain exits or at certain times. Together, these provisions enable the operator to dictate who drives on the toll roads and at what times.

Inability to Guarantee State-of-the-art Safety and Maintenance Standards

The public may want major traffic arteries to have cutting-edge safety technologies and traffic management. Private road operators, on the other hand, have an incentive to reduce costs by avoiding these

outlays. Private investors want protection against large increases in safety or maintenance costs. As a result, road contracts typically require private operators to meet only generally applicable safety standards. In order to obtain state-of-the-art highway safety, Indiana must pay the additional cost of constructing and maintaining the road to the higher standards, as well as to compensate the private company for any lost tolls caused by the construction.

In the future, new standards may include things such as new surfaces, embedded road sensors, or technologies that are not currently envisioned. The Chicago Department of Transportation, for example, has recently conducted a study which found that using a new type of road surface that includes recycled rubber is slightly more expensive than regular asphalt but creates a

Loss of Public Control: Camino Colombia Toll Road

The Camino Colombia Toll Road is a prime example of problems with lack of public control associated with privatization. The Camino Colombia Toll Road, located in Texas, first opened to traffic in 2000. Completely financed by private investors at a cost of \$90 million, this road was intended to support the increased traffic associated with the North American Free Trade Agreement.⁵⁶ Politicians predicted the road would be a “generator of regional economic activity” and provide congestion relief. However, the road fell far short of its projections. An independent auditor predicted that the Camino Colombia road would generate \$9 million in revenue within the first year, but instead it only received \$500,000.⁵⁷ By 2004, the toll road had failed and bondholders foreclosed on the remaining \$75 million note. The road was sold at an auction for \$12.1 million to John Hancock Financial Services Inc. TxDOT had initially bid \$11.1 million for the road, but was unwilling to increase its offer. After purchasing the roadway, John Hancock Financial Services, Inc. immediately closed the road to all traffic. This move forced TxDOT to pay the private company \$20 million to purchase the road, allowing it to finally reopen the route after five months.⁵⁸

This clearly shows one of the pitfalls of privatization. Texas lost complete control of transportation along the toll road, while a private entity had the right to close the route regardless of the public consequences. Unfortunately, many transportation officials do not appear to have learned from this experience, and future privatization agreements may have similar results.

number of public benefits. It reduces strain on sewers and other water infrastructure because the surface is porous enough to allow water to return back into the ground. It also creates an outlet for used tires that are otherwise difficult and costly to dispose of. Despite the potential public benefits, a private operator would most likely be dissuaded from upgrading to this standard by the extra costs.⁵⁹

Even if high maintenance standards are specified in a contract, without proper oversight private companies will have a monetary incentive to under-invest. Private operators may seek investments that help attract drivers, but these are not necessarily the kind of safety, environmental, and other investments that public policy requires. Unfortunately, states have exhibited an inability to properly oversee private contractors in the past. The Federal Highway Administration, in a review of quality assurance activities, found numerous deficiencies “such as a lack of independent sampling of highway materials for verification tests; inadequate statistical comparisons of the test results; and insufficient state control of test samples, sampling locations, and testing data.” They also found that pavement on highways is deteriorating faster than expected, which they attribute in part to the weaknesses in oversight.⁶⁰

Private operators will have a greater incentive not to invest in improvements and maintenance as they come under financial distress or approach the end of a contract. Private operators should be required to provide prior safeguards against this possibility. For instance, for I-495 in Virginia the operator is required to provide a letter of credit or performance bond that the DOT can use if the roadway is not returned in proper condition. Public agencies can also retain a portion of tolls during the final years of a contract and dispense them only if facilities are returned in good condition. These kinds of measures can – and should

– be included with any contract; but they represent yet another area that government lawyers and accountants will need to monitor.



The Public Will Not Receive Full Value

Putting a fair dollar value on a long-term toll road lease is difficult. As events of the last year have shown, the state of the broader economy and financial markets can change quickly and dramatically, leaving business plans and state budgets in ruins.

The current crisis in state budgets makes large up-front payments for toll roads difficult to resist. To give a sense of scale, the \$1.8 billion sum paid for the 99-year lease on Chicago’s Skyway is enough to pay every resident in Chicago a one-time sum of \$643.⁶¹ The consortium that purchased a 75-year lease to operate the Indiana Toll Road paid an even greater sum: \$3.8 billion. Potential privatization deals for the New Jersey and Pennsylvania turnpikes mentioned payments between \$10 billion and \$30 billion. For elected officials struggling to plug chronic budget shortfalls, these short-term windfalls are enticing.

As impressive as the upfront payments are, they pale in comparison to the likely value of the future tolls traded for them. The sums are smaller than public entities could generate doing the same financing themselves.

Financial analysis by experts in asset valuation confirms that privatization deals have failed to supply full value for the future tolls that private companies are expected to collect.

- Analysis of the Indiana and Chicago deals by Dennis Enright of NW Financial, a New Jersey investment

bank, found that the private investors in those deals would likely recoup their investment in less than 20 years. That analysis is confirmed in at least Indiana's case by the company that won the bid. The company, Macquarie, sent investors a presentation asserting an "anticipated 15 year payback to equity."⁶² Given that Indiana's deal is 75 years long, and Chicago's is 99 years, the analysis demonstrates that governments in these states received far less for their assets than they are worth.

- Economist and long-term valuation expert Roger Skurski at the University of Notre Dame found that the \$3.85 billion Indiana Toll Road lease should have more reasonably been valued at \$11.38 billion.⁶³
- A study by finance experts at Penn State and Harvard calculated that based on the same schedule of tolls on the Pennsylvania Turnpike, the public could generate \$26.5 billion over 50 years compared with \$14.8 billion for a 50-year private asset lease.⁶⁴ That same year, after deterioration of private capital markets, a private consortium subsequently offered \$12.8 billion for a 75-year lease.
- In Texas, the Department of Transportation (TxDOT) initially excluded a public toll authority from bidding to build and run a new toll road planned near Dallas, even though it connected to another one of the authority's roads. Instead, TxDOT accepted a \$3.1 billion bid from the private company, Cintra. The bid, though seemingly large, would have generated an estimated 12.5 percent rate of profit for Cintra and would have required the public to compensate the company if a competing roadway was

built within 20 miles. Due to outrage over the deal, one state senator initiated hearings, which led to a temporary moratorium on private deals and provided the opportunity for the toll authority to bid. The public authority's bid offered an estimated \$1.9 billion in additional proceeds, calculated on a net present value basis, despite the public entity's higher estimated investment for constructing the road itself.⁶⁵ The state was able to cancel its initial contract with the private operator.

- A 2008 report prepared for the Virginia Attorney General's office said of the experience with the Dulles Greenway, an early "green field" project, "it has been well known for some eighteen years that a private toll road would be significantly more expensive than a publicly funded project."⁶⁶
- In 1999, Ontario, Canada, received \$3.1 billion for the lease of toll road 407 ETR. In the following years, commercial and residential development exceeded government projections, and the value of the road increased. In 2002, a valuation conducted by an investor in the concession estimated that the road was actually worth \$6.2 billion Canadian.⁶⁷

Figuring out the fair price for a toll road is a high-stakes guessing game. The long-term value of the upfront payment itself depends on predicting correctly the extent to which inflation will erode the value of those dollars and the rate of return investors could have otherwise garnered with the money. Expected revenues depend on future toll rates and how many cars and trucks will use the road, as well as whatever lesser revenue may be obtained from service area vendors and development of

The Indiana Mis-Investment

Governor Mitch Daniels of Indiana promoted the concession of the Indiana Toll Road as a way to receive money upfront and invest it for future use. He argued that the interest from such a large investment could be used to fund future transportation programs, as well as other initiatives. Unfortunately, however, after only two years, revenue from the initial investment is already \$138.6 million less than projected, leaving Indiana in a precarious position.⁷¹

future advertising and amenities. Private concession deals attempt to reduce uncertainty by indexing future toll rates to factors such as inflation and the growth of the national economy, but much uncertainty remains on the revenue side. Meanwhile, the road operator's costs will depend on factors such as future maintenance and improvements, the number of workers that will be employed, and the cost of providing road safety and snow removal. All of these factors will themselves be influenced by future trends in transportation technology and demographics as well as the degree to which the road operator can shift costs onto the state. Furthermore, some private investors may gain substantially by refinancing their projects after a deal is completed. Sometimes allocation of these refinancing gains is included in the agreement; however, quite often they are not considered.⁶⁸

To be fair, it is not only state governments that have a difficult time estimating the value of toll roads. Private investors – fueled by the speculative fervor of the last decade – have also made big missteps. In late 2008, as a result of lower than projected traffic and the repercussions of the financial crisis, Macquarie Infrastructure Group was forced to write down the value of several of its toll road properties in the United States. The company wrote down the value of the Dulles Greenway by 13

percent, the Indiana Toll Road by 45 percent, the Chicago Skyway by 21 percent, and California's South Bay Expressway by 91 percent.⁶⁹ Published reports have suggested that Macquarie may even be at risk of defaulting on debt payments for the Indiana Toll Road and the South Bay Expressway due to lower-than-expected revenues from the highways.⁷⁰

Concession agreements must include clear provisions to deal with the potential for default – including provisions that guarantee ongoing maintenance of the highway and the quick and orderly reversion of the highway back to state control. (See page 27.)

But while both government and private actors can fail to put an accurate value on toll roads, the public is likelier to end up getting the short end of the deal.

Private Investors Have Higher Costs of Capital

Private companies have higher long-term borrowing costs than public entities. According to analysis by Dennis Enright at the investment bank, NW Financial Group, in 2007 public sector costs for raising capital through debt were a full 35 percent less than the lowest cost a private entity could hope to obtain.⁷² Other academic studies confirm these higher private capital costs.⁷³

Today, due to the tighter private credit market, the disparity in financing costs is wider than it was. A recent report by PricewaterhouseCoopers found that in countries with good credit ratings, the spread between the cost of public and private capital – once in the range of 0.6 to 0.8 percentage points – had increased to 1 to 1.5 percentage points by late 2008. “Funding for large brownfield monetizations (like the Pennsylvania Turnpike at \$12 billion+) are finding credit margins are well above 200 basis points [2 percentage points],” the report states.⁷⁴ Deloitte, a major consultant on privatization projects, advises that, “with the maturing of the private finance market in the United Kingdom, the financing costs difference between the private cost of capital and public borrowing is now in the range of only 1-3 percentage points.”⁷⁵ The public-private spread is nothing new. For example, back in 1997, Karen Hedlund of the law firm Nossaman, Gunther, Knox & Elliott similarly reported in *Toll Roads News* that the public sector enjoyed a 200 basis point advantage over investors when borrowing long-term in the capital markets.⁷⁶

Due to these higher costs, Robert Poole, director of transportation studies at the Reason Foundation and a strong proponent of road privatization, predicts that states will receive lower bids for their roadways as investors attempt to cover their costs.⁷⁷

The financial crisis has already doomed at least one privatization project. In 2008, Missouri officials announced an ambitious plan to repair or replace 802 bridges by 2014. The initial proposal envisioned using private financing to pay for construction, with the state reimbursing the investors over a fixed period of time. However, when the credit market began to worsen in September 2008, private financing became infeasible. The Missouri DOT quickly scrapped the private-financing scheme and now intends to fund the entire project through the sale of government bonds. In

explaining the decision to forego private funds, Bob Brendel, the transportation department outreach coordinator, noted that it had become clear that the public sector could borrow money more easily than private citizens.⁷⁸

Because government officials can issue tax-free bonds and bond traders are willing to accept lower interest rates on public bonds, deals based on private capital are inherently more expensive than public financing. In light of the turmoil in the credit market, it will probably become even more difficult for the state to get a bargain through private financing. Moreover, approximately 20 percent of the financing for a private deal is typically done through issuance of stocks or other private equity. As even aggressive privatization advocates concede, equity is typically more expensive than debt.⁷⁹ When investors purchase private infrastructure stocks, they take on greater risk than if they purchase private infrastructure bonds; therefore, they expect higher rates of return. Thus, regardless of whether private companies raise capital through debt or equity, their costs will be higher than public financing.

The higher private cost of capital means that privatization deals will create significantly higher costs that get passed onto taxpayers and drivers. Even when multiple private companies bid for a public toll road, their higher long-term borrowing costs will be passed on to the public in the form of lower upfront payments than the government could generate by borrowing against the same future toll hikes without using a private road operator as an intermediary. In other words, privatization requires greater toll hikes to generate the same up-front payment that could be generated without privatization. According to the NW Financial Group study, published before the recent financial crisis, “doing such a deal with non-public ownership will result in tolls 20 to 30 percent higher than a public deal of equal size.”⁸⁰

Privatization requires greater toll hikes to generate the same up-front payment that could be generated without privatization.

The previously mentioned study of public and private options for the Pennsylvania Turnpike similarly found that, “[f]or a given upfront sum to be raised, tolls levied in a Full Public Monetization may require only 71.5% of the tolls charged under a Corporate Lease.”⁸¹

There is no debate about whether public borrowing costs are lower than the private sector’s. Defenders of road privatization may argue that private-sector efficiencies will offset the private sector’s higher borrowing costs, but there is little evidence that those efficiencies, where they exist, can make up for the higher cost of capital.

Potential for Minor Cost Savings on Existing Toll Roads Does Not Offset the Higher Cost of Capital

Privatization advocates often counter concerns about the high capital costs of privatization by talking about potential

efficiency increases from private operators. Relatively minor cost savings may be gained by avoiding public-sector rules about hiring standards.⁸³ Overall, however, the potential savings are so limited that Macquarie Infrastructure Group, for example, reported to potential investors on the Indiana deal, “no significant cost savings envisaged.”⁸⁴ The U.S. Government Accountability Office (GAO) reported that the minor cost savings are often outweighed by increased monitoring costs.⁸⁵ In sum, private operation cannot be expected to produce sufficient cost savings to offset the high costs of privatization.

Private Deals Must Also Cover Shareholder Profits

While the high capital costs of privatization alone ensure the public cannot get as much value from a private deal as it could from a public one, public value is also reduced

Securitization without Privatization

Public entities are able to securitize or “monetize” future toll road revenues without going through the process of privatization. In testimony before the New Jersey Assembly’s Transportation Committee, securitization expert Peter Humphreys explained that, without privatization, the state could generate a large up-front payment even without aggressive toll hikes. By securitizing future toll revenue, he calculated, the state could generate an upfront payment of \$1.2 billion for each annual \$100 million of future toll revenue it securitized for 15 years. Given that New Jersey tolls currently generate \$700 million a year, a single deal without a single toll hike would then generate \$8.4 billion over 15 years.⁸²

Securitization is not always a wise option for state governments because it too is a form of borrowing from future toll payers, but states that pursue this option will at least generally get a better deal than if that same borrowing is done through privatization.

by the high profits the investors make. For instance, Cintra, one of the companies purchasing the Chicago Skyway, revealed that it anticipates bringing in a 12.5 percent return on equity.⁸⁷ Analysis by Infrastructure Management Group similarly found that investors in recent concession deals expected a long-term return rate of around 12 percent on existing toll roads and 14 percent or higher for projects involving new construction.⁸⁸

Whatever the profit share allocated to shareholders, this is a net loss to the public. Drivers on private toll roads must not only cover the costs of road construction and

maintenance; they must also pay for the extra compensation of shareholders and executives. Due to the large profit margins, operators of private roads are required to raise much more revenue than public agencies. This extra revenue is achieved through higher tolls than would have been charged without privatization.

Transaction Costs

Privatization deals also create significant legal and monitoring costs for state or local governments. For governments to avoid unintended consequences, they must

Highway Modernization can be Accomplished without Privatization

The decision to establish a private toll road should be distinguished from other highway modernization efforts that may be part of a private road proposal. Modernization can be accomplished under either public or private auspices. A particular public toll authority may, for instance, be slow to adopt electronic tolling, while a potential private operator may promise to install the new technology promptly. In this case, elected officials have the power to instruct the toll authority to modernize, even if they have to pass new legislation or appoint new toll authority managers to speed the process. Alternately, the public could hire the private operator just to install the new system. The same is true of proposals for toll lanes that create discounts for carpoolers or for driving during non-peak hours. These approaches can be done with or without a private intermediary. The key distinction is that a privatized modernization program does not include a transfer of control over the roadway, with the associated long-term loss of public value.

Modernization should similarly be distinguished from privatization in situations where the state seeks to build a new toll road or expand an existing one. There are potential gains and risks to outsourcing construction project design and oversight to a private firm. In some cases a private builder in a “design-build” project might better manage the risk of cost overruns. But, as problems with Boston’s Central Artery “Big Dig” project managed by Bechtel/Parsons Brinckerhoff illustrate, private outsourcing can lead to its own problems with cost, safety, and quality.⁸⁶

The point is that highway modernization projects should be distinguished from financing and long-term ownership. Giving greater discretion and incentives to a private builder or creating high-tech tolling options need not entail private ownership or private financing of the completed road.

hire lawyers and analysts to conduct asset valuation, performance monitoring, and contract enforcement. Goldman Sachs, for example, was paid \$20 million for financial advice on the Indiana privatization deal and \$9 million for the Chicago Skyway deal.⁸⁹ Many of these costs would also be incurred if the government were to use a public entity such as the turnpike authority to securitize future toll revenues for an upfront payment. Under a private deal, however, additional state inspectors, financial experts and lawyers would be needed throughout the contract term to interpret the contract and potentially litigate to ensure that the private operator is upholding the terms of the deal. The state of Virginia, for instance, has 30 engineers, lawyers, and accountants dedicated to overseeing its private road deals; and the state must still make use of additional outside consultants.⁹⁰



Private Companies Often Engage in Risky Financial Schemes

Toll road deals are based on upfront payments to the states or construction companies and a contract for the long term maintenance and upgrading of the highway. This relationship assumes the private operator will have the available funds to meet these obligations. But what happens if it does not and cannot keep its part of the bargain? This is not a merely theoretical question.

If these business models prove unsustainable, the public may be left with a road operator in bankruptcy who will not invest in maintenance and upkeep, or who will collapse at an untimely moment, leaving government to figure out how to continue

to operate the highway amidst a cloud of litigation. Private toll operators in both Texas and Virginia have already faced bankruptcy, leading to the foreclosure of Texas' private road and subsequent auction. Unfortunately, the purchaser of the road in Texas immediately closed the road to traffic, forcing the state to purchase it at an inflated price one year later.

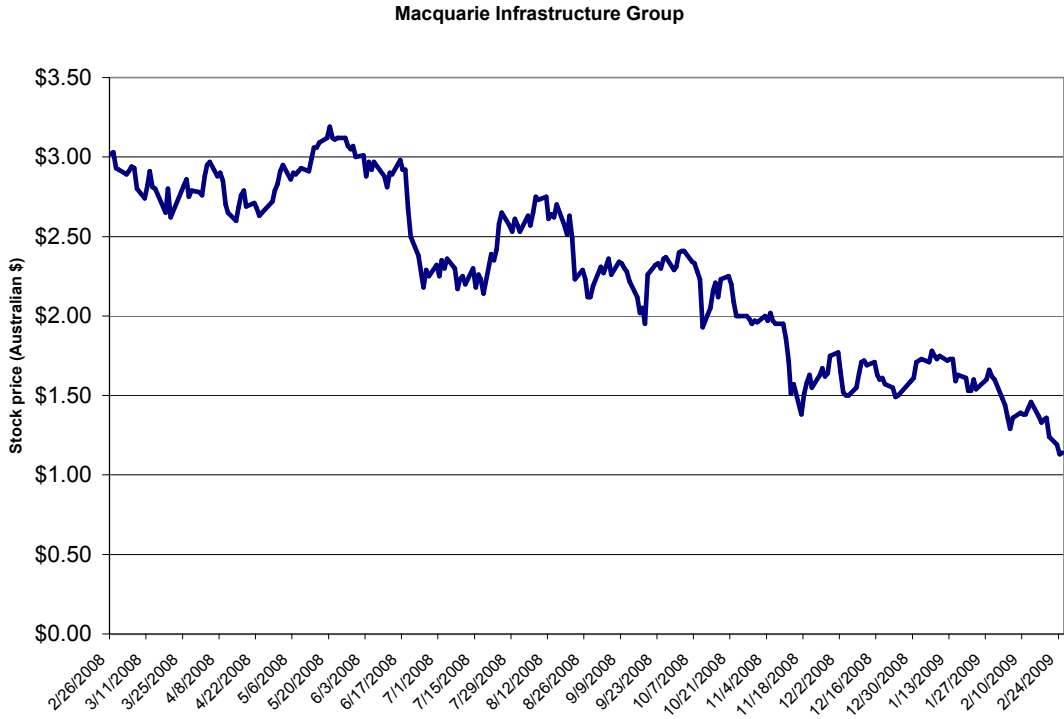
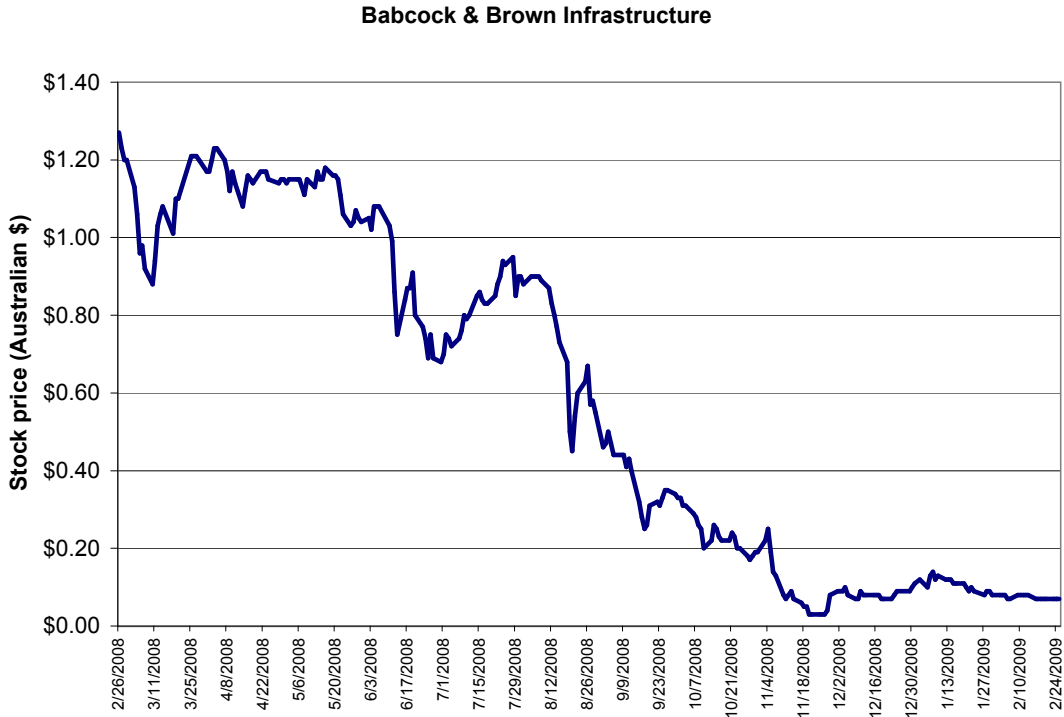
Like the mortgage industry, the private infrastructure industry often relies on heavily leveraged debt and the trading of long-term risk. Some infrastructure investors such as Australia's Macquarie have followed the mortgage broker model by repackaging infrastructure deals into shares of listed infrastructure funds. Financial firms such as AIG and Goldman Sachs have followed suit.

Public watchdogs are increasingly wary of this trend. As James L. Oberstar and Peter DeFazio, the chairmen of the U.S. House Transportation and Infrastructure Committee and the Subcommittee on Highways and Transit, respectively, warned, "The dependence of these firms on debt and asset inflation rather than income or cash flows to finance acquisitions and pay dividends to shareholders raises questions concerning the sustainability of this model."⁹¹

Typically, firms that have invested in toll roads acquired their investments with large amounts of borrowing. The peak of these acquisitions occurred several years ago when credit was cheap. A few firms even used credit to pay dividends to their stockholders. Some of the biggest deals are financed with interest rates that start low and balloon upwards over time, like those infamous mortgages with low teaser rates. Jim Chanos, an early critic of Enron, warned in *Fortune* magazine about the strategies used by the largest infrastructure firm, Macquarie, "Borrowing future growth to pay investors today bears the hallmarks of a Ponzi scheme."⁹²

Regardless of whether such dire warnings

Figure 2, a-b. Stock Prices for Private Infrastructure Companies (in Australian dollars)⁹⁴



are overstated, more expensive credit has certainly hurt private toll operators' bottom lines. Most heavily hit on the private side are the Australian infrastructure financing groups, Babcock & Brown and Macquarie. These firms are leaders of Australia's well-developed infrastructure finance market. Stock prices for the two Australian firms fell dramatically in the past months as investors began to worry that these firms had far less liquidity than they suggested, shown by the graphs on the previous page. The price of stock in the Babcock & Brown Infrastructure Fund had dropped to just 7 cents per share (Australian) by February 2009.⁹³ Many infrastructure funds have been downgraded by rating agencies and analysts have posted warnings regarding these liquidity concerns.



Problems Compounded By Excessively Long Contracts

The loss of control and lost value from privatization are greatly compounded by the fact that privatization contracts often extend so far into the future. The Chicago and Indiana lease deals will stretch for generations: 99 years and 75 years, respectively. Private investors prefer deals at least 50 years long, because that length allows them to qualify for large tax subsidies.

To appreciate how profound future changes will be over these time frames, consider these transportation-related milestones: Henry Ford introduced the Model T in 1908, 101 years ago and Congress created the interstate highway system in 1956, 53 years ago. Similarly, population changes during these time periods can be dramatic.

Metropolitan areas have doubled their populations in the course of a few decades, creating huge changes in transportation needs. Massive, unforeseeable changes will likely take place for transportation technology, networks, demographics, and the distribution of population over time frames like those in the Chicago and Indiana deals. In the face of such uncertainties, governments cannot predict their transportation needs, nor the revenue potential of their toll roads, well enough to negotiate a deal that fairly allocates risks, dictates policy, or sets a fair price.

No contract can be crafted well enough to solve these problems. Even the most public-minded elected officials with the best lawyers and consultants cannot draw up a lease or concession contract that will predict the public's needs and contingencies in the distant future. Ambiguities in the future interpretation of a contract under unforeseen circumstances may have huge stakes and may need to be litigated.

Professor José Gómez-Ibáñez at Harvard, who has written numerous books on infrastructure privatization, describes this problem as “the overuse of long-term concession contracts as the method of regulation.” He explains that, “the concession contract attempts to describe completely the obligations of the private firm to the government and vice versa, and it can not be changed unilaterally by either party. ...The main risk with concession contracts is that an unforeseen event will make the contract unworkable for one or both parties. In such cases, the parties face a difficult choice of whether to renegotiate the contract or try to live with its unsatisfactory terms until the concession expires.”⁹⁵

A study for the Organization for Economic Cooperation and Development (OECD) and the European Commission of Ministries of Transport similarly concluded that toll road contracts beyond 30 and 35 years are “sub-optimal for taxpayers” and refers to the long-term losses of longer

deals as “mortgaging the future.”⁹⁶ A Federal Highway Administration study of European experiences recommends against deals longer than 30-35 years. England and France, according to this study, will require private road contracts to be renegotiated at the end of each 7.5 years.⁹⁷

Beyond the uncertainties inherent in a multi-generational time frame, an additional issue of good government arises: disenfranchisement of future generations of voters. Private investors in toll roads specifically seek out essential thoroughfares that lack attractive alternative routes. These highways are vital infrastructure, integral to the daily lives of residents. So long as the state, directly or through a turnpike authority, retains control over its toll roads, voters have the ability to hold decision-makers accountable. Turning over control of the roads to private investors eliminates that accountability and binds future voters to present-day decisions. Doing so for several generations of voters is simply anti-democratic.



Lack of Transparency

Given the profound implications of road privatization, no deal should be approved if the public has not had the opportunity to review, question and comment upon it. Unfortunately though, many states lack legislation requiring transparency in private road projects, such as making proposals available to affected communities. This refusal to provide information is justified on the basis that private road builders and operators regard their own analysis and proposals as “proprietary” business secrets. But such rules prevent full public review of the process and undermine both transparency and the opportunity for full public participation.⁹⁸ The Indiana and Chicago leasing deals were finalized with very little public deliberation or oversight. Texas would have lost billions of dollars in revenue if public hearings had not exposed the higher payoff that could be offered by the public authority. The Florida Department



Cars lining up for the opening of the Pennsylvania Turnpike in 1940 (Photo: Pennsylvania Turnpike Commission).

Strong Public Opposition to Road Privatization

Across the country, there is strong opposition to road privatization. A poll conducted by the National Association of Realtors found that 84 percent of Americans oppose the privatization of existing public highways. Two-thirds oppose letting private companies build, own and operate new roadways.⁹⁹ Similarly, a 2009 survey by HNTB found that 92 percent of Americans said they most trusted either state, federal or local government to best manage and maintain infrastructure projects, compared to 7 percent who chose private sector companies.¹⁰⁰

Surveys from states that have approved or proposed road privatization mirror these results. The data follow a trend, identified by Rod Diridon, Sr., executive director of the San Jose State University's Mineta Transportation Institute, that people tend to become more skeptical about privatization the more they learn about a particular plan.¹⁰¹ For example, in Pennsylvania, 49 percent of those polled in March 2007 said they supported plans to privatize the Pennsylvania Turnpike. However, by August 2008, the level of support had dropped to 29 percent, with 60 percent of Pennsylvanians opposing Turnpike privatization.¹⁰²

of Transportation is actually exempt from undergoing review of its privatization contracts by the Florida Council on Efficient Governments, a council created to review state contracts with private operators. Full transparency requires the public to have a meaningful opportunity to participate in public hearings plus timely disclosure of a potential deal's terms and any related contracts and subcontracts well before a decision is made.

Likewise, citizens need to be able to hold their representatives accountable for their decision to approve (or not approve) any privatization deal. Opinion polls show the public generally opposing road privatization. (See "Strong Public Opposition to Road Privatization.") In order to avoid a situation in which the executive branch approves a deal that legislators subsequently disavow, the legislature should also be required to vote on the final terms of any potential deal. This is akin to the way that Congress is required to ratify trade deals

negotiated by the federal executive branch. Legislators who must defend their votes will listen more closely to the public. If governors need legislators' approval, they will also be more attentive to public opinion.



Inadequate Oversight Exists to Ensure the Public Interest is Protected

State Level

States do not Rigorously Evaluate Privatization Agreements

In order to safeguard the public interest, elected officials must rigorously examine every aspect of a privatization agreement. They must ensure that privatization is the

most appropriate means to deliver a particular project, and they must be certain that aspects of the public interest, such as protecting taxpayers and the environment, are not overlooked. Unfortunately, state governments have failed to develop systematic approaches to evaluating these public interest concerns in privatization agreements. Instead, public officials tend to employ an ad hoc approach in which they may consider some aspects of the public interest, such as the impact on regional mobility, but ignore other important aspects, such as equity concerns.¹⁰³

Governments in other countries, such as Australia and the United Kingdom, have developed systematic approaches to identifying and evaluating the public interest before entering into privatization agreements. Typically, these governments identify important elements of the public interest and develop criteria for how to consider potential deals. In Australia, for example, the state of Victoria requires all privatization agreements to be judged according to eight specific public interest tests, including whether the rights and views of affected communities have been heard and protected, whether community health and safety are ensured, and whether there are sufficient safeguards to ensure public access to the infrastructure.¹⁰⁴ These public interest evaluations are conducted often during the negotiations to adequately protect the public.¹⁰⁵

Unfortunately, these kinds of safeguards have been used much less frequently in the United States. In a recent report titled, *Highway Public-Private Partnerships: More Rigorous Up-front Analysis Could Better Secure Potential Benefits and Protect the Public Interest*, the U.S. Government Accountability Office notes that neither Chicago nor Indiana employed public interest tests prior to the leasing of the Chicago Skyway or the Indiana Toll Road, such as ensuring transparency of negotiations and examining effects on regional mobility. They also

failed to use comparisons with the public sector to examine the long-term costs of a project and the value of transferring risk to the private sector. In fact, Indiana Governor Mitch Daniels did not even commission an independent financial analysis of the concession until the deal was almost complete.¹⁰⁶ Similarly, transportation officials in other states, such as New Jersey, Pennsylvania, and Illinois, admit that they have not developed a systematic approach to assessing public interest concerns.¹⁰⁷

The failure to use formal public interest tests may result in certain aspects of the public interest being overlooked, such as the value of foregone toll revenue. When states have decided mid-course to conduct thorough analysis, it has often changed their decisions. In Texas, for example, Harris County conducted a study in 2006 to examine the value of a long-term concession compared to retaining public control. The county determined that it would gain little through the concession, and that by implementing more aggressive tolling, it could realize similar or greater financial gains. Thus, Harris County opted to retain control of the toll roads.¹⁰⁸ Similarly, when Oregon hired a consultant to compare the estimated costs of private versus public sector financing, the state concluded that the cost of the privately financed project was not justified given the limited value of risk transfer. Unfortunately, the study was not conducted until after the private partners had already done substantial early development work.¹⁰⁹

States Lack the Capacity to Independently Assess and Monitor Concession Agreements

Private road contracts require ongoing vigilance. Private operators have a monetary incentive to underinvest if such underinvestment will not affect their bottom line. For this reason, public oversight of transportation projects is essential to ensure that safety standards are maintained.

But, while the budgets for transportation departments have increased over the past five years, staffing levels have either declined or remained stagnant.¹¹⁰ This has resulted in an unprecedented level of contracting out by state agencies, accompanied by a decline in oversight.

Long-term concession deals are extremely complex, and state DOTs are unlikely to have the in-house expertise needed to appraise, monitor, or oversee privatization agreements. The state must also be ready to litigate when companies demand compensation for public decisions that reduce toll traffic. In Georgia, the DOT's new commissioner put a hold on all privatization agreements due to her staff's lack of experience.¹¹¹ In order to manage these projects, state DOTs are increasingly outsourcing engineering, inspections and other tasks to private contractors and consultants. In 2006, the Federal Highway Administration found that several state projects had been delayed due to inadequate staff oversight capacity and expertise. Reviews of quality assurance activities have found numerous deficiencies in state oversight of consultants.¹¹² Similarly, the U.S. Government Accountability Office (GAO) finds that the trend toward outsourcing erodes in-house expertise, which will further diminish the ability to oversee projects in the future.¹¹³

Increasing reliance on outside contractors has also increased the potential for conflicts of interest with private road operators. With the growing interest in privatization among investment banking firms, there is a possibility that a firm may provide financial advice to a state while simultaneously engaging in investment banking for the same deal.¹¹⁴ For example, Goldman Sachs was an advisor to Indiana on the concession of its toll road, but failed to mention that it was also creating a fund whose sole purpose was to invest in infrastructure. In fact, while it was supposedly advising Indiana on how to get the best

return, its Australian subsidiary's mutual funds were investing in Macquarie Infrastructure Group (the concessionaire), becoming *de facto* investors in the deal. These potential conflicts of interest, coupled with the lack of oversight by state officials, mean that decisions may not be guided by what is best for the public.¹¹⁵

Federal Level

While the federal government in recent years has aggressively promoted road privatization through new regulations, it has done little to develop or disseminate public interest protections for such deals. This has particularly profound consequences when private funding replaces federal grants that would have required public interest safeguards and reviews.

The Bush administration Department of Transportation actively promoted privatization agreements through various policies and practices, including programs that waive federal regulations and grant tax subsidies for privatization projects. For example, the federal government waived regulations for projects in Texas and Oregon that prevent private investors from being involved in a highway project until federally mandated environmental review has been completed. The U.S. Department of Transportation and the Federal Highway Administration have also promoted privatization agreements to state officials through activities such as drafting model legislation and creating a promotional website and newsletter.¹¹⁶

Despite these efforts at promotion, the administration and U.S. DOT did not seek to regulate privatization agreements, even when national interests were affected. When federal funds are used in highway construction, the projects are constrained by numerous federal regulations. These regulations relate to issues such as prevailing wages (Davis-Bacon), assistance for small and minority-owned businesses (disadvantaged business enterprises), environmental

review (National Environmental Policy Act), air quality improvement (clean air conformity), environmental mitigation (wetlands), resource conservation (Endangered Species Act), domestic job and industrial base protection (Buy America), and accommodation for the disabled (Americans with Disabilities Act).¹¹⁷ Regulations similarly require that transportation plans be developed in a transparent manner and reflect the collective views of the community.¹¹⁸ However, when federal funds are not used, no federal guidelines exist to regulate the projects. States can even avoid public protections by separating out the specific portions of a project that would not pass federal muster and funding these parts with private financing.¹¹⁹

Even when federal funds have been used for private projects, the federal government has avoided active involvement. As the GAO notes, the Federal Highway Administration has yet to develop federal definitions of the “public interest,” and officials have failed to provide guidance on identifying and evaluating public interest considerations.¹²⁰ This creates the potential for national interests, such as interstate commerce issues, to be neglected. For example, federal officials did not review the terms of the concession agreement for the Indiana Toll Road, even though 60 percent of the traffic on the highway is interstate in nature.¹²¹ Such review was not required, according to federal officials, because the federal funds used for the road had been repaid.¹²² Similarly, because the lease of the Chicago Skyway did not include any

new expenditure of federal funds, there was no requirement that the Federal Highway Administration approve the lease. The law did require the FHWA to ensure that the toll rates under the agreement represented a reasonable rate of return. However, because federal officials had no standard definition of a “reasonable rate of return,” they deferred to the state’s discretion.¹²³

Furthermore, though the federal government has the authority to oversee any project receiving federal aid, it does so only rarely. Following the passage of the Intermodal Surface Transportation Equity Act in 1991, the federal government has increasingly delegated oversight responsibility to state departments of transportation.¹²⁴ Unfortunately, many states lack the ability to properly oversee projects.

Ultimately, a lack of federal involvement in important transportation projects can be detrimental for interstate transportation. States may agree, for example, to long-term concessions that include non-compete or concession clauses, which may hamper the nation’s ability to respond properly to new transportation needs. Additionally, many of the transportation projects being considered include facilities in more than one state, or projects that are located in one area but benefit larger regions. If states act in complete independence of each other, without federal oversight, they are likely to produce an uncoordinated and inefficient transportation system.¹²⁵ Thus it is essential for the federal government to take a more active role in regulating and overseeing privatization agreements.

Protecting Against Bad Privatization Deals



Developing a General Approach to Toll Road Privatization

Earlier in this report, we suggested a series of criteria that could be applied to privatization proposals to determine whether they have the potential to deliver benefits for the public. To recap, privatization may make sense when:

- Private companies have a **proven comparative advantage over government agencies** in providing a particular good or service.
- The services that are privatized are **well defined, with clear criteria for the evaluation of success or failure.**
- **Private contractors' performance is disciplined by ongoing competition**, with multiple contractors capable of submitting bids and contracts of short enough duration to allow for unsatisfactory performers to be readily replaced.

- Government officials making the decision to privatize can be **held accountable** for the results of a deal.

When evaluating toll road privatization according to these criteria, it is necessary to look separately at the two types of privatization arrangements discussed in this report: the leasing of existing roads and the private construction of new roads.

Privatization of Existing Roadways: A Bad Deal for the Public

The privatization of existing toll roads fails to meet all of these conditions. Public entities, not private companies, have a clear and significant advantage when it comes to the long-term cost of capital: the ability to issue tax-free debt. Second, while the operation of a toll road may be a well-defined task, the provision of overall mobility to the public is not. Non-compete clauses and other provisions in concession agreements – often considered necessary to attract private investment – can undermine the ability to provide a robust and efficient transportation network. Third, toll road privatization creates a monopoly with no

meaningful ongoing competition and deals last for several decades. Finally, the length of these deals insulates them from public accountability. The downsides of a deal are likely to surface only after officials have left office and the public has no recourse to change the contract.

As a result, in order to protect the public interest, states should not agree to the privatization of existing roadways.

The evidence shows that concession agreements for existing toll roads provide short-term benefits in the form of lump-sum payments. However, the basic economics of toll deals indicate that the value of those upfront payments will be less than the value of future tolls that drivers will be forced to pay, given the profit margins and higher capital costs of private operators.

New Private Toll Roads: Proceed With Great Caution

Private finance for the construction of new roads could only make sense for certain projects if public interest protections are greatly enhanced. Before considering any privatization agreement, federal and state governments should develop systematic approaches to ensure the public interest is protected.

First, any new roads or new lanes must be consistent with long-term transportation plans, as well as with broader governmental commitments to reduce oil consumption, protect air quality, or curb global warming pollution. Public officials should not prioritize projects based on the availability of private capital. Instead, they should focus on projects that meet true public needs, regardless of whether private investors see those projects as potential profit opportunities.

Second, state governments need to honestly evaluate their capacity to assess and monitor concession agreements to determine whether they can adequately protect their constituents. Many state transportation departments lack the

expertise necessary to evaluate privatization agreements properly, and history has shown that it can be dangerous to rely on outside analysts, who may suffer from conflicts of interest. Thus, departments of transportation must build up their own, in-house expertise to ensure they can fully examine the terms of an agreement before signing any long term deals.

Third, states must develop a systematic approach to evaluating privatization proposals. If states continue with their *ad hoc* approach, it is likely that important public interest concerns will be neglected. State governments could adopt the model used in other countries, such as Australia, where officials are required to impose certain standards for each agreement, such as ensuring transparency, examining the effect on regional mobility, and protecting equity concerns. The U.S. Secretary of Transportation should assist in this process by developing and submitting criteria for identifying the national public interest in privatization agreements.

Finally, the federal government must modernize its approach to transportation. The Federal Highway Administration and the U.S. Department of Transportation should take a more active role in regulating privatization projects, even when federal funds are not used. Privatization agreements with interstate implications, for example, must be rigorously evaluated by the federal government to ensure the interests of the nation as a whole are protected. Furthermore, the federal government needs to ensure that private financing is not being used to bypass important federal regulations, such as environmental and labor laws.

These general approaches to privatization agreements will help ensure that the public interest is protected. However, the state and federal governments need to honestly examine their methods of privatization and adopt systematic approaches to ensure the national public interest is safeguarded in all agreements.



Principles to Ensure Any Deal Protects the Public Interest

Public officials considering privatization proposals must screen those proposals using public interest criteria and also compare the costs and benefits of those proposals with the cost and benefit of public financing and operation. For “green field” deals to build new roads, public officials should specify exactly how private entities might add value, and whether those more limited tasks might be outsourced while retaining broader public control and financing.

Basic public interest principles can protect against bad privatization deals. The following six guidelines can help public officials distinguish a lemon of a privatization deal from one that might provide real value to the public:

- The public should retain control over decisions about transportation planning and management.
- The public must receive fair value so future toll revenues won't be sold off at a discount.
- No deal should last longer than 30 years because of uncertainty over future conditions and because the risks of a bad deal grow exponentially over time.
- Contracts should require state-of-the-art maintenance and safety standards instead of statewide minimums.
- There must be complete transparency to ensure proper public vetting of privatization proposals.
- There must be full accountability in which the legislature must approve the terms of a final deal, not just approve that a deal be negotiated.

Transparency and accountability will force public officials to face difficult questions. Public officials will be less likely to embrace road sell-offs as an “easy out” if they are forced to evaluate the plans against these public interest principles. As the GAO notes, “there is no free money in public-private partnerships.”¹²⁶

Increased transparency can reduce the risk to the public of agreeing to a long-term private toll road deal. Other measures – such as requiring private toll road operators to share a portion of their profits if proceeds exceed anticipated levels – can also safeguard the public from risk.

By challenging privatization proposals to financially outperform what the public sector could produce with the same borrowing and toll increases, privatization proposals can be evaluated more pragmatically. Promised operational efficiencies can be evaluated on their own terms. And ideological claims that assert infrastructure privatization will “unlock the dormant value of public assets,” can be understood as little different from taking out a second mortgage on one's home.

If it is established that the public toll road authority or other public special-purpose entities can deliver better financing than private bidders, this still does not mean that public “securitization” of future tolls is a good idea. It should be evaluated the way any bond issuance or other borrowing would be: by judging whether the benefits of upfront investments would outweigh the longer-term finance burden.

Similarly, when considering any potential privatization deal, it is important to spell out exactly where privatization would be expected to generate increased value. Government agencies may lack certain kinds of technical expertise – for example, the capacity to install or manage electronic toll collection systems or implement certain new bridge-building techniques. The government may even have less ability to contain construction costs. Once the

specific public shortcomings have been identified, it will be possible to consider whether the government might outsource those activities separately or whether it would be cost efficient for the public sector to build those capacities in-house.

For existing toll roads, there simply are not enough potential efficiency gains for toll concession deals to advance the public interest. It is harder to make overall assessments of potential deals for new road construction through private companies that would claim future toll revenues. There is more potential for upsides, but also far

more potential risks for the public. In either case, no private deal should go forward unless the government is certain that the identified benefits can not be purchased separately and that the benefits truly outweigh the many associated downsides of road privatization.

Finally, the federal government must take a more active role in overseeing all privatization agreements that have national implications. Factors such as interstate commerce must be considered to ensure that we maintain a well-coordinated and logical interstate highway system.

For a detailed listing of completed and proposed privatization projects by state, please download Appendices B and C of this report, available at www.uspirg.org/road-appendix.

Notes

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10 One reason privatization of infrastructure has been modest in the United States is simply because the U.S. never had much public infrastructure to speak of in the industries where privatization took place: no state telecommunications company, energy company, civilian shipyards, airline, or electricity generation and transmission. See note 3, p. 6. Municipalities in the United States have experimented with privatized service delivery. While these moves make headlines, the overall trend is more ambiguous because challenges with monitoring and a desire to better steer the process often prompt municipalities to subsequently contract these services back in. For a discussion, see M.E. Warner with Mike Ballard and Amir Hefetz, "Contracting Back In - When Privatization Fails," *The Municipal Year Book 2003*, International City County Management Association, 2003, 30-36.

11 Based on the World Bank's Public Private Infrastructure database (PPI) which counts only privatizations that grant operational control to a private firm. See note 1. Current levels of privatization in developing countries have revived behind telecommunications deals, but the total is still 30 percent below its peak in real terms. See "Revival of Private Participation in Developing Country Infrastructure," *Gridlines* Note # 16, January 2007.

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Appendix A

Compensation and Non-Compete Clauses in Privatization Agreements

STATE	TOLL ROAD	COMPENSATION CLAUSE
California	CA 125	The agreement prevents the state from building or improving competing roads that were not already included in the state's 20-year plan. A provision was included to require the state to compensate the private operator if such actions were taken.
Colorado	Northwest Parkway	The concession agreement contains a compensation clause requiring the highway authority to compensate the concessionaire if any unplanned road or transit projects are built in the corridor and hurt revenues. If the authority can't pay, the private entity can keep any revenue sharing money, increase tolls beyond limits, or extend the lease. Currently the state is considering a proposed realignment and extension of West 160 th Avenue, which the concessionaire considers a "probable adverse action" necessitating compensation. The highway authority claims this project does not violate the compensation clause.
Colorado	E-470	Commerce City signed a non-compete agreement with the toll authority requiring them to intentionally slow traffic on the nearby Tower Road. The speed limit was changed to 40 mph from 55 mph, and traffic lights were added at three intersections, including on a dirt road. The restrictions were eventually rescinded and the speed limit was raised to 50 mph, though the traffic lights remain.
Indiana	East-West Toll Road	Indiana is required to pay the investors for reduced toll revenue when the state performs construction on the road.
Texas	SH 130 Segments 5&6	The contract includes a provision that TxDOT will pay Cintra-Zachry for lost profits if state projects reduce toll traffic, such as the widening or building of competing roads. The state can earn credit for pushing traffic to the toll road, such as by lowering the speed on I-35.
Virginia	Capital Beltway	The state is required to compensate the concessionaire for lost toll revenue if the number of HOVs encroach upon tollable capacity beyond a certain threshold.



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