



Public-Private Partnerships in State and Local Highway Transportation Projects

By Christopher D. Carlson

The following feature is the 2008 winning article of the John Stewart, Jr. Scholarship Writing Competition awarded by the FBA's Transportation and Transportation Security Law Section. The timely topic of Public-Private Partnerships (PPPs) is one of keen interest at the U.S. Department of Transportation and across the country. The article explains how state and federal fuel taxes, long the primary source of funding for modern public highway transportation projects, are fast becoming insufficient as a source of capital for future transportation needs. The article illustrates with case studies how states are turning to private investment and PPPs as one way to close the gap created by insufficient tax revenues and increasing transportation costs and needs and provides lessons learned from these experiences. The writing competition was established by the section to honor the memory of its late section chair, John Stewart. John's legal career spanned more than 35 years and was devoted primarily to public service (first as a lawyer with the U.S. Department of State and then as a lawyer with the Federal Aviation Administration). John was very well known and respected in both the domestic and international aviation communities for his professional skill and personal qualities. He had a particular gift for mentoring fledgling attorneys and was a life-long advocate of legal careers in public service.



I. Introduction

State and federal fuel taxes—the primary source of funding for modern public highway transportation projects¹—are fast becoming insufficient as the source of capital for future transportation needs. Expenditures are expected to exceed receipts in 2009 in the account that makes up the majority of the Highway Trust Fund (the dedicated source of funding for federal highway projects), and the fund itself could have a negative balance by 2012.² In response to funding shortfalls and increased demand for highway infrastructure, some states have authorized their state and local transportation authorities to enter into long-term contracts with private entities, called “Public-Private Partnerships” (PPPs), in order to develop, finance or operate new transportation projects³ and are leasing their infrastructure assets to fund expenditures in lieu of borrowing.⁴

Private investment in public highway infrastructure is one way to close the gap created by insufficient tax revenues and increasing transportation costs and needs. This note will analyze some recent projects and illustrative legislation in this field, with a specific focus on projects at least partially funded by user fee-generated revenues. User-fee funded projects hold the greatest incentive for private investment and thus represent a potent solution to the transportation funding problem. State statutes authorizing PPP relationships can be a viable method to address the problems of increased transportation demand, operation and maintenance costs and budget shortfalls so long as the procedures are sufficiently tailored to allow efficient project selection, project viability, and cost and risk allocations.

A. The Transportation Funding Problem

The costs of transportation needs are increasingly outpacing sources available to fund them. In some areas, motorists pay, on average, fewer fuel taxes per mile driven than would be necessary for additional capacity.⁵ Increases in costs of materials and labor have outpaced increases in state highway revenues, and growth in transportation demand is projected to further exceed state tax revenues devoted to highway purposes.⁶ New road construction has increased at a slower pace than population growth, vehicle registration, and road usage as measured by vehicle miles traveled (VMT).⁷

Part of the reason for the inability of fuel tax revenues to keep pace with transportation costs and needs has been the stagnancy of state and federal fuel tax levels, which are charged as fixed dollar amounts at the point of sale, as opposed to a percentage of cost.⁸ The federal rate on automobile gasoline purchases has not increased since 1993, and for the period 1993–2003, only three states have raised their fuel tax rates enough to keep pace with inflation.⁹ The increasing use of fuel-efficient and alternative-fuel vehicles will likely further diminish the viability of fuel taxes as a source of highway funding in the longer term.¹⁰

Because of this susceptibility to shortfalls, some states have already begun using some of their general tax revenues for highway transportation needs, which in 2004 amounted to approximately 15 percent of state-provided

funding for that purpose.¹¹ Despite this general revenue diversion, however, some states are predicting budgetary shortfalls ranging from \$2.8 to \$48 billion dollars over the next 10–25 years.¹²

B. History of Private Involvement in State Highways

Private involvement in surface transportation preceded the modern public highway financing system as we know it today. The first private turnpike¹³ in the United States was chartered in 1792 in Pennsylvania. Soon more followed as other states took Pennsylvania's lead,¹⁴ and eventually private roads, by one estimate, came to outnumber public ones in the first half of the nineteenth century.¹⁵ This all changed with the Federal Aid Highway Act of 1916, which marked the first major step toward federal involvement in the state highway system.¹⁶ The Act required each state to form a separate highway agency and use engineering professionals to oversee the use of federal funds disbursed through the program, which could amount to up to 50 percent of the funding for the cost of roads and bridges necessary to provide mail services.¹⁷ Significantly, the Act also prohibited the imposition of state tolls on roads financed with any amount of federal funds.¹⁸ The legislation thus created a significant incentive for states to forgo tolling as a means of highway funding in favor of the federally funded program, which, in turn, created a significant disincentive for the continued involvement of private entities in roads not funded (at least partially) through user fees, because tolls had the advantage of being a reliable source of return on highway investment.

It is thus not surprising that states soon began to turn toward fuel taxes as a way of generating revenue for highway funding purposes, beginning with Oregon in 1919.¹⁹ The federal government followed suit in 1932.²⁰ Even in this climate favoring taxes over tolls, however, some states realized that by issuing bonds and charging tolls they could construct highways sooner than if they had to rely on fuel taxes alone,²¹ and five states opened public toll-financed highways between 1940 and 1952.²²

But the idea of a fully tax-supported road system became firmly institutionalized with the Federal Aid Highway and Highway Revenue Acts of 1956, which established the modern Interstate Highway System (IHS) and the federal fuel tax-funded Highway Trust Fund, in addition to continuing the prohibition on tolling on the newly constructed interstate highways.²³ Tolling could continue on roads built before 1956 that became incorporated into the IHS, however, and new tolling was allowed on a case-by-case basis under specific conditions for interstate bridges and tunnels with a limited federal funding share.²⁴

That fewer new toll roads were built while the IHS was under construction shows the limit of these exceptions.²⁵ The 1956 acts thus preserved, if not strengthened, the incentives created by federal highway legislation in 1916—namely, reliance on federal funding in place of local tolls. For better or worse, fuel taxes continue to be the principal source of revenue for highway budgets to this day,²⁶ although recent legislation has given states some ad-

ditional flexibility to pursue other sources of funding or to charge user fees in order to relieve congestion.²⁷

C. International Implementation of PPP Highway Projects

The motivations for the use of PPPs in other countries parallel the reasons for private sector involvement in the U.S. road system: shortfalls in dedicated funding sources and rising costs and demand. The United Kingdom turned to the private sector in the early 1990s because the country's highway infrastructure maintenance and renewal projects had become "plagued with delays" due to lack of capital.²⁸ Norway began using PPPs to counter the rising costs of maintenance and construction.²⁹ New Zealand, faced with a shortage of transportation infrastructure relative to its needs, passed authorization for PPPs in order to accelerate the delivery of improvements and to spread out the cost of the new construction over time.³⁰ Australia and Germany turned to the private sector to reduce construction and maintenance costs and in order to maintain roads in response to budgetary shortfalls, respectively.³¹

II. Background on PPPs, Selected Projects and Legislation

A. Models of Public-Private Partnering

PPPs are fundamentally contractual relationships, and the term "partnership," rather than being an attempt to more specifically define the extent of the legal relationship between the public and private entities, is instead used to indicate "more private sector participation than is traditional" in public infrastructure projects.³² The usual or "traditional" method of contracting is to divide the various aspects of a project into discrete responsibilities and subject each aspect to a separate contract solicitation.³³ PPP arrangements include agreements to renovate, construct, operate, maintain, and/or manage a facility or system whereby the public partner retains ownership and may give defined "concessions" to the private partner, but the private partner is responsible for all or substantially all aspects of a given project.³⁴

The range of responsibilities the private partner assumes defines the type of partnership that exists. Responsibilities involved in highway projects include design, construction, financing, operation and maintenance. For example, road projects are typically "build-operate-transfer" (BOT) arrangements whereby the private partner takes primary responsibility for funding, designing, building and operating the project, possibly with a right to collect tolls from users (a right that has to be forgone by the public partner and hence constitutes its concession), until a period of time specified in the contract elapses for the transfer of control and ownership back to the public partner.³⁵

In the case of pre-existing assets, the above leasing arrangement is a "rehabilitate-operate-transfer" (yielding the unfortunate abbreviation ROT) project in which the private partner promises to improve the asset, operate it, and possibly collect fees from users for a set period of time.³⁶ Such an arrangement is more suitable for deteriorating or obsolete infrastructure.³⁷

B. Threshold Considerations

1. Project Selection

Whether an infrastructure project is selected for private-sector development and operation is typically discretionary on the part of state legislators or administrative agencies. Most projects that have been opened to the private sector have had a low priority (for example, those that have remained in state transportation plans for 7–30 years) and in areas where traffic growth is anticipated but not yet realized.³⁸ The high-priority projects, by contrast, with the potential for positive toll revenues, tend to be reserved exclusively for state operation.³⁹ By opening up high-priority projects in established corridors to private-sector partnership, state and local governments could potentially increase the chances that these ventures would be financially viable and would make future projects more attractive to private-sector partners.⁴⁰

2. Project Viability

Project viability in the PPP context refers to the project's profitability with respect to the private partner. Historically, tolling has been the most common way the private sector receives a return on its investment.⁴¹ What makes tolling harder to implement in places where it did not exist before, and more difficult to raise tolls where it already exists, is the public's misperception that gas taxes and other car user fees are sufficient to pay for both long- and short-term transportation expenses, thereby leading to the conclusion that tolls represent a kind of double taxation.⁴² This view appears to have been memorialized in the various incarnations of the Federal Aid Highway Acts prohibiting the use of tolls on federally funded highways except in certain limited circumstances.⁴³

Another obstacle to the implementation of tolling is the potential for traffic diversion, that is, the phenomenon of motorists selecting alternate routes in order to avoid paying tolls. Opposition to a proposal to toll Interstate 81 in Virginia, for example, cited the potential diversion of trucks from the interstate, which could create more congestion and accidents on local roads, in addition to increased maintenance costs.⁴⁴ A 2005 study on the Interstate 81 proposal estimated the potential commercial vehicle diversion would range from 12 percent to 25 percent of commercial vehicles, depending on how high tolls were set.⁴⁵ The governor of Ohio implemented a toll reduction policy on the Ohio Turnpike in 2004 in response to studies that showed commercial traffic diversion onto untolled roads raised similar concerns.⁴⁶

Projects funded solely by state treasuries or other tax revenues are certainly possible and authorized in some statutes,⁴⁷ but this relies solely on the savings to be gained (which can be substantial)⁴⁸ from contracting with the private sector to solve the transportation funding problem. Alternatives to a lump-sum payment include a "shadow tolling" arrangement, in which the public sector pays for the project over time based on a predetermined fee per car. This avoids the problem of state and local entities servicing too much debt at one time, which is the usual method of financing when public entities own and operate the asset.⁴⁹

C. Selected State PPP Toll Road Projects

1. Dulles Greenway, Virginia

A limited partnership organized for the purpose of investing in toll roads opened the Dulles Greenway in 1995 under a BOT arrangement authorized by the Virginia Highway Corporation Act.⁵⁰ The private partner originally built the Dulles Greenway as a four-lane road that runs 14 miles from Dulles International Airport to Leesburg, Va., in anticipation of development around that area, and the roadway has been expanded since.⁵¹ The Virginia Department of Transportation granted the private partner a 42-year franchise to build and operate the project and made the partner responsible for paying the costs associated with the acquisition of the right of way and environmental requirements, in addition to costs associated with operations and maintenance (which includes protection provided by the Virginia State Police).⁵² Because title to the land is in the hands of the private partner, the private partner must pay real estate taxes and bear the cost of liability insurance.⁵³

The agreement lacked a noncompete clause, and when the state improved a competing road ahead of schedule, it adversely affected the traffic projected to use the private road.⁵⁴ This, in turn, affected the tolls the road could collect, and the shortfall in projected revenue led to a default in payments in 1996 and a refinancing in 1999.⁵⁵ In its fifth year, the project has generated only 35 percent of its projected revenue (an increase of 15 percent from its first year of operation).⁵⁶

Although the tolls are subject to a state-mandated ceiling of \$2.00, the highest toll charged as of January 2004 was \$1.90 because of a lack of demand.⁵⁷ The highest two-axle tolls are now set at \$3.50, although they are set to rise to \$4.00 in 2012 and will include congestion-management price premiums starting in 2009.⁵⁸

2. State Route 91, California

The California Private Transportation Company opened its State Route 91 (SR-91) project in 1995, which was specifically authorized in 1989 by California's legislature.⁵⁹ SR-91 is a four-lane road that runs for 10 miles in the median of an eight-lane freeway in Orange County.⁶⁰ The partnership was to last 35 years from the time of opening, and, as in the case of the Dulles Greenway, the private partner is responsible for the costs associated with operations and maintenance, including the provision of state police on the highway.⁶¹ Because the state retained title to the land and the right of way was already in the hands of the state, property taxes and acquisition of right-of-way costs did not have to be borne by the private partner.⁶² The state also assumed liability for injuries, so long as the private partner followed state guidelines for design, construction, and operation.⁶³

Instead of a cap on toll prices, the private partner had the power to set tolls but was subject to a 17 percent overall profit cap for normal tolls and a 23 percent cap on tolls derived from special congestion lanes.⁶⁴ Any profit over the cap would revert back to the state highway fund if it was not used to pay down the outstanding debt on the project.⁶⁵

Unlike the Dulles Greenway, the public partner was subject to a noncompete clause that forbade the state from im-

proving roadways within 1.5 miles of each side of SR-91 until 2030.⁶⁶ Public pressure on the California Department of Transportation to make improvements to the nontolled lanes eventually resulted in a repurchase of the road in 2003 for \$207.5 million in order to remove the contractual barriers to improvement of the nontolled lanes.⁶⁷ California's legislature passed additional specific authorizing legislation that enabled Orange County's transportation administration to purchase the road from the private partner.⁶⁸ The price paid was \$81.9 million more than the cost of building the road.⁶⁹

3. Pocahontas Parkway, Virginia

A joint venture controlled by a nonprofit corporation formed for this project opened the Pocahontas Parkway toll road in 2002 under the authority of Virginia's Public-Private Partnership Act of 1995.⁷⁰ The Pocahontas Parkway is a four-lane road that runs for 8.8 miles and connects the Chippenham Parkway at Interstate 95 with Laburnum Avenue and Interstate 295 East.⁷¹ The private partner had the right to operate the road and collect tolls for 30 years.⁷² Virginia owns the road and the right of way, and undertook operations, maintenance, and police responsibilities subject to a right of reimbursement against the private partner once revenues were sufficient.⁷³

The private partner was prohibited from increasing tolls without a state consultant's concurrence and must apply revenues to debt service ahead of any other disbursements.⁷⁴ Unlike California's SR-91, this road was built in anticipation of development along Virginia's James River and not solely for congestion-relief purposes.⁷⁵

In 2006, an Australian private toll operator (Transurban) took over operations, maintenance and the right to collect tolls from users under a 99-year concession agreement with Virginia after paying the previous private partner's debts and the state's accrued expenses.⁷⁶ Toll revenues remain capped and revenues are subject to a revenue-sharing arrangement with the public partner.⁷⁷

4. Indiana Toll Road

The Indiana Toll Road was leased in 2006 under a ROT-type arrangement, whereby the private partner was granted a 75-year lease to operate, improve, and collect tolls from users in exchange for a \$3.8 billion lump-sum payment to the state under a concession agreement.⁷⁸ The road runs for approximately 157 miles and connects the Ohio Turnpike and the Chicago Skyway, linking several metropolitan areas in northern Indiana along the way.⁷⁹ The private partner (referred to in the agreement as the "concessionaire") is responsible for the costs of operation, maintenance and police service as well as any liabilities for injuries arising out of operation of the road.⁸⁰

Although tolls may be raised unilaterally by the private partner, they are subject to maximum inflation-adjusted amounts as specified in the concession agreement.⁸¹ Starting in 2010, tolls may be raised by the greater of 2 percent or the prior year's increase in consumer price index or nominal per capita gross domestic product.⁸² As in the case of the Pocahontas Parkway, gross revenues must be applied to debt service, operations, maintenance and rehabilitation costs before any equity distributions are made.⁸³

The private partner is also obligated to undertake man-

datory expansion projects if congestion causes the road to fall below established minimum “Levels of Service” or “LOS,” which refers to a published measure of traffic congestion.⁸⁴ The concession agreement also specifies the operating standards the private partner is required to observe in the operation of the road.⁸⁵

The concession agreement also contains a noncompete provision that entitles the private partner to compensation if Indiana builds or improves a similar highway of at least 20 continuous miles within 10 miles of the toll road.⁸⁶

D. Illustrative PPP Enabling Statutes⁸⁷

1. Virginia's Public-Private Transportation Act of 1995⁸⁸

Virginia allows private entities to submit unsolicited proposals in addition to participating in the usual request for proposal process for public infrastructure projects by a “responsible public entity”⁸⁹ under § 56-560.⁹⁰ In either case, the responsible public entity must find that the proposed transportation facility (1) satisfies a public need; (2) reasonably addresses the needs of state or local transportation plans by “improving safety, reducing congestion, increasing capacity, and/or enhancing economic efficiency”; (3) is priced reasonably in relation to similar facilities; and (4) is based on plans that will result in the timely development and/or operation of the transportation facility or facilities or their more efficient operation.⁹¹

This approval is subject to the formation of a “comprehensive agreement”⁹² that is required prior to developing and/or operating the qualifying transportation facility.⁹³ The comprehensive agreement must make provision for, inter alia, user fees (the amounts of which are to be negotiated by the parties⁹⁴), distribution of earnings exceeding the maximum rate of return as established by the comprehensive agreement⁹⁵ and incorporation of the duties of the private entity under the statute.⁹⁶ Because, under § 56-565 (entitled “[p]owers and duties of the private entity”), a private entity has the power to impose user fees only with “the necessary federal, state, and/or local approvals,”⁹⁷ the statute appears to contemplate that the private entity would be subject to the same approvals that a public entity would be subject to when authorizing tolls.⁹⁸

In addition, the comprehensive agreement “shall, as appropriate,” make provision for, inter alia, insurance coverage;⁹⁹ reimbursement to the public entity for services provided;¹⁰⁰ compensation to the private entity, “which may include a reasonable development fee, a reasonable maximum rate of return on investment, and/or reimbursement of development expenses in the event of termination for convenience”;¹⁰¹ and the date of the project’s reversion to the relevant public entity.¹⁰²

Responsible public entities are also empowered under the Act to exercise any power of condemnation that they have if they find that such action serves the public purpose of the statute.¹⁰³ Such action serves the public purpose of the Act if it “facilitates the timely development and/or operation of a qualifying transportation facility.”¹⁰⁴ Such property may be transferred to a private entity if it serves such a public purpose and the private partner agrees to develop or operate the qualifying transportation facility.¹⁰⁵

Finally, the public and private entities have the flexibility to secure any financing that they negotiate among themselves.¹⁰⁶ The partners are also free to issue debt or equity and enter into leases or loan agreements, including those secured by a security interest or lien on the property interests associated with the project.¹⁰⁷ If, however, the title to the underlying land remains in the hands of the public entity, presumably the private entity, acting on its own initiative, would not be able to procure any financing secured by such land.

The responsible public entity can take possession of the project in the event of a material default.¹⁰⁸ Any revenues subject to liens, however, “shall be collected for the benefit of, and paid to, secured parties . . . to the extent necessary to satisfy the private entity’s obligations,” to the extent such revenues exceed costs of operation and maintenance.¹⁰⁹ After payments to creditors, remaining revenues are paid to the private party up to the negotiated rate of return.¹¹⁰ Such an election, however, does not pledge or obligate “[t]he full faith and credit of the responsible public entity” to honor previous arrangements out of “sources other than revenues.”¹¹¹

2. Indiana's Enabling Statute¹¹²

The provisions specifying the mandatory and nonmandatory items of the agreement between the public and private entities required prior to the beginning of the project are similar to those of the Virginia statute. For instance, the agreement may provide (subject to the discretion of the state authority) for the reimbursement of state-provided services, maintenance of insurance policies, compensation to the operator in the form of revenues, and the date and time of the termination of the operator’s authority and duties and reversion of the project to the state.¹¹³

In addition, the state department has the power to “fix and revise” the amounts of user fees that can be charged,¹¹⁴ including the establishment of maximum amounts, and variances from those amounts, according to an index or other method the state authority considers appropriate.¹¹⁵ Although user fees must be nondiscriminatory, they can vary according to vehicle class and axle, and time of day or year.¹¹⁶ The calculation of the amount of fees that can be charged can take into account the private partner’s financial condition and need for adequate compensation.¹¹⁷ The public-private agreement may authorize the private partner to adjust the user fees to any degree lower than or equal to the maximum set by the department,¹¹⁸ but only to the extent set forth in the public-private agreement.¹¹⁹

Although the Indiana statute does not purport to give state or local authorities an independent source of authority for condemnation, a public entity can transfer any property interest held for public use to a private entity for use as a transportation project if the private entity undertakes to develop, finance, or operate such project so long as it serves the public purpose of the statute.¹²⁰

Like the Virginia act, the Indiana statute does not vest the authority to accept a responsive proposal in the state’s department of transportation. Prior to the execution of a public-private agreement, a feasibility study on the proposed project must be prepared and reviewed by the budget committee, and the department’s determination of the successful offeror must be accepted by the governor.¹²¹

The discretion to procure the appropriate financing for the project is also similar to that delegated by the Virginia act, including its caveat that debt and bond obligations of the private party are not considered to be debts of the state and are thus not backed by its full faith and credit.¹²²

In contrast to the Virginia statute, upon termination (including termination for default), the department “may agree to accept the qualifying project subject to any liens on revenues previously granted by the operator to any person providing financing for the qualifying project”; but “[t]he full faith and credit of the state ... is not pledged to secure any financing of the operator by the election to take over the qualifying project,” and “[a]ssumption of development or operation, or both, of the qualifying project does not obligate the state ... to pay any obligation of the operator.”¹²³ Thus, although the Virginia statute provides for a continuity of creditor liens on revenues upon reversion of the project to the state, the Indiana provisions make this assumption on the part of the transportation department voluntary. Indeed, no part of the public-private agreement may provide “that the state or the department is responsible for any debt incurred by an operator in connection with the delivery of the project.”¹²⁴

A private entity may also set up reimbursement arrangements for the public entity’s environmental certification and permit acquisition and right-of-way acquisition.¹²⁵ The department is also explicitly required to “seek the cooperation of federal and local agencies to expedite all necessary federal and local permits, licenses, and approvals.”¹²⁶

In addition, tangible personal property used exclusively in connection with a project that is either leased or owned by the operator is considered public property and is exempt from all ad valorem property taxes and assessments.¹²⁷ Income received from the project, however, is still taxable while the project is still ongoing.¹²⁸ The term of the project (as measured from the date on which operations of a part of the project by the operator begins) cannot exceed 75 years.¹²⁹

III. Lessons from Prior PPP Implementations

A. Project Selection

As a threshold matter, the public authority responsible for implementing the partnership should have the authority to award, or recommend, a high-priority project as the basis for a PPP agreement. Of the recent projects to be examined by the U.S. Government Accountability Office, only California’s SR-91 has been profitable, and it was the only project built solely to relieve congestion.¹³⁰ On projects where increased usage has been anticipated but not yet realized, as in the cases of Virginia’s Dulles Greenway and the Pocahontas Parkway, positive revenues have either been lower than expected or nonexistent.¹³¹

It is not clear that the Indiana and Virginia legislatures have seriously tried to deal with this problem. Both statutes do not purport to give the state or local transportation authorities the final, or even a weighted, say in the selection of successful offerors.¹³² Indeed, one might conclude that vesting the authority in a government official with the highest level of political exposure (the governor), as opposed to allowing project ratification in a more bureau-

cratic way (such as legislative acquiescence), reflects the same hesitance to disturb the status quo that was seen in the repeated reenactments of the federal prohibition (with some erosion) on the tolling of interstate highways.¹³³ This is not meant to imply that less transparency in the implementation of PPPs for highway transportation projects is preferable. Rather, allowing state and local agencies to act within their delegated spheres of competence should be the ideal. Of course, if state and local agencies have not acted in a transparent way in the past, attention should be given to transparency issues.

Allowing private investors to bid on projects identified in the state’s long-term transportation plan or to suggest unsolicited projects of their own (as Virginia does)¹³⁴ would potentially increase private sector involvement in higher-priority projects. Vesting affirmative final approval authority over public-private partnerships in the highest executive levels of government should be reconsidered if higher levels of private investment in highway infrastructure are to be accomplished.

B. Project Viability

The public authority should also have the flexibility to regulate user fees in order to balance the need for a rate of return sufficient to attract further private investment with the willingness of users to pay. Both Virginia¹³⁵ and Indiana¹³⁶ have sought to do this with differing levels of specificity. Regulation of profit margins, as opposed to fee caps, have the benefit of allowing the private partner to more flexibly match price levels with demand and were accordingly used in congestion-mitigation projects.¹³⁷ Indexed toll rate regulation, on the other hand, protects users from “monopolistic” pricing and creates incentives for the private partner to operate the project efficiently (because costs of operation are usually borne by the private partner) and invest in service-enhancing innovations (because all of the increase in profitability—absent a revenue-sharing arrangement—goes to the private partner).¹³⁸

When projects are operated at a loss, however, even generous caps on profits can have a punitive effect on the private party. Years of zero or negative returns can dilute the value of future returns even if profits reach the contractual maximum, which could bring the average rate of return to an amount that is lower than the private partner expected. In such a case, an average rate of return limit would be more desirable, with its benchmark at smaller intervals than the duration of the project.¹³⁹

Linking the private entity’s expected profits with the amount of costs expended in operating the project may be seen as problematic, however, because the private party could have an incentive to increase project costs (or “over-capitalize”¹⁴⁰) in order to maximize profits. But because these projects typically have a high amount of debt financing,¹⁴¹ the private partner would presumably not incur costs unnecessarily, as the need to have to make regular debt payments if such financing was used would create an incentive to keep costs down in order to assure a positive cash flow. In addition, because highway infrastructure projects are already capital-intensive and profitability is by no means assured, it would seem irrational for a private

entity to invest excess capital in a project in the hopes of offsetting future revenues.

Concerns have been raised about the potential “monopolistic” impact of having a toll road operated by a single private entity for the duration of the PPP relationship.¹⁴² Specifically, there is a concern that the private entity would have an incentive to raise tolls in order to increase profits, which would conflict with the apparent public interest in keeping tolls low. This would appear unfounded as public and private interests are aligned when tolls are managed to reduce congestion. Further, although private operation of highway infrastructure is “monopolistic” in the sense that usually only one private entity operates and maintains the road for the duration of the PPP relationship, private operation of highway infrastructure is not “monopolistic” in the sense that the ownership of most of the transportation infrastructure in the United States is public and that creates opportunities for users to avoid paying tolls for the use of roads or sections thereof. Moreover, private entities in transportation infrastructure projects need the driving public to continue to use user-pay roads and not shift to alternative methods of tax-supported transportation in order to have viable projects.

C. Cost Allocations

Ideally, the costs of fulfilling the terms of the contract should rest on the party that is better able to bear them. Thus, costs of acquisition of land and rights of way,¹⁴³ environmental certification and permits,¹⁴⁴ and other approvals¹⁴⁵ should perhaps be borne, at least initially, on the public partner. In some cases where the private partner had to find and acquire land for the underlying project—the project became more costly than had initially been anticipated.¹⁴⁶

With respect to costs related to services the state provides not arising from the project (such as the cost of police enforcement), reimbursement of the public partner by the private partner would not seem to always be necessary, yet such an arrangement was present in all the projects under consideration. This appears to be a windfall to the public entity, inasmuch as it would otherwise have had to bear the costs of police enforcement if there had been no partnership arrangement for the project going forward, and presumably the fines and penalties imposed by law enforcement would revert to the public treasury.

Similarly, the public partner receives added compensation for its concession in the form of property taxes on the project, as Indiana seems to recognize in its exemption of personalty from ad valorem property taxes.¹⁴⁷ Broader property tax exemptions would allow public entities to receive their bargained-for compensation sooner (in the form of a lump sum or otherwise) rather than later (via taxation).

D. Risk Allocations

In the ideal situation, risks would be transferred to the party that is better able to bear them. In the PPP context, risks typically borne by the private sector include construction, schedule, traffic and revenue risks, which are priced

in to the private partner's bid for the project to the extent they can be predicted.¹⁴⁸

In the event of a transfer of operation of the project from the private to the public partner because of default or otherwise, an agreement that does not provide for a continuity of revenue liens by creditors would seem to elevate the risk inherent in the project,¹⁴⁹ because lenders would be foreseeably reluctant to put their money into ventures that could potentially leave their loans unsecured, thereby raising the private partner's costs of capital or inhibiting its ability to obtain certain types of financing altogether. If revenues are sufficient to cover the costs of operation and maintenance, it is not clear why the public partner would need the added protection of a voluntary assumption of creditor liens when the contract could provide that such liens are only collectible to the extent that revenues exceed expenses.

Concerns have been raised as to the desirability of non-compete agreements in PPP projects.¹⁵⁰ Noncompete agreements are a valid risk-transfer device by which the private partner can disclaim the risk that the public entity would later undermine the viability of the project by building additional competing facilities. (Facilities are in “competition” with the project if they would allow drivers to avoid tolls they would otherwise have to pay in getting to their destination.) Vague noncompete agreements, however, would seem to add an unnecessary degree of risk to the PPP relationship. As California's SR-91 example illustrates, taxpayers may not have the patience to endure an extended period of nonimprovement in a mixed-fee structure (user- and non-user-fee funded) highway. Notice should be taken of the planned developments in a public authority's long-term transportation plan within the agreement. Instead of a strict prohibition on competitive practices, a public partner could agree to compensate the private entity for any loss of revenue caused by unanticipated developments.¹⁵¹

IV. Conclusion

State statutes authorizing PPP relationships can be a viable method to address the problems of increased transportation demand, operation and maintenance costs and budget shortfalls so long as the procedures are flexible enough to allow efficient project selection, project viability, and risk and cost allocations. Recent experience has shown, however, that not all projects that have been opened to private investment have been profitable, and some state statutes are not ideally drawn for the most efficient project selection, viability, and cost and risk allocation results. States that have allowed for a degree of flexibility in project selection have attracted significant levels of private investment. Similarly, ensuring project viability through flexible fee structures will ensure the continued participation of the private sector in public infrastructure. Additionally, initial cost and risk allocations could have a significant effect on the future viability of the particular project, and would affect the willingness of prospective investors to participate in future projects generally. A public transportation agency that has the flexibility to bear costs and risks depending on the needs of the particular projects will likely be more

successful in securing beneficial partnerships with private parties. **TFL**

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Endnotes

¹U.S. GOV. ACCOUNTABILITY OFFICE, GAO-06-554, HIGHWAY FINANCE: STATES' EXPANDING USE OF TOLLING ILLUSTRATES DIVERSE CHALLENGES AND STRATEGIES 6 (June 2006) [hereinafter GAO-06-554], available at

<http://www.gao.gov/new.items/d06554.pdf>.

²U.S. GOV. ACCOUNTABILITY OFFICE, GAO-08-44, HIGHWAY PUBLIC-PRIVATE PARTNERSHIPS: MORE RIGOROUS UP-FRONT ANALYSIS COULD BETTER SECURE POTENTIAL BENEFITS AND PROTECT THE PUBLIC INTEREST 1 (Feb. 2008) (citing an Office of Management and Budget report) [hereinafter GAO-08-44], available at <http://www.gao.gov/new.items/d0844.pdf>.

³See, e.g., VA. CODE § 56-556 *et. seq.* (2008), IND. CODE § 8-15.7-1-1 *et. seq.* (2008).

⁴Kate Linebaugh, *Macquarie Takes Ride on U.S. Roads: Australian Bank Leads Drive for Private Investment in Infrastructure*, WALL. ST. J., Apr. 6, 2007, at A7.

⁵Motorists pay 2 cents in fuel taxes per mile driven based on combined federal and state fuel taxes of 40 cents per gallon and fuel efficiency of 20 miles per gallon, while average costs for additional peak period capacity amount to as much as \$10 million per lane mile, which equates to about 30 cents per mile driven on the added lane during peak periods. U.S. DEPT. OF TRANSPORTATION, REPORT TO CONGRESS ON PUBLIC-PRIVATE PARTNERSHIPS 89 (Dec. 2004) [hereinafter DOT 2004 Report], available at <http://www.fhwa.dot.gov/reports/pppdec2004/pppdec2004.pdf>.

⁶GAO-06-554, *supra* note 1, at 15 (for the period 1995-2004).

⁷For the period 1980-2000, for example, vehicle miles traveled increased by 80 percent, while urban lane miles increased by only 37 percent, GAO-06-554, *supra* note 1, at 12-13. The Federal Highway Administration projects that highway VMT will more than double over the next 50 years, from three trillion miles to seven trillion, GAO-08-44, *supra* note 2, at 13.

⁸See, e.g., 26 U.S.C. § 4081(a)(1)(A)(iv) and (a)(2)(A)(i) (2008).

⁹The current federal tax rate on gasoline is 18.3 cents per gallon, whereas the highest state tax levy is Washington's 37.5 cents per gallon. 26 U.S.C. § 4081(a)(2)(A)(i) (2008); WASH. REV. CODE § 82.36.025 (2008).

¹⁰GAO-06-554, *supra* note 1, at 16.

¹¹In 2004, 52 percent of highway revenues spent came from state funds, and 8 percent of that portion represented funds derived from general tax revenues. *Id.* at 6.

¹²Some examples include the following: Indiana, \$2.8 billion over the next 10 years; Utah, \$16.5 billion through

2030; North Carolina, \$30 billion over the next 25 years; Missouri, \$1-2 billion annually; Colorado, \$48 billion through 2030. *Id.* at 24-25.

¹³A turnpike is defined as road funded at least in part by fees charged directly to users. DARRIN GRIMSEY & MERVYN K. LEWIS, PUBLIC PRIVATE PARTNERSHIPS: THE WORLDWIDE REVOLUTION IN INFRASTRUCTURE PROVISION AND PROJECT FINANCE 43 (2004).

¹⁴U.S. DEPT. OF TRANSPORTATION, REPORT TO CONGRESS ON PUBLIC-PRIVATE PARTNERSHIPS 15 (Dec. 2004), available at <http://www.fhwa.dot.gov/reports/pppdec2004/pppdec2004.pdf>.

¹⁵Grimsey & Lewis, *supra* note 13, at 45.

¹⁶GAO-06-554, *supra* note 1, at 7.

¹⁷*Id.*

¹⁸*Id.*

¹⁹*Id.*

²⁰DOT 2004 Report, *supra* note 5, at 16.

²¹GAO-06-554, *supra* note 1, at 7-8.

²²DOT 2004 Report, *supra* note 5, at 16.

²³GAO-06-554, *supra* note 1, at 8.

²⁴*Id.*

²⁵*Id.*

²⁶Federal highway and transit authorization bills have recently become a preferred target for earmarks, which rose from 10 in the 1982 bill to over 6,000 in 2005. U.S. DEPT. OF TRANSPORTATION, INNOVATION WAVE: AN UPDATE ON THE BURGEONING PRIVATE SECTOR ROLE IN U.S. HIGHWAY AND TRANSIT INFRASTRUCTURE 48 (July 2008) [hereinafter DOT 2008 Report], available at http://www.fhwa.dot.gov/reports/pppwave/ppp_innovation_wave.pdf. As the Department of Transportation notes, directing that funds already allocated for transportation purposes to be spent in a specific way is not inherently wasteful, but "there is no mechanism in place to ensure that all or even a substantial number of earmarks are based on a projects underlying merits, economic or otherwise ... [and] because [f]ederal earmarks are often inconsistent with state or local transportation plans, many earmarks languish, unspent, while high-priority projects may be delayed or cancelled for lack of funding." *Id.*

²⁷For example, the Surface Transportation and Uniform Relocation Assistance Act of 1987 allowed tolling of non-Interstate roads, and the Intermodal Surface Transportation Efficiency Act permitted tolling for the construction, reconstruction, or rehabilitation of federally assisted non-IHS roadways and raised federal share on interstate bridges and tunnels to equal the share provided for other federal-aid highway projects (then 50 percent) and allowed privately operated toll road participation. GAO-06-554, *supra* note 1, at 8; U.S. GOV. ACCOUNTABILITY OFFICE, GAO-04-419, HIGHWAYS AND TRANSIT: PRIVATE SECTOR SPONSORSHIP OF AND INVESTMENT IN MAJOR PROJECTS HAS BEEN LIMITED 8 (March 2004) [hereinafter GAO-04-419], available at <http://www.gao.gov/new.items/d04419.pdf>. The latter piece of legislation included congestion pricing pilot program that allowed for tolling on interstate and non-Interstate roads to reduce congestion for five projects, which was later raised to 15 and opened up to private-sector participation in 1998 by the Transportation Equity Act for the 21st Century (TEA-21). GAO-04-419 at 9. TEA-21 also allowed for three states to participate in

pilot projects to toll Interstate highways if the purpose is to reconstruct or rehabilitate the road and the state cannot adequately maintain or improve the road without collecting tolls. *Id.* Also, the Transportation Infrastructure Finance and Innovation Act of 1998 permits the Federal Highway Agency to give direct loans, loan guarantees and lines of credit for nationally or regionally significant surface transportation projects that can generate their own revenues through user charges or dedicated funding sources, with the goal of using federal funds to attract private investment. GAO-06-554, *supra* note 1, at 10. The last major piece of legislation to make inroads on the fuel-tax funded highway system was the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). GAO-08-44, *supra* note 2, at 13. Significantly, the SAFETEA-LU allowed private entities building and operating certain qualifying projects to issue tax-exempt debt. *Id.* The SAFETEA-LU also continued previous pilot programs and added new ones, such as tolling on three pilot projects by state or compact of states to construct new IHS highways, tolling on non-High Occupancy Vehicles (HOVs) in HOV lanes on non-IHS roads. GAO-06-554, *supra* note 1, at 9.

²⁸U.S. DEPT. OF TRANSPORTATION, REPORT TO CONGRESS ON PUBLIC-PRIVATE PARTNERSHIPS 68 (Dec. 2004), *available at* <http://www.fhwa.dot.gov/reports/pppdec2004/pppdec2004.pdf>.

²⁹*Id.* at 68–69.

³⁰*Id.* at 69.

³¹*Id.* at 70–71.

³²*Id.* at 10.

³³U.S. DEPT. OF TRANSPORTATION, INNOVATION WAVE: AN UPDATE ON THE BURGEONING PRIVATE SECTOR ROLE IN U.S. HIGHWAY AND TRANSIT INFRASTRUCTURE 7 (July 2008) [hereinafter DOT 2008 Report], *available at* http://www.fhwa.dot.gov/reports/pppwave/ppp_innovation_wave.pdf.

³⁴*Id.*; DOT 2004 Report, *supra* note 5, at 10.

³⁵DARRIN GRIMSEY & MERVYN K. LEWIS, PUBLIC PRIVATE PARTNERSHIPS: THE WORLDWIDE REVOLUTION IN INFRASTRUCTURE PROVISION AND PROJECT FINANCE 10-11 (2004).

³⁶David A. Levy, *BOT and Public Procurement: A Conceptual Framework*, 7 IND. INT'L & COMP. L. REV. 95, 102-103 (1996). The BOT and ROT methods of financing appear to have originated in developing countries where public sector capital was scarce or unavailable. *See id.* at n.1.

³⁷*Id.* at 103.

³⁸GAO-04-419, *supra* note 27, at 22.

³⁹*Id.*

⁴⁰*Id.* at 29.

⁴¹*Id.* at 21.

⁴²*Id.* at 22.

⁴³*Id.*

⁴⁴GAO-06-554, *supra*, note 1, at 40. Because “wear and tear on roads increases directly in proportion to the cubic power of vehicle axle weight,” linking transportation funding to *road* rather than *fuel* usage would go further to ensure that benefits are commensurate with costs from a road user’s perspective. *See* DARRIN GRIMSEY & MERVYN K. LEWIS, PUBLIC PRIVATE PARTNERSHIPS: THE WORLDWIDE REVOLUTION IN INFRASTRUCTURE PROVISION AND PROJECT FINANCE 32 (2004). The

predominant federal and state approach to transportation funding via fuel taxation is thus inconsistent with a strict application of the “benefit principle,” an economic concept that, in the transportation context, would have the beneficiaries of transportation expenditures bear their proportion of the costs associated with their use of those assets. *See* GAO-06-554, *supra* note 1, at 17. If highways were subjected to the test of market viability—a primary concern of private investors—users would probably support, and investors would back, new projects that seek to satisfy latent transportation demand. *See* U.S. GOV. ACCOUNTABILITY OFFICE, GAO-08-44, HIGHWAY PUBLIC-PRIVATE PARTNERSHIPS: MORE RIGOROUS UP-FRONT ANALYSIS COULD BETTER SECURE POTENTIAL BENEFITS AND PROTECT THE PUBLIC INTEREST 25 (Feb. 2008), *available at* <http://www.gao.gov/new.items/d0844.pdf>.

⁴⁵The study assumed toll rates ranging from \$0.04 to \$0.07 per mile per axle. GAO-06-554, *supra* note 1, at 41, n.35.

⁴⁶GAO-06-554, *supra* note 1, at 41.

⁴⁷Virginia’s enabling statute expressly contemplates a public entity’s use of federal funds received by the state for the purpose of highway financing and “any and all revenues” available to it for these projects. VA. CODE §§ 56-566.C, 56-567.1 (2008). The financing discretion delegated by Indiana’s statute is substantially similar. IND. CODE §§ 8-15.7-8-3, 8-15.7-8-4 (2008).

⁴⁸One report “comparing the use of innovative contracting with traditional procurement” found that the use of PPPs “can result in cost savings ranging from 6-40 percent.” U.S. DEPT. OF TRANSPORTATION, REPORT TO CONGRESS ON PUBLIC-PRIVATE PARTNERSHIPS 42 (Dec. 2004), *available at* <http://www.fhwa.dot.gov/reports/pppdec2004/pppdec2004.pdf>.

⁴⁹U.S. DEPT. OF TRANSPORTATION, INNOVATION WAVE: AN UPDATE ON THE BURGEONING PRIVATE SECTOR ROLE IN U.S. HIGHWAY AND TRANSIT INFRASTRUCTURE 51 (July 2008), *available at* http://www.fhwa.dot.gov/reports/pppwave/ppp_innovation_wave.pdf.

⁵⁰U.S. GOV. ACCOUNTABILITY OFFICE, GAO-04-419, HIGHWAYS AND TRANSIT: PRIVATE SECTOR SPONSORSHIP OF AND INVESTMENT IN MAJOR PROJECTS HAS BEEN LIMITED 38 (March 2004), *available at* <http://www.gao.gov/new.items/d04419.pdf>.

⁵¹*Id.* at 38.

⁵²*Id.* at 39.

⁵³*Id.*

⁵⁴*Id.*

⁵⁵*Id.*

⁵⁶*Id.* at 40–41.

⁵⁷*See id.* at 40.

⁵⁸Dulles Greenway Future Toll Schedule, *available at* <http://dullesgreenway.com/future-toll-rates-approved.html> (last visited Sept. 10, 2008).

⁵⁹GAO-04-419, *supra* note 27, at 40.

⁶⁰*Id.*

⁶¹*Id.* at 42.

⁶²*Id.*

⁶³*Id.* at 43.

⁶⁴*Id.*

⁶⁵*Id.*

⁶⁶*Id.* at 42.

⁶⁷*Id.* at 44.

⁶⁸*Id.*

⁶⁹The cost of construction was \$125.6 million, \$20 million of which represented equity investment. *Id.* at 43.

⁷⁰*See id.* at 49–50.

⁷¹*Id.* at 50.

⁷²*Id.*

⁷³*Id.*

⁷⁴*Id.* at 51.

⁷⁵*Id.* at 50.

⁷⁶U.S. DEPT. OF TRANSPORTATION, INNOVATION WAVE: AN UPDATE ON THE BURGEONING PRIVATE SECTOR ROLE IN U.S. HIGHWAY AND TRANSIT INFRASTRUCTURE 13 (July 2008), *available at* http://www.fhwa.dot.gov/reports/pppwave/ppp_innovation_wave.pdf.

⁷⁷*Id.*

⁷⁸*See* Ind. Concession Agreement, 12, 41 (Apr. 12, 2006), *available at* <http://www.in.gov/ifa/files/4-12-06-Concession-Lease-Agreement.pdf>.

⁷⁹The Indiana Finance Authority's Indiana Toll Road home page, *available at* <http://www.in.gov/ifa/2474.htm> (last visited Aug. 13, 2008).

⁸⁰Ind. Concession Agreement, 29–30, 39.

⁸¹*Id.* at 48.

⁸²U.S. GOV. ACCOUNTABILITY OFFICE, GAO-08-44, HIGHWAY PUBLIC-PRIVATE PARTNERSHIPS: MORE RIGOROUS UP-FRONT ANALYSIS COULD BETTER SECURE POTENTIAL BENEFITS AND PROTECT THE PUBLIC INTEREST 43 (Feb. 2008) [hereinafter GAO-08-44], *available at* <http://www.gao.gov/new.items/d0844.pdf>.

⁸³Ind. Concession Agreement at 49.

⁸⁴*Id.* at 43–45, 12.

⁸⁵*Id.* at 14.

⁸⁶*Id.* at 4, 74–76.

⁸⁷Because the focus of this section is on ongoing and prospective partnerships, California's authorizing legislation, which dealt only with specific projects, will not be discussed. U.S. GOV. ACCOUNTABILITY OFFICE, GAO-04-419, HIGHWAYS AND TRANSIT: PRIVATE SECTOR SPONSORSHIP OF AND INVESTMENT IN MAJOR PROJECTS HAS BEEN LIMITED 41 (March 2004) [hereinafter GAO-04-419], *available at* <http://www.gao.gov/new.items/d04419.pdf>.

⁸⁸VA. CODE § 56-556 (2008).

⁸⁹A “responsible public entity” is defined as “a public entity, including local governments and regional authorities, which have the power to develop and/or operate the qualifying transportation facility.” § 56-557. A “public entity” is defined as “the Commonwealth and any agency or authority thereof, any county, city or town and any other political subdivision of any of the foregoing.” *Id.* The commonwealth's Transportation Board is authorized “[t]o construct, maintain, repair and operate turnpike projects at such locations within the Commonwealth as may be determined by the Board and approved by the Governor.” § 33.1-299(a).

“Qualifying transportation facility” is defined as any transportation facility “developed and/or operated by a private entity pursuant to the [Public Private Transportation Act],” and “transportation facility” includes “any road, bridge, tunnel, overpass ... or similar commercial facility used for the transportation of persons or goods, together with any ... other property needed to operate such facil-

ity,” excluding any structure whose use is “not essential to the transportation of persons or goods.” § 56-557.

⁹⁰§ 56-559.

⁹¹§ 56-560.C.

⁹²§ 56-560.E.

⁹³§ 56-566.A.

⁹⁴§ 56-566.B. The user fees, however, have to be set at a level that accounts for any “lease payments, service payments, and compensation to the private entity.” *Id.*

⁹⁵§ 56-566.E. Earnings in excess of the maximum rate can be discretionarily distributed to the commonwealth's Transportation Trust Fund, the public partner, or the private partner for the purposes of debt reduction. *Id.*

⁹⁶§ 56-566.D.

⁹⁷§ 56-565.A.

⁹⁸Thus, any toll project approved by the state board under the statute would have to also be approved by the governor. *See* § 33.1-299(a) and note 89, *supra*.

⁹⁹§ 56-566.A.4.

¹⁰⁰§ 56-566.A.6.

¹⁰¹§ 56-566.A.8.

¹⁰²§ 56-566.A.9.; § 56-572.

¹⁰³§ 56-569.

¹⁰⁴§ 56-558.B.

¹⁰⁵§ 56-564. Although the use of condemnation for effectuating the transfer of property from one private party to another may seem questionable under the Takings Clause of the U.S. Constitution, which prohibits federal and state governments from taking private property without meeting a “public use” requirement, a private partner developing a public transportation facility would seem to occupy an analogous position to that of a “railroad with common carrier duties,” a situation typically cited as a classic example of a constitutional use of the eminent domain power. *See Kelo v. City of New London*, 545 U.S. 469, 472, 477 (2005); U.S. CONST. Amend. V. The dissent agreed that a “sovereign may transfer private property to private parties, often common carriers, who make the property available for the public's use—such as with a railroad, a public utility, or a stadium.” 545 U.S. at 498 (O'Connor, J., dissenting).

¹⁰⁶§ 56-567.1.

¹⁰⁷*Id.*

¹⁰⁸§ 56-568.A.1.

¹⁰⁹*See* § 56-568.B.

¹¹⁰*Id.*

¹¹¹*Id.*

¹¹²Although Indiana has a dedicated article for “Public-private Agreements for Toll Road Projects” in its code, currently the relevant state authority can neither issue a request for proposals nor enter into a public-private agreement relying on the authority contained in that article without specific statutory authorization. IND. CODE § 8-15.5-1-2(b) (2008). Because “tollway” is included within the definition of “project” under the more general article entitled “Public-private Partnerships,” this note will focus on the latter. § 8-15.7-2-14(2).

¹¹³§ 8-15.7-5-1(a), (b)(4), (6), (8), (10), (11). The statute also expressly contemplates the payment of a lump sum, periodic payments, or revenue-sharing arrangements in

consideration for public concessions and leases of existing state facilities or lands. § 8-15.7-5-1(b)(9)

¹¹⁴Private entities are expressly empowered to impose user fees under § 8-15.7-3-2(2).

¹¹⁵§ 8-15.7-5-2(a).

¹¹⁶§ 8-15.7-5-2(b)(1), (2).

¹¹⁷§ 8-15.7-5-2(b)(3).

¹¹⁸§ 8-15.7-5-2(c)(1), (2).

¹¹⁹§ 8-15.7-3-2. The duties of the private party as stated throughout the article are required to be incorporated in the agreement, as in the case of the Virginia statute. § 8-15.7-5-4.

¹²⁰§ 8-15.7-10-1. Such action constitutes a public purpose if it “facilitates the timely development, planning, design, construction, maintenance, repair, rehabilitation, expansion, financing, or operation of a qualifying project.” § 8-15.7-1-2. A qualifying project is defined as a project “developed, financed, or operated by an operator under this article.” § 8-15.7-2-16. See note 105 for constitutional concerns raised by these provisions.

¹²¹§ 8-15.7-4-1(b)(1), (4); § 8-15.7-4-3(b), (c).

¹²²§ 8-15.7-8-4, 8-6, 8-9.

¹²³§ 8-15.7-5-6(a), (d).

¹²⁴§ 8-15.7-5-1(c).

¹²⁵§ 8-15.7-6-4.

¹²⁶§ 8-15.7-6-5.

¹²⁷§ 8-15.7-7-1.

¹²⁸§ 8-15.7-7-3.

¹²⁹§ 8-15.7-13-1.

¹³⁰U.S. GOV. ACCOUNTABILITY OFFICE, GAO-04-419, HIGHWAYS AND TRANSIT: PRIVATE SECTOR SPONSORSHIP OF AND INVESTMENT IN MAJOR PROJECTS HAS BEEN LIMITED 22 (March 2004), available at <http://www.gao.gov/new.items/d04419.pdf>. On the subject of the noncompete agreement that was the catalyst for the termination of the partnership, see Section III.D, *infra*.

¹³¹See sections II.C.1 and II.C.3, *supra*.

¹³²Virginia’s statute does this with respect to the state-level agency (albeit in a more convoluted way) via the operation of VA. CODE § 56-566.D., § 56-565.A., and § 33.1-299.A. (2008); Indiana’s via IND. CODE § 8-15.7-4-3(b), (c).

¹³³See note 25, *supra*, for examples of the increasing federal tolerance of tolling and the recognition that tolling is not only a funding mechanism but also a congestion-management device.

¹³⁴VA. CODE § 56-560.A.

¹³⁵VA. CODE § 56-566.B.

¹³⁶IND. CODE § 8-15.7-5-2.

¹³⁷See section II.C.2.

¹³⁸U.S. DEPT. OF TRANSPORTATION, INNOVATION WAVE: AN UPDATE ON THE BURGEONING PRIVATE SECTOR ROLE IN U.S. HIGHWAY AND TRANSIT INFRASTRUCTURE 53, 55, 57 (July 2008), available at http://www.fhwa.dot.gov/reports/pppwave/ppp_innovation_wave.pdf. The authors of the Department of Transportation’s July 2008 report expressed a preference for price regulation as opposed to rate of return regulation, noting that economists studying other regulated industries are generally least averse to the former. *Id.* at 57.

¹³⁹To illustrate, assume a 20-year project with 20 percent

annual profit caps. If revenues from the project during the first five years only meet expenses and reach the cap on profits in the remaining 15 years, the average profit-expense ratio is only 15 percent per year ($[(0.20 \times 15) / 20]$ years). Depending on the ratio of expenses to the amount of the initial *investment* (one would not expect annual expenses to equal the amount invested unless something unforeseen occurred), this return can be diluted even further before it reaches the private investors. If the contract provided for an average profit of 20 percent per year over 10 years, the years of profitability could have made up for the years when the project merely broke even. (Of course, all the projects financed with a combination of equity and commercial debt included within the GAO’s 2004 study had a greater portion of debt than equity invested in the project, which complicates the picture as far as rates of return on investment are concerned. U.S. GOV. ACCOUNTABILITY OFFICE, GAO-04-419, HIGHWAYS AND TRANSIT: PRIVATE SECTOR SPONSORSHIP OF AND INVESTMENT IN MAJOR PROJECTS HAS BEEN LIMITED 40, 43 (March 2004), available at <http://www.gao.gov/new.items/d04419.pdf>. None of the projects were financed solely on an equity basis. See *id.* at 38.) Averaging the profit cap over the duration of the entire project may lead to (or be seen as allowing for) draconian toll pricing for later users, especially if the project is expected to have a long initial period of unprofitability.

¹⁴⁰DOT 2008 Report, *supra* note 26, at 57.

¹⁴¹See GAO-04-419, *supra* note 27, at 40, 43.

¹⁴²JEFFREY N. BUXBAUM & IRIS N. ORTIZ, USC KESTON INSTITUTE FOR PUBLIC FINANCE AND INFRASTRUCTURE POLICY, PROTECTING THE PUBLIC INTEREST: THE ROLE OF LONG-TERM CONCESSION AGREEMENTS FOR PROVIDING TRANSPORTATION INFRASTRUCTURE 11 (2007), available at <http://www.usc.edu/schools/sppd/keston/pdf/20070618-trans-concession-agreements.pdf>.

¹⁴³VA. CODE § 56-564 (2008); IND. CODE § 8-15.7-6-4 (2008).

¹⁴⁴IND. CODE § 8-15.7-6-4.

¹⁴⁵IND. CODE § 8-15.7-6-5.

¹⁴⁶GAO-04-419, *supra* note 27, at 23.

¹⁴⁷IND. CODE § 8-15.7-7-1.

¹⁴⁸U.S. GOV. ACCOUNTABILITY OFFICE, GAO-08-44, HIGHWAY PUBLIC-PRIVATE PARTNERSHIPS: MORE RIGOROUS UP-FRONT ANALYSIS COULD BETTER SECURE POTENTIAL BENEFITS AND PROTECT THE PUBLIC INTEREST 21–23 (Feb. 2008) (citing an Office of Management and Budget report) [hereinafter GAO-08-44], available at <http://www.gao.gov/new.items/d0844.pdf>.

¹⁴⁹This possibility was noted in section II.D.2., *supra*.

¹⁵⁰JEFFREY N. BUXBAUM & IRIS N. ORTIZ, USC KESTON INSTITUTE FOR PUBLIC FINANCE AND INFRASTRUCTURE POLICY, PROTECTING THE PUBLIC INTEREST: THE ROLE OF LONG-TERM CONCESSION AGREEMENTS FOR PROVIDING TRANSPORTATION INFRASTRUCTURE 42 (2007), available at <http://www.usc.edu/schools/sppd/keston/pdf/20070618-trans-concession-agreements.pdf>.

¹⁵¹California did this in a subsequent project. GAO-04-419, *supra* note 25, at 18.