



USC Keston Institute for Public Finance
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Protecting the Public Interest: The Role of Long-Term Concession Agreements for Providing Transportation Infrastructure

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Protecting the Public Interest: The Role of Long-Term Concession Agreements for Providing Transportation Infrastructure¹

Jeffrey N. Buxbaum² and Iris N. Ortiz³

■ Executive Summary

Lack of cash has led virtually every state in the nation to explore innovative finance techniques that allow important improvement projects to move forward while keeping taxes and fees low. In 2004, the City of Chicago rocked the transportation infrastructure world by leasing the Chicago Skyway to private investors for 99 years and putting \$1.83 billion in the bank. The city took that money, paid off its Skyway debt, relieved numerous burdens in the city budget, contributed to other non-transportation programs, and created a reserve fund. This deal was simultaneously hailed as a stroke of genius and decried as a treasonous selling of American infrastructure to foreigners. Several months later, Indiana leased its toll road to foreign investors for \$3.8 billion, almost twice as much as analysts expected, allowing the State to fully fund its long-range transportation plan. People noticed. Was this the long sought silver bullet of the innovative finance world? Many think so, and numerous states have been seriously considering heading down the path of long-term concessions, either through leases of existing assets or through development of new green field projects.

But these concessions are tremendously controversial. The Indiana concession barely survived stiff opposition from the state legislature. Texas, which has been energetically pursuing Comprehensive Development Agreements to fund new toll highways, has seen the legislature push a moratorium on new concession agreements. Other states, just in the last few months, have gone from exuberance to cautious optimism. How are public sector decision-makers to know whether they are advancing the public interest when they consider these agreements?

¹ Study prepared with a grant from the Keston Institute for Public Finance and Infrastructure Policy, University of Southern California. The views expressed herein reflect those of the authors and do not necessarily reflect the views of the staff, officers, or Board of the Keston Institute for Public Finance and Infrastructure Policy.

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The confusion and controversy surrounding long-term concession agreements has come about because they have been promoted as silver bullets, as essentially free money provided by the private sector that will not require new taxes or fees. But users of the facilities will have to pay, and how users pay will be very different from how they have paid in the past. These new models may in fact prove to be more equitable and efficient than the old methods, but the negative reaction in some quarters to the initial agreements highlights the need for careful analysis and transparency going forward.

Here are some of the ways that the long-term concession agreement changes things:

Tolls, Not Taxes. Tolls have historically been used to fund individual projects or groups of projects that were too expensive to be paid for from taxes. Traditional toll facilities financed by municipal bonds and governed by public or quasi-public agencies typically aimed to keep tolls at the minimum necessary to retire the bonds and fund needed reserves. One of the main advantages cited of switching to the concession model is the ability to raise tolls to track or exceed inflation and to keep tolls on for a long time, since the public sector has been unwilling or unable to do this. While it is true that these high toll levels a century from now will be no higher than their value today on an inflation-adjusted basis, the public policy decision to extend and escalate tolls in this way has been rolled into the decision to lease the highway to the private sector. These are two separate decisions, each deserving analysis and debate.

Private Equity versus Private Debt. The private sector has long been involved in the finance of transportation facilities, through the purchase of municipal bonds. The concession model allows private entities to take an equity stake in a project, which significantly changes their interest in the outcome of the project. Under the municipal bond model, the private sector has one concern – full and timely payment of bonds, starting the day the debt is incurred. Under the private equity model, the private sector hopes that revenue will exceed forecasts and yield returns greater than expected. This transforms the operator of the toll road from an entity tasked with providing a public good, albeit at a price, to one that wants to maximize profit. Because the United States highway system has most recently been a public enterprise, people instinctively reject the idea of someone profiting from a toll road. Although the public sector can allay some of this criticism by limiting excessive profits by concessionaires through contract provisions and building in profit-sharing arrangements, this will have the effect of reducing the potential value of the concession and lowering any upfront payments by the concessionaires.

Private Sector Cost Savings. Another impetus for the concession approach is the belief that the private sector can deliver services at less cost than the public sector. There are as many arguments in favor of this thesis as there are against it. The public sector has responded to criticisms of its inefficiency by creating in-house enterprises that are better able to manage costs (such as Florida's Turnpike Enterprise), and by outsourcing some or all of its operations without equity participation. Simple design-build contracts also are a way that the public sector has attempted to control costs without use of the concession model. The point is that the concession model can bring with it many cost saving features, but that does not mean that public agencies do not have other means of achieving some or all of the benefits.

The concession model has grown from the reality that our transportation system needs far more money than is available from traditional sources. There are no silver bullets in public finance and there are no easy answers to this fundamental dilemma. The concession approach to project financing has many advantages over traditional methods and as many concerns with these nontraditional techniques. At this point, very few people have a complete picture of the short- and long-term implications of different approaches and elected officials are bombarded with ideologically laden lobbying from both sides. Many of the concerns with long-term concessions identified in this report are legacies from past agreements that have been rectified as both the public and private sectors have learned and adapted. Some potential alternatives to private concessions have not yet been adequately explored because they raise still more difficult political issues that are generally avoided by elected officials.

What is needed is dispassionate, objective analysis that allows decision-makers to clearly see the advantages and disadvantages of *all* viable approaches to solving the crisis of paying for transportation. As the transportation industry and elected officials gain more experience with concessions, it is possible that the firestorm of emotion will subside, and well thought-out solutions that gain public acceptance will emerge. Already, we are seeing states such as Florida and New Jersey taking a much more methodical approach than their predecessors. Ultimately, each state or region will need to determine for itself the proper balance between competing objectives when it comes to delivering an effective transportation system.

■ 1.0 Introduction

Virtually every state in the nation is financially challenged to maintain, expand, and enhance their transportation systems.⁴ This has led to a quest for innovative financing techniques that will allow important projects to move forward without the political downside of increasing taxes or fees. While effective at accelerating project delivery, most innovative financing methods primarily involve debt and cash management techniques that just defer or reduce payments for a few years – they do not involve new revenue. As a result, the long-term concession agreement or Public Private Partnership (PPP) has emerged as a potential source of significant new revenue for transportation.

In 2004, the City of Chicago rocked the transportation infrastructure world by leasing the Chicago Skyway to private investors for 99 years in exchange for an upfront cash payment of \$1.83 billion. The City used that money to pay off its Skyway debt, relieve numerous burdens in the city budget, contribute to other nontransportation programs, and create a reserve fund. This deal was alternately hailed as a bold stroke of financial genius and

⁴ Transportation Research Board, National Cooperative Highway Research Program, Project 20-24(49). *Future Financing Options to Meet Highway Transit Needs*. December 2006. Web-only document 102, available at: http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_w102.pdf.

decried as a short-sighted and possibly treasonous selling of American infrastructure to foreign interests. Several months later, Indiana leased its toll road to foreign investors for \$3.8 billion, almost twice as much as analysts expected, allowing the State to fully fund its long-range transportation plan. People noticed. Was this the long-sought silver bullet of the innovative finance world? Many think so, and numerous states have been seriously considering such long-term concessions, either through leases of existing assets or through development of new greenfield projects.

But these arrangements are tremendously controversial. The Indiana concession barely survived stiff opposition from the state legislature. Texas, which has been energetically pursuing Comprehensive Development Agreements to fund new toll highways, has seen its legislature impose a moratorium on new concession agreements. Other states, just in the last few months, have gone from exuberance to cautious optimism. The Chairmen of the Committee on Transportation and Infrastructure and the Subcommittee on Highways and Transit of the U.S. House of Representatives recently sent a letter to the Governors of all 50 states warning them against rushing into public-private partnerships involving national highways because “many such arrangements do not protect the public interest.”

The problem is that these deals are complicated. It is difficult enough for people that spend their lives tracking transportation finance issues to understand what is going on. The experts disagree on the true costs and benefits of these deals. The challenge is even greater for legislators who also have to be experts on many other issues such as crime, education, health care, and economic development.

Private investors around the world, and increasingly in the United States, have been eager to invest heavily in new and existing transportation infrastructure. There are two main drivers to this trend: 1) the long-term, stable nature of the revenue streams, which are ideally suited to the long-term perspective of financial instruments such as pension funds; and 2) stability of the United States government and a long tradition of a legal system that enforces contracts. However, much of the information promoting long-term concessions comes from those who will benefit directly – the construction companies, toll operators, bankers, attorneys, and their consultants. Similarly, opposition comes from those with a vested interest such as public employee unions and consumer advocacy groups. Public sector decision-makers may not know what information and advisors they can trust when it comes to balancing the prospect of a windfall payday with protecting and advancing the long-term public interest.

Long-term concession agreements with equity participation by the private sector are one form of what are generically called “public-private partnerships” – also known as PPPs or P3. Over the last year or so, PPP has typically referred to these concessions, but PPP refers to any contractual agreements between the public sector and a private entity that allow for private sector participation in the delivery of transportation projects.⁵ PPPs range from the simplest form, design-build, to more complex transactions, including design-build-finance-operate (DBFO) or long-term leases/concession agreements. This synthesis

⁵ FHWA definition of PPP from FHWA’s PPP web site, available at: <http://www.fhwa.dot.gov/ppp>.

focuses on long-term concession type agreements where the private sector plays a larger role than experienced historically in the United States by taking an equity stake in a project. Although other PPPs are possible, such as long-term maintenance agreements or operation of transit lines, most activity has focused on toll highways where the tolls provide the long-term revenue stream that drives the project financing. Most of the language in this report presumes tolling, but this does not preclude applicability to other means of raising funds.

This synthesis explores issues of interest to help the public get the best value for the money it invests in infrastructure using long-term concession methods, so that decision-makers pay attention to the most critical aspects of these proposals. We begin with a summary of public concerns related to long-term concessions, and then explore information that has been provided to decision-makers for recent concession deals. We finish with a discussion of potential strategies to protect the public interest.

■ 2.0 Public Concerns Related to Long-Term Concessions

PPP agreements are not new. State departments of transportation (DOTs) have used design-build contracts for highway construction for several years. In 1990, FHWA's Special Experimental Project Number 14 (SEP-14) authorized the use of innovative contracting techniques, including design-build, and to date, 38 states have laws that allow design-build. However, public awareness and concerns about PPP agreements have increased after recent long-term lease agreements were signed in Chicago and Indiana, transferring both the right to collect tolls and the operation and maintenance of toll facilities to private investors, in exchange for an upfront concession payment. Concerns about concessions have been raised by interest groups, individuals, elected officials, and the media.

Public concerns about long-term concession agreements, specifically related to long-term leases and DBFO contracts involving private investors who would either collect toll revenues or receive state payments to recoup their investment can be divided into three areas:

1. Aspects of public sector decision-making;
2. Conflicts of private sector interests with public sector interests; and
3. Contract terms and how they affect price and public control.

2.1 Public Policy and Fiscal Concerns

Long-term concession agreements to operate and maintain transportation facilities while receiving financial compensation (through toll revenues or annual payments) have been widely used in Europe, Asia, Australia, and Latin America. Toll road concessions were initiated in Spain in the 1960s, followed by France in the 1970s. Long-term concessions are

widely used in other European countries as well, such as England (through the shadow toll model), Portugal, and Italy. The Japan Highway Public Corporation, which developed the toll road system in Japan, was privatized. China and Malaysia also have implemented toll roads through long-term concessions. Mexico, Colombia, and Chile in Latin America also have used concession agreements to build toll roads. However, United States experience in PPPs has been mainly through design-build contracts, and to date, only a few toll facilities have been constructed under DBFO agreements or through long-term concessions. The public is concerned that the lack of public sector experience with concessions, along with growing financial needs and political interests may lead decision-makers to enter into long-term concession agreements that do not meet the public goal of providing a safe and reliable transportation system that benefits all users.

Public Sector Inexperience. Unlike other countries, long-term leases and DBFO agreements for highway investments are relatively new in the United States. Consequently, state DOTs have had no reason to have in-house expertise to deal with the legal and financial aspects of long-term concession transactions and to manage these contracts after an agreement has been signed. State DOTs have contracted with legal and financial experts to help with these agreements but this has raised public concerns about potential conflicts of interest, with some of these legal and financial firms also providing advice to private investors. There is concern that the lack of appropriate experience may undermine the public sector's ability to make good decisions in the public interest.

Undervaluation Fears. In a long-term lease or DBFO agreement, the State receives an upfront payment and/or revenue-sharing over the concession term. Private investors submit proposals for development or lease of a transportation facility tied to a value determined by several factors, including projected usage and revenues, level of risk transferred to the private sector, cost of financing. Prior to the selection of a bidder, the State will typically conduct a valuation of the facility as a benchmark to compare with the proposals received. However, there is still a great deal of uncertainty regarding the value of these facilities. For example, the winning bid price for the Indiana Toll Road's 75-year lease was \$3.85 billion, almost twice as much as the pre-bid valuation. Even considering this, there are critics who claim that the winning bidder paid too little.

There is a big difference in uncertainty in value depending on whether the long-term concession agreement is for the development of a new ("greenfield") facility, or the long-term lease of an existing facility. Developing a greenfield project is inherently more risky than leasing an existing facility because there is not a demonstrated traffic pattern or existing revenue stream. For an existing facility, much of the traffic risk is mitigated, and many variables related to operations, maintenance, traffic, revenue streams are known.

In some states, excess toll revenues are used to support other transportation infrastructure needs, including public transportation programs. For example, the toll revenues from the Turnpike in Florida are used to build Federal-aid eligible facilities without Federal

funding; the State can then take advantage of toll credits⁶ to pay for public transportation capital needs using 100 percent Federal funds. In New Jersey, a portion of the toll revenues from both the New Jersey Turnpike Authority and the South Jersey Transportation Authority⁷ are dedicated to the Transportation Trust Fund; in a recent publication, the Regional Plan Association (RPA) has raised the concern of losing the toll revenues if the State's facilities are leased to a concessionaire.⁸ By statute, the New Jersey Turnpike Authority must provide \$22 million annually, and the South Jersey Transportation Authority provides an annual payment of \$2.5 million to the Transportation Trust Fund. In California, about 18 percent of the toll revenues collected by the Bay Area Toll Authority (BATA) are dedicated to transit. States looking into leasing their toll facilities need to consider the current use of toll revenue the facilities' O&M and debt service. There also are concerns that states could lose tax revenues from potential tax benefits (e.g., lower net gains after including asset depreciation) that the private investor would be eligible for through the lease agreement. However, tax exemptions are variables included in the facility valuation process and the impact of this potential revenue loss is built into the deal.

Use of Upfront Payments. Depending on the type of long-term concession agreement, the public sector may receive a large upfront payment, and if the contract includes revenue sharing provisions, the concessionaire will make annual payments from tolls collected by the facility throughout the lease term. The public concern is twofold. Decision-makers might use the money to provide short-term budget relief for programs not related to transportation, as was done in the Chicago Skyway lease. Furthermore, even if the dollars are kept in transportation, they might be used for projects outside the geographic region where the facility is located, and in projects that do not benefit the facility users, as was done in the Indiana Toll Road lease. There may be good reasons to do some of these things, but use of these "windfall" paydays is of big concern to the general public.

Perception that Public Sector Could Raise as Much Money as the Private Concession Deal. Some of the literature indicated that the public sector could raise as much capital as a long-term concession agreement through public financing. Two potential limiting factors to this statement include: 1) debt limits that restrict how much debt can be issued by the state or toll authority; and 2) the historical inability or unwillingness of public and quasi-public agencies to raise tolls regularly so that they keep pace with inflation.

The ability to periodically raise tolls is what makes these long-term concession agreements financially feasible. NW Financial Group conducted a review of both long-term lease agreements for the Chicago Skyway and the Indiana Toll Road. The analysis concluded

⁶ A toll credit is an innovative finance tool created under ISTEA that allows states to "apply toll revenue used for capital expenditures to build or improve public highway facilities as a credit toward the non-Federal matching share of certain transportation projects." FHWA Innovative Finance Primer.

⁷ The New Jersey Turnpike Authority operates the New Jersey Turnpike and the Garden State Parkway; the South Jersey Transportation Authority operates the Atlantic City Expressway.

⁸ Regional Plan Association (RPA). *Proceed with Caution: Ground Rules for a Public-Private Partnership in New Jersey*. January 8, 2007.

that the public sector could have generated as much revenue as the private sector, with the benefit of toll revenues remaining in control of the public sector. In both cases, NW Financial Group assumed that the public sector would impose periodic toll rate increases. However, one of the motivations behind the Indiana Toll Road lease was the assumption that the public sector would not be able or willing to implement such increases. Public opposition to toll increases and political inability to adjust toll rates periodically add uncertainty to the ability of the public sector to monetize public assets at a level that competes with private sector proposals. There is no doubt, however, that if the public sector was willing to increase tolls at the same rate proposed by private investors that the public sector could raise as much money as the private sector through long-term concession deals. The Florida Legislature recently passed House Bill (HB) 985, which includes a provision that requires annual toll rate indexing by CPI, and no less than once every five years. This action could establish a precedent that may lead other states to consider more regular toll increases, which in turn can facilitate public sector competition for long-term concessions.

Public Participation and Outreach. Some critics of long-term concessions say that opportunities for public participation are limited, and that information on private sector proposals and contracting terms remains confidential (protected by the State), out of reach to the public and some decision-makers, such as lawmakers.

2.2 Concerns That Private Sector Interests Conflict with Public Sector Interests

A private company is liable to its investors and must respond to its shareholders, who are expecting a return on their investment. Therefore, there is a public concern that the private sector will be focused on recouping its investment and on generating a profit, while neglecting users' needs and interests. In addition, recent long-term concession agreements in the United States have been led by foreign investors, raising public concerns that decisions regarding investment in United States public assets are being transferred to foreign companies.

Unsolicited Proposals and “Cherry-Picking” of Profitable Projects. PPP legislation in some states allow for private investors to submit unsolicited proposals for transportation projects. The public concern is that the private sector will select the most profitable projects, leaving other needed, but not profitable, projects to the states. Unsolicited proposals also can lead to lack of competition among bidders, since some states' PPP legislation dictates short time periods for competing proposals (e.g., 45 days in Virginia).

“Cherry-picking” is not limited to private investors selecting more profitable routes, but also can involve the public sector putting out requests for proposals for concessions that include unprofitable facilities built in conjunction with profitable routes. In this case, the public sector may include subsidies to attract private investors. The use of subsidies raises public concerns related to double taxation – if drivers are paying taxes, why should they have to pay again with tolls? It can be argued, however, that most new toll facilities will not be self-supporting for many years and other sources will be needed to cover the costs

not paid initially through tolls. This is an issue that applies not only to long-term concessions, but to any toll facility paid for through a combination of toll revenue bonds and fuel tax revenues.

Public Resources Devoted to Review of Proposals. When the public sector receives an unsolicited proposal, it must devote staff time and resources to reviewing those proposals, meaning that these resources will be diverted from other public needs. Some PPP legislation allows the states to charge a proposal fee, but this may not cover the entire public cost. Proposal fees range from \$10,000 up to \$50,000 in those states where the fees are specified by PPP legislation; in other states, the fees are to be determined on a case-by-case basis. In Texas, concerns have been raised in the SH 130 long-term concession deal, where the cost of the environmental study and legal fees are estimated at \$19 million, close to the upfront fee of \$25 million. Nevertheless, TxDOT would have to cover these expenses using its own money if the project was built through traditional procurement.

2.3 Concerns Related to Contract Terms and How They Affect Price and Public Control

Sometimes it is the contract details between the public sector and the private investors that raise concerns, especially if those details are not made public until the deal is signed.

Tolling Policy. Concession agreements for new or existing tolling facilities typically allow for periodic toll increases according to certain rules. Indeed, contractually allowed toll increases are one of the main factors that drove the high prices received for the asset leases in Chicago and Indiana. The allowable toll increases in both of these deals are considerably higher than had been the case when in public ownership and also higher than the historical experience in the United States, overall. The United States population has grown accustomed to the real value of tolls decreasing over time, since rates rarely keep up with inflation and are usually subject to difficult political battles. Through the long-term leases, the public sector has shifted toll setting prerogatives to the private sector (typically within a framework of rules) but the public is concerned that private interest to generate a profit will be the only factor when setting toll rates. This concern ignores other considerations such as the contractual limitations on toll increases and diversion of traffic to other routes if tolls are judged excessive.

As mentioned in Section 2.1, the ability to increase toll rates over time is the key factor that underpins any DBFO or concession proposal for toll facilities. In Texas and Pennsylvania, public entities have submitted competing proposals for long-term lease agreements proposed for SH 121 (greenfield) and the Pennsylvania Turnpike, respectively. The public proposals include periodic toll increase similar to those proposed by the private sector. Failure to ensure that these toll increases occur would decrease the value of the concession agreement.

Allocation of Toll Revenues, Profit Sharing, and Windfall Revenues. If traffic and revenue are not adequate to achieve the investors' desired returns, that risk is borne by the investors. Conversely, if revenues are higher than planned, the private sector gets to keep

the difference, unless revenue sharing is specified in the contract. This is the private sector's motivation for doing these deals. This means that the public sector will have "lost" revenues that potentially could be used to benefit other transportation needs. Some long-term concession agreements include revenue sharing clauses so that the public sector still can benefit from excess toll revenues throughout the length of the concession contract. By including revenue sharing, the public sector foregoes a higher upfront fee.

Another way that the private sector could benefit from windfall revenues in a long-term concession agreement is through refinancing of debt. There have been cases in which the equity share of the long-term concession transaction has been reduced by refinancing debt under better terms, improving the return on investment initially estimated for the long-term concession agreement. In this case, unless stipulated in the contract, the public sector does not benefit from this transaction.

Length of Lease. The public concern with the length of long-term lease agreements is related to the time during which the facility will be under private management, and the perception that the government will not have the ability to protect the public interest for such a long period of time. For example, the Chicago Skyway lease is for 99 years; the Indiana Toll Road lease is for 75 years. In other countries, the typical length of concession agreements is 30 to 40 years. The length of the lease agreement depends on several factors, including the desired upfront fee and the target rate of return for the private investor. If the public sector is expecting to generate a large payment upfront, a longer lease term ensures a larger payment. In some instances, especially for "greenfield" projects for which traffic and revenue projections are highly uncertain, the length of a lease term may be longer to ensure that the private sector achieves a target return on investment. A lease agreement for an existing toll facility could have a shorter lease term, because the facility already may have a stable stream of revenue that can be forecasted with a higher level of confidence, resulting in lower risk to the private investor.

Another factor that determines the length of the lease relates to the potential tax benefits realized by the private investor through depreciation and amortization of the upfront payment. If the concession length is longer than the design life of the facility, the private investor is considered owner of the facility for tax purposes. Therefore, the private investor is eligible to account for accelerated depreciation of a portion of the upfront payment over 15 years. Other portions of the upfront payment are amortized over 15 years or throughout the life of the long-term lease for tax purposes.⁹ The ability to depreciate the "value" of the asset for tax purposes seems to be one of the driving factors behind the longer lease terms in the United States.

Extent of "Noncompete" Clauses. The inclusion of noncompete clauses is a highly controversial issue and public concern. After the experience on the SR 91 Express Lanes in

⁹ House Transportation and Infrastructure Committee, Hearing on "Public-Private Partnerships: Financing and Protecting the Public Interest," February 13, 2007, Summary of Subject Matter. Available at <http://transportation.house.gov/hearings/hearingdetail.aspx?NewsID=51> (accessed May 31, 2007).

California,¹⁰ there has been an increased awareness of the impact of noncompete clauses on the public sector and their ability to provide needed improvements on alternate routes, especially if the traffic conditions on the alternate route lead to unsafe operation of the roadway. Typically, noncompete clauses prevent the state and local governments from adding capacity within a specified distance from the facility or require the public sector to pay the concessionaire for “lost” revenue. The public perception is that a monopoly is given to concessionaires by including noncompete clauses in concession contracts, and that the public has no choice but to use the toll facility.

Default or Renegotiation. If the private investor defaults on its loans, defaults on its agreement with the public sector, or goes bankrupt, there is typically no legal requirement for the public sector to step in and rescue the project. However, the highway in question may be an important facility to the community, and the public sector may still choose to bear some of the costs in these circumstances. This happened in the case of the Camino Colombia Toll Road near Laredo Texas, where the private toll road developer defaulted and TxDOT ended up buying the road, albeit at a deep discount from the original development cost.

A very real concern is that the needs or abilities of the public sector or private concessionaire will change over the long timeframe of some concession agreements, and that the cost to renegotiate the agreements might be high. The result would be that government will lose the flexibility to change policy direction due to the concession agreements.

Facility Operating and Maintenance Requirements and Environmental Standards. There are several concerns related to the requirements and standards included in the lease contract to deal with operations and maintenance needs, and environmental provisions:

- Since achieving a target return on investment is the main objective of private investors, the public is concerned that a concessionaire will not provide appropriate maintenance to the facility leading to unsafe conditions or premature aging. How can the lease contract ensure that a concessionaire meets maintenance requirements and provides safe conditions for users? Advocates of long-term concessions believe that private investors are encouraged to maintain physical and traffic conditions and safety at optimal levels for two reasons. First, it is cheaper in the long term to keep a facility well maintained, and second, it provides good customer service to attract users. However, the most effective way for the public sector to ensure compliance is to do so in the concession agreement.

¹⁰The State of California and the California Private Transportation Company (CPTC) partnership was dissolved when the State tried to add capacity to the Riverside Expressway, which violated the noncompete clause included in the SR 91 concession contract, adjacent to the express lanes.

- A leased facility may require future expansion and/or extensions and other major capital improvements over the lease period. Responsibility for these capital investments (public or private sector) and how these improvements will be funded needs to be clear.
- In terms of operations, some toll facilities allow free access for certain vehicles, such as those for emergency response and public transit. Some toll authorities collect lower tolls from certain users (e.g., electronic toll users). If an existing facility is leased or a DBFO contract for a roadway extension/expansion is awarded to a private investor, will existing operating policies change, or will the concessionaire operate under the same terms as the public sector? Other concerns refer to the provision of policing and emergency response services on the facility and whether this will remain a responsibility of the public sector or be transferred to the private sector.
- An environmental concern found in the literature review refers to the use of products for snow removal that may negatively affect the environment but reduce maintenance costs.¹¹

Consideration of the Transportation System as a Whole. At all levels of government, people have expressed concerns about the creation of a fragmented system by leasing highway infrastructure to different private investors, who would be concerned only with how their facility operates, and not consider interoperability issues of the entire highway network.

Labor Issues. Under public sector operations, toll authority employees may enjoy a level of job security, wages, and benefits that might be jeopardized by a long-term lease agreement with the private sector. Some are concerned that under a long-term concession agreement, a private investor may be exempt from regulations on wage rates and requirements on employing women and minority businesses, and that jobs will be lost through efficiencies introduced by the private sector.

Eminent Domain. Public concern on this issue is related to the use of eminent domain powers to benefit private investors, or whether those powers are transferred to the private sector under a long-term concession agreement to build or expand a toll facility. This concern has been raised for the proposed Illiana Expressway project in Illinois and Indiana, where the Indiana portion is expected to go through privately owned farmland. This, however, is where the “partnership” component of PPP is most evident. The PPP is a business deal where each party gets benefit. In a properly crafted long-term concession deal, the public sector benefits by having the project constructed. This would justify an eminent domain taking, even though the private sector stands to profit. Keeping the public sector in charge of eminent domain decisions is one way to ensure that the public interest is being served.

¹¹RPA, op. cit.

■ 3.0 Information Provided to Decision-Makers

There are no simple or single answers to the concerns outlined in the section above. The key issue from the perspective of this research effort is how these concerns have been handled by public sector decision-makers and whether they had good, complete information at the time they made their decisions. We were interested in these five questions:

1. What information was provided?
2. Who provided the information?
3. How was the information used in the decision-making process?
4. How reliable was the information provided?
5. How were the public interests protected?

Based on the literature review of recent long-term concessions in the United States, it is difficult to provide detailed answers to these questions. For the projects reviewed, most of the information available to the public about potential long-term concessions was very general, including ranges of expected value of the facility and the names of potential concessionaires. Proposals remain confidential throughout the selection process. Some details (e.g., length of concession, toll policy) of the winning proposal are provided during the negotiation process, with full details provided after a contract is signed.

In general, the public sector has three opportunities to make decisions:

1. When deciding to solicit proposals (or be open to unsolicited proposals);
2. When deciding that a particular proposal meets their needs and initiating negotiations; and
3. When fully executing the agreement.

The following case studies provide some insight into the types of information available to public throughout the long-term concession procurement process, after a concessionaire has been chosen, and after a contract has been signed. These examples are representative of activities around the country, but are not exhaustive.

3.1 Chicago Skyway Lease

The Chicago Skyway was leased to private investors for a period of 99 years for an upfront payment of \$1.83 billion. The Skyway Concession Company is a partnership between Cintra and Macquarie Infrastructure Group. The upfront payment was provided through equity from both private investors and private debt, and the upfront payment was used by the City of Chicago to pay outstanding debt (from the Skyway and the City), create a reserve fund, provide budget relief, and pay for other nontransportation-related

programs. This transaction was the first long-term lease of an **existing** toll facility in the United States.

In March 2004, the City of Chicago issued a request for qualifications (RFQ) from private investors for an operating agreement to operate and maintain the Skyway for at least 50 years. The financial and technical capabilities of the interested parties were evaluated by a designated evaluation committee, comprised of representatives from several city departments. Goldman, Sachs & Co. and Loop Capital Markets served as financial advisors throughout the selection process. The selection of potential bidders was based on: expertise in toll road operation and maintenance, customer service, and public safety, and the financial capacity to pay the purchase price and maintain the Skyway. Five of 10 proposers were selected to submit detailed proposals. The winning bidder was selected based on the best financial proposal. Bids were submitted by October 2004, and by the end of that month, the City of Chicago (with unanimous approval of the city council) chose the Cintra-Macquarie Consortium to operate and maintain the Skyway toll facility for 99 years. The transaction was closed in January 2005, after the City received the full upfront payment.

No major public opposition to the Skyway lease was reported. Conventional wisdom suggests that there was little controversy because more than half of the traffic comes from out-of-state drivers, and 13 percent are heavy vehicles. Controversy did develop after the concession agreement was signed because some of the revenues (after payment of the Skyway outstanding debt) were diverted to nontransportation purposes.

The City of Chicago created a “virtual data room” that was accessible to qualified bidders (password required) to access information on the Skyway, including traffic and revenue studies, financial reports, and the like. Users could post questions on this site, which were answered and posted for all bidders to see. Press releases providing information on the process, including release of RFQ, selected bidders, and selection of concessionaire were posted in the City of Chicago web site.

Some of the characteristics of the concession agreement are as follows:

- The agreement does not contain noncompete clauses. Expansion of freeways in the vicinity of the corridor is underway. Further expansion on competing routes may not be feasible, due to the urban nature of the corridor.¹² Competing routes already are congested, while the Skyway has spare capacity.
- The agreement required the private concessionaire to employ all unionized employees. Those employees who did not want to work for the concessionaire could move into other city jobs.
- Standard manuals on maintenance and operations were developed by the City and included in the agreement.

¹²Peter Samuel and Robert Poole, Reason Foundation. *Should States Sell Their Roads*. Policy Study 334. May 2005.

- Toll rate escalation was limited to the maximum of three measures: 2 percent, CPI, or per capita GDP. No revenue sharing provisions were included in the contract.
- No restrictions were included regarding refinancing. The original equity contribution was reduced from \$887.7 million to \$652.3 million after refinancing.

The City of Chicago, with assistance of its financial and legal counselors, drafted a concession agreement that retained the same level of operations and maintenance as under public operation. The city council was provided with three pieces of information before approving the contract: 1) how much money would be paid by the winning bidder; 2) who the concessionaire was; and 3) a written assurance that the concessionaire would abide by the terms established in the concession agreement.

There is no enabling legislation in Illinois that allows PPP for transportation investments. However, the Illinois General Assembly recently commissioned a study to assess the monetized value of the Illinois State Toll Highway Authority (ISTHA) system (as a whole and by segment) under different types of PPP strategies (e.g., concessions, Initial Public Offerings (IPO)).¹³ The report was made available to the public at the General Assembly's web site. There are no indications that the State plans to move forward with a concession or DBFO agreement for other existing or new toll facilities.

3.2 Indiana Toll Road Lease

The Indiana Toll Road was the second long-term lease of an existing facility in the United States. The deal generated an upfront payment of \$3.85 billion for the State of Indiana for a 75-year lease; the revenues from the upfront payment will be used to pay outstanding toll bonds and fund the "Major Move" transportation program. Thirty-four percent of the funding going to the "Major Move" program will be invested in the seven counties where the facility is located to address equity concerns, based on the fact that 66 percent of the traffic comes from out-of-state drivers, so those revenues can be invested in other areas of the State. According to the Indiana Department of Transportation (INDOT),¹⁴ the concession agreement includes a "noncompete" clause, which precludes the State from building a **new** four-lane limited-access highway within 10 miles on either side of the toll road. The State can make improvements to other roadways within the 20-mile corridor.

Governor Mitch Daniels made toll financing part of his political campaign during the 2004 elections. As he took office in January 2005, he immediately began considering the potential lease of the Indiana Toll Road and moved quickly with the procurement, following on the footsteps of Mayor Daley in Chicago. The idea of the Indiana Toll Road lease was part of a study conducted by INDOT that identified a \$3 billion gap to provide needed

¹³Credit Suisse. Illinois Tollway System Valuation. August 2006.

¹⁴Interview with Joe Gustin, INDOT Public Private Partnerships Deputy Commissioner, May 23, 2007.

transportation infrastructure, and evaluated three alternatives address these needs: 1) do nothing; 2) increase the fuel tax; and 3) lease the Indiana Toll Road. The Governor decided to explore the toll road lease, and directed the Indiana Finance Authority (IFA) to evaluate this option further.¹⁵ The request for qualifications was issued by the end of September 2005. Interested parties were required to provide technical and financial qualifications by the end of October 2005. Qualified proposers were required to submit final bids by January 2006. Final bids were based on a single drafted contract to ensure that the only difference among the bidders was the upfront payment. At the same time, the State conducted a valuation analysis that estimated the facility value if it remained under public control.

Four bids were submitted; the winning proposal came from Macquarie-Cintra. HB 1008, which authorized the concession agreement for the Indiana Toll Road, was approved by the Indiana General Assembly in March 2006 by a narrow margin of 51 to 48 in the House and 31 to 19 in the Senate.¹⁶ The debate over the lease agreement was contentious, and was voted along strict party lines. One of the main reasons for public opposition was related to the foreign origin of the concessionaires who won the bid. The procurement process coincided with the public disclosure that United States ports were operated by a firm owned by a Middle Eastern country, which helped fuel the opposition to leasing the facility to a foreign consortium.

The lease contract was signed by mid-April 2006, although the facility transfer was not completed until the end of June 2006. A lawsuit challenging the constitutionality of the deal was filed shortly after the legislation passed, but the Indiana Supreme court upheld the deal.

Information about the concession agreement was posted throughout the process, and currently is available at <http://www.in.gov/ifa/tollroad.html>. Prior to the concession agreement, tolls in the Indiana Skyway were increased by 72 percent for passenger cars and more than double for trucks, which ensured a higher bidding price. Passenger car toll rates will remain constant through 2010, while truck tolls will increase at preestablished rates through 2010. The concession agreement was amended to include: 1) a toll freeze for passenger vehicles to preconcession rates (maximum of \$4.65, prior to the 72 percent increase) until electronic toll collection (ETC) is fully implemented; 2) a 40 percent discount through 2016 for passenger vehicles using ETC; and 3) continuation of commuter discount cards until the ETC is implemented. Indiana reimburses the concessionaire for any toll revenue losses resulting from these provisions, since increased toll rates were part of the facility valuation.

¹⁵Interview with Ryan Kitchell, IFA Executive Director, May 25, 2007.

¹⁶In Indiana, the legislature must provide enabling legislation before the State can enter into any PPP agreement.

We interviewed INDOT and Indiana Finance Authority (IFA) staff,¹⁷ to understand the information provided to decision-makers and how the public interests were protected in the Indiana Toll Road lease deal:

- **What information was provided to decision-makers?** In order to lease the Indiana Toll Road, the State needed legislation that would allow PPPs and authorize the Indiana Toll Road lease. A key aspect of the decision-making process was the creation of an educational program for elected officials on PPPs in general and providing specific information related to the Indiana Toll Road lease, including historical data and estimates of potential revenues that could be realized through a lease agreement.
- **How was the information used in the decision-making process?** One of the main goals through the educational process was to provide enough information so that any decision on whether to approve the lease deal was based on facts. This information was provided to legislators after a winning was selected to assist the legislature during the two-month decision period to prepare and enact PPP legislation.
- **Who provided the information?** INDOT and IFA hired consultants, investment bankers, and law firms to provide information on PPPs activities in the United States and the implications of the Indiana Toll Road lease, and to draft the legislative language on PPPs and the lease agreement. The media provided significant coverage of the progress on the Indiana Toll Road lease. Several legislative hearings during January through March 2006 were open to the public, and public hearings were conducted in Indianapolis and in the area where the toll road is located after the legislature enacted the PPP legislation authorizing the Indiana Toll Road lease.
- **How reliable was the information provided?** By outsourcing services related to the preparation of the information, INDOT ensured that decision-makers received information based on facts. Furthermore, it was in the interest of the State to ensure that the information provided was reliable and accurate, since “all eyes were on Indiana,” and providing erroneous information could have led to more public distrust and potentially derailed the effort to lease the facility.
- **How was the public interest protected?** According to INDOT, the public interests were protected by:
 - Procuring expert services from independent financial, law and consulting firms.
 - Making a decision that the upfront payment would be dedicated to transportation purposes, and include that commitment in the PPP legislation to avoid any “change of heart” after the agreement was signed.
 - Preparing a solid agreement. The lease contract is 120 pages long and includes over 300 pages of appendices that establish the standards for operations, maintenance, and construction.

¹⁷Interview with Joe Gustin, INDOT (May 24, 2007), and Ryan Kitchell, IFA (May 25, 2007).

- Retaining the ability to do improvements and/or expansions on existing facilities within the vicinity of the Indiana Toll Road. The noncompete clause only prevents INDOT from constructing a new, Interstate-quality facility within 10 miles on each side of the Indiana Toll Road.

The publication date of the valuation study seems to coincide with the legislature's decision-making period on the concession although it is not clear from the literature what other information was available. Information on losing bids was provided after the deal was completed. Other information posted on the Indiana Finance Authority web site includes the request for proposals, operating standards, and a valuation study (dated March 7, 2006). The valuation study, conducted by Crowe Chizek and Company LLC, estimated the Net Present Value (NVP) of the Indiana Toll Road cash flows over a 75-year period at \$1.92 billion, about half of the Macquarie-Cintra bid. The large difference between the assessed value and the actual upfront payment is due to the use of conservative assumptions in the Crowe Chizek and Company LLC analysis. For instance, the annual growth of operating expenses was assumed at 5.1 percent, and toll increases were applied every seven years at 22 percent (annual average growth of 3 percent).

A year after completing the Indiana Toll Road Lease, some of the lessons learned are:

- Never underestimate the effort required to complete a PPP agreement. It requires significant dialogue with a large number of people, including stakeholders and experts. It also requires assembling a team with specific skills, and its size may vary depending on the type of arrangement pursued (e.g., greenfield versus asset lease).
- The education of decision-makers is important, although it does not guarantee success. Education should begin early in the process, ideally a year before completing the deal.
- On the public side of a PPP agreement, there are two key lessons: 1) the power of the Internet; and 2) the potential level of opposition. The Internet was a powerful tool to develop a grassroots movement that opposed the lease. The public sector found that they had to be well prepared with facts to address the arguments and concerns of the opposition.

3.3 Other Potential Long-Term Concessions in Indiana and Illinois

The controversy that surrounded the Indiana Toll Road deal has influenced both Indiana and Illinois' forays into additional long-term concessions. In late 2006, Indiana's Governor Daniels proposed two toll projects as PPPs, the Illiana Expressway, and the Commerce Corridor. The proposed Illiana Expressway would be a toll road between I-57 in Illinois through I-65 in Indiana to I-94 near Michigan City. The proposed Commerce Corridor is an outer belt along the eastern and southern outskirts of Indianapolis.

Public hearings were conducted starting in January 2007 to present both projects, and were well attended by concerned residents. In March 2007, both the Commerce Corridor and the Illiana segment between I-65 and I-94 were removed from consideration due to

significant public opposition, mainly due to potential land taking. The public expressed concerns about the use of eminent domain for a project involving the private sector, effects on rural life, and the loss of farmland. The Illiana project is being supported by business leaders, based on expected economic development and tourism growth. Legislation directing the Indiana DOT to study the feasibility of the Illiana Expressway between I-65 and I-57, including an assessment of potential funding options, was recently approved by the Indiana Legislature.¹⁸ According to the Times of Northwest Indiana, the Illiana study cannot consider private financing.¹⁹

3.4 Texas

Texas has probably been the state that is most aggressively advancing PPPs for new transportation infrastructure. In 2003, legislation passed that authorized PPPs through Comprehensive Development Agreements (CDA).²⁰ Under HB 3588, TxDOT and the Regional Mobility Authorities²¹ were given authority to execute CDAs for project development, including design-build contracts. It also included an ambitious initiative, the Trans Texas Corridor (TTC), to build transportation corridors that include separate passenger and truck lanes, high-speed commuter rail, freight rail lines, and utility infrastructure. Funding for these corridors will be provided through tolls, long-term concession agreements, and public funding. This legislation complemented earlier enabling authority for Regional Mobility Authorities, and funding of the Texas Mobility Fund, a state infrastructure bank, at \$250 million per year (multiyear funding totaling \$3 billion). Together with other financial tools, this legislation provides considerable leveraging ability for new projects and helps the State address its funding gap. The Texas political leadership and senior TxDOT officials strongly supported these initiatives.

Under CDAs, information submitted by bidders is not subject to disclosure until a final contract is signed with the winning bidder,²² and TxDOT can provide compensation (up to \$1 million) to losing bidders for use of intellectual property included in the proposal. The public process involved in a CDA includes providing public notices when announcing requests of interests, informational sessions, and opportunities for public input (Q&A).

¹⁸2007 Regular Session of the Indiana Legislature. Senate Bill 105 on various transportation matters.

¹⁹Patrick Guinane, *The Times of Northwest Indiana*, *Illiana Study in the Hopper*. April 30, 2007. Available at: http://www.nwitimes.com/articles/2007/04/30/news/top_news/doc0d14bf4ca84be1e3862572cd00195ae4.prt.

²⁰Durbin Associates. *A Study of Innovations in the Funding and Delivery of Transportation Infrastructure Using Tolls*. Final Report of the Pennsylvania House of Representatives Select Committee on Toll Roads. November 2005.

²¹Regional Mobility Authorities are local, independent transportation agencies that can build, operate, and maintain toll roads.

²²Durbin Associates, op. cit.

Trans Texas Corridor. A CDA was signed in 2005 between TxDOT and Cintra/Zachry for planning of the TTC-35 corridor. The project currently is in planning stages, with the environmental process underway. Several groups oppose the development and implementation of TTCs, including the Texas Toll Party, Corridor Watch, and the Texas Farm Bureau. Some of the public concerns raised by these groups include the use of eminent domain, conversion of no-toll state highways into toll facilities (double taxation), and the lack of public information during the negotiation process.

SH 130. A concession agreement was recently signed for segments 5 and 6 of SH 130 in the Austin area. Earlier segments of this project were developed by the Texas Turnpike Authority as a publicly financed project using a mix of funding sources, including a TIFIA loan and state and local grants, and the construction contracts all incorporated design-build techniques. In 2006, TxDOT chose Cintra/Zachry to design, build, finance, and operate segments 5 and 6 of SH 130, and, after months of negotiation, a concession agreement was signed in March 2007. The concession agreement extends to 50 years and includes an upfront fee of \$25 million and revenue sharing. Some of the key items in the concession agreement show the extent to which contract terms have evolved to reflect various concerns:²³

- Refinancing of debt is allowed after commencing operations; the concessionaire must share any gains from refinancing with TxDOT.
- Concessionaire must maintain confidentiality of customer records.
- State police to do policing on facility, at no cost to TxDOT.
- TxDOT retains authority to monitor and inspect the facility for compliance.
- Key personnel must be approved by TxDOT.
- Prevailing wages will be set per TxDOT statutes.
- The contract allows TxDOT to add capacity to competing routes, but it includes provisions to compensate the concessionaire in case of revenue reductions due to a competing free facility. Concessionaire must provide a traffic and revenue (T&R) study that shows detriment to toll revenue within 120 days of announcing development of competing facility.
- Concessionaire must maintain a specified traffic level of service (based on speed). Capacity must be added to maintain level of service, unless the expansion does not receive NEPA approval or there are five years left to end of concession.
- Contract terms address “termination for convenience.” Concessionaire to receive compensation under those circumstances.

²³TollRoadNews.com, *Speeds on new Texas 130 South TR Major \$-Issue*, July 6, 2006.

- Toll rates to be adjusted based on growth of state gross domestic product.
- Revenue sharing of toll revenues (based on a combination of posted speed, annual revenues and contract year, revenue sharing ranges from 4.65 percent up to 50 percent of toll revenues paid to TxDOT).
- Concessionaire should meet quotas for hiring minorities, women, and disadvantaged business enterprise (DBE) firms.

SH 121. TxDOT selected Cintra/JP Morgan for the SH 121 concession, a new toll highway that is an extension of the existing President George Bush Turnpike in the Dallas-Fort Worth region earlier this year. The concession agreement includes an upfront fee of \$2.1 billion, \$561 million in immediate construction commitments (including completion of the toll facility, construction of major interchanges, and improvements to connecting roads), and revenue sharing over the 50-year concession period. The U.S. DOT has approved \$1.9 billion in private activity bonds and \$700 million in TIFIA loans for the project; it is unknown, however, whether the private investor will make use of these Federal financing tools to finance the project.

In May 2007, the North Texas Tollway Authority (NTTA) submitted a preliminary proposal for the SH 121 project, proposing an upfront payment of \$2.5 billion and guaranteeing annual payments totaling \$833 million over the life of the agreement. This proposal came after the Cintra/JP Morgan bid was selected by TxDOT. The Federal Highway Administration (FHWA) warned that the State may be violating Federal laws related to fair and open competition if the NTTA's proposal is accepted, jeopardizing the potential use of TIFIA loans to support the project financing.²⁴ In addition, it has raised concerns that it could establish a precedent that would discourage private participation in toll projects. Nonetheless, the Texas Transportation Commission (TTC) has authorized NTTA to submit a bid for the SH 121 project.

An interesting debate has been initiated between long-term concession supporters and those who believe that the public sector could generate the same value as the private sector on a concession deal. NW Financial Group conducted an evaluation of the NTTA and Cintra/JP Morgan concession proposals for the SH 121 project. This evaluation concluded NTTA can provide a better value than the private proposal, and that the State could make an additional \$2 billion if accepting the NTTA proposal. The Reason Foundation provided a counter argument that pointed out at potential flaws on the assumptions used for the valuation analysis of the public sector proposal. These countering analyses suggest that the selection of assumptions is key to determining how much revenue can be generated, whether it is through a long-term concession agreement, or through public financing.

²⁴The FHWA letter to TxDOT is available at: <http://www.tollroadsnews.com/sites/default/files/FHWAon121.pdf> (accessed on May 14, 2007).

Documentation related to both the SH 130 and SH 121 concession agreements is available for public review on the TxDOT web site at http://www.dot.state.tx.us/services/texas_turnpike_authority/pub_priv_partnerships.htm.

Other Long-Term Concession Proposals in Texas. There are several other projects that have been proposed for implementation through CDAs, including:

- **Dallas-Fort Worth Connector** - The request for qualifications (RFQ) was issued in December 2006 and due in May 2007.
- **North Tarrant Express** - TxDOT currently is evaluating the RFQ submittals of seven proposers.
- **SH 161 (Dallas County)** - Ten proposers submitted qualifications, and four were selected to submit detailed proposals. The TTC has not authorized TxDOT to move forward with the request for proposals.
- **TTC-69** - Two proposers submitted qualifications, and both were selected to submit detailed proposals. The TTC authorized TxDOT to request detailed proposals in September 2006.
- **U.S. 281-Loop 1604 Toll Project (Bexar County)** - Two proposers submitted qualifications and both were selected to submit detailed proposals. The TTC has not authorized TxDOT to move forward with the request for proposals.
- **I-365 (LBJ Freeway) Managed Lane Project** - Four proposers submitted qualifications and all were selected to submit detailed proposals. The TTC authorized TxDOT to request detailed proposals in October 2006.

The PPP That Wasn't. The Harris County Toll Road Authority operates 77 miles of toll roads in and around Houston. In 2006, the county conducted a study to determine how much revenue could be generated through three different financial arrangements: asset sale, long-term concession agreement, and keeping the system as a publicly controlled entity (i.e., status quo). The long-term concession scenario was estimated to generate between \$7.5 and \$10 billion for a 50-year lease, and between \$9.0 to \$12 billion over a 75-year lease. The status quo had a value of at least \$8.1 billion over 75 years. The study was released in June 2006, and by July 2006, the Harris County commissioners had decided to maintain public control over the toll road system.

The County's study was innovative in that it assigned each of three financial analysts the task of coming up with the best deal for the County under each of the three financial arrangements. Setting the ground rules on a basic set of common assumptions, each analyst was then free to be as aggressive as they could in estimating the value to the County. Though never explicitly stated, there is good reason to believe that the commissioners considered not only the financial value to the County, but also the value of retaining total control over their own destiny.

Future of Texas Long-Term Concessions. A review of press clippings from 2001 through the present reveals considerable frustration with the decision-making process related to CDAs and the Trans Texas Corridor. The concerns are numerous, but the recurring theme revolves around transparency. The legislation and constitutional amendments that allowed the TTC and CDAs in general to move forward were adopted piecemeal, and critics claimed that the public and legislators were not aware of the cumulative implications of the votes cast. This, combined with a long period where the details of the contracts related to the TTC were not disclosed, further increased frustration.

This frustration came to a head during the 2007 legislative session, and the future of long-term concessions in the State of Texas is uncertain as of this writing. The legislature passed a bill in early May 2007 (HB 1892) that would stop the implementation of private toll roads through September 2009, and requires the creation of a committee to study to study PPPs involving toll roads and concession agreements. In addition, the bill includes provisions to: 1) reduce the maximum concession period to 40 years; 2) change the formula to calculate the buyback price of a toll facility in case of “termination for convenience” to exclude future toll revenues; and 3) allow regional mobility authorities or county toll road authorities to use state-owned right-of-way and to access the state highway system. In a letter to TxDOT, the FHWA warned that some of the provisions included in the bill that transfer powers for highway development to local governments could jeopardize the State’s eligibility for Federal funds. TxDOT’s Executive Director issued a letter that indicates the potential of the bill to end the PPP program, even after the moratorium is over.²⁵ Governor Rick Perry is a supporter of PPPs, and he vetoed the bill; however, the measure has overwhelming support from legislators enabling an override of the Governor’s veto. The Governor already has warned the legislature that he would call a special session during the summer to fix the bill if it is passed into law over his veto. The legislature sent a revised bill (SB 792) to the Governor in late May 2007. That bill:

- Includes a two-year moratorium on the construction of new, privately owned/operated toll roads, but has dozens of exemptions, including Houston, Dallas, San Antonio, El Paso, and the Rio Grande Valley.
- Gives local toll agencies the first shot at new toll roads but requires most new toll projects to be subject to an upfront “market valuation” of how much they might attract on the private market. If a local toll agency cannot generate at least the same market value, the projects could be put up for bid on the private market.
- Allows the state to buy back profitable toll roads from private operators, with the buy-back amount based on original estimates of toll revenue for the life of the project.
- Creates a legislative study committee (nine members total – three each from House, Senate, and Governor’s office) to identify the “public policy implications of entering into CDAs and selling existing toll projects to private interests” as well as to “develop

²⁵The TxDOT letter to the legislature is available at: <http://www.tollroadsnews.com/sites/default/files/TxDOTon1892.pdf> (accessed on May 14, 2007).

recommendations for safeguards and protections of the public's interest when a contract for the sale of a toll project to a private entity is entered into.”

Legislators have several concerns about long-term concessions, including: noncompete clauses; unlimited authority to raise tolls; length of concession agreements; no disclosure of contracts; and transfer of public roads to foreign private investors. While several of these concerns are clearly addressed in the concession agreements, there seems to be a disconnect between the information provided by TxDOT and how this information reaches (and is interpreted) by the legislature and the public. This is a critical point – Texas has adjusted its program to respond to experience in its own state and elsewhere, but opposition is more ideological than fiscal and often the opposition is based on misinformation.

Transparency continues to be the primary concern. A recent audit by the State Auditor's Office on TTC-35 (including SH 130) shows that the corridor cost could exceed \$105 billion, and that the State could have to pay \$13.6 billion in financing costs, and \$16.5 billion for rail line projects that are not part of the concession agreement. Some of the recommendations from the audit regarding the TTC-35 and the CDA process include: 1) legislative oversight of TTC; 2) transfer of toll revenue projections from TxDOT to the state comptroller; 3) increasing public access to information on the project; 4) TxDOT to provide regular financial forecasts to the governor, legislature, and comptroller; and 5) CDAs over \$250 million to be submitted to the attorney general for review and approval.²⁶

3.5 Virginia

The Dulles Greenway in the western suburbs of Washington, D.C. opened in 1995 as the first major private toll road in the country. After that, the Public-Private Transportation Act of 1995 (PPTA) was passed. This allows private entities to enter into agreements to construct, improve, maintain, and operate transportation facilities in Virginia.²⁷ Through this program, the Virginia Department of Transportation (VDOT) accepts solicited and unsolicited proposals for highway development with private sector participation.

Dulles Greenway. The Dulles Greenway toll road was developed under a DBFO arrangement and was planned and delivered prior to the creation of the PPTA in 1995. The development of the toll road was authorized by the Virginia General Assembly under the Virginia Highway Corporation Act of 1988. The initial private investor was the Toll Roads Investors Partnership II (TRIP II), and the project was financed through \$40 million in equity and \$310 million in private taxable debt. The facility experienced significant financial troubles due to traffic and revenue being well below projections. In response to these financial troubles, the debt was restructured in 1999 and the initial concession was extended by 20 years, to 2056. Traffic has increased in the last few years and TRIP II was

²⁶Clay Robinson, Houston Chronicle. *Audit Rebukes Corridor Costs*. February 23, 2007.

²⁷Virginia Department of Transportation, <http://www.virginiadot.org/business/ppta-default.asp>.

recently bought by Macquarie Infrastructure Group for \$617.5 million. Toll revenues are dedicated to repay debt, and the rate on return of the project has been limited to 18 percent by the Virginia State Corporation Commission (SCC). Only the SCC has the authority to set toll rates. Local opposition to the project was limited to property owners who were affected by the project.

Pocahontas Parkway. The Pocahontas Parkway was the first unsolicited proposal for a highway project developed under Virginia's PPTA through a design-build contract with Fluor Enterprise and Morrison Knudsen (now Washington Group), and included the creation of a nonprofit 63-20 corporation²⁸ (Pocahontas Parkway Association), which had the authority to issue tax-exempt bonds to provide a share of the project financing. The initial design and construction were funded through tax-exempt toll revenue bonds (\$354 million), Federal funding (\$9 million for design costs), and a state infrastructure bank (SIB) loan (\$18 million).

In 2004, Transurban submitted an unsolicited proposal to acquire the rights to operate the Pocahontas Parkway. After 18 months of negotiation, Transurban executed an Asset Purchase Agreement with the Pocahontas Parkway Association (PPA) and entered into the Amended and Restated Comprehensive Agreement ("ARCA") with VDOT on June 29, 2006. Under the terms of those agreements, Transurban has acquired the sole rights to enhance, manage, operate, maintain, and collect tolls on the Parkway for a period of 99 years. Transurban also has defeased all of PPA's underlying debt. The private investor provided an upfront payment of \$548 million (equity and private debt), and agreed to build a 1.58-mile extension to the Richmond International Airport. In addition, the concession agreement includes a clause for revenue sharing based on the internal rate of return achieved. Transurban has requested a TIFIA loan of \$150 million to refinance senior debt, upgrade the electronic tolling systems, and provide \$48 million for the proposed extension. Toll rate increases are set through 2016 and then capped by the greater of 2.8 percent, CPI, or per capita real GDP growth. There is a noncompete clause in the agreement prohibiting capacity improvements within six miles on both sides of the highway.

Current PPP Activity in Virginia. The legislature amended the PPTA legislation in 2005. The amended legislation included the following revisions:²⁹

- Establishes an interim agreement to provide for partial planning and development activities while other aspects of a qualifying transportation project are being negotiated and analyzed;
- Facilitates deals that involve multiple public agencies;

²⁸A 63-20 corporation is a nonprofit entity that can issue tax-exempt debt on behalf of private project developers.

²⁹Durbin Associates, *op. cit.*

- Authorizes responsible public entities to enter into comprehensive agreements with multiple private entities;
- Requires responsible public entities to protect confidential information submitted by a private entity; and
- Adds factors that responsible public entities may consider when selecting proposals.

In testimony to the U.S. House of Representatives Committee on House and Infrastructure, Governor Tim Kaine indicated that the PPTA legislation was amended “to outline the public policy goals of private financing” (more timely, more efficient, or less costly project delivery) and the amendments considered the State’s 10-year experience with PPPs.³⁰ More recently, policy guidance on private concessions was added to the law, including two main elements: it requires that concession payments are used to provide transportation benefits to the facility users, and extends public sector eligibility for property and license tax exemptions to private concessionaires.

VDOT has a six-phase process to review PPP submissions:

1. **Quality Control** – In this initial phase, VDOT determines whether the proposal addresses the needs identified in local, regional, and state transportation plans, and specifies that those needs cannot be addressed under traditional procurement. This review also identifies if the proposal will result in the availability of the facility to the public in a more timely, more efficient, or less costly fashion and provide for cost and/or risk-sharing with private entities.
2. **Independent Review Panel (IRP)** – This panel consists of members of the Commonwealth Transportation Board (CTB), VDOT representatives, transportation professionals, members of the academic community and representatives of other entities affected by the proposal. In Phase 1, the IRP reviews and evaluates all proposals based on the evaluation and selection criteria in the PPTA guidelines. The IRP will then recommend to VDOT and the CTB whether none, one, or more proposals should be advanced to the detailed review phase. Phase 2 involves public participation and receipt of comments from affected jurisdictions. Each affected jurisdiction should receive a copy of the proposal and have 60 days to submit comments to the IRP.
3. **Oversight Board Approval** – Following review and recommendations by the IRP, the CTB reviews the conceptual proposals and any recommendations of the IRP and recommends whether to advance to a detailed proposal and further evaluation and action by VDOT under the PPTA guidelines.

³⁰Tim Kaine, Governor of Virginia. Testimony before the Committee on Transportation and Infrastructure and the Subcommittee on Highways, Transit and Pipelines, U.S. House of Representatives. May 24, 2006. Available at: <http://www.governor.virginia.gov>.

4. **Submission and Selection of Detailed Proposal** – VDOT creates a proposal review committee to review the recommendations of the IRP and CTB, and may request that none, one, or more proposer(s) submit detailed proposals. Detailed proposals should be consistent with the recommendations of the IRP, CTB, and the provisions and evaluation criteria as defined in the request for detailed proposals (RFDP). Based upon a review of the detailed proposals, VDOT may select none, one, or more proposals for competitive negotiations.
5. **Negotiations** – The negotiation phase is initiated if VDOT determines: 1) that the proposal meets the selection criteria established for evaluation; and 2) that initiation of the negotiation stage shall be in the public interest. Components of the negotiations include the rights and obligations of the parties, set a maximum return or rate of return to the private entity, determine liability, and establish length of PPP agreement.
6. **Interim and/or Comprehensive Agreement** – Once VDOT and the selected proposer have finalized the draft language of the interim and/or comprehensive agreement, the draft version is forwarded to the Office of the Attorney General (OAG) for review and approval. Written approval from the Secretary of Transportation is required before finalizing the PPP agreement.

The PPTA proposal evaluation and selection criteria include, among several items, demonstration of public support for the project. As part of these criteria, the proposer should provide evidence of community benefits, the extent of support/opposition, and include strategies to involve public officials and the community.

VDOT staff³¹ provided answers to the main questions related to the public decision-making process for PPPs and the information provided during this process:

1. What information is provided to decision-makers? Project proposal information is provided along with supplemental internal and external analysis of the proposals.
2. How is the information used in the decision-making process? The information is used to analyze and evaluate the qualifications and abilities of each proposer to advance to the next phase of procurement.
3. Who provides the information? The main contact in VDOT is the Innovative Project Delivery Division. Information is provided from a variety of divisions in VDOT along with Staff Augmentation Consultants.
4. How reliable is the information provided? Independent analysis is performed by consultants to help supplement the information provided by proposers.

³¹E-mail communication from Jennifer Rasnick, VDOT Innovative Finance and Revenue Operations, May 16, 2007.

5. How is the public interest protected? By requiring private equity investments and a sharing of risk on projects. Additionally, VDOT has a transparent procurement process that includes public hearings, up-to-date information on VDOT's web site, public and jurisdictional comment periods, and other activities that allow the citizens to participate in the process.

PPP projects that have been approved or are in the evaluation process are:

- **I-95/395 HOT Lanes** - An interim agreement was signed in October 2006 between VDOT and Fluor-Transurban to build high-occupancy toll (HOT) lanes on I-95 and I-395. Under the interim agreement, Fluor-Transurban must complete the environmental review process, conduct a traffic and revenue study, develop a finance plan, prepare a Federally approved project management plan, develop a plan for HOV/transit (in consultation with HOV/transit stakeholders), and conduct a value engineering review. Costs for the project development process are shared by VDOT and Fluor-Transurban. A comprehensive agreement will be negotiated after completing the project development phase.
- **Capital Beltway (I-495) HOT Lanes** - Fluor-Transurban signed a comprehensive agreement in April 2005 to develop the project. The agreement establishes a business relationship between VDOT and the private partner to move ahead on future project decisions and agreements to design, construct, finance, operate, and maintain the HOT lanes facilities. The NEPA process was completed last year and the project is current in the design phase.
- **U.S. 460 Corridor Improvements** - In February 2006, VDOT issued a solicitation for proposals for development and operations of the U.S. 460 Corridor. Three conceptual proposals were submitted and accepted by VDOT from Virginia Corridor Partners, Itinere, and Cintra USA. The members of the IRP were selected in February 2007 and recommendations from the group are due by June 2007.
- **I-81 Corridor** - VDOT currently is negotiating an agreement with STAR Solutions for potential improvements to the I-81 corridor. In October 2006, the Commonwealth Transportation Board approved the initiation of an I-81 Freight Rail study and the implementation of operational and safety improvements along the existing I-81. The Final Environmental Impact Study for corridor improvements was published in April 2007. The initial improvement concept included the construction of truck-only toll (TOT) lanes, but this alternative has been eliminated from further consideration.

In April 2007, the Virginia Legislature approved legislation that authorizes the Northern Virginia and Hampton Roads regions to implement and operate tolls facilities and enter into concession agreements. Hampton Roads currently is proposing the implementation of six toll project, at an estimated cost of \$9 billion. In Northern Virginia, corridor investments are estimated at \$15.4 billion over the next 25 years, including both highway and multimodal improvements.

After more than 10 years of experience with PPPs, some of the lessons learned by VDOT are:³²

- PPPs are not appropriate for every project;
- The key challenge to a successful PPP is project financing;
- The private partner must bear some of the risk of the project after it is built, such that the public gets a better facility and better customer service;
- The public partner must be in healthy financial condition;
- Avoid conflict of interest and political interference;
- PPPs require significant time commitments from both public and private partners, especially from senior staff;
- Expectations should be realistic among all parties;
- Increasing participation of international firms on PPP procurements has been important;
- Each PPP agreement will become a precedent to the next;
- Keep Federal partners informed of project progress;
- The procurement process is better controlled through solicited proposals; and
- Development of expertise takes time and is supplemented with attorneys, financial advisor, and traffic modeling consultants.

3.6 Current Asset Lease Activity around the Country

The asset leases for the Chicago Skyway and Indiana Toll Road attracted much attention from elected officials around the country struggling to address their own overwhelming funding shortfalls. Both Pennsylvania and New Jersey have older turnpikes, and are considering long-term asset leases to raise sorely needed cash.

Pennsylvania. In November 2005, the Transportation Funding and Reform Commission was created to evaluate Pennsylvania's existing transportation funding and unmet needs and to provide funding recommendations to address those needs. The final report was published a year later and among its recommendations was to aggressively explore PPPs, including toll concession agreements and leasing of the Turnpike. By December 2006, Governor Ed Rendell and PennDOT issued a request for expressions of interest (REI) for a

³²VDOT e-mail communication, op. cit.

long-term lease and toll concession on the Pennsylvania Turnpike. Recent reports indicate that Governor Rendell has received informal estimates between \$10 and \$12 billion for the Pennsylvania Turnpike concession. Forty-eight firms have submitted “expression of interest,” including legal, financial, and transportation consulting firms; these proposals are not necessarily to lease the facility but to provide their specialized services to the State if the State decides to go forward with a Turnpike concession. PennDOT only released the names of the companies submitting the “expressions of interest”; proposals are being held confidential and are not considered “public records.” According to PennDOT, the procurement process for the Turnpike lease is being held as the traditional procurement process in which proposals are confidential (to protect proprietary information). Only the contract will become a public document, after the selection of a concessionaire. The legislature has expressed concerns and is requesting access to documents, before moving forward with development and approval of legislation that will allow leasing the Turnpike and other public assets (including transit agencies and airports). The Turnpike lease legislation is expected to include some protections for labor and limits on toll increases.

One of the “proposers” for the Turnpike lease includes the Turnpike Authority itself. The Turnpike Authority has publicized its proposal,³³ which includes borrowing \$4 billion over 10 years for highway and bridge repairs, with debt repaid from state gas tax and driver license and registration fees. The Turnpike proposal also includes adding tolls on I-80 by 2011, and the creation of a “Regional Mobility Fund” that would be funded through a \$1 surcharge on vehicles traveling through Turnpike interchanges in Philadelphia, Scranton, Pittsburgh, and Harrisburg. In a March 20, 2007 presentation to the Senate Transportation Committee, the Turnpike Authority presented a 37-year plan to provide \$965 million annually for transportation improvements, which also included a 25 percent toll increase in 2010 and a 3 percent annual growth in toll rates beginning in 2012.³⁴

A financial analysis by Morgan Stanley evaluated three alternatives that would use the Pennsylvania Turnpike to generate additional revenue needed to support the State’s transportation needs: 1) a long-term concession; 2) a nonprofit 63-20 public corporation; and 3) the Pennsylvania Turnpike Authority proposal. Morgan Stanley expects that the long-term concession will provide the highest upfront value for the facility, estimated at \$18 billion, assuming a 85-year lease agreement, with toll rates increasing at 5.5 percent over the first 50 years of the lease and at 3.0 percent thereafter, and a 9.0 percent investment rate. The upfront payment from leasing the Turnpike was estimated to be between \$2.3 billion and almost \$20 billion. All three alternatives analyzed include the assumption of annual increases of toll rates.

New Jersey. New Jersey has extraordinary financial difficulties. The New Jersey Transportation Trust Fund (TTF) was expected to run out of money in 2006 and other parts of government are in dire need of funding. In February 2006, Governor Corzine

³³Pennsylvania Turnpike Authority proposal is available at: <http://www.paturnpike.com/PPP>.

³⁴Pennsylvania Turnpike Authority, *Funding Pennsylvania’s Transportation System – Creating a Public-Public Partnership*. March 20, 2007. Available at <http://www.paturnpike.com/PPP>.

presented a short-term plan (FY 2007-2011) to address the impending TTF bankruptcy. The plan provided short-term relief, saving the TTF from bankruptcy, and included restructuring current debt, redirecting the 1.5 cent motor fuel tax and half of the toll proceeds into the TTF, and freezing the level of TTF funds used for capitalized maintenance projects.

To address the long-term state funding needs, Governor Corzine and the legislature had UBS Investment Bank conduct a study of the feasibility and desirability of leasing many of the State's assets, including all of its toll roads, the lottery, airports, hospitals, and prisons, among others. The study found that the best potential for asset leasing was the New Jersey Lottery, but that the State's toll roads – the New Jersey Turnpike, Garden State Parkway, and Atlantic City Expressway also were potentially good candidates, along with the development rights at NJ TRANSIT stations.³⁵

In the wake of the controversy surrounding the Indiana Toll Road deal, New Jersey is moving very cautiously. The result of UBS' findings was an additional round of study that currently is underway to assess the viability of long-term concessions for these assets and to provide recommendations on how to proceed. The study is being conducted by Credit Suisse and will provide detailed proposals for long-term leasing of the State's toll facilities and how to proceed if the lease alternative is pursued. Once the second study results are available and presented to the Governor, the State will initiate a public outreach program to get public input. The public outreach phase will be important to increase public support if the State decides to lease its toll roads. Senators Richard Codey and Raymond Lesniak support the Governor's proposal but opponents of asset monetization currently outnumber its supporters. A recent survey by Fairleigh Dickinson University PublicMind showed that 58 percent of New Jersey residents oppose the privatization of the New Jersey Turnpike. Recent reports indicate that Governor Corzine might be reconsidering the idea of leasing the toll roads, and instead may consider a public benefit corporation thus retaining public control and collection of toll revenues.

Senate Bill (SB) 2539 was introduced in February 2007 by Senator Lesniak to authorize PPPs in New Jersey. The legislature has taken no action to date on this bill. Some of the provisions proposed in this bill include:³⁶

- Proceeds from a lease agreement should be used to reduce state debt or to refund the Turnpike debt;
- The New Jersey Turnpike Authority can submit a bidding proposal after a concession has been negotiated with a private investor;
- Concession term cannot exceed 75 years;

³⁵The UBS study is available at: http://www.state.nj.us/treasury/pdf/asset_evaluation_report.pdf.

³⁶TollRoadsNews.com, *Details of the New Jersey Turnpike Concession Bill*, February 2, 2007.

- Public hearings will be held to present the negotiated agreement and solicit public input;
- The legislature has the authority to veto a concession agreement within 30 days of submittal;
- Tolls for cars and trucks should increase at the growth rate of CPI and Per Capital Nominal GDP, respectively; and
- Union employees are guaranteed to remain employed by the Turnpike Authority for up to six years.

3.7 Other Long-Term Concession Activities

Other states have also been pursuing long-term concessions. Some of the activities underway are:

- Georgia, where potential long-term concessions for new and improved highways are a main focus of the DOT. The first proposed concession agreement on SR 316 has been dropped, but other concessions have been proposed, and more are expected to be solicited this fall.
- Oregon, where the state entered into a predevelopment agreement with Oregon Transportation Improvements Group for three potential projects. One has been dropped, and the others are indicating conditions that would make public acceptance difficult.
- Florida, which is moving cautiously into public-private partnerships in general, and is building staff capacity to be able to effectively handle such proposals when they arise.

■ 4.0 Potential Strategies to Address Public Concerns

Long-term concessions represent a significant change from the status quo; their effects are not easily understood even by experienced public policy and transportation professionals. Legislators, newspaper reporters and editors, and the general public are even less able to track the relevant issues. The key to addressing public concerns (as well as concerns of elected officials from state and local governments) is transparency in the process, from idea conception through the entire term of the lease agreement if a long-term concession contract is eventually signed. Some might be tempted to ask: “what are the strategies to achieve public acceptance of long-term concessions?” but asking the question in this way means that the most important lesson has not been learned. The correct question should be: “what are the strategies to lead elected officials to the best decisions regarding devel-

opment and preservation of transportation assets?” This important lesson was repeated throughout much of the literature.

The Regional Plan Association of New York, New Jersey, and Connecticut (RPA)³⁷ recently released a white paper describing the types of information that should be disclosed by New Jersey as it considers a potential long-term lease agreement for the New Jersey Turnpike, the Garden State Parkway, and the Atlantic City Expressway. The RPA suggests that these considerations should be disclosed through legislation or in the lease agreement:

- “Disclose what will be lost that may need to be replaced with other government funding if revenue from the asset is no longer collected by a public agency;
- Disclose current performance, operation, maintenance, environmental, and labor standards on the asset in question;
- Disclose full text of any contract used to establish the long-term concession;
- Early on, disclose the future allowable toll schedule, including starting toll rates and the degree to which variable tolls may be used in the future to help manage congestion and performance;
- Disclose any noncompete agreements or other contract language potentially impacting the expansion of other transportation infrastructure;
- Disclose the performance, operation, maintenance, environmental, and labor standards that the private sector will be held to, and how the contracts will ensure high-performance operation and maintenance of the affected corridors;
- Hold legislative hearings and town hall meetings on the subject, and allow sufficient time for meaningful public input and legislative review;
- Disclose transaction costs, including fees to investment banks, financial advisors, lawyers, and other professionals retained by the public sector to analyze and craft the long-term concession agreement; and
- Provide information that answer the following questions:
 - How much will the toll increase, and when?
 - How will toll revenue be used, compared to the status quo?
 - Will toll strategies be designed to help cut congestion and pollution?

³⁷RPA, *op. cit.*

- What happens if the road does not raise enough revenues or the deal defaults? Are taxpayers at risk?
- How will windfall revenues be spent by the State?
- Will the new facility operator deliver superior transportation system performance?
- If the corridor performance degrades over time, what remedies does the contract allow?
- How will important labor, environmental, and related concerns be addressed?
- What are the land use impacts?”

Some of these points reflect the public concerns discussed earlier in this paper. A more detailed list of suggestions to address each of the public concerns identified from the literature is provided below.

4.1 Potential Strategies to Address Concerns about Public Sector Decision-Making

A. Public Sector Inexperience

Lack of public sector experience is one of the biggest concerns. Some actions to alleviate this include:

1. Unless in-house expertise is available, the public sector should contract for specialty services related to: law, financial analysis, traffic/revenue forecasting, and design and operation of toll facilities. The public sector must be cognizant of potential conflicts of interest where firms represent both sides in negotiations.
2. It takes a lot of time and effort to review solicited or unsolicited proposals. Agencies need to develop these capabilities in-house or get assistance through contracts. Again, it is important to be cognizant of potential conflicts of interest.³⁸
3. Review and consider best practices at the national and international levels. Lessons learned from other states and countries through previous long-term concession deals can help in development of better long-term concession agreements.³⁹
4. Develop public-private sector comparators to demonstrate to the public and decision-makers the potential value of a transaction.⁴⁰ Assumptions used in the analysis related

³⁸Tyler Duvall (U.S. DOT), Testimony to Congress, March 2007.

³⁹Duvall, op. cit. Alistair Sawers (RBC Capital Markets), Testimony to Congress, March 2007.

to traffic, toll policies, risks, and other factors should be clearly defined, and sensitivity analysis should be conducted to assess the impact of changes in baseline assumptions. Of particular importance is consideration of both short- and long-term measures.

5. The public sector should consider the creation of an independent commission to advise the legislature and the Governor as to the direction that best represents the public interests.

B. Undervaluation of the Facility

Ultimately, there is no single, objective value of a facility. The value is determined by what buyers are willing to pay and what the government is willing to accept. The public sector needs to understand that there is no “right” answer.

1. The public sector should estimate the value under government ownership, and set a minimum value for the concession agreement. This value should remain confidential through the procurement process to encourage proposals that are not based just on meeting the minimum price.
2. How can the public sector know for sure that it is getting the best deal? The public sector needs assistance to develop a methodology to evaluate whether a long-term concession or traditional delivery is appropriate for a project, and estimate the value of the facility. Public-private sector comparators, “value-for-money” methodology, net present value (NPV), and return on investment (ROI) analyses are tools that can be used to assess the value of the facility. States can learn from techniques used in other states and countries with more experience in long-term concessions and use in-house expertise or contract services to conduct the assessment.
3. The public sector could encourage participation of public toll authorities to submit competitive proposals for asset monetization (i.e., public toll authority to generate upfront payment).
4. If toll revenues on an existing facility or toll system currently are used to support other needs beyond operating and maintenance costs and debt service, the valuation process should account for potential revenue losses, and, as suggested by RPA, publicly disclose this information.

C. Uses of Upfront Payments and Equity Issues

Use of the upfront payment can be a major cause of concern, and there is a need to balance the short-term opportunities to close funding gaps (of all sorts) with the long-term needs of the public. Issues regarding who and which geographic regions end up paying tolls and where the funds go geographically also can be contentious. These issues are not

⁴⁰Sawers, op. cit. Frank Busalacchi (Wisconsin DOT), Testimony to Congress, March 2007.

unique to long-term concessions – they also emerge from traditional public sector toll financing.

1. Revenues from long-term lease agreements should be spent in a rational and transparent manner. Potential uses that might be supported by the public include: debt service payments (and more specifically to pay transportation-related debt); transportation investment programs; and reserve funds. Diversion of dollars to nontransportation uses (as with the Chicago Skyway deal) has come under criticism, although there could be sound reasons to allocate funds in this way if a good case can be made for the relationship between the source and use of the funds.
2. Allocate funding to projects that benefit the users of the leased facility. For example, Indiana allocated a percentage of the revenues to be spent on transportation improvement within the seven-county region through which the Indiana Toll Road runs. However, to gain acceptance in the legislature, Indiana also allocated money around the State – potentially a more tenuous connection.
3. Set aside some money as an annuity to fund projects over the life of the lease. The danger of an upfront payment lease is that those monies could be spent within the early years of the concession, with no money flowing in the later years. This means that the public will be paying tolls for generations but will see no money flowing to other sources after the initial payment is spent. An annuity guards against this problem.

D. Perception that the Public Sector Could Raise as Much Money as the Private Concession

A common and reasonable question is whether the public sector could do as well by setting up its own toll system. This can be a difficult question to answer and the answer may vary depending on the assumptions used.

Evaluate the revenue potential of public monetization and identify the pros and cons of this investment alternative, including nonfinancial measures. If the analysis shows that long-term concession is the best strategy, these analyses should be clearly presented so the public understands why a long-term concession was chosen.

E. Public Participation and Outreach

Transparency in the process is a key element for public support of long-term concessions.

1. Some examples of how to attain transparency in the process include:
 - Requests for Expressions of Interest/Proposals should be widely publicized.
 - Make public documents that are available to potential proposers also available to the public.
 - Provide information on appointed negotiators and decision-makers.
 - Disclose the criteria for the selection of a concessionaire.

- Disclose the names and qualifications of bidders.
 - Be clear and upfront about what type of information should remain confidential and provide an explanation as to why confidentiality is necessary. For example, bid amounts are likely to remain confidential (at least until a concessionaire is selected) as well as some proprietary ideas included in the proposals. However, confidentiality should be kept at a minimum to ensure public support.
 - The procurement process should consist of two major steps: 1) request for qualifications (in which interested investors provide information on relevant experience, financial resources, and legal structure); and 2) request for proposals from short-listed firms. The contract should be awarded to the private investor that submits a proposal with the best value.
 - Provide opportunities for public comments during the development of enabling legislation for PPPs and during the procurement process for solicited and unsolicited proposals. Provide time for public evaluation before signing a concession agreement.
2. Transparency should remain beyond the procurement process. When revenue sharing is included in the agreement, the public should have access to annual traffic and revenue studies, audited financial statements, and other public documents that are used to determine the toll revenue returned to the public sector.⁴¹
 3. Establish clear selection criteria and provide full disclosure of competitors' qualifications.
 4. Public disclosure serves as a check on corruption and gives the public a clearer sense of their rights and obligations and facilitates public monitoring of concessionaire performance.⁴² Include provisions in the lease agreement that ensure cancellation of the contract if there is proof of corruption on awarding the lease.⁴³

4.2 Potential Strategies to Address Concerns That Private Sector Interests Conflict with Public Sector Interests

The traditional public sector approach to developing and managing the transportation system is serving the public interest. While the “public interest” can be diverse, ultimately, elected officials are answerable to the voters. When the private sector is involved, the primary motivation is profit for shareholders. Unless adequately controlled through contractual agreements, there is a strong possibility that private sector interests will supersede the public interest.

⁴¹Samuel and Poole, *op. cit.*

⁴²Cesar Queiroz, World Bank. *Public-Private Partnerships in Highways in Transitions Economies: Recent Experience and Future Prospects*. Presented at TRB 86th Annual Meeting, January 2007.

⁴³Duvall, *op. cit.*

A. Revenue Maximization versus System Effectiveness

Absent other factors, the private sector interest will be to maximize toll revenue. This creates a real business interest in keeping the road in good repair and providing superior customer service. These objectives align well with public sector interests. However, maximizing revenue also may result in toll-setting policies that result in decreased use of the toll facility, which may not be in the public's interest. While this can be an issue for a new highway, it is of more concern on an existing facility with a history of usage is based on "below market" toll rates. If the private sector sets tolls too high, the result could be diversion of traffic from the tolled, privately operated highway to nontolled, public highways which could cause congestion and accelerated deterioration. The broader implications of toll policies on system performance need to be addressed in long-term concessions.

Ways to address this can involve:

1. Revenue sharing, to address any off-highway impacts;
2. Use of availability payments⁴⁴ to motivate the concessionaire to maximize traffic use of the road; and
3. Requirements to provide free service for transit vehicles and emergency vehicles.

B. Unsolicited Proposals and "Cherry-Picking" of Profitable Projects

The traditional selection process for public projects varies from place to place and typically involves a mixture of technical and political considerations. When unsolicited proposals are encouraged, private proposers can potentially short-circuit this process. There are potential advantages to this, in that the private sector may propose innovative solutions that are more cost-effective than those that come out of the traditional planning process. However, there are potential downsides to advancing individual projects proposed by the private sector in a vacuum, without considering the effects on the entire transportation system. Reviewing unsolicited proposals can also result in unanticipated and unbudgeted costs and the resources needed to review and potentially advance them. Each state needs to determine its own comfort level with unsolicited proposals and develop measures to mitigate undesirable effects. Possible approaches include:

1. PPP legislation can be designed to regulate or even prohibit unsolicited proposals. Specific provisions that regulate the unsolicited proposal process must be included in the legislation. Virginia, which has a long history of accepting unsolicited proposals, incorporated changes to its PPTA law in 2005 that gears the program more towards solicited proposals, although VDOT must accept unsolicited proposals by statute.

⁴⁴ Availability payments can be based on traffic volumes, availability of road capacity, operations and maintenance expenses, safety, and other factors that would be considered important to the public sector. Under a concession agreement that includes availability payments, the public sector agrees to make annual payments to the concessionaire based on performance.

Unsolicited proposals now have to pass a quality control review that defines if the proposal is in accordance with the Code of Virginia and the VDOT PPTA implementation guidelines, and whether the proposed project provides identifiable benefits to the Commonwealth such as equity investment, meeting defined transportation priorities and shared risk accepted by the private partner.⁴⁵

2. The public sector should incorporate competition into the unsolicited process, similar to current practice in Virginia. The public sector should provide an opportunity to interested investors to submit competitive proposals for unsolicited projects within a specified period that provides sufficient time for preparation, submission, and evaluation of competitive proposals.⁴⁶
3. States often require unsolicited proposals and counter proposals to be accompanied by application fees to offset the cost of reviewing the proposals by the public sector.

4.3 Strategies to Address Concerns Related to Contract Terms and How They Affect Price and Public Control

The value of a concession/lease agreement is determined by the negotiated contract terms between the public and private sectors. Contract terms on long-term concession agreements are held confidential most of the time until the agreement is signed. However, lack of knowledge on contract terms and how the public interest is being protected often contribute to avoidable public opposition and suspicion.

A. Tolling/User Fee Policy

Under public ownership, toll increases are subject to public and political debate. In a long-term concession agreement, tolls are typically set by the private investor and public participation may be limited by contract terms to how frequently and by how much the toll rates will increase over the concession period. The public is concerned that the private investor will set tolls to maximize profit and will not consider potential diversion of traffic onto other routes or inequality introduced by high tolls on middle- and lower-income groups.

1. The public sector should establish the frequency of toll rate adjustments by including formulas within the contract. Toll adjustment policies need to consider congestion pricing if that is an objective of the project.
2. Include a general toll policy within enabling legislation for PPPs, and provide an opportunity for public input on this issue.

⁴⁵VDOT e-mail communication, op. cit.

⁴⁶Karen J. Hedlund (Nossaman, Guthner, Knox & Elliot, LLP). *Public-Private Partnerships: The Most Effective Finance Tool in the Box*, TxDOT Horizons, Fall 2006.

3. Include revenue sharing provisions within the contract, such that the private sector is required to share excess revenues if, for example, the rate of return or projected traffic exceeds a threshold established in the agreement. This may result in a lower upfront fee but ensures that the public sector fully benefits from windfall revenues.
4. Ensure that the pricing structure reflects congestion and other characteristics affecting the value that the user receives so that traffic does not divert from one part of the system to another.⁴⁷
5. Conduct a careful selection of growth indices. Make sure that middle- and lower-income groups are not disproportionately affected.⁴⁸
6. The lease agreement should address nonstandard toll rates that will be applicable during the concession term. In some cases, it may be desirable for the concessionaire to allow reduced rates or exemptions to ensure public support. Emergency vehicles (e.g., police, ambulances, and fire vehicles attending emergency situations) are typically exempted from paying tolls; toll policies for other vehicles (e.g., public transit, electronic toll users) should be defined in the contract.

B. Allocation of Toll Revenues, Profit Sharing, and Windfall Revenues

The public is concerned about the “opportunity loss” from windfall revenues if toll collection is transferred to private investors.

1. The public sector can include revenue sharing provisions in the lease agreement to share in the rewards if toll revenues are higher than projected during the facility valuation process but needs to understand that this could reduce the upfront payment.
2. Shadow tolls⁴⁹ or availability payments can be used to compensate the private investor, instead of allowing the private investor to simply keep the toll revenue. The private sector would simply be paid a direct fee for the service they provide, and if tolls are collected, the public sector retains any excess revenues after the concessionaire is paid. This type of long-term concession agreement is proposed for the new Golden Ears Bridge in British Columbia, Canada.
3. Refinancing can be regulated as part of the lease contract with provision for revenue sharing of gains from the refinancing transaction.

⁴⁷Duvall, op. cit.

⁴⁸RPA, op. cit.

⁴⁹Under a “shadow toll” concession agreement, no tolls are collected on the facility, but the public sector makes payments to the concessionaire based on traffic volumes and service levels.

4. If a TIFIA loan is used in a long-term concession agreement, the TIFIA program allows the TIFIA debt to be refinanced as long as the proceeds are used to complete, expand, or upgrade the project.⁵⁰
5. Another option is to include rebalancing provisions in the contract to bring the contract terms back into the financial balance achieved in the original negotiation, based on changes to underlying economic conditions. This alternative currently is applied in Spain and Portugal.⁵¹

C. Length of Lease

Long-term leases, such as the 99-year term of the Chicago Skyway concession, give a perception that the government loses its ability to protect the public interest for a long period of time. However, the public sector has significant control over this process and chooses the length of the concession based on the desired amount of revenue to be obtained through a concession.

1. The maximum length of lease/concession agreements can be established through state legislation. For example, legislation in Texas limits lease agreements to 50 years but in Colorado, the PPP statute allows lease agreements up to 99 years.⁵²
2. Another alternative is to include a clause in the agreement that ends the lease when the private investor has reached a specified rate of return.⁵³ This allows both for shorter lease terms if revenues are high, or longer lease terms if the traffic revenues are below projections. Spain and France have some experience with this type of lease. The downside of these agreements is that they can be difficult to audit.⁵⁴
3. Explain to the public the rationale for selecting a lease period. Is it a desired large upfront payment? Or is a longer period required so that the private sector can meet its targeted rate of return? In some instances, longer lease terms give better financing options and depreciation of assets to concessionaires,⁵⁵ or it could be based on the time required to repay debt (20- to 30-year typical debt service) and some additional time in case of slow revenue growth at the beginning of the lease.

⁵⁰Hedlund, op. cit.

⁵¹Jennifer Mayer, FHWA. *Private Returns, Public Concerns: Addressing Private Sector Returns in Public-Private Highway Toll Concessions*. Presented at TRB 86th Annual Meeting, January 2007.

⁵²Karen J. Hedlund (Nossaman, Guthner, Knox & Elliot, LLP). Testimony to Congress, March 2007.

⁵³Samuel and Poole, op. cit.

⁵⁴Mayer, op. cit.

⁵⁵Mayer, op. cit.

4. Projects with more stable toll revenue streams or lower revenue risk have the potential for shorter lease terms than facilities for which revenue stream may be uncertain.⁵⁶ For instance, projects that use shadow tolls or availability payments to compensate the private investors could have shorter lease terms than a greenfield project.
5. The concession agreement also could be rebid at the end of the lease term.
6. A concession agreement should include clauses that specify any major capital investments (construction or reconstruction) to be performed by the private investor over the length of the lease, especially for long-term deals.

D. *Extent of “Noncompeting” Clauses*

Some of the earlier PPP projects included noncompete clauses that precluded the public sector from making any improvements that would increase capacity that competes with the privatized toll facility. Such clauses were intended to give the private sector comfort that the public sector could not unilaterally decide to undercut the revenue stream of the investors. There are enough examples of this occurring that this seemed like a reasonable provision that would be necessary to attract bidders. In practice, noncompete clauses have become a lightning rod for public criticism – a noncompete clause motivated the Orange County Transportation Authority to buy back the concession to the SR 91 Express Lanes from the California Private Transportation Company in 2002. Although the SR 91 noncompete clause is now widely acknowledged as a mistake, even when noncompete clauses are specifically prohibited (such as in Texas), the public seems to assume that they are required in a long-term concession deal. This is not the case and there are several ways to handle this issue:

1. Some lease contracts have excluded noncompete clauses but require the public sector to provide compensation if proof is provided that improvements to other transportation infrastructure cause a decrease in revenue.
2. The lease agreement can include provisions that allow planned construction (e.g., projects in the transportation improvement program and long-range plan).
3. The agreements can exclude other modes from the “noncompete” clauses; for example, exclude arterial improvements in urban areas, public transportation, and Interstate expansion to relieve congestion and for safety purposes.⁵⁷

⁵⁶Hedlund, Testimony to Congress, op. cit.

⁵⁷Illinois Road and Transportation Builders Association. *Reconstructing the Future Vision for Utilizing Public-Private Partnerships To Fund Public Transportation Infrastructure*. August 2006.

E. Risk of Default/Renegotiation

PPP experience in the United States shows that the risk of default is real, especially if traffic projections are not met. Both the Dulles Greenway and the Pocahontas Parkway struggled in the early years to meet revenue projections; the Camino Colombia Toll Road in Texas was bought by TxDOT after the private developers went bankrupt and could not make debt payments.

Renegotiation of a contract may be required in long-term concession agreements due to changing conditions and interest over time and sometimes due to optimistic cost and revenue assumptions.⁵⁸ The public is concerned that the public sector could be at a disadvantage in contract renegotiations and that public interests may not be protected.

1. The concession agreement should specify that the facility reverts to the public sector at no cost in the case of default or bankruptcy.
2. Ensure that if the private sector defaults, operations will not be interrupted and that financial liability will not be transferred to the public sector. The control of operations should not be tied up in bankruptcy proceedings.⁵⁹
3. If the public sector decides to terminate the contract for “convenience,” the lease agreement should specify the level of compensation to the private investors.
4. Renegotiation terms should be included in the contract. Typically, renegotiation of a contract is conducted by a third party and requires that the changes do not adversely affect either party.

F. Facility Operating and Maintenance Requirements, Environmental Standards, and Expansion

When infrastructure assets are transferred to the private sector, there is an expectation that the level of service and performance of the asset should at a minimum meet the level of performance experienced under public management.

1. Concession agreements should include performance standards and specifications on maintenance, safety, customer service, etc. The agreement may include penalties for not meeting standards, and/or incentives if the road is maintained under a desirable condition. Long-term concessions using “shadow tolls” or “availability payments” include performance standards to determine the concessionaire’s financial compensation.
2. The concession agreement should include specifications about future widening, extensions, and other major capital investments on the facility. The contract will define

⁵⁸Queiroz, op. cit.

⁵⁹Duvall, op. cit.

whether future expansion or reconstruction remains a responsibility of the public sector or if it is transferred to the private entity. The contract should have flexibility to negotiate issues that may arise over the lease period and are not anticipated at contract signing. If expansion and maintenance are a responsibility of the concessionaire, the concessionaire will account for these future investments in the proposal. The lease agreement should specify who is responsible for conducting planning, environmental permitting, and land acquisition. Concession agreements in Europe usually require the capital investments necessary to maintain the facility in good condition.

3. The public sector may require periodic inspections by an independent party to assess the facility condition as part of the concession agreement.
4. The contract terms should lay out detailed performance requirements. For example, the lease agreement may require the concessionaire to maintain a reserve fund for operations and maintenance. The contract should include a clause that requires the facility to be in state of good repair at the end of the agreement.⁶⁰
5. Include specifications about electronic toll collection and the implementation of new technology. Ensure that any issues related to public privacy are addressed in the contract.⁶¹
6. When leasing an existing asset, the public sector should conduct an assessment of the current state of that asset prior to lease.⁶² Operating and maintenance standards, safety requirements and environmental standards should be developed through independent engineers and technical advisors.

G. Labor Issues

Long-term concession agreements raise concerns about possible employment reductions at existing toll agencies, changes to wages and benefits, and other labor protection issues that may arise from transferring the facility from public to private operations. The contract may include clauses to address these issues. Decision-makers should be aware that the level of labor protections included in the contract are one of many factors that will affect the valuation of the facility.

1. The concession agreement should explicitly address the performance of the concessionaire with respect to employment and benefits. In some cases, it may need to ensure the transfer of public employees to the private sector, and protection of all or a portion of their benefits.

⁶⁰Hedlund, Testimony to Congress, *op. cit.*

⁶¹RPA, *op. cit.*

⁶²RPA, *op. cit.*

2. Long-term concession projects receiving state or Federal funds will be subject to state or Federal labor regulations.
3. Include provisions for DBEs, prevailing wages, and the use of prequalified design and construction professionals.⁶³

H. Eminent Domain

The use of eminent domain for public projects is a sensitive issue which transcends long-term concessions. A poll in Ohio showed that 65 percent of people are opposed to the use of eminent domain to take private property for public projects such as roads⁶⁴ and this issue has become one of the main reasons for public opposition for long-term concession agreements to develop new toll roads in Indiana and Texas. The public perception is that the power to use eminent domain is transferred to the private sector under a long-term lease agreement when in fact this has not been the case for any private transportation concession in the United States.

1. Land acquisition clauses must be included in the concession contract. For example, the public sector can acquire land through eminent domain as is done for other highway projects and then transfer the right-of-way to the private investor. Private investors also may choose to acquire land through negotiation.
2. Eminent domain authority is not transferred to the private sector; it remains in public sector hands.

■ 5.0 Key Issues and Findings

This report has attempted to summarize the current state of thinking and practice in the area of private concessions or PPPs for transportation financing. Given the rapid pace of change, it can only be a snapshot of the recent past. Parties on both sides are learning and adapting and working hard to find a workable basis for agreement. Many aspects of the concession process have been discussed and many projects deconstructed to get at the heart of the issue. Namely, how can the vast amounts of private capital available in the financial marketplace best be tapped while the public interest is protected? At the end of this effort, the following key issues have emerged.

⁶³Illinois Road and Transportation Builders Association, op. cit.

⁶⁴Neal Pierce. *A Smart Government Could Steer Us Beyond Toll Roads*, *Houston Chronicle*, April 8, 2007. <http://www.chron.com/disp/story.mpl/editorial/outlook/4697575.html> (accessed on April 10, 2007).

5.1 Tolls, Not Taxes

Tolls have historically been used to fund individual projects or groups of projects that were too expensive to be paid for from taxes. The first long-term concession agreements have taken tolls from one facility and spread them beyond transportation (Chicago Skyway) and around the State (Indiana Toll Road). In the Chicago Skyway case, the majority of the toll payers are not residents of Chicago or Illinois, which explains why the elected officials in Chicago had no significant opposition to the deal. In Indiana, out-of-state truckers are a big component of the traffic flow – they are not constituents of Indiana officials.

Traditional toll facilities financed by municipal bonds and governed by public or quasi-public agencies typically aimed to keep tolls at the minimum necessary to retire the bonds and fund needed reserves. The Chicago and Indiana concessions featured regular toll increases at a rate never before seen in the United States. The revenue embodied in these periodic increases is a significant source of the value of the concession. Although it is entirely reasonable that tolls (like wages) should keep up with inflation, the public is not used to this financial reality. These new agreements represent a significant departure from the past that cry out for public debate and disclosure over the advantages, disadvantages, and long-term consequences.

Although some agencies have successfully converted their narrow, bond-financed toll facilities into more general revenue mechanisms, for the most part there is an expectation that tolls will only remain in place as long as there is capital debt to be repaid. Typical project debt is of a term of 30 to 40 years. Concession terms of 75 and 99 years mean that tolls essentially will remain in place permanently and escalate to levels never seen before. At the same time, it is this revenue potential that also greatly enhances the value that a concessionaire can offer for a project.

One of the main advantages cited of switching to the concession model is the ability to raise tolls to track or exceed inflation and to keep tolls on for a long time, since the public sector has been unwilling or unable to do this. While it is true that these high toll levels a century from now will be no higher than their value today on an inflation-adjusted basis, the public policy decision to extend and escalate tolls in this way has been rolled into the decision to lease the highway to the private sector. These are two separate decisions, each deserving analysis, and debate.

Interestingly, the public sector has begun to respond to this. In May 2007, a bill was introduced in the Florida Legislature that would *require* Florida's Turnpike Enterprise to raise tolls often to track inflation. In this way, the public sector is capturing some of the value for the public that was thought to be only available if a long-term concession was used.

5.2 Private Equity versus Private Debt

The private sector has long been involved in the finance of transportation facilities, through the purchase of municipal bonds. The concession model allows private entities to take an equity stake in a project, which significantly changes their interest in the outcome of the project.

Under the municipal bond model, the private sector has one concern – full and timely payment of bonds, starting the day the debt is incurred. There is only the downside risk of default and as a result, most financing packages require significant reserves, and a significant cushion between forecast revenue and debt service to make sure that debt service payments are made. If revenue outstrips forecasts, there is no upside potential for additional profits to the investors.

Under the private equity model, the private sector foregoes the expectation of full and timely payment on bonds in exchange for the possibility that revenue will exceed forecasts and yield returns greater than expected. This transforms the operator of the toll road from an entity tasked with providing a public good, albeit at a price, to one that wants to maximize profit.

Because the United States highway system has most recently been a public enterprise, people instinctively reject the idea of someone profiting from a toll road. In switching to the private equity model, the public sector is saying that it needs and wants access to additional capital, but that access has a cost. Although the public sector can allay some of this criticism by limiting excessive profits by concessionaires by contract and building in profit-sharing arrangements, this will have the effect of reducing the potential value of the concession and lowering any upfront payments by the concessionaires.

As we look at the concessions that are advancing in the wake of analysis of the Chicago, and Indiana agreements, we can see how states and regions are trying to balance these competing objectives.

5.3 Private Sector Cost Savings

Another impetus for the concession approach is the belief that the private sector can deliver services at less cost than the public sector. They can do this because they have a stake in the long-term cost structure of the project and have an incentive to control costs and maximize their return on investment at every step. And they are not subject to civil service rules that may make delivering transportation facilities more costly. Most importantly, the private sector has agreed to operate and maintain the facility at a particular price: if it cannot contain costs and be efficient, it will lose money.

There are as many arguments in favor of this thesis as there are against it. The public sector has responded to criticisms of its inefficiency by creating in-house enterprises that are better able to manage costs (such as Florida's Turnpike Enterprise), and by outsourcing some or all of its operations without equity participation. Simple design-

build contracts also are a way that the public sector has attempted to control costs without use of the concession model.

The point is that the concession model can bring with it many cost-saving features, but that does not mean that public agencies do not have other means of achieving some or all of the benefits.

■ 6.0 Conclusions

The concession model has grown from the reality that our transportation system needs far more money than is available from traditional sources. There are no silver bullets in public finance and there are no easy answers to this fundamental dilemma. Parts of the system are more than half a century old and need to be rebuilt. Some areas of our country are growing so fast that substantial and costly transportation investments are needed simply to keep pace. The concession approach to project financing has many advantages over traditional methods and as many concerns with these nontraditional techniques. At this point, very few people have a complete picture of the short- and long-term implications of different approaches and elected officials are bombarded with ideologically laden lobbying from both sides.

We can choose to ignore the financial reality but this will only defer still harder choices to the future. Well-planned transportation investments return dividends many times over⁶⁵ but the money must come from somewhere. These new models may in fact prove to be more equitable and efficient than the old methods, but the negative reaction in some quarters to the initial agreements highlights the need for careful analysis and transparency going forward. Many of the concerns with long-term concessions identified in this report are legacies from past agreements that have been rectified as both the public and private sectors have learned and adapted. Some potential alternatives to private concessions have not yet been adequately explored because they raise still more difficult political issues that are generally avoided by elected officials.

What is needed is dispassionate, objective analysis that allows decision-makers to clearly see the advantages and disadvantages of *all* viable approaches to solving the crisis of paying for transportation. As the transportation industry and elected officials gain more experience with concessions, it is possible that the firestorm of emotion will subside, and well thought out solutions that gain public acceptance will emerge. Already, we are seeing states such as Florida and New Jersey taking a much more methodical approach than their predecessors. Ultimately, each state or region will need to determine for itself the proper balance between competing objectives when it comes to delivering an effective transportation system.

⁶⁵National Cooperative Highway Research Program. *The Positive Impacts of Transportation Investment*, NCHRP Project 8-36, Task 22. Prepared by: Cambridge Systematics, Inc., February 2002.

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