

## **Appendix D**

### **Non-Airport Privatization in the U.S. Transport Sector**

#### **D.1 Objective of Appendix**

The purpose of this appendix is to identify and document lessons learned from non-airport privatization in the transportation sector in the United States and the potential relevance to airport privatization.

#### **D.2 Introduction**

State and local authorities in the U.S. are increasingly considering public-private partnerships (“PPP” or “P3”) and other forms of privatization for transportation infrastructure. The federal government through congressional statutes continues to encourage this process through new and innovative programs, including the Private Activity Bonds (“PAB”) program, the Transportation Infrastructure Finance and Innovation Act of 1998 (“TIFIA”) program (as described in Appendix D.1), Interstate Tolling programs, the SEP-15 program,<sup>1</sup> the Corridors of the Future Program, and the Federal Transit Administration’s (“FTA”) PPP Pilot Program.

#### **D.3 Analytical Framework for Reviewing Transactions**

In non-airport transportation modes, the privatization model has been most actively pursued, both in terms of size of deal and volume of deals, in the highways sector. Therefore, the majority of the cases reviewed are in the highway sector, however, cases involving transit, parking, and ports were also analyzed. Transaction summaries were prepared for 19 deals encompassing these modes.

As many of the best lessons can be learned from failures rather than successes, it was important to review both deals that have and have not closed. In this context, it is important to note:

- Ultimately, ‘value for money’ can only truly be assessed at the end of a contract period. For example, the recent peaks and troughs in the economic cycle underscore that what might appear to be a good investment one year can rapidly appear to be an unwise investment the next. Further, as many of the transactions reviewed are large infrastructure projects with long design lives, a true appreciation of value for money will only be gained much closer to the end of those periods.
- Privatization is fundamentally underpinned by the concept of risk transfer (or risk sharing) between the public and private sectors. Inevitably, risks will be passed to the private sector at a premium on some deals, and these risks will not be realized. As such, it could be argued that in these cases ‘value for money’ was not achieved. Conversely, some potential risks will arise on other projects, and the premium placed on the risk by the private sector will prove inadequate, leading to private sector losses. As a result, true ‘value for money’ can only really be gauged by looking at the process as a whole, rather than on a transaction by transaction basis. The track record of privatization in the transportation sector in the U.S. is still too small and too recent to do this.

---

<sup>1</sup> SEP-15 is a new experimental process for the Federal Highway Administration (FHWA) to identify new public-private partnership approaches to project delivery.

Given these constraints, it was necessary to posit lessons learned by comparing a number of similar transactions and contrasting their various outcomes to date. The non-airport transportation deals reviewed were grouped into discrete categories and identified as either representing “full privatization” where the full control and/or operation of an entire airport are vested with a private entity (via a long-term lease or sale of entire asset) or “partial privatization” where partial control and full ownership of an airport remains vested with the public owner as follows:

Mode	Type of Deal	Transaction	Form of Privatization
Highway	Long term revenue securitization on mature toll roads	▪ Chicago Skyway	▪ Full
		▪ Indiana Toll Road (I-90)	▪ Full
		▪ Pennsylvania Turnpike	▪ Full
		▪ Alligator Alley, Florida	▪ Full
	Transfer of distressed start-up toll roads to the private sector	▪ Pocahontas Parkway, Virginia	▪ Full
		▪ Northwest Parkway, Denver	▪ Full
New private sector toll roads and managed lanes	▪ South Bay Expressway (SBX), San Diego County	▪ Full	
	▪ Dulles Greenway, Virginia	▪ Full	
Managed lane and availability payment projects	▪ Texas IH-635 / LBJ Freeway	▪ Full	
	▪ Miami Port Tunnel	▪ Full	
Development agreements and unsolicited proposals	▪ TTC I-69 in Texas	▪ Full	
	▪ I75/I575 in Atlanta	▪ Full	
Parking	Off-street parking	▪ Chicago garages	▪ Full
	On-street parking	▪ Chicago metered spaces	▪ Full
Transit	Greenfield transit project	▪ Las Vegas Monorail	▪ Full
	Operating franchise for existing rail system	▪ Boston Rail Operating Franchise	▪ Partial
		▪ Denver FasTracks	▪ Partial
Ports	Expansion and operation of marine terminal	▪ Seagirt Terminal, Baltimore	▪ Partial
	Upgrade and operation of container berths	▪ Port of Oakland Outer Harbor	▪ Partial

Most of these examples entail long-term concessions or leases of the entire asset (i.e., “full privatization”). It should be noted that some non-airport transportation assets also have forms of partial privatization as well. For example, the New Jersey Turnpike and Garden State Parkway, announced plans in October 2010 to seek bids from private operators to outsource the collection of highway tolls. In addition, many of the terminals and other infrastructure at U.S. ports were financed and developed by private cargo and cruise companies under long-term leases similar to privately financed unit terminals at U.S. airports (e.g., JFK, Los Angeles).

Appendix D.3 provides a summary of the key project details for each of the transactions, including the ownership, operational details, type of privatization, date of transaction, valuation, description of transaction, and other features.

Finally, it should be noted that when reading this appendix, the “valuations” of projects have come from a wide range of sources and wide range of circumstances and as a result they are not

directly comparable, but have been provided to give an indicative guide to the scale of the deal, rather than any precise project valuation.

#### **D.4 Overall Conclusions and Lessons Learned**

Although each project is unique, there are a number of consistent themes from non-airport privatization that have relevance to airport transactions, including:

1. The success of these deals (ranging from 30 to 99 years) cannot be determined in the short term. Also, the length of a concession needs to be considered carefully. In particular, longer terms raise more upfront money, but do not necessarily deliver overall best value for money. This principle applies as much to airport owners, who have also been considering 99 year deals, as to any other privatization deal. To date the term of long-term leases or concessions for “brownfield” surface transport assets has been driven, at least in part, by accounting treatment and tax exposure, and the same rules apply to airports where the useful life of existing terminals can be 30-40 years. This suggests a 50-year term should be adequate for depreciation treatment on airport deals, and depending on the age of the airport, possibly less. In the case of the Chicago Skyway, the bridge had major components with a long useful life of 75+ years, which led to the 99 year term and the city of Chicago seemed comfortable carrying the 99-year term over to Midway to maximize the upfront payment but this term does not appear to have been driven by tax or accounting considerations. However, while a longer term does raise more upfront money, it should be remembered that it does not necessarily deliver overall best value for money.
2. Although funding constraints may be a key factor in moving a public sector body to consider privatization, value for money must be the main rationale. For example, the adoption of “63-20 financing”<sup>2</sup> may have appeared to offer a low cost funding solution, but the resultant misalignment of risk and reward did not always deliver value for money. Further, award criteria should not simply focus on price and, as value for money in its widest sense should be the objective, the inclusion of other considerations, such as environmental benefits, is both possible and beneficial. For airports, the consideration of wider economic and environmental benefits, and their inclusion within award criteria, is highly relevant.
3. Similarly, in measuring the success of a transaction, while the amount of the money received is an important consideration, it should not be the only criteria. It is also important to consider the investments made by the private entity in infrastructure, the level of service provided, the pricing of services to the public, the degree of environmental stewardship, and employee satisfaction. Airports, like all transportation infrastructure, do not operate in isolation, and have the same duties of care to stakeholders as other businesses. As such they must learn to balance simple monetary gains against these other wider considerations when considering privatization options.

---

<sup>2</sup> 63-20 financing refers to the issuance of tax-exempt bonds by nonprofit entities to finance tangible public assets pursuant to IRS revenue ruling 63-20 of 1963, typically under long-term leases. For example, the 63-20 financing structure has been used to build hospitals, toll roads/bridges, university buildings, city halls, water and sewage facilities, hotels, and convention centers.

4. The letting of concessions delivers a stable financial environment to address maintenance needs of economically critical infrastructure, and this appears to remain true even if the project finances fail. Indeed, many have argued that, even when projects failed financially, it should always be remembered that much needed essential economic infrastructure was delivered when it was needed, and often decades ahead of when it would have been delivered using traditional funding approaches. However, to ensure full public support, the public sponsor also needs a clearly articulated plan for how any additional proceeds raised by the public sector are to be invested, especially when revenues are being raised from one sector (such as an airport) to finance another (such as highways or other social facilities).
5. The early years of a concession are the most vulnerable and the public sector has an important role to play in mitigating risk in these early years. The public sector must also appreciate the expectations of the market and deliver a transparent and timely procurement process. Valuing and then correctly allocating risk is central to delivering value for money for the public sector and, hopefully, ensuring a successful outcome for all the parties involved. In recent years, the aviation industry has experienced volatile market demand and conditions, usually as a consequence of events beyond the industry's control. Airport owners need to consider whether some form of revenue underwriting in the critical early years of a concession delivers better value for money.
6. Although underwriting private finance through direct user payments is one mechanism for delivering P3 projects, other mechanisms, including availability and performance payments, might represent a more appropriate risk transfer approach and deliver better value for money. Airports are the same as all the other schemes considered in this appendix in that there is the potential to transfer demand/revenue risk to the private sector. However, as we can see from recent highways and transit schemes, many are now questioning whether this risk transfer delivers true value for money and airports need to ask themselves the same question.
7. For strategic transportation projects, the role of the private sector is seen as one of delivery, not of definition or specification. A solicited approach to privatization procurements allows the public sponsor to maintain control of project identification (and therefore the overall strategy for the project and sector) while ensuring the private sector is focused on the areas where it can best deliver value for money, namely, delivery of the service required.
8. Although projects may appear to be similar, all have unique features, and these must be understood when developing the term and nature of the deal between the public and private sectors. Also, even the most technically complex project can be procured through privatization techniques. However, the involvement of the private sector cannot fundamentally change the nature of a project. For example, a project that needs a significant subsidy if procured by traditional means will still need a subsidy if procured as a privatization. In addition, even infrastructure of regional or national importance can, in principle, be procured through privatization techniques.

## **D.5 Long Term Revenue Securitization on Mature Toll Roads**

In this category of highway transactions, four similar assets are reviewed that have very different outcomes. The highest profile transactions in the transportation sector are the largest financially, in particular:

- Chicago Skyway – A 99 year lease for a payment of \$1.8 billion.
- Indiana Toll Road – A 75 year lease for a payment of \$3.8 billion.
- Pennsylvania Turnpike – A 75 year lease proposal that attracted a \$12.8 billion “best offer,” although this was ultimately withdrawn when the legislature failed to vote on the proposal.
- Alligator Alley – A 50 to 75 year lease proposal that had an extended bidding process, but which culminated in the Florida Department of Transportation receiving no compliant bids in May 2009.

All of these transactions involved existing tolled facilities and were offered as long-term concessions for the operation and maintenance of those existing facilities. However, the outcome for each was very different.

These projects were all promoted by their public sector owners for three basic reasons:

1. A desire to raise revenues immediately (to be used to pay off existing debts and to assist in the funding other planned new infrastructure).
2. A desire to create a stable financial environment that allowed the sustainable maintenance and operation of what were perceived to be critical elements of the regional transportation network.
3. The transfer of operating, maintenance, and revenue risk to the private sector to achieve overall value for money.

Although each of these transactions involved the transfer of the asset, the transfer of staff varied. For example, the Chicago Skyway contract required the concessionaire to offer jobs to the existing employees. However, because most employees were given the choice to keep their existing job most decided to stay with the city. In contrast, on the Indiana Toll Road, when the concessionaire took over, almost all of the managers from the public sector joined the concession company.

### **D.5.1 Chicago Skyway**

The Chicago Skyway reached financial close in October 2004 and was the first long term lease of an existing toll road in the U.S. The City of Chicago used \$1.8 billion received from the transaction to:

1. Pay down existing debt on the facility.
2. Fund a \$500 million long-term and \$375 million medium-term reserve for the city.
3. Fund a \$100 million neighborhood, human, and business infrastructure fund to be drawn down over five years.

In addition, as a result of this transaction, the city's credit rating was upgraded, which reduces its cost of future borrowing and therefore enables the city to deliver more projects. Therefore, the city achieved its first objective. It is also worth noting that the competitive process in this transaction delivered a winning bid that was 2.6 times more than the next nearest bid.

Regarding maintenance and operations, the Skyway concessionaire must follow detailed technical specifications based on "best practice." Apparently, under public control there were no such formal standards and hence the concessionaire is actually now required to uphold the road system to a higher standard than the city previously had. However, this does come at a price to users.

The concession agreement contains a pre-established toll schedule to 2017, and an agreement that after that date annual increases will be capped at the higher of 2%, consumer price index ("CPI"), or the increase in nominal gross domestic product ("GDP") per capita. By comparison, under the city's 47 years of control, toll changes were infrequent and on occasions actually decreased in real terms (such as the period from 1989 to 2004 where tolls declined by approximately 25% in real terms).

Some have contended that requiring the concessionaire to maintain the Skyway to a certain standard is inherently inflexible because at any point during the term of the concession this standard may be considered unnecessary or unaffordable. Despite this, it is clear that the letting of the concession has, at least to date, achieved the second objective of delivering a stable financial environment to address maintenance needs.

The risks inherent with the operation and maintenance of the Skyway, along with inherent uncertainties over future revenues, have been transferred to the private sector. However, it should also be noted that the deal does include a non-compete clause (which does reduce the usage risk to some degree) and there is no upside revenue sharing between the public and private sector.

Although it will be some time before it will become clear whether these risks have been transferred in a manner that delivers value for money, there are a number of recent events which provide some preliminary guidance on this issue.

- The original financial structure (backed by toll receipts) had equity at \$882 million and bank loans of \$948 million. In a subsequent refinancing, equity fell to \$510 million, with capital accretion bonds of \$961 million (21-year maturity; 5.6% interest rate), current interest bonds of \$439 million (12-year maturity), and subordinated bank debt of \$150 million. As the debt to equity ratio is, at least in part, a reflection of the perceived risk profile of a project by lenders, the refinancing to a higher debt to equity ratio generally implies a market perception of reduced risk. It is common for debt to equity ratios to change at refinancing as a project's risk profile inevitably changes over time. However, such a change does not mean risk was misunderstood at the time of the original deal.
- Many thought the price bid by the winning consortium was very high (as previously mentioned, 2.6 times higher than the nearest other bid). Then, as revenues continued to grow, it was suggested the original investors had achieved a good deal, as reflected in the refinancing. However, the recent economic downturn resulted in a decline of revenues, again raising concerns over the "high" original bid price.

The lesson is that the true value for money cannot be calculated until the end (or close to the end) of the concession, and that investments of this kind will, as with all businesses, go through good and bad times.

### **D.5.2 Indiana Toll Road**

From a chronological perspective the next transaction was the Indiana Toll Road. Like the Skyway:

- The monies were used to pay down existing toll road bonds and establish new transportation project funds, including a fully funded 10 year statewide “Major Moves” transportation plan. Similar to the Chicago Skyway deal, the credit rating of the state was upgraded, with consequent wider benefits.
- The concession also included maintenance and operational requirements to be met, and the concession can default if these standards are not met. An oversight board of state employees and private citizens reviews the concessionaires performance for non compliance with operational and maintenance standards. The concessionaire also made commitments to improve the toll road over the life of the concession, for example, by introducing electronic toll collection (an action that has already been implemented).
- The risk transfer profile offered significant private sector upside (including a non-compete clause and no revenue sharing).

This deal closed in 2006, and was a 75 year lease that raised an upfront payment of \$3.8 billion for the State of Indiana.

### **D.5.3 Pennsylvania Turnpike**

On the basis of the perceived successes of the Chicago Skyway and the Indiana Toll Road, there was an attempt to privatize the Pennsylvania Turnpike. Understanding this proposed privatization requires a review of the chronology of events in the period from 2006 to 2008.

In November 2006, Pennsylvania Governor Ed Rendell raised the idea of a long-term lease of the Turnpike to a private group as a means of raising money to improve infrastructure within the state. Then in December 2006, the state solicited information from firms interested in leasing the Turnpike. This action was motivated by the findings of a Transportation and Reform Commission, convened earlier in 2006 by the governor, which had concluded that Pennsylvania needed an additional \$1.7 billion of funding to maintain the current transportation system.

Although there appears to have been a general consensus that there was a major transportation funding deficit, leasing the Turnpike was not universally accepted as the solution. Concerns seem to have included the length of the concession, the application of P3 to brown-field rather than a green-field scheme, plus the prospect that the lease could go to a foreign company. As a consequence, two parallel funding initiatives were developed in early 2007:

- The Turnpike Commission proposed that they increase tolls on the Turnpike and introduce tolls on the untolled I-80. The Commission would then turn over funds to the Pennsylvania Department of Transportation (“PennDOT”) for statewide transportation

improvements, including transit. This was known as Act 44 and, assuming tolling of I-80 was approved, was projected to generate \$116 billion over 50 years.

- Meanwhile, around the same time, Governor Rendell released estimates of \$12 billion to \$16 billion to lease the Turnpike and asked the state legislature for permission to seek bids.

Given the difference in funds expected to be raised by the two plans, Act 44 was passed in July 2007 by the legislature and Governor Rendell agreed to halt the concession plans and support tolls on the I-80. In August 2007, the Turnpike also made its first payment of \$6.25 million to PennDOT as per Act 44.

However, although Act 44 was approved, it had exposed a number of geographical and philosophical differences within the legislature and the governor doubted that approval to toll I-80 would be given, which was a major element of the Act 44 funding plan. Therefore, in September 2007, Governor Rendell resurrected his plan to lease the Turnpike and in October 2007, 14 proposals to lease the Turnpike were submitted by the private sector.

Meanwhile, in the same month (October 2007), the Turnpike submitted an application to the Federal Highway Administration (“FHWA”) to toll I-80, and in December 2007, the FHWA asked for more information.

In February 2008, the governor announced his support for a bill that would repeal tolls on the I-80 and lease the Turnpike.

In May 2008, Abertis Infraestructuras, SA and Citi Infrastructure Investors submitted a \$12.8 billion proposal to lease the turnpike. This was the largest of the three bids received, but was still at the lower end of the values initially indicated by the governor in May 2007.

Under the terms of the offer, tolls could have been increased by the greater of 2.5% per year or by the change in the CPI, but the concessionaire would have to make a number of agreed upon improvements to the road and to maintain and operate it to defined standards.

Although both the private and public sectors had drawn heavily on the experiences of Chicago Skyway and Indiana Toll Road, there were a number of important differences between Pennsylvania Turnpike and the previous two deals. For example:

- There were concerns that the financial assumptions adopted by the public sector to estimate how much revenue they would have each year to invest were overly optimistic (the plan being to save most of the \$12.8 billion and use the annual interest to fund new projects).
- The state lacked a clearly articulated plan for how the proceeds were to be invested.
- The oversight mechanism for spending the funds was questioned, in particular the absence of legislative or public representation on the board that would be established to control investment decisions.



Meanwhile, the Turnpike Commission continued making payments under Act 44 (although it should be noted that these relied heavily on debt in the near term, with toll increases and the introduction of tolling on the I-80 being required to resolve its long term commitments under Act 44). Therefore, when the governor asked the legislature to approve the Abertis/Citi \$12.8 billion offer, several months of debate followed. Legislators were inundated with information from those both in support of, and against, the lease proposal. The three issues already listed above (financial assumptions, investment clarity, and the oversight mechanism) became the focus for much of the debate.

When the legislature failed to vote on the offer from Abertis/Citi in September 2008, the concessionaire let its offer expire (early October). At almost exactly the same time, the FHWA rejected the proposals to toll the I-80. As a result, the expected \$900 million a year in funding from Act 44 over the next 10 years was reduced to about half that value.

Although Pennsylvania adopted an approach very similar to that which had successfully delivered deals on the Chicago Skyway and Indiana Toll Road, it is clear that ultimately there were two fundamental problems:

- Although there was a commonly held understanding that there was a problem with funding transportation in the state, there was no consensus on the way forward.
- Although the process of public sector procurement was well run and the deal structure adopted a proven and robust approach, there was less clarity and transparency on how the public sector planned to use the funds they expected to receive.

It is also worth noting that the deal was progressing during the middle of 2008. Although the full extent of the oncoming recession and financial crisis was still not apparent to many until September 2008 (with the nationalization of Fannie Mae and Freddie Mac, Lehman Brothers filing for bankruptcy, Bank of America purchasing Merrill Lynch, and AIG receiving help from the Federal Reserve), there were already signs of stress in the market and as a consequence, the offer submitted by the private sector was at the lower end of expectations.

One can only speculate as to how the legislature might have responded had the offer been at or above the higher end of the range of values initially proposed by the governor (i.e., \$16 billion).

#### **D.5.4 Alligator Alley in Florida**

The Alligator Alley case study shows even more clearly how the downturn in the market 2008 (as well as the events surrounding the Pennsylvania Turnpike in the same year) influenced the market appetite for investing in long term toll road leases. The timetable of events for Alligator Alley was as follows:

- 1969 - The highway is constructed as a two-lane tollway connecting the two coasts of Florida. It was control accessed and tolls were based on toll revenue bonds issued in 1964.
- 1986 to 1992 – The highway was further widened to four lanes.

- 1999 – The toll plazas were converted to one-way tolling with the West Plaza collecting eastbound tolls and the East Plaza westbound tolls.
- 2007 – Revenues totaled approximately \$24 million a year and operating expenses were about \$6 million.
- May 2008 – An RFQ was issued by the Florida Department of Transportation (“FDOT”) followed by public workshops in Collier and Broward Counties.
- June 2008 – SOQ’s were submitted by 8 consortia, including investors that had been closely involved with Chicago Skyway and Indiana Toll Road.
- June 2008 – FDOT announced a plan to re-issue the Request for Qualifications (“RFQ”).
- July 2008 – Only 6 teams responded to the re-issued RFQ. Of interest, Macquarie (one of the main players in Chicago Skyway and Indiana Toll Road) did not submit a response this time, and neither did Abertis, (which had been one of the main players in the Penn Turnpike deal).
- August 2008 – All 6 groups who had responded to the revised RFQ were short-listed to bid.
- January 2009 – The bid deadline was extended to May 8.
- April 2009 – The bid deadline was further extended to May 18, however, one of the bid teams still formally announced it was abandoning its bid.
- May 2009 – A second bidder formally left the bid process and a number of team members moved between groups. Then on May 18, FDOT announced it had received no bids for the project and was therefore stopping the process.
- July 2009 – FDOT said it was not ruling out a P3 for Alligator Alley despite receiving no bids for the asset, stating it would continue to look at options for leasing. One official said "privatization is not off the table just temporarily dead because of the economy."

Later it was confirmed that ultimately only two groups were preparing bids for the asset by the time of the bid deadline (and interestingly neither included any of the entities involved in Chicago Skyway, Indiana Toll Road or Pennsylvania Turnpike). The two teams preparing to bid were a consortium of Vinci/Alinda and a Global Via/Atlantia pairing.

Clearly timing, both in terms of the recession/financial crisis, and following on from the failed Pennsylvania Turnpike, had a negative impact on the deal. Although Alligator Alley had a strong history of traffic and revenue growth, the recession in 2008 led to a 5.2% decrease in transactions and 6.7% decline in toll revenue, and over the bid period the economic outlook remained unclear.

However, some participants (and some who decided not to become involved) have suggested that a further problem was a lack of upside opportunity (and hence a lack of opportunity to make higher margins on the investment). At the time that the concession was being promoted by FDOT, toll rates on the Alligator Alley for cars were \$2.50 for cash customers and \$2.00 for

electronic/SunPass customers. The rate per mile was very low in comparison to other toll facilities across the country (78 miles at 3.2 cents per mile). The concession proposed a toll increase of 50% in 2009 to \$3.75 and \$3.00 for cash and electronic customers, respectively. After 2009, rates were to be permitted to be raised at the greater of either 3% per year or the rate of inflation (“the ratio of the Index for the immediately preceding Index year ended June 30th to the Index for the second most recent Index year ended June 30th”). This meant there was very little above inflation revenue growth opportunity in the deal.

Finally, unlike previous deals, FDOT included a revenue sharing clause, which further limited upside opportunities for the private bidder.

Although the market conditions in 2008 and 2009 undoubtedly influenced this transaction, it would be wrong to conclude this was the only reason for failure. It would appear that the market that had developed to bid for these revenue securitization deals was accustomed to greater risk (and hence greater potential returns) than that being offered in the Alligator Alley deal, and this further influenced those interested or willing to consider a bid for the project.

### **D.5.5 Lessons Learned from Long Term Revenue Securitization**

The success of a long term lease (50 to 99 years) cannot be determined in the short term. Further, even if the risks transferred to the private sector did not materialize, it does not mean that ‘value for money’ was not achieved by the public sector by the transfer of that risk to them.

In addition, the letting of long term concessions should deliver a stable financial environment to address maintenance needs of economically critical infrastructure. However, some argue that the inherent inflexibility of a long term lease is not a good thing, with the concession in effect making the commitment to maintain the asset to a certain standard despite the fact that such a standard may be considered unnecessary or unaffordable in the future.

The term of long-term leases or concessions for “brownfield” (i.e., existing asset) transactions is driven in part by tax treatment. If the lease is structured to have a term that exceeds the remaining life of the asset (e.g., road, parking, transit, port, or airport facility), the private operator can be considered the “owner” of the asset and the asset can be depreciated for tax purposes.<sup>3</sup> There is no specified percentage requirement beyond the useful life, but tax lawyers are more comfortable with some cushion. Depreciating the asset allows the private operator to reduce the amount of net income subject to taxation, which in turn provides the opportunity for a higher upfront lease payment. The same rules would apply to airport concessions where the useful life of terminals can be 30-40 years and the airfield less. Therefore, a 50-year term would be adequate for depreciation treatment, and depending on the age of the airport, possibly less. In the case of the Chicago Skyway, the bridge had major components with a long useful life of 75+ years, which led to the 99 year term. The city of Chicago seemed comfortable carrying the 99-year term over to Midway to maximize the upfront payment.

A bigger motivating factor seems to be that a longer term generates a larger upfront payment. This is especially relevant when there is substantial debt to be paid off to provide a large

---

<sup>3</sup> Title 26 – Internal Revenue, Chapter 1, Internal Revenue Service, Department of the Treasury, Subchapter A – Income Tax, Part 1 – Income Taxes, 1.167(a) – 4 Leased property.

enough upfront payment to defease the debt and also provide a significant return to the public owner.

In the early toll road deals, the private operators were financing the transactions at very high leverage levels with long amortization periods (40 years). The rating agencies felt more comfortable with a cushion of years left in the concession after the anticipated bond amortization period. For example, in the Indiana toll road transaction, a 50-year term would have worked for tax purposes for the toll road lease, but the bidders' ability to secure more favorable financing was significantly enhanced by the 75-year term. This type of high leverage is no longer available, and therefore this is no longer a driving factor.

The other lessons learned from these experiences, with respect to considering “good practice” for P3 or Privatization deals is:

- The financial assumptions adopted by the public sector to estimate how much revenue they would have each year should be robust. The traditional approach in most countries is to develop a public sector comparable and this is now generally accepted as good practice for the public sector.
- To deliver full public support, the public sponsor should have a clearly articulated plan for how the proceeds are to be invested and, given the timescales involved, the oversight mechanism for spending the funds needs to be seen as transparent and nonpartisan.
- The public sector has to acknowledge the state of the market, the nature of the returns the market expects, and should aim for a transparent and timely procurement process.

## **D.6 Transfer of Distressed Start Up Toll Roads to the Private Sector**

The four previous examples focused on existing toll roads with a long track record of traffic, revenues, and costs. The next category relates to toll roads that were initially developed and funded by the public sector, but which upon opening, entered into financial difficulties and were then offered to the private sector as a way of resolving those difficulties. Therefore, this category focuses on lessons learned in the value of revenue risk transfer by the public sector.

### **D.6.1 Pocahontas Parkway**

Pocahontas Parkway (Route 895) is a 9 mile toll road in Richmond, Virginia. The 4-lane road connects Chippenham Parkway at the I-95 with I-295 south of the Richmond International Airport.

The initial key timeline of events were:

- 1995 -The Virginia General Assembly passes the Public-Private Transportation Act (“PPTA”) which allows private groups to raise money to build and operate transportation facilities. The aim is to generate transportation funding that otherwise would not be available.
- 1997 – The not-for-profit Pocahontas Parkway Association (“PPA”) is formed in response to a proposal by a private sector consortium of Flour Daniel/Morrison Knusden to build

the project as a toll road. PPA has the powers to issue bonds for constructing and operating Pocahontas 895. This is Virginia's first-ever PPTA project.

- 1998 – Construction begins.
- September 2002 – The Pocahontas Parkway, which cost \$314 million, opens to traffic.

The PPA was a particular form of corporation that is classified as a “63-20” by the Internal Revenue Service. Much of the risk was left with the PPA, and the contract included limited liability provisions if the corporation defaulted.

The Pocahontas Parkway was only the second transportation project nationwide to be financed through a 63-20 corporation. As we discuss later, this has not proved to be a successful approach to P3 deals.

Upon opening, it became clear that Pocahontas Parkway had been promoted on forecasts of traffic and revenue that were significantly over estimated. The Pocahontas Parkway had financial problems from the start and was in danger of defaulting on upcoming debt service payments in 2005. This was despite VDOT agreeing to defer its reimbursement of annual operating and maintenance costs associated with the toll road. To get a sense of the scale of the shortfall, the Virginia Department of Transportation (“VDOT”) said that in 2006 average daily traffic using the Pocahontas Parkway was only 60% of projected traffic in the original PPA business case.

In recognition of the Pocahontas Parkway’s difficulties, Transurban submitted an unsolicited proposal under the PPTA for the concession of the parkway. Transurban is a toll road operator from Australia (rather than a highway contractor).

As it became clear the Pocahontas Parkway would not be able to continue to meet its debt payments, VDOT chose to end its contract with Fluor Daniel/Morrison Knudsen and began negotiations with Transurban.

When VDOT was negotiating the deal with Transurban it should be remembered that there was a strong possibility that in the next few years the Pocahontas Parkway Association would have had insufficient toll revenues to fully cover the debt service on the toll revenue bonds. This could have led to default on some of the bond interest payments, and financial losses for the private bondholders, or could have led to the state subsidizing the amount of the interest payments that were in default.

In June 2006, after the completion of a competitive process as outlined by the PPTA, the VDOT and the Pocahontas Parkway Association agreed to a 99-year lease for Transurban to manage the Pocahontas Parkway.

Under the original VDOT-PPA agreement, the project value was \$318 million, with \$300 million financed privately through the issuance of bonds. When Transurban took over the Pocahontas Parkway in 2006, it entered into a 99-year lease agreement with VDOT for \$611 million. The funds from Transurban were used to defease all of the outstanding debts and covered a deferred reimbursement to VDOT for operation and maintenance costs incurred up to that date.

The new contract with Transurban included the establishment of toll levels and increases, which were capped at \$0.50 per year through 2010, and \$0.25 per year through 2016. If revenues exceeded expectations, a revenue sharing mechanism between Transurban and VDOT was triggered.

Transurban's contract stated that it was to take over all the cost and management of operations and maintenance of the Pocahontas Parkway, which included an upgrade to electronic tolling and the construction of an airport connector. The electronic tolling has since been introduced and the airport connector was under construction as of September 2010.

The original Pocahontas Parkway contracts included one for the total operation and maintenance of the facility and a second for the formation of a 63-20, although they varied in the placement of financial liabilities. As it became clear the first contract would fail because of the lower than anticipated traffic levels, it also became clear that the remaining debt would become a state obligation. In order to avoid a repetition of such a significant tax burden falling on Virginia residents in the future, VDOT's contract with Transurban included non-recourse financing to protect the state.

There are a number of lessons to be learned from the Pocahontas Parkway project:

- Although the original scheme involving PPA was promoted as a public private partnership, it is clear that the risk allocation was actually heavily biased towards the public sector. The potential benefits of raising tax exempt bonds using the 63-20 structure turned out to be outweighed by the basic commercial risk of the project.
- The later involvement of the private sector using non-recourse financing has not only removed a major potential tax burden from the citizens of Virginia, but has ensured the delivery of what is viewed to be an important new highway link to the airport.

In addition, the private sector accepted revenue sharing on the upside.

### **D.6.2 Denver North West Parkway**

The Denver North West Parkway is a toll road that connects E-470 in the east, at I-25, with U.S. 36 and State Highway 128 in Broomfield. This project was initially promoted and funded by a group formed by three city councils (Broomfield, Lafayette, and Weld County) and a property developer who used state laws created in the mid-1980s to create the "not for profit" Northwest Parkway Public Highway Authority. As a public private partnership with state-granted governmental powers, the new authority secured two important tools:

- The ability to condemn land
- The ability to sell tax-exempt revenue bonds

Construction of the Northwest Parkway commenced in June 2001, under a design/build contract by the Highway Authority. The Northwest Parkway opened to traffic in November 2003, and toll collection started on January 1, 2004.

However, like the Pocahontas Parkway, the Northwest Parkway consistently generated less income than envisioned when it was funded. The Northwest Parkway was originally built with \$416.4 million in bonds, to be paid back with toll revenue over 35 years. Due to the road's under-utilization, the bond debt was downgraded in 2006.

To get a sense of the scale of the short fall in traffic, in 2007 there were 12,000 cars per day, well below the 18,500 expected in 2004 (one year after opening).

As a consequence of these financial difficulties, the public sector decided to look into the potential for the private sector take on the project and the associated debt problem. At that time, the public sector identified its primary goals as:

- Maximize the value of the toll road
- Retire current debt
- Maintain or exceed current levels of service

The key timeline for the events that followed were:

- September 2006 - an RFQ was issued to private sector financial groups
- October 2006 - 11 bidders were short-listed
- April 2007 - Brisa/CCR was named preferred bidder
- November 2007 - Financial close reached
- January 2008 - Syndication launched for Northwest Parkway
- May 2009 - Brisa confirms acquisition of the remaining 10% from CCR, bringing its total equity stake in the Northwest Parkway to 100%

It is interesting to note that Brisa, like Transurban, is a toll road operator not a contractor. Although many participants focus on construction, a key aspect of privatization is the operational phase, which is far longer, and from both a financing and user perspective, far more important than the construction phase. This change in mindset to think of a project over its entire life cycle (i.e., construction, maintenance, refurbishment, etc.), and hence the delivery of a service, rather than a physical asset, is critical to delivering successful P3 projects.

The Brisa deal did have some funding problems:

- To achieve financial close, Brisa had to increase its equity commitment.
- The syndication process was also affected by the financial crisis, even though, ultimately, syndication was achieved.

These problems are now common to all P3 infrastructure deals, with larger equity contributions a common feature, as developers have found it harder to access the debt markets post credit crunch, as well as the loss of the debt syndication market.

However, this deal did confirm that under the right conditions P3 projects could still be financed even during the recent financial crisis.

### **D.6.3 Lessons Learned from Distressed Start up Toll Roads**

The first key lesson learned relates to valuing risk. As research has shown,<sup>4</sup> the biggest risk in traffic forecasting relates to the early traffic levels achieved on green field projects. It seems this risk may not have been fully appreciated or valued when the projects discussed above were developed.

The second key issue is an over emphasis on funding instead of the risk transfer and full-life 'value for money' considerations. Although both Pocahontas Parkway and Denver Northwest Parkway originally appeared to be private sector projects, the particular not-for-profit corporation (63-20 financing) adopted in both cases meant that ultimately the main risk for the project (i.e., traffic revenues) rested with the public sector not the private sector.

While a 63-20 financing does have certain tax benefits that make it attractive from a funding perspective, some argue that because the private party has no long term equity interest in the project to protect under a tax-exempt transaction, the motivation of the private sector to succeed, a key aspect of P3 or privatization deals, is lost.

## **D.7 New Private Sector Toll Roads**

This section reviews the group of toll road transactions that were promoted and financed by the private sector and highlights what has been a major issue for private sector toll roads, namely their vulnerability to failure and default in the early years of the concession life. The transactions reviewed show the problems that can arise and how they have traditionally responded.

The projects are:

- South Bay Expressway, San Diego County, California.
- Dulles Greenway, Virginia.

### **D.7.1 South Bay Expressway**

The South Bay Expressway is a 9 mile toll road (with a 3 mile connector) promoted by Caltrans. The project completed the missing link in San Diego's north-south freeway corridor.

The enabling legislation is California's AB 680 legislation passed in 1989 and funded by a TIFIA loan. Financial close occurred in May 2003, and the road opened to traffic in November 2007. The award followed a competitive design-build bid procurement process in which the same designer, design subcontract, and design price were mandated to each bidder.

The conditions of sale were that a limited partnership, South Bay Expressway, L.P., holds a franchise with the State of California under which it financed and built the highway, then transferred ownership to the state. The limited partnership then leases back, operates, and maintains the facility for 35 years. In 2042, control reverts back to the state at no cost.

---

<sup>4</sup> Standard & Poor's, "Traffic Forecasting Risk Study Update 2005: Through Ramp-Up and Beyond," August 2005.



The northern 3 mile segment of the South Bay Expressway, including the SR 54 interchange, was financed using a mix of federal funds and local sales tax proceeds. Both sections were built by the same contractor under two separate design-build contracts. Funding sources for the Southern Toll Section were investor equity, bank debt (\$470 million), TIFIA loan (\$140 million), and donated right of way (\$48 million). The bank debt was syndicated to a group of 10 banks. For the Northern Connector section, federal funds were used (federal aid receipts) and local sales tax receipts.

The \$140 million 35-year TIFIA loan was the first-ever provided to a private toll road development. It was secured by a second priority security interest in all project revenues subordinate to the lien of the senior loans. The project revenues consist of (a) all income, tolls, revenues, rates, fees, charges, rentals, or other receipts derived by or related to the operation or ownership of the project, including all amounts from joint development or leasing of air space lease rights, (b) any revenues assigned to the borrower and proceeds of the sale or other disposition of all or any part of the project, and (c) all income derived from permitted investments.

The franchise allows a maximum 18.5% return on total investment with an additional incentive return for action to increase average vehicle occupancy on the toll road. However, unlike the Pocahontas or Denver North West Parkways, the risk that revenues would not meet expectations was fully transferred to the private sector..

In March 2010, South Bay Expressway, L.P. and California Transportation Ventures, Inc. filed petitions in the U.S. Bankruptcy Court for the Southern District of California seeking relief under Chapter 11 of the Bankruptcy Code. It cited lower than expected revenues as a consequence of the recession combined with larger than anticipated construction costs (in part related to land acquisition issues).

Although the investor lost its equity, the road remains open for traffic, with the road continuing to be operated by South Bay Expressway under Chapter 11. From the perspective of toll road users, nothing has changed. Some risk transfer projects result in profits and some result in losses for the investors.

As of September 2010, the precise scale of outstanding debt was unknown, but as revenues are expected to exceed operating costs (and a new equity investor is being sought), it is likely the debt will ultimately be repaid under a revised debt payment program. In fact, the next Dulles Greenway case provides some guidance on the most likely path to be followed by the South Bay Expressway.

### **D.7.2 The Dulles Greenway**

The Dulles Greenway is 14 miles long and runs from the public sector owned Dulles Toll Road (which is owned by the US Government but leased to the Washington Airports Authority) to Leesburg in Virginia. The two toll roads join at a single toll plaza where drivers pay one toll that is divided between the operators of the two facilities.

The Dulles Greenway toll road was privately financed and constructed over two years (1993-1995) as a Design Build Finance Operate (“DBFO”) highway. The initial agreement envisaged operational responsibilities reverting to the public sector in 2036. A 1988 action of Virginia's

General Assembly enabled the project to proceed by authorizing private development of toll roads. The maximum toll schedule through 2012 was set by the Virginia State Corporation Commission (“SCC”). For the period 2013 to 2020, tolls could be escalated at real GDP, CPI plus 1%, or 2.8% per year (whichever is greater). After 2020, tolls were to be set by the SCC on application. It was one of the first U.S. projects to exemplify the basic concept of project revenue financing.

The original financing of the Greenway (by the limited private partnership TRIP II) involved \$40 million in equity and approximately \$300 million in debt. Institutional investors provided \$258 million in long-term, fixed-rate notes that were due in 2022 and 2026. In addition, a number of commercial banks agreed to provide part of the construction funding and \$40 million in revolving credit. All the loans were to be serviced by revenues from tolls collected on the road.

In September 1995, the Greenway opened to traffic, but, like many of the examples already discussed, the actual traffic levels and associated total revenues fell well short of the levels forecast. In response to the traffic shortfall, toll rates were reduced. Although traffic increased in response to the reduction in rates, total revenues did not increase. Therefore, in July 1997, tolls were increased and the speed limit on the toll road was raised from 55 to 65 mph.

Because of the lower than anticipated revenues, the project began to default in 1996 and in 1999 a large refinancing package was approved that was expected to resolve the project’s financial problems. Despite the refinancing, the project continued to struggle financially and in 2001 the SCC extended TRIP II’s concession period for an additional 20 years to 2056.

In 2004, variable peak and discounted off-peak point-to-point toll rates were introduced on the Greenway to better manage peak period congestion, becoming the first toll road in the Washington D.C. region to have variable toll levels by time of day.

In September 2005, TRIP II was purchased from the original project developers by Macquarie Infrastructure Group (“MIG”) for \$617 million.

The opening years for the Greenway project were a challenge. The limited private partnership defaulted on its original long term financing from the very first debt service due date because traffic and revenue was extremely low. There was much debate at the time over why the traffic and revenue projections were so faulty, but it is generally believed that it came down to a combination of factors, including an unexpected upgrade of the competing parallel road and the slower than expected development of land along the route.

Nevertheless, the basic concept for the Greenway seems to have been sound. Loudoun County’s population grew from 86,100 in 1990 to 169,600 in 2000, representing a growth of 97%. Although there have been major disputes over development policy in county government, growth continues to be strong and the area is very attractive for development. Nearby Jefferson and Berkeley Counties, along with the airport, are also developing and also feed the Greenway. Although it would be wrong to attribute all of the project’s early failings to lack of development, it is clear that the rate of development in the corridor in the early years of the concession was over estimated. However, from the fourth year traffic grew strongly and the original bondholders were paid roughly \$0.90 on the dollar. It is also clear that 10 years after opening (and with 50 years of

concession life remaining) the project was an attractive high yield investment opportunity for MIG when they acquired it in 2005.

In Europe, where there is a longer track record of funding green field toll roads, a number of approaches have been adopted to address this “early year” traffic risk issue, such as the Loan Guarantee Instrument offered by the European Investment Bank as described in Appendix D.2.

The public sector has an important role to play in addressing early revenue risk in facilities such as toll roads if value for money is to be achieved using P3 structures.

### **D.7.3 Lessons Learned from New Private Toll Roads**

The lessons to be learned from these toll road transactions include:

- These projects are most vulnerable to failure in the first few years after completion.
- The public sector has an important role to play in mitigating this risk if maximum value for money is to be obtained.

Lessons are being learned and projects are now genuinely developing as public private partnerships under the TIFIA program. As each party takes on the risks it is best able to manage, value for money considerations take a more central role instead of simply maximizing upfront public sector financial receipts.

## **D.8 Managed Lane and Availability Payment Road Projects**

This section reviews the group of toll road transactions for new generation “Managed Lanes” and “Availability Payments.” These newer approaches to financing attempt to deal with the issues encountered by private sector toll roads as discussed earlier.

The projects are:

- Texas IH-635 / LBJ Freeway, Texas.
- Miami Port Tunnel, Florida

### **D.8.1 IH 635 / LBJ Freeway**

Texas has most actively adopted privatization structures for highways in recent years, and while the Texas House of Representatives voted in December 2007 for a two-year moratorium on any new agreements to private companies to collect tolls on new roads or to sell existing roads to tolling companies, this did not have an impact on the already substantial deals in the pipeline at that time. In addition, the moratorium excluded certain geographical areas.

The Texas Department of Transportation (“TxDOT”) is the promoter on the IH-635/LBJ Freeway. The project consists of improvements to the existing IH-635 (LBJ Freeway) in the Dallas-Fort Worth area and is part of a corridor that extends 21 miles from Luna Road to US 80. The IH-635/LBJ Freeway includes a portion of the IH-35E facility that extends south of IH-635 to the Loop 12/IH-35E Interchange. Construction is schedule to start in early 2011 and is expected to be complete in 2016.

This is a “managed lane” project. As the demand for travel by highway increases while investment in new highways remains low, there is a growing interest in maximizing the efficiency and operation of existing highway assets. This has given rise to the concept of managed lanes. As defined by the USDOT, Federal Highway Administration,<sup>5</sup> managed lanes consist of one or a combination of the following operational strategies:

- Pricing—Both traditional toll lanes and toll lanes that use congestion pricing, where price is varied during certain time periods in order to manage demand (e.g., peak-period surcharge or off-peak discount).
- Vehicle eligibility—The lanes are managed by allowing certain vehicles or restricting others; minimum occupancy is an example of an eligibility restriction.
- Access control—An example would be express lanes where all vehicles are allowed but access is limited during long stretches of the facility, minimizing turbulence in the flow of vehicles.

TxDOT has defined a managed lane as follows:

"A managed lane facility is one that increases freeway efficiency by packaging various operational and design actions. Lane management operations may be adjusted at any time to better match regional goals."

TxDOT developed a range of actions that are available for managed lanes based on three criteria:

- Time of Day Restrictions - allowing access to lanes at certain times of the day.
- Vehicle Type Restrictions - allowing access to only certain types of vehicles, such as carpools, buses, trucks, or vehicles paying a fee.
- Value Pricing - charging motorists for access to managed lanes and/or charging at varying rates for specific *time periods*

The IH-635/LBJ project provides an interesting example for the following reasons:

- The “value pricing” element of managed lanes (also known as congestion pricing or peak-period pricing) has become particularly attractive in Texas because it allows additional capacity to be added to highways and revenues raised to fund these improvements, while maintaining the position that existing highway capacity remains free of charge.
- By considering these different forms of traffic management (in particular, value pricing), managed lanes attempt to keep a roadway from becoming congested over time, and to optimize traffic to achieve the best vehicle and person throughput.

---

<sup>5</sup> USDOT, Federal Highway Administration, *Managed Lanes: A Primer*.  
[http://ops.fhwa.dot.gov/publications/managelanes\\_primer/index.htm](http://ops.fhwa.dot.gov/publications/managelanes_primer/index.htm)

- Although the prioritization of road space to certain vehicle categories is not new (high occupancy vehicle or HOV lanes in North America and Bus Lanes in Europe have been around since the 1970s) what makes managed lanes new and different is the use of pricing as one of the key actions or techniques to influence lane use. Use of pricing to influence use of a limited number of highway lanes is a unique U.S. concept. Although both Europe and Asia use pricing as a means to manage road space, the concept is applied across whole networks rather than selected lanes. For example, the London Congestion Zone or the Singapore Road Pricing Cordon are a form of road pricing, but not just for certain lanes.

The concept of managed lanes should not be confused with the proposals in Oregon to introduce a user fee for roads. The Oregon proposal would effectively convert the existing system of taxing highways based on fuel consumption to a tax system based on distance travelled and roads used. The key distinction is the Oregon proposal is not designed to ration road space, but rather to allocate the cost of road maintenance more equitably.

Funding additional roadway capacity using managed lanes is growing in popularity with private finance programs being promoted in Texas, Virginia, and Georgia.

The process began with the submission of qualifications by four potential bidders in September 2005, but the financial close was significantly delayed, and was completed in June 2010. Although the project suffered in part from the 2008 financial crisis, the lack of political agreement in Texas over tolling and the consequent lowering of confidence in toll financed projects in the financial markets also delayed the progress.

The \$2.6 billion project is expected to be financed with \$600 million in private activity bonds (PABs), a TIFIA loan of \$850 million, a \$630 million equity contribution from the winning consortium, and \$520 million from TxDOT. The PABs will be senior debt secured on the project's revenue and the TIFIA loan will have subordinate status unless the project goes into bankruptcy, at which point the TIFIA loan moves up to parity with the senior bonds.

There are a number of interesting aspects to this transaction as follows:

- This is the first direct investment by a U.S. public sector pension fund in a private finance highway project. Large public sector pension funds (especially those based in Canada) are becoming increasingly involved in direct investment in P3 transportation projects. The equity potential of the pension fund market is very large. In addition, many see pension funds as an ideal equity investor in infrastructure investments such as toll roads because they have many features that are attractive to pension funds, including long tenures, inflation indexed revenues, cash generating attributes, and revenue stability.
- The role of the TIFIA funding in this deal was also important because it provided funding flexibility in the critical early years of the project and as such, it was a critical element in the overall funding package.

### **D.8.2 Miami Port Tunnel**

Because of the risk premium attributed to traffic and revenue risk for toll road projects by private bidders, some promoters have attempted to achieve better value for money by transferring some of

this risk back to the public sector. In addition, some projects do not lend themselves to the imposition of tolls. These factors have led to the concept of “availability payments” for P3 highway projects.

The Miami Port Tunnel project was promoted by Florida Department of Transportation (FDOT) in partnership with Miami-Dade County and the City of Miami. The design-build-finance-maintain-operate (DBFMO) contract proposed was for 30-years of operation after a maximum of 5 years for construction and improvements. The tunnel would connect Watson Island to the Port of Miami-Dade and is expected to remove many trucks and buses from downtown Miami streets.

The transaction was launched in February 2006 and in April 2006 three consortia were short-listed. All three teams submitted bids in March 2007. The bidders were:

- FCC Construcción/ Morgan Stanley (FCC Construcción/ Morgan Stanley/ Hatch Mott MacDonald/ Edwards & Kelcey).
- Miami Access Tunnel (Bouygues/ Babcock & Brown/ Transfield Services).
- Miami Mobility Group (ACS Infrastructure Development- Dragados USA/ Odebrecht/ Parsons Transportation/ DMJM Harris/ Iridium).

In May 2007, the Miami Access Tunnel consortium was chosen as preferred proponent. Of all the contending consortia, this group had proposed the lowest annual maximum availability payment at \$33.23 million.

However, the project struggled to reach financial close during the credit crunch so FDOT cancelled the project in December 2008. Subsequently, in April 2009, FDOT unexpectedly reaffirmed its commitment to the deal by agreeing to move forward with the existing procurement process. They said they would move forward again with the Miami Access Tunnel consortium, although the new procurement timetable required the deal to reach commercial close by June with financial close to follow on October. FDOT also said that in the event that this timetable was not followed they would re-tender the project.

The commercial close occurred in June 2009 and financial close in October 2009. The participation of the TIFIA credit office appears to have been a critical factor in the project moving forward. The TIFIA debt is approximately \$340 million with a 35-year term loan and a fixed interest rate of 4.31%. The equity consortium, comprised of Meridiam Infrastructure at 90% equity and Bouygues at 10% equity, provided \$80 million. A total of ten banks provided \$340 million of senior debt which pays margins of 300 basis points.

The gearing ratio is 90:10,<sup>6</sup> which is relatively high for a toll road, but reflects the market’s different perception of risk on an availability payment project versus a traditional toll road project.

---

<sup>6</sup> The ratio that compares owner's equity to borrowed funds.

FDOT will pay the concessionaire milestone payments at various stages of project development and will also provide availability payments to the concessionaire that begin at the completion of construction and will occur annually for 30 years.

### **D.8.3 Lessons Learned from Managed Lanes and Availability Payment Projects**

The lessons to be learned from these newer approaches to toll road transactions include:

- Although direct user tolling is one mechanism for delivering P3 road projects, other mechanisms, including availability and performance payments, might represent a more appropriate risk transfer approach and deliver better value for money.
- TIFIA funding in these projects was critical because it provided funding flexibility in the critical early years of the project
- As each party takes on the risks it is best able to manage, value for money considerations take a more central role instead of simply maximizing upfront public sector financial gain.

### **D.9 Comprehensive Development Agreements and Unsolicited Proposals**

Although the public sector has traditionally assumed the role of developing, defining, and promoting projects, there have been some projects developed under the P3 structure that bring the private sector into the project cycle earlier such as:

- TTC 69 in Texas, which is a Comprehensive Development Agreement (“CDA”)
- I75/I575 in Atlanta, which was an unsolicited bid

However, to date, this model has not been overly successful in the US, which is consistent with experience elsewhere in the world.

#### **D.9.1 TTC I-69 in Texas**

The TTC I-69 is the Texas component of a planned 1,600-mile highway connecting Mexico, the U.S., and Canada, which involves upgrades and improvements in 8 states. In Texas it will run from the Lower Rio Grande River Valley to I-37 and then continue along the south and east portions of Texas from Corpus Christi through Houston all the way to northeast Texas.

In April 2006, TxDOT issued an RFQ for the project. At the time it was called the biggest highway project in Texas. In September 2006, “Bluebonnet Infrastructure Investors” and “Zachry ACS TTC-69 Team” were short-listed to receive Request for Detailed Proposals. The two consortia were bidding to enter into a CDA with the state to design, develop, finance, construct, and maintain the 600-mile multi-use transportation corridor. In March 2008, TxDOT received proposals from the two short-listed consortia and in June 2008, the Zachry/ACS team won the contract to create a master plan for the corridor. At that time it was announced that Zachry/ACS would need up to 18 months to complete the development and financial plans although as of September 2010, there has been no announcement about the signing of the CDA.

Under the planned contract, Zachry/ACS was to have the right of first negotiation to perform work on certain projects. The planning work by Zachry/ACS was to be performed within the constraints prescribed by the Texas Transportation Commission and state law. Zachry/ACS had proposed 7 projects as well as a specific plan for upgrading U.S. Highway 77 from Brownsville to Corpus Christi using toll revenues. The \$2.5 billion upgrade of US 77 was proposed to be the first of the projects developed under the TTC. TxDOT required that separate facility agreements would be needed if it moved forward with the design, construction, financing, maintenance, and operation of any specific projects identified within the master plan.

Since the selection of Zachry/ACS, it appears the most progress has been made by the public sector I-69 segment committees in their work on regional or segment projects.

### **D.9.2 I75/I575 in Atlanta**

In 2003, the Georgia legislature passed a law that allowed for unsolicited proposals to be submitted under what was then known as the Public Private Initiative, or PPI, program. The law allowed private sector entities to submit proposals for public sector projects. The state then reviewed these PPI proposals, made them public, and allowed other companies to submit competing proposals.

Several unsolicited proposals were subsequently submitted, including proposals for:

- GA-316.
- GA-400.
- I-285W/I-20W.
- I-75/I-575.

However, only the I-75/I-575 proposal, which was submitted in November 2004, was advanced. In May 2006, the Georgia Department of Transportation (“GDOT”) announced it signed its first-ever PPI contract – a Developer Services Agreement (“DSA”) – for \$38.5 million with Georgia Transportation Partners (“GTP”), a joint-venture company formed by Bechtel Infrastructure Corporation and Kiewit Southern Co. The GTP team included 19 engineering, financial services, and consulting firms, who along with Bechtel and Kiewit Southern were under contract to perform preliminary engineering and development services in support of transportation improvements to the I-75/I-575 Corridor.

The DSA provided the procedural framework for GDOT and GTP to examine improvements to the I-75/I-575 Corridor. The DSA included a combination of congestion relief options to be studied, including High Occupancy Vehicle, High Occupancy Toll, Express Toll and Truck-Only/Toll lanes, and a Bus Rapid Transit system.

The entire scope of services for the DSA was to be completed no later than July 2009. GDOT Commissioner Harold Linnenkohl said at the time “The PPI process will allow us to evaluate badly needed traffic solutions for this corridor and implement them in a quicker, more efficient and more cost-effective way than under the traditional bid process. This added flexibility helps us keep up with the infrastructure needs of our growing state.”



Under this approach, GDOT was to negotiate a developer service contract with the PPI team that would spell out the PPI team's role in the environmental process. After the environmental process was complete, a design/build contract had to be negotiated. If that contract was negotiated to each party's satisfaction, the PPI team would take over the final design of the project and its construction.

According to the state, if the project was constructed under a traditional approach, where design and construction were authorized under separate contracts, then a 15-20 year timeframe was anticipated. Under the PPI process, it was expected that the project could be completed in as little as 6 years using a design/build approach.

In 2009, the Georgia legislature put in place a new framework empowering the GDOT to identify projects and solicit proposals under what is now known as the Public Private Partnership, or P3, program. Subsequently, GDOT confirmed that it was canceling all un-solicited P3 projects, including the I-75/I-575, and moving ahead with a solicited bidding procurement program instead. The I-75/I-575 is the first of those solicited proposals.

The I-75/I-575 transaction was launched in February 2010 and in June 2010 three teams were pre-qualified:

- West by Northwest Development Partners – Vinci Concessions, OHL Concesiones, Hubbard Construction, Parsons, and Archer Western Contractors.
- Georgia Mobility Partners - Cintra Infraestructuras, Meridiam Infrastructure North America, Soares da Costa, Ferrovia SA, Aecom Services and Prince-SDC Contracting.
- Northwest Atlanta Development Group - ACS Infrastructure Development, Dragados SA, PBS&J and C.W Matthews Contracting.

The bid process is progressing via discussions between the three prequalified teams and GDOT and a formal request for proposals is expected to be issued in early 2011.

The key lesson to learn is that to achieve best value for money (in its widest possible sense), projects need to be defined by the public sector within an overall sector strategy, and then delivered by the private sector through a competitive process that allows a clear comparison of alternative bids.

### **D.9.3 Lessons Learned from CDA's and Unsolicited Proposals**

The track record with these models for procurement has not, to date, been overly successful. In many ways, GDOT highlighted the fundamental issue when it cancelled the unsolicited bid process, started a solicited process instead, and said:

“a solicited approach would allow them to maintain complete control of project identification, selection, procurement and construction and the result is a program that will effectively deliver projects that increase mobility and provide greater options for the traveling public.”

Unsolicited bids and CDA's raise questions about the role of the public and private sectors in P3 projects. To date, as elsewhere in the world, it would appear that for strategic transportation projects, the role of the private sector is seen as one of delivery, not of definition or specification.

## **D.10 On- and Off-Street Parking**

The privatization of off-street (garage) and on-street (metered) parking in the City of Chicago might appear to be similar, but they are very different as described below.

### **D.10.1 Chicago Parking Garages**

Garage parking system in Chicago is considered the largest downtown underground public parking system in the U.S. Income from the garages in 2005 totaled \$16 million. The downtown parking facilities included in the transaction had over 9,000 spaces and four underground parking garages:

- Grant Park North, a three-level facility (two underground) for over 1,800 cars.
- Grant Park South, a four-level facility (three underground) for over 1,300 cars.
- East Monroe Street, a three-level facility (two underground) for over 3,800 cars.
- Millennium Park Garage, a seven-level facility (six underground) for over 2,000 cars.

The East Monroe Street garage required major rehabilitation, including a requirement to perform the work within five years. The city's estimate of the rehabilitation was \$65 million. However, the actual cost was to be determined by the concessionaire and bidders were not asked to specify their estimates. The winning bidder was selected on price only.

The winning team (Morgan Stanley with LAZ Parking as their operator) bid \$563 million for the 99-year concession sale and lease. The garages had income in 2005 of approximately \$16 million, which equates to an earnings multiple of 35 based on the bid price of \$563 million, or 39 based on the bid price plus the estimated \$65 million to rehabilitate the East Monroe Street garage.

Given the relatively small size of the project (from a capital cost perspective) the funding sources for the winning bidder were all equity based.

The city did not impose any restrictions on the parking charges that could be levied at the garages as there are a lot of privately operated parking garages in the city and hence the concessionaire did not have a monopoly position. In addition, there is no revenue/profit sharing with the city.

The city used the proceeds from the sale as follows:

- \$122 million for Chicago park improvements.
- \$120 million for a reserve to generate income to replace the Park District's annual parking fee income of \$5 million.
- \$278 million to pay off all debt associated with the garages.
- \$35 million to rebuild Daley Bicentennial Park when the East Monroe Street garage is rebuilt by the lessee.

- \$8 million for banking, legal, and transaction fees.

The deal appears to have been viewed favorably by both the public and private sectors, and with the exception of a law suit filed by a tax payer organization (which was not permitted to proceed), it also appears to have been broadly accepted by the citizens of Chicago. This positive outcome can probably be attributed to:

- The nature of the asset was clearly definable and, although in public ownership, it neither held a monopoly position nor was viewed as a public service.
- The city was experienced in the privatization process (having successfully completed the Chicago Skyway deal) and was able to apply that experience to define a clear specification to private bidders and articulate clear criteria for the concession award (i.e., the highest price).
- The city was able to present to the public a clear plan for the use of the sale proceeds.
- The market at the time of the deal was relatively buoyant and there was a growing cadre of infrastructure investment funds interested in assets of this nature.

### **D.10.2 Chicago Metered Parking System**

The Chicago metered parking system comprised approximately 36,000 parking spaces on streets throughout the city. In February 2008, the city launched a long term concession sale of these spaces. In March 2008, there were 10 teams that responded to the RFQ. However, the financial crisis was already starting to be felt and the two “Best And Final Offer” bids were only received in early December 2008 (with a third team led by Cintra not submitting).

Two days after submission of bids, the city council voted 40-5 in favor of the transaction in an overwhelming display of support. The winner was Chicago Parking Meters LLC, the consortium led by Morgan Stanley's infrastructure fund.

The winning team bid \$1.15 billion for the 75-year concession. The conditions of sale were the city set the future parking rates and the concessionaire had to update and maintain the parking meter stock. There were some built-in protections for concession revenue related to actions by the city. The concessionaire was to operate and maintain the parking system and collect the revenues, and the city would collect parking fines. The concession agreement included provisions for compensation to the concessionaire for changes in the number of spaces, hours of operation, and parking rates. There is no revenue or profit sharing.

Funding sources were originally all equity. However, in May 2010, the concessionaire closed a long-tenor, forward starting interest rate swap<sup>7</sup>. Five banks acted as swap providers. The interest rate swap was unusual because there was no underlying debt in the transaction. An interest rate swap covers a notional amount which is usually representative of the principal on which interest

---

<sup>7</sup> Forward starting swaps lock in the rate today for an asset or liability to be created or sold in the future. A company that plans to issue fixed rate at a future date can use a forward starting swap to hedge the future issuance rate. Forward starting swaps allow companies to take advantage of favorable rates when the market offers them not just when coming to market. Locking in the forward financing costs or investment yields allow the hedger to accurately budget cash flows and expenses related to future projects.

accrues. In this case, the notional amount was \$400 million, which may or may not be equivalent to the amount of debt taken by the concessionaire when debt market terms improve. The intention is that the swap is a hedge against an upward movement in interest rates once the deal is leveraged. Although not an uncommon derivative in the corporate world, this is thought to be the first interest rate swap of its kind for a single asset infrastructure credit.

The project has had a number of high profile opponents and was not, at least initially, popular with the general public.<sup>8</sup>

Not long after the financial close, Chicago's inspector general's office released a report criticizing the deal, claiming Mayor Richard Daley and aldermen had moved too quickly in approving a \$1.15 billion contract. The report claimed city officials made inadequate financial considerations and failed to explore viable alternatives to the 75-year lease as a means to fill the 2009 budget deficit. It also recommended how the city could undertake the lease or sale of public assets in the future using a more deliberative process. Although Mayor Daley dismissed the city inspector general's report, aldermen soon after approved a measure that required a 15-day review period before voting on future privatization deals for major city assets. Therefore, further changes to the way the city seeks future privatization proposals appear likely.

In addition, the transaction received a considerable amount of bad press due to operational problems especially in the first few weeks of the concession. It appears the problems arose because:

- Unlike most P3 deals, parking rates were increased immediately, although the parking meter equipment was being phased in over a much longer replacement period.
- The decision to increase rates before improvements were made generated two issues. First, from a public relations standpoint, this was a mistake because people were unhappy to pay more for no apparent gain or advantage. The private sector operator was accused of “gouging” the public while simply implementing the increases defined by the city in the concession agreement. Second, the meters were not equipped to receive more coins and there were significant increases in break-downs and failures due to full coin boxes, which reflected poorly on the private sector operator.
- The city had kept the bidders at arms length from the asset base during the bid period, but the concession required a lot of activities in the first few weeks of the concession. When the private bidder took over operation it discovered that a lot of the meters were not actually as described in the asset database.
- Consequently, a lot of temporary fixes on the existing meters planned by the private operator were delayed by the need to re-order different parts. These problems might have been eased if there had been a phased transfer of operations, shadow operations/familiarization period, or a more detailed asset database.

---

<sup>8</sup> In August 2008, a tax payer organization filed a lawsuit against the City Comptroller, the Illinois Secretary of State, and the Illinois Comptroller. A judge has allowed the case to precede, but removed the Illinois Secretary of State from the list of defendants. As of May 2010, the case had still not been heard in court.

However, the private operator believes that these were temporary problems that were all resolved within the first month of operations (and the level of press criticism has declined significantly since the initial operating period). As of September 2010, the contract appears to be operating well and new meters are being installed in accordance with the concession agreement.

### **D.10.3 Lessons Learned from the Parking Transactions**

The key lesson appears to be that while projects may appear to be similar, all have unique features, and these must be recognized when constructing the term and nature of the deal between the public and private sectors. In particular:

- Although garage and on-street parking may appear to be very similar, they are actually very different. The garages operated in a defined area and competed with other facilities in an open and competitive market. The metered spaces were dispersed, less well defined, and operated as a monopoly in a highly public manner.
- Privatizations are complex by their nature and each needs to be treated in a rational and transparent manner irrespective of any success on earlier deals.
- Although the on-street project may have had initial problems, largely as a consequence of a failure to understand the complexities of the initial hand-over period, the deal is now delivering the stated objectives. As a result, the success or failure of these deals cannot be truly judged for many years.

## **D.11 Infrastructure and Operations in Transit**

The track record on privatizations in the transit market is not very large and not very favorable, with a small number of high profile failures and a number of projects on the drawing board that are making limited progress. However, this is not uncommon given the complex nature of transit deals, which tend to be more difficult to advance than road transactions. Although the record is not very positive to date, recent developments suggest that lessons have been learned.

Three very different examples of infrastructure and operations deals are reviewed:

- Las Vegas Monorail – an example of infrastructure and operations combined.
- Boston Rail Operating Franchise – an example of operations only.
- Denver FasTracks – an example of infrastructure and rolling stock but not operations.

### **D.11.1 Las Vegas Monorail**

The Las Vegas Monorail was originally (1993) a joint venture between MGM Grand and Bally's Hotel to build and operate a 1 mile system linking the hotels and claims a number of firsts:

- It was the first and only privately owned public transportation system in the U.S. and it operated with no public subsidies.
- The MGM Grand-Bally's Monorail Limited Liability Company, which initiated the project, was the first joint venture between competing hotels/casinos.

Originally, the Las Vegas Monorail was not a typical transit project. However, in 1997 the State of Nevada passed legislation that enabled a private company to own, operate, and charge a fare as a public monorail system. Subsequently, in 2000, the non-profit public benefit corporation, LVMC, was formed, and it acquired the original Monorail system under a 50-year franchise agreement. A key objective of this change in 2000 was to allow the expansion of the monorail using private funds.

The funding source for the expansion of the system by LVMC was tax-exempt revenue bonds backed by fares and advertising revenues. For tax purposes, the Monorail is registered as a not-for-profit company as it provides a public service per Nevada law. Similar to the Pocahontas and Denver North West Parkway transactions, LVMC was a “63-20 corporation and ultimately suffered a similar fate as those projects.

The MGM Grand-Bally's Monorail limited liability company's rights to the initial monorail project, which were granted under a franchise agreement with Clark County, were granted to LVMC under a new franchise agreement.

LVMC then entered into a management contract with Transit Systems Management LLC, for the construction, operation, and management of the project, which was upgraded and expanded to 3.9 miles with 7 stops. This expanded Las Vegas Monorail opened in July 2004 but suffered mechanical failures in September that caused it to be shut down until the end of December 2004. However, it has operated reliably since that time.

Bombardier Transportation is contracted to operate and maintain the Las Vegas Monorail system. In January 2009, they received the first 5-year option order to continue to operate the system

Revenue bonds were issued by the Nevada Department of Business and Industry on behalf of LVMC. LVMC maintains a collection fund from which it pays operations and maintenance costs first and then transfers net project revenues on a monthly basis to the trustee for loan payments to pay debt service payments on the bonds and to maintain a debt service reserve. LVMC also maintains a separate capital replacement fund. Although LVMC has executed a management contract which includes an O&M agreement, its fare box, advertising, and other project revenues remain the property of LVMC.

Patronage and revenue levels have not met expectations and in January 2010 the Las Vegas Monorail filed for Chapter 11 Bankruptcy Protection. The filing is not expected to affect system operations or impact the monorail's hours of operation or service to its customers.

There appear to be a number of issues that arise from this case:

- It is very rare to find anywhere in the world a transit system that does not rely on some form of public subsidy. Although the original promoters of the monorail (two hotels) were clearly viewing the project from a very different perspective than most traditional transit projects, the decision in 2000 to expand the system should have raised the issue of sustainability without a subsidy.

- This transaction again raises questions about 63-20 corporations and whether such structures transfer sufficient risk to the private sector promoters of the project.

### **D.11.2 Boston Rail Operating Franchise**

The Boston Rail Operating Franchise is an example of a franchise to operate rail services across an existing rail network. The Boston Rail Operating Franchise is a fully integrated train operation for the 13-line urban rail network around Boston. It includes track maintenance, station management, ticket selling, and train operation and control.

Massachusetts Bay Transit Authority (“MBTA”) is the owner of the system and promoter of the operating franchise. The Massachusetts Bay Commuter Railroad Company (“MBCRC”) is the current franchise holder.

The current concession was awarded in July 2003 to MBCR. The MBCR contract originally expired in July 2008, but included an additional 5-year option. This option was taken, with the franchise originally extended by 3 years to July 2011 and then later by another 2 years to July 2013.

The project had a very different approach to risk transfer than the Las Vegas Monorail project, with the public sector retaining a lot more of the risks, which it was better positioned to manage. For example, this different approach to risk transfer included the following:

- It was a fixed price franchise committed for the length of concession, although MBTA took the risk on fuel costs.
- The payments to MBCR are made based on performance. There is no patronage and/or revenue risk with the franchise holder. Further, any major capital development (e.g. new rolling stock or stations) would involve additional payments to MBCR.
- The concession required MBCR to demonstrate how they would deal with extreme winter weather, but MBTA set aside the additional funding for the annual snow plan. In other words, the cost associated with the risk of severe weather was retained by the public sector, although the delivery risk for the winter weather plan was retained by the private sector.

The concession also followed other state contracts in requiring a minimum percentage of the contract to be provided by “disadvantaged suppliers,” which was 11.5% by value.

As noted above, MBCR secured two extensions of the concession, which is proof that the franchise is perceived as a success. The reasons for this appear to be in part attributable to a balanced transfer of risk between the public and private sector to the parties best able to manage that risk.

### **D.11.3 Denver FasTracks**

Denver FasTracks is a different model of transit privatization in that it includes infrastructure and track maintenance but not operations, although it is adopting many of the risk allocation policies employed in the Boston franchise.

FasTracks was approved in 2004 and was intended to expand and improve the Regional Transportation District's (RTD) rail and light rail connections. However, there was an acknowledged significant funding shortfall and the RTD proposed to bridge the gap using alternative financing strategies, including P3s.

The Eagle P3 (as the arrangement is called) consists of the East Corridor, Gold Line, Commuter Rail Maintenance Facility, and an initial segment of the Northwest Rail Corridor. RTD will have 47 miles of new rail under construction or under contract, which is more than double the amount of rail in RTD's existing light rail system. It also represents nearly 40% of the total FasTracks rail network now under contract.

The East Corridor is a 23 mile electric commuter rail corridor that runs from Denver Union Station to Denver International Airport. Five intermediate stations are included: 38th/Blake, Colorado, Central Park Blvd., Peoria/Smith Rd. and Airport Blvd/40th Ave. The Gold Line is an 11.2-mile electric commuter rail transit corridor that connects Denver Union Station to Ward Road in Wheat Ridge. It passes through northwest Denver, Adams County, and Arvada. There are six intermediate stations, including 41st Avenue, Pecos, Federal, Sheridan, Olde Town Arvada and Arvada Ridge. The Commuter Rail Maintenance Facility will be the site to repair, clean, fuel, and store the vehicles that will serve the four FasTracks commuter rail corridors: East, Gold Line, Northwest Rail, and North Metro. The portion of Northwest Rail included in the Eagle P3 includes shared tracks with the Gold Line from Denver Union Station to Pecos Street, plus an additional two miles north, to the South Westminster Station, at 71st Avenue and Lowell Boulevard in Westminster.

Phase I of the project includes property acquisition, construction of the East Corridor, construction of the Maintenance Facility, and the purchase of Electric Multiple Unit (EMU) rail vehicles. Phase I is scheduled to begin in August 2010. Phase II of the project includes the Gold Line and the short segment of Northwest Rail. Phase II is scheduled to begin following the award of a Full Funding Grant Agreement (FFGA) by the Federal Transit Administration in 2011.

In June 2010, RTD selected the consortium led initially by Macquarie and Fluor, known as Denver Transit Partners (DTP). The consortium will design, build, operate, and maintain the project under a 34-year contract in return for annual performance-based payments. RTD expects the project to attract \$1 billion in 2011 through the Federal Transit Administration ("FTA") Full Funding Grant Agreement process. In addition, between \$400 million and \$500 million of tax-exempt PABs will be issued with a 30-year maturity.

RTD believes the deal has delivered considerable value. For example:

- DTP's proposal is \$300 million lower than RTD's budget estimate of \$2.3 billion. DTP offers a price (defined as Annual Service Payments) which are nearly half of RTD's estimated affordability limit for the project.
- Enhancements proposed by DTP include (1) approximately 6 miles of single track on the East Corridor to reduce construction costs without negatively impacting operating performance, (2) track configuration changes including the addition of "pocket" tracks and the rearrangement of turnouts and crossovers to enhance operational flexibility, (3)



standardization of bridge elements to simplify construction, (4) modifications to the Commuter Rail Maintenance Facility to improve efficiency; and (5) a new high-quality commuter rail vehicle design that provides greater seating capacity, storage for bicycles/luggage, and enhanced security features such as interior CCTV monitoring.

- DTP plans to complete all 3 commuter rail lines ahead of schedule and will complete the East Corridor by January 2016 – nearly one year earlier than RTD’s deadline.
- DTP’s proposal incorporates a state-of-the-art train control system, including a fully redundant communications system and full Positive Train Control (PTC) functionality that will meet the requirements of the 2008 Railroad Safety Improvement Act.

Another interesting feature of this deal is that RTD will pay the other bidding consortium, led by HSBC Infrastructure, Siemens, and Veolia, a \$2.5 million stipend for the intellectual property in its proposal. That gives RTD the further option to use cost-saving ideas from this proposal.

Although this deal is a good example of how involving the private sector can deliver additional funding as well as additional benefits through innovation, it has not been without problems. In particular, it has taken a long time for this transaction to evolve.

- 2004 – FasTracks was approved in 2004 and was intended to expand and improve the Regional Transportation District's (RTD) rail and light rail connections. It was acknowledged that P3 would be needed as one of the ways to fill an identified funding gap.
- Late 2007 and Early 2008 – Legal and financial advisors were appointed by RTD to assist with the P3 process.
- October and November 2008 – Statements of Qualifications (“SOQ”) were received from 3 teams, with all 3 being short listed for the RFP stage.
- October 2009 – The RFP was issued to the 3 teams. In the intervening period some team members in the consortia had already changed.
- November 2009 – One of the consortium dropped out of the project citing changes in circumstances since the original SOQ.
- April 2010 – Technical proposals submitted by the 2 remaining teams.
- May 2010 – Final proposals submitted by the 2 teams and there was a public presentation of the proposals.
- June 2010 – The winning bidder is named.

The long timeline has clearly been problematic, and has not been assisted by the financial crisis, with a number of consortia members dropping out and new members joining.

In fact, only days after being named bidder in June 2010, Macquarie announced that it intended to sell its equity prior to the financial close. The Uberior Group and John Laing, which are experienced infrastructure investors, have taken Macquarie’s place as equity sponsors. In fact, John Laing had been a member of the consortium that pulled out of the bidding process in November 2009 (although it had left the consortium prior to that date).

### **D.11.4 Lessons Learned from Transit**

The key lessons to be learned from these transit cases are:

- The complexity of transit projects is not, in itself, a barrier to the application of privatization techniques.
- The Las Vegas Monorail demonstrates that the involvement of the private sector cannot fundamentally change the nature of a project – in this case, that transit projects need a public subsidy to be viable.
- The Boston Rail Operating Franchise shows that with the correct risk transfer arrangement, privatization can deliver top quality services to the travelling public and value for money, and that this risk transfer does not need to include patronage or revenue risk.
- It appears likely that the structure adopted by RTD will achieve an investment grade rating on their PAB's for the Eagle P3 deal (although at the low end of the scale).
- The very complexity of transit deals creates opportunities for the private sector to innovate in delivery, saving money, and delivering services earlier than expected.

### **D.12 Ports**

Port privatization has served as an effective tool for attracting private investment to port facilities worldwide in lieu of public funds. The vast majority of investments in new port terminals around the world in the last ten years have been done via private investments. However, the U.S. is one of the very few countries that generally has not embraced private investment in port terminals. This is due in part because ports in the U.S. are seen as having “strategic importance,” as most clearly demonstrated by the DP World controversy.

In October 2005, Dubai Ports World (“DPW”), a state-owned company in the United Arab Emirates (“UAE”), approached the Committee on Foreign Investment in the United States (“CFIUS”) to clear regulatory hurdles for a possible acquisition of the British firm Peninsular and Oriental Steam Navigation Company (“P&O”). The CFIUS is the multi-agency federal panel that reviews transaction with foreign corporations that raise antitrust or national security questions. P&O held the management contract for 6 major U.S. port facilities (New York, New Jersey, Philadelphia, Baltimore, New Orleans and Miami) plus operations in 16 other ports. In February 2006, the stockholders of P&O agreed to sell their company to DPW.<sup>9</sup> The issue rose to prominence as a national security debate. The issue was whether such a sale to a company based in the UAE would compromise port security.

On March 8, 2006, the U.S. House Appropriations Committee voted 62–2 to block the deal, and Senator Charles Schumer added amendments to a senate bill to block the deal, causing an uproar in the Senate.<sup>10</sup> On March 9, 2006, DPW released a statement saying they would turn over operation of U.S. ports to a U.S. entity.<sup>11</sup> In December 2006, DPW sold P&O's U.S. port

---

<sup>9</sup> Wikipedia, accessed October 2, 2010.

<sup>10</sup> “House Panel Votes to Block Ports Deal,” Fox News, March 9, 2006.

<sup>11</sup> “Dubai Company Gives Up On Ports Deal,” CBS Broadcasting Inc., March 9, 2006.

operations to AIG Global Investment Group, a New York-based asset management company with no experience in port operations.<sup>12</sup>

Although there is fundamentally no reason why ports cannot utilize privatization approaches to develop their infrastructure (as they have elsewhere in the world), to date there have been very few deals that would fall within this definition, and the “strategic role and security” issue may account for part of this. However, two port privatization projects have recently closed as discussed below.

### **D.12.1 Seagirt Terminal, Baltimore Harbor**

The Port of Baltimore has been in operation for over 300 years. In 2008, the port handled about 40 million tons. Seagirt is the largest facility in Baltimore Harbor and commenced operations in 1990. It has a current minimum annual capacity of 1.0 million twenty-foot equivalent units (“TEUs”) across its 3 berths and in 2008, handled 500,000 TEUs. The terminal is owned by the Maryland Transportation Authority (MdTA).

The transaction time line was as follows:

- Transaction launched in April 2009.
- In July 2009, the pre-qualified bidders were Ports America (Ports America Baltimore), Ceres, and Alinda Capital Partners LLC.
- The preferred bidder, Ports America (Ports America Baltimore), was chosen in November 2009.
- The financial closing occurred in January 2010

The deal was valued at \$334 million, with an 18:82 split between equity and debt. The concessionaire will operate the Seagirt Marine Terminal, build a new 50-foot berth, and purchase 4 new cranes and as part of the 50-year lease. The concessionaire will benefit from a revenue sharing structure above a certain level of container volume use at the facility.

MdTA plans to reinvest funds from this concession as part of a capital program that will allow major highway-related projects to proceed, including upgrades to I-95, the US 40 Hatem Bridge, and the US 50/301 Bay Bridge. It will also fund a repayment to MdTA for investment in Seagirt, as well as provide ongoing revenues for administrative and other port purposes.

The cost of building the new berth is estimated to be slightly over \$100 million. The upfront payment is thought to be between \$200 million and \$250 million. The anticipated capital investment in projects at the port over the 50-year lease is \$500 million.

Because the financial close occurred in early 2010, it is too early to draw conclusions on how the project will progress.

---

<sup>12</sup> King Jr., N.; Hitt, G. (“Dubai Ports World Sells U.S. Assets,” The Wall Street Journal. <http://online.wsj.com/article/SB116584567567746444.html>, December 12, 2006.

### **D.12.2 Port of Oakland Outer Harbor**

The Port of Oakland was established in 1927 and is now a major intermodal container port, ranking as the 4th busiest container port in the U.S. The port has 20 deepwater berths, 35 container cranes, 10 container terminals, and 2 intermodal rail facilities, which handle over 2 million containers a year.

In March 2009, Port of Oakland selected Ports America Outer Harbor Terminal, LLC (“PAOH”) through a competitive process to upgrade and operate 5 container berths in the Port of Oakland (berths 20 through 24) through a 50-year concession and lease agreement.<sup>13</sup> PAOH took over management of the terminal in January 2010.

The area accounts for approximately 4,400 feet of berth with about 160 acres of storage space for a total of approximately 175 acres. In addition, the concession agreement allows for the opportunity for the concessionaire to acquire the adjacent berths 25 and 26 when the current use agreement for that area expires (as early as June 30, 2013). The combined areas (Berths 20-26) would bring the total berth length to more than 5,500 feet or the equivalent of berthing 5 to 6 container ships in a row depending on the size of the vessels.

As a first step the investment, PAOH proposed \$150 million to upgrade 160 acres within the Port, comprising some 4,400 feet of berth. During the life of its operational stewardship at the Port, PAOH plans to invest \$2.5 billion to improve the competitiveness of the Port.<sup>14</sup>

PAOH is paying a \$60 million up front fee to the Port of Oakland and an annual rent of at least \$19.5 million, with the figure rising each year.

Although the agreement will save the Port of Oakland \$3 million in annual debt service, this was not the only consideration, with environmental benefits also considered in the bid evaluation. PAOH estimates that when their build out is completed, emissions per TEU could be reduced by as much as 90% due to electric stacking cranes rather than diesel, no truck idling and fewer miles driven within the yard, ship to shore power and truck appointments.

Although it is too early to draw conclusions, there are a number of interesting features to note:

- The deal can be expanded later as other existing terminal contracts end.
- The procurement award criteria included environmental benefits as well as financial gain.
- The private sector payments are a mix of an upfront payment and annual rent.

### **D.12.3 Lessons Learned from Ports**

Although the strategic nature and importance of ports is highlighted by the DPW controversy, the Seagirt and Oakland examples demonstrate that privatization can be applied to port assets.

---

<sup>13</sup> Press Release, Port of Oakland, March 4, 2009.

<sup>14</sup> Ibid.

Also, the use of more flexible approaches to the award, such as future expansion to other operations and the mix of upfront and annual rent, and the inclusion of environmental benefits in the award criteria all point to this sector recognizing that the privatization process is flexible and can (and should) be adapted to meet the specific requirements of each situation.

The inclusion of environmental benefits within the bid evaluation criteria has particular resonance with the airport and aviation industry.

## References

Press Release 'Public Private Partnerships to Focus Solely on Solicited Proposals'. *Georgia Department of Transport*, November 2, 2009.

Press Release 'Alabama State Port Authority Issues Request for Expression of Interest in the Garrows Bend Intermodal Terminal'. *Alabama State Port Authority*, March 26, 2009.

Presentation at American Association of Port Authorities Port Property Management and Pricing Seminar. *F. Brogan, Port of Corpus Christi Authority and K. Carney, JP Morgan*, June 28, 2008.

'Denver Airport Train Faces Steep Grades for \$404 Million Offering'. *Richard Williamson*, July 27, 2010.

'Highway Public-Private Partnerships- More Rigorous Up-Front Analysis Could Better Secure Potential Benefits and Protect the Public Interest'. *United States Government Accountability Office*, February 2008.

Presentation at IBTTA Transportation Finance Summit 'Georgia- Development of Truck Express Lanes'. *D. Weir, Georgia State Road & Tollway Authority*. December 3 -5, 2006.

Presentation at American Association of Port Authorities Port Finance Seminar 'Public Private Partnerships and Transportation Finance'. *D. Miller- Public Financial Management*, 2006

Presentation 'Shifting International Trade Routes: Financing Future Infrastructure Needs'. *A. Van Praagh, Morgan Stanley*, January 24, 2008.

'Infrastructure Investors Are Willing to Pound the Pavement'. *A. Cho, J.T. Long, J. Parsons, E. Schwartz- Engineering News-Record*, July 19, 2010.

'A Private Consortium is Fast-Tracking a Beltway of Billions'. *A. Cho - Engineering News-Record*, July 19, 2010.

'Drive by Dollars- What States Should Know When Considering Public-Private Partnerships to Fund Transportation'. *The PEW Center on the States*, March 2009.

Presentation at American Association of Port Authorities Port Property Management and Pricing Seminar. *D. Alexander, Port of Oakland and E. Richards, O'Melveny & Myers LLP*, June 28, 2008.

'Report of the Legislative Study Committee on Private Participation in Toll Projects'. *The State of Texas*, December 2008.

'The Innovation Wave: An Update on the Burgeoning Private Sector Role In U.S. Highway and Transit Infrastructure'. *United States Department of Transportation*, July 18, 2008.

U.S Department of Transportation Federal Highway Administration 'User Guidebook on Implementing Public-Private Partnerships for Transportation Infrastructure Projects in the United States'. *AECOM Consult Team*, July 7, 2007.

Presentation at West by Northwest Project Request for Qualifications Pre-Statement of Qualifications Workshop. *Georgia Department of Transportation*, March 11, 2010.

U.S Department of Transportation Federal Highway Administration 'Case Studies of Transportation Public-Private Partnerships in the United States'. *AECOM Consult Team*, July 7, 2007.

'The Use of '63-20' Nonprofit Corporations in Infrastructure Facility Development'. *Nossaman LLP* (accessed August 26, 2010 at <http://www.nossaman.com/the-use-6320-nonprofit-corporations-infrastructure-facility> ), May 1, 2001.

'TIFIA Defined'. *U.S Department of Transportation Federal Highway Administration*, accessed August 29, 2010 on <http://www.fhwa.dot.gov/ipd/tifia/defined/index.htm>

Public Works Financing 'Equity Investors: A New Dawn for Toll Roads in America'. *R. Poole, Reason Foundation*, July 30, 2005.

'Georgia DOT Signs First-Ever PPI Agreement'. *Infrasite News* (accessed at [http://www.infrasite.net/news/news\\_article.php?ID\\_nieuwsberichten=4562&language=en](http://www.infrasite.net/news/news_article.php?ID_nieuwsberichten=4562&language=en) on August 29, 2010) May 18, 2006.

'Port of Oakland Awards 50 Year Operating Concession to Ports America Affiliate'. *Highstar Capital* (accessed at <http://www.highstarcapital.com/newsFull.php?id=14> on 29 August 2010) March 3, 2009.

'Pennsylvania Turnpike'. *Enotes* (accessed at [http://www.enotes.com/topic/Pennsylvania Turnpike](http://www.enotes.com/topic/Pennsylvania_Turnpike) on August 29, 2010).

'Pocahontas Parkway'. *The National Council for Public-Private Partnerships* (accessed at <http://ncppp.org/cases/pocahontas.shtml> on August 29, 2010).

'America's Infrastructure Fire Sale'. *H. Lamb* (accessed at [http://www.wnd.com/news/article.asp?ARTICLE\\_ID=51688](http://www.wnd.com/news/article.asp?ARTICLE_ID=51688) on August 28, 2010), August 26, 2006.

## Appendix D.1

### Transportation Infrastructure Finance and Innovation Act (TIFIA)

The Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA) created a program that provides credit assistance for qualified projects of regional and national significance. The TIFIA credit program is designed to fill market gaps and leverage substantial private co-investment by providing supplemental and subordinate capital.

The program's fundamental goal is to leverage federal funds by attracting substantial private and other non-federal co-investment in critical improvements to the nation's surface transportation system.

TIFIA was created because entities that sought to finance large-scale transportation projects with tolls often had difficulty obtaining financing at reasonable rates due to the uncertainties associated with these revenue streams, especially for green field sites and in the early years of a project.

The TIFIA credit program offers three distinct types of financial assistance designed to address the varying requirements of projects throughout their life cycles:

- Secured (direct) loan—Offers flexible repayment terms and provides combined construction and permanent financing of capital costs. Maximum term of 35 years from substantial completion. Repayments can start up to five years after substantial completion to allow time for facility construction and ramp-up.
- Loan guarantee—Provides full-faith-and-credit guarantees by the federal government and guarantees a borrower's repayments to non-federal lender. Loan repayments to lender must commence no later than 5 years after substantial completion of the project.
- Standby line of credit—Represents a secondary source of funding in the form of a contingent federal loan to supplement project revenues, if needed, during the first 10 years of project operations, and is available for up to 10 years after substantial completion of the project.

The amount of federal credit assistance may not exceed 33% of total reasonably anticipated eligible project costs and the exact terms for each loan are negotiated between the USDOT and the borrower based on the project economics, the cost and revenue profile of the project, and other relevant factors. For example, USDOT policy does not generally permit equity investors to receive project returns unless the borrower is current on TIFIA interest payments.

## Appendix D.2

### European Investment Bank Loan Guarantee Instrument

The European Investment Bank (“EIB”) was created by the Treaty of Rome in 1958 as the long-term lending bank of the European Union (“EU”). The task of the EIB is to contribute towards the integration, balanced development, and economic and social cohesion of EU Member States. The EIB raises substantial volumes of funds on the capital markets, which it lends on favorable terms to projects that further EU policy. In particular, the EIB:

- Enjoys its own legal stature and financial autonomy within the EU.
- Operates under strict banking practices and in close collaboration with the wider banking community, both when borrowing on the capital markets and when financing capital projects.

The Loan Guarantee Instrument for Trans-European Transport Network Projects (“LGTT”) is an innovative financial instrument set up and developed by the EU and the EIB which aims to facilitate a larger participation of the private sector involvement in the financing of Trans-European Transport Network infrastructure (“TEN-T”). This instrument facilitates private sector involvement in core European transport infrastructure, which often faces difficulties in attracting private-sector funding due to the relatively high levels of revenue risk in a project’s early operating stages.

The LGTT facilitates investment in TEN-T projects by significantly improving the ability of the borrower to service senior debt during the initial operating period or “ramp-up” phase of the project. It is designed to enhance the credit quality of the senior credit facilities, thereby encouraging a reduction of risk margins applied to senior loans to a project. These savings should surpass the cost to the borrower of the guarantee, resulting in a financial value-added for the project.

The stand-by liquidity facility guaranteed by the LGTT should not normally exceed 10% of the total amount of the senior debt (up to 20% in exceptional cases e.g. high traffic volatility during the ramp-up period with strong indication of stabilized traffic and acceptable debt service capacity post ramp-up). The amount of the guarantee is subject to a maximum ceiling of €200 million per project.

Under the LGTT the EIB will accept exposure to higher financial risks than under its normal lending activities. In effect, if the EIB guarantee is called upon by the stand-by liquidity facility (“SBF”) providers at the end of the availability period, then the EIB would reimburse the SBF providers and become a subordinated lender to the project but ahead of any payment to the equity providers and related financings.

Once the EIB has become a creditor to the project, amounts due under the LGTT will also rank junior to the debt service of the senior credit facility. The EIB, by taking such subordinated risk through the LGTT guarantee, will help the project to cope with the revenue risk of the early years



of operation (the first 5 to 7 years) while relying on the long-term perspective of the project to be financially viable.

This is clearly a facility which addresses one of the fundamental concerns with toll roads linked to development, namely that while long term viability appears strong, short term revenue problems can arise. Although not available in the U.S., this does present a “conceptual” solution for toll road funders to follow, and as discussed below, similar U.S. equivalent solutions, such as TIFIA, are now starting to appear regularly in toll road project funding.

The public sector has an important role to play in addressing early revenue risk in facilities such as toll roads if value for money is to be achieved using P3 structures.

## **Appendix D.3**

### **Non-Airport Privatization Transaction Summaries**

### Chicago Skyway

Item	Description
<b>Ownership</b>	Skyway Concession Company, LLC (SCC) – which consists of equity partners Cintra Concesiones de Infraestructuras de Transporte, S.A. and Macquarie Infrastructure Group/Macquarie Infrastructure Partners. The Project Sponsor is the City of Chicago.
<b>Operational Details</b>	A 7.8 mile, 6-lane divided, elevated highway including a 3.5-mile elevated structure crossing the Calumet River. Built in 1958, it connects I-94 (Dan Ryan Expressway) in Chicago to I-90 (Indiana Toll Road) at the Indiana border. The car toll (2010) is \$3.00, with trucks paying \$1.80 per axle (and which are 40% higher between 4am - 8pm). Toll price escalation was covered by a specified toll regime from 2008 to 2017, followed by greater of 2%, CPI or Nominal GDP per capita.
<b>Type of privatization</b>	Long term (99 year) lease of an existing toll road asset.
<b>Date of Transaction</b>	Financial close was October 2004.
<b>Valuation</b>	\$1.83 billion upfront payment
<b>Description of transaction</b>	Request for Qualifications (RFQ) issued in March 2004 by the City of Chicago. Ten responses were received and 5 groups were invited in May 2004 to prepare proposals. Three bids were submitted in October 2004. The long term lease awarded in October 2004. Cintra/Macquarie bid \$1.83 billion, 2.6 times as much as the next highest bidder, a French and Canadian group led by Vinci Concessions. Abertis Infraestructuras of Spain was the only other bidder, offering \$505 million for the lease. The conditions of sale were that in January 2005 the SCC assumed operations of the Chicago Skyway. SCC is responsible for all operating and maintenance costs of the Skyway. It has the right to all toll and concession revenue. No revenue-sharing and no non-compete clause.
<b>Other Features</b>	The original financial structure (backed by toll receipts) had Cintra equity at \$485 million, Macquarie equity at \$397 million and Bank Loans of \$948 million. Subsequent refinancing saw the Cintra/Macquarie equity fall to \$510 million, with Capital accretion bonds of \$961 million (21-year maturity; 5.6% interest rate), Current interest bonds of \$439 million (12-year maturity), and Subordinated bank debt of \$150 million (Banco Bilbao Vizcaya Argentaria, Santander Central Hispano and Calyon).

---

### Indiana Toll Road (I-90)

---

Item	Description
<b>Ownership</b>	Equity partners: Statewide Mobility Partners Consortium - Cintra Concesiones de Infraestructuras de Transporte, S.A. (50%) and Macquarie Infrastructure Group/Macquarie Infrastructure Partners (50%). The Project Sponsor is Indiana Finance Authority (IFA), on behalf of Indiana DOT.
<b>Operational Details</b>	Length of 157 miles (from Ohio to Illinois). It provides the primary connection to the Chicago Skyway. The Indiana Toll Road links the largest cities on the Great Lakes with the Eastern Seaboard. Connections with I-65 and I-69 lead to major destinations in the South and on the Gulf Coast. The toll (2010) is: 2-axles at \$4.65 with i-zoom and \$8.00 without i-zoom. 3-axles at \$11.75, 4 axles at \$24.50, 5 axles for \$32.00 and 6 axles for \$37.50, and 7 or more axles at \$69.75. Annual toll increase capped at highest of 2%, CPI or per capita GDP increase.
<b>Type of privatization</b>	Long term (75 year) lease of an existing toll road asset
<b>Date of Transaction</b>	Financial close June 29, 2006.
<b>Valuation</b>	\$3.8 billion
<b>Description of transaction</b>	Enabling Legislation: House Enrolled Act 1008 (HEA 1008), known as "Major Moves," signed into law in March 2006. Request for Toll Road Concessionaire Proposals released by IFA in September 2005. The lease concession awarded to Indiana Toll Road Concession Company, LLC (ITRCC) comprised of an even partnership between Cintra and Macquarie. In April 2006, ITRCC and IFA executed the "Indiana Toll Road Concession and Lease Agreement" providing for a 75-year lease. ITRCC submitted the highest bid of \$3.8 billion. Other bidders included a group led by Babcock & Brown (\$2.84 billion), an all Spanish group (\$2.52 billion), and Kwame Parker (\$1.9 billion). The concession does not allow for revenue sharing and a non-compete clause is included.
<b>Other Features</b>	Funding source consisted of: Cintra Equity and Macquarie Equity of \$374 million each and Senior bank debt - \$3,030 million. Senior bank debt was provided by a 7-bank club comprising Banco Bilbao Vizcaya Argentaria SA, Banco Santander Central Hispano SA, Caja de Ahorros y Monte de Piedad de Madrid, BNP Paribas, DEPFA Bank, RBS Securities Corporation and Dexia Credit Local. The state has allocated the funds from the lease towards road projects, paying off existing toll road bonds and establishing two transportation project funds.

---

### Pennsylvania Turnpike

---

Item	Description
<b>Ownership</b>	Grantor: Office of the Governor of Pennsylvania
<b>Operational Details</b>	Operated by the Pennsylvania Turnpike Commission and serving most Pennsylvania's major urban areas, it encompasses 532 miles (856 km) in three sections. Its main section, extending from the Ohio state line in the west to the New Jersey state line in the east, is 359 miles (578 km). Its Northeast Extension, extending from Plymouth Meeting in the southeast to Wilkes-Barre and Scranton in the northeast, is 110 miles (180 km). Its various access segments in Western Pennsylvania total 62 miles (100 km). Construction on the Turnpike began in 1937 and was completed from Ohio to New Jersey in 1956. Most of the toll road operates as a paper-ticket toll road. E-ZPass is accepted in designated lanes at all toll plazas. As of March 2010, the fare for a two-axle automobile travelling the entire Turnpike eastbound from the Warrendale Gate to the end of the Turnpike at the Delaware River Bridge into New Jersey, a distance of 329 miles (529 km), costs \$29.35, or by travelling from Warrendale to the Wyoming Valley exit near the end of the Northeast Extension, a distance of 409 miles (658 km), costs \$33.20. A 3% toll increase went into effect on January 3, 2010. The Turnpike handles over 172 million vehicles/ year (2009). Expansion from 4 to 6 lanes is being undertaken on this toll road.
<b>Type of privatization</b>	Cancelled (The target was a long-term lease of existing asset)
<b>Date of Transaction</b>	n.a.
<b>Valuation</b>	n.a.
<b>Description of transaction</b>	In November 2006, Pennsylvania Governor Ed Rendell raised the idea of a long-term lease of the turnpike to a private group as a means of raising money to improve other infrastructure within the state, following examples of similar toll road lease arrangements in Illinois, Indiana, Texas, and Virginia. In October 2007, 34 companies submitted 14 proposals to leasing the turnpike. On May 19, 2008, the Spanish firm Abertis Infraestructuras, SA and Citi Infrastructure Investors of New York City submitted a record \$12.8 billion proposal to lease the turnpike. However, the proposal failed to obtain legislative approval and the offer was withdrawn by Abertis and Citi.

---

### Alligator Alley

<b>Item</b>	<b>Description</b>
<b>Ownership</b>	Florida Department of Transportation (FDOT) which is still exploring P3 options for operating this Concession after a failed bid process in 2009.
<b>Operational Details</b>	<p>It is a section of Interstate 75 (State Road 93) and State Road 84 extending from Naples on the west coast of Florida to Weston on the east. First opened in 1969, most of the highway traverses the Everglades and is also known as the Everglades Parkway. Originally built as a two-lane toll road connecting the two coasts of Florida. Widened to 4-lane in 1992.</p> <p>Automobile drivers pay a \$2.50 toll (\$2.00 for SunPass users).</p>
<b>Type of privatization</b>	A Long Term Lease (50 to 75 years) was proposed but not bids received
<b>Date of Transaction</b>	Process was abandoned in May 2009
<b>Valuation</b>	n.a.
<b>Description of transaction</b>	<p>Since 2008, FDOT has been considering a concession period from 50 to 75 years for Alligator Alley, depending on the offers presented. The department said it would award the lease to the bidder with the largest upfront payment and the project will include some revenue-sharing as required by state law. In 2009, at least two groups were preparing bids for the asset, although both failed to submit proposals by the May 18, 2009 deadline. These were:</p> <ul style="list-style-type: none"><li>• a consortium of Vinci and Alinda advised by RBC Capital Markets (financial) and Chadbourne &amp; Parke (legal).</li><li>• a Global Via/ Atlantia pairing advised by SG and JPMorgan (financial) and Latham &amp; Watkins and Greenberg Traurig (legal).</li></ul> <p>FDOT continues to look at options for leasing the Alley and the use of P3 for monetization.</p>
<b>Other Features</b>	The proposal involved no upgrades or improvements to the system and toll increases

---

**Pocahontas Parkway**

---

<b>Item</b>	<b>Description</b>
<b>Ownership</b>	Transurban USA. <b>Project Sponsor is the</b> Virginia Department of Transportation (VDOT) and the Pocahontas Parkway Association
<b>Operational Details</b>	The Pocahontas Parkway (Route 895) is an 8.8-mile tolled highway seven miles south of Richmond, Virginia. The four-lane road connects Chippenham Parkway at I-95 in Chesterfield County with Interstate 295 south of the Richmond International Airport in Henrico County. Construction began in the fall 1998, and the Parkway was opened to traffic in stages beginning in May 2002.
<b>Type of privatization</b>	99 year lease of relatively new asset plus construction of new extension
<b>Date of Transaction</b>	Fiscal year 2007
<b>Valuation</b>	\$597.4 million including refinancing, construction of the RAC and installation of an electronic tolling system
<b>Description of transaction</b>	The Parkway was constructed using funds generated by bonds issued by the Pocahontas Parkway Association (PPA) in 1998 under Virginia's Public Private Transportation Act of 1995. The PPA was established for the sole purpose of financing the construction of the Parkway. The Parkway's total development costs were funded through tax-exempt revenue bonds (\$354 million) issued by PPA, a State Infrastructure Bank loan (\$18 million) and Federal funding for roadway design (\$9 million). Transurban executed an Asset Purchase Agreement with the Pocahontas Parkway Association, a 63-20 non-profit corporation, and entered into the Amended and Restated Comprehensive Agreement (ARCA) with VDOT on June 29, 2006. Hence Transurban has acquired the sole rights to enhance, manage, operate, maintain, and collect tolls on the Parkway for a period of 99 years. Transurban has also defeased all of PPA's underlying debt and is obligated to construct the Richmond Airport Connector (RAC), a 1.58-mile, four-lane extension of the toll road to Richmond International Airport.
<b>Other Features</b>	Funding Sources for the Original construction were 63-20 corporation tax-exempt toll revenue bonds - \$354 million, SIB loan - \$18 million and Federal funds for design costs - \$9 million. Funding for the long-term lease (2006) were Senior bank debt - \$420 million, Subordinated debt - \$55 million, Equity contribution - \$141 million and TIFIA loan - \$150 million

---

**Northwest Parkway, Denver, Colorado**

---

<b>Item</b>	<b>Description</b>
<b>Ownership</b>	Operated & managed by Northwest Parkway LLC- whose sole shareholder is Brisa Auto Estradas de Portugal S.A.
<b>Operational Details</b>	The project consists of the two-mile Interlocken Loop between SH128 and Tape Drive and a nine-mile limited access toll road between Tape Drive and I-25 with a connection to E-470. It is Colorado's newest toll road and opened on November 24 <sup>th</sup> , 2003. The toll is \$3.10 for 2-axle vehicles and \$3.10 per additional axle on the Main tollway. There is a \$1.00 toll on the ramps. Go-Pass and Express Toll customers receive a 20% discount on ramp locations.
<b>Type of privatization</b>	99 year lease of a relatively new asset
<b>Date of Transaction</b>	November 2007
<b>Valuation</b>	\$600 million
<b>Description of transaction</b>	The parkway was originally built with \$416.4 million in bonds, to be paid back with toll revenue over 35 years. The road opened in 2003. Due to very low traffic levels, relatively to forecast, there were concerns over debt repayment and public sector sought a private investor on a long term lease. In September 2006 an RFQ was issued to private sector financial groups. In April 2007 Brisa/CCR was named preferred bidder and in November 2007 Financial Close reached. Later Brisa became the sole owner.
<b>Other Features</b>	The project financing did prove problematic. Initially Brisa had to increase the level of equity it planned to commit to reach financial close. Then, when the debt went to syndication in early 2008 it suffered delays as a consequence of a tightening market and a general lack of enthusiasm for the deal, although syndication was ultimately achieved.

---



**South Bay Expressway (SBX), San Diego County, California**

---

<b>Item</b>	<b>Description</b>
<b>Ownership</b>	South Bay Expressway, L.P. (Earlier California Transportation Ventures) - Owned by Macquarie Infrastructure Group and Macquarie Infrastructure Partners. The Project Sponsor was Caltrans.
<b>Operational Details</b>	A 9.3 mile, 4-lane divided highway from SR 905 (international border) to SR 54 (near San Diego). The car toll (2010) varies from \$0.75 to \$3.85 on FastTrak tag and \$2.50 to \$4.50 by cash. Trucks with 3 to 4 axles pay 2 times car toll and trucks with 5 or more axles pay 3 times car toll.
<b>Type of privatization</b>	35 year Build-Transfer-Operate franchise.
<b>Date of Transaction</b>	Financial close May 2003 and opened to traffic in November 2007.
<b>Valuation</b>	Cost: \$658 million for the Southern 9.3-mile section and \$138 million for the Northern 3.2-mile Connector.
<b>Description of transaction</b>	Enabling legislation: California's AB 680 legislation passed in 1989 and funded by loan under TIFIA- Transport Infrastructure Finance and Innovation Act, 1998. The conditions of sale were that a limited partnership holds a franchise with the State of California under which it financed and built the highway, then transferred ownership to the State. The limited partnership then leases back, operates, and maintains the facility for 35 years. In 2042, control goes back to the State at no cost. Funding sources for the Southern Toll Section were Investor equity, bank debt (\$470 million), TIFIA loan (\$140 million), and donated right of way (\$48 million). For the Northern Gap & Connector section it was federal funds (Federal aid receipts) and local sales tax receipts.
<b>Other Features</b>	The northern 3.2-mile segment, including the SR 54 interchange, was financed publicly using a mix of federal funds and local sales tax proceeds. Both sections were built by the same contractor under two separate design-build contracts. The franchise allows a maximum 18.5% return on total investment with an additional incentive return for action to increase average vehicle occupancy on the toll road. In March 2010, South Bay Expressway, L.P. and California Transportation Ventures, Inc. filed petitions in the United States Bankruptcy Court for the Southern District of California seeking relief under chapter 11 of Bankruptcy Code.

---

**Dulles Greenway**

---

<b>Item</b>	<b>Description</b>
<b>Ownership</b>	Owner: TRIP II a special purpose company that has had numerous share holders over time (see below). The operator is Autostrade International, a subsidiary of Italian-based Autostrade S.p.A.
<b>Operational Details</b>	The Dulles Greenway is 14-mile long and carries traffic between the Capital Beltway and Dulles Airport.
<b>Type of privatization</b>	Long term lease of a new toll road asset
<b>Date of Transaction</b>	Opened September 1995
<b>Valuation</b>	\$350 million
<b>Description of transaction</b>	The Greenway was privately financed and constructed from 1993 to 1995 as a DBFO and had an initial agreement to have operational responsibilities revert to the Commonwealth of Virginia in 2036. To finance the Greenway, the limited private partnership, TRIP II put up \$40 million in equity, and secured \$310 million in privately placed taxable debt. Loans were to be repaid with toll revenues, and the financing was secured by a first mortgage and security interest in the developer's right, title, and interest in the facility. When the Greenway opened to traffic in September 1995, traffic fell short of projected levels. TRIP II restructured its debt in 1999 and agreed to an extension of the project. In 2001 the Virginia State Corporation Commission (SCC) extended TRIP II's concession period for an additional 20 years to 2056. In 2005 Macquarie Infrastructure Group (MIG) agreed to purchase TRIP II for \$617.5 million.
<b>Other Features</b>	Enabled by 1988 action of Virginia's General Assembly, authorizing private development of toll roads. The maximum toll schedule has been set by the SCC through to the end of 2012. From 2013 through to 2020 tolls can escalate annually at the higher of CPI plus 1%, real GDP, or 2.8% per annum. Post-2020 tolls are set by the SCC on application. One of first U.S. projects to embody the basic concepts of project revenue financing. The Greenway is the first toll road in greater Washington, D.C. to feature variably priced tolls.

---

**Texas IH-635 / LBJ Freeway**

---

<b>Item</b>	<b>Description</b>
<b>Ownership</b>	Texas Department of Transportation (TxDOT) is the promoter. A consortium that includes Cintra (LBJ Infrastructure Group) has won the concession.
<b>Operational Details</b>	The project consists of improvements to the existing IH-635 (LBJ Freeway) in the Dallas-Fort Worth metropolitan area and is part of a corridor that is 21 miles long. The scheme is a “managed lane” project. Construction will start in early 2011 and is expected to be completed in 2016.
<b>Type of privatization</b>	Long-term lease of the IH-635 Managed Lanes (DBFMO)
<b>Date of Transaction</b>	June 2010 Financial Close
<b>Valuation</b>	\$2.6 billion
<b>Description of transaction</b>	The transaction was launched May 2005, with Pre qualifications submitted in September 2005, and four teams pre qualified to bid in November 2007. Request for detailed bids was issued in October 2007, with an original bid deadline of March 2008. The bid deadline was extended such that bids were not submitted in January 2009. The preferred bidder (the Cintra team) was selected in February 2009. Commercial close was achieved in September 2009. The ultimate members of the winning team were Cintra Infraestructuras (50%), Meridiam (40%) and Dallas Police & Fire Pension System (10%). This is different to the original structuring of the consortium when the prequalification process began. Financial close was significantly delayed, with close finally achieved in June 2010.
<b>Other Features</b>	The project will be financed with USD600m in PABs, a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan of \$850 million, a \$630 million equity contribution from the winning consortium, and \$520 million from the Texas Department of Transportation. The PABs will be senior debt secured on the project's revenue and the TIFIA loan will have subordinate status unless the project goes into bankruptcy, at which point the TIFIA loan moves up to parity with the senior bonds. Both agencies put a stable outlook on their ratings.

---

**Miami Port Tunnel, Florida**

---

<b>Item</b>	<b>Description</b>
<b>Ownership</b>	Grantor: Florida Department of Transportation (FDOT). The Concession was granted to: Miami Access Tunnel (ultimate equity was Meridian and Bouygues).
<b>Operational Details</b>	The project is being led by Florida Department of Transportation (FDOT) in partnership with Miami-Dade County and the City of Miami. The DBFMO contract has a 30 year concession period after a maximum of five years for construction and improvement works. The tunnel will connect Watson Island to the Port of Miami-Dade and remove thousands of heavy truck and bus trips a year from downtown Miami streets.
<b>Type of privatization</b>	DBFOM contract for new tunnel
<b>Date of Transaction</b>	Financial close in October 2009
<b>Valuation</b>	\$1 billion
<b>Description of transaction</b>	The transaction was launched in February 2006 and in April 2006 three consortia were short-listed. Bids were submitted in March 2007 and in May 2007 the Miami Access Tunnel Consortium were chosen. This group had proposed the lowest annual maximum availability payment at \$33.23 million. However, the project struggled to close and FDOT cancelled the project in December 2008. However, in April 2009 FDOT reaffirmed its commitment to the deal by agreeing to move forward with the existing procurement process. This change of heart appears, at least in part, to have been triggered the replacement of one of the major equity investors”. Commercial close was achieved by June and financial close in October 2009. The TIFIA debt portion of amounts to around \$340 million and the loan term is 35 years. A total of ten banks provided \$340 million of senior debt with the sponsor, the Miami Access Tunnel consortium, providing \$80 million of equity, with Meridian Infrastructure at 90% and Bouygues at 10%. The gearing ratio is 90:10.
<b>Other Features</b>	FDOT will pay the consortium milestone payments at various stages of project development. FDOT will also provide availability payments to the concessionaire that begin at the completion of construction and will occur annually for 30 years.

---

**Trans-Texas Corridor (TTC I-69)**

---

<b>Item</b>	<b>Description</b>
<b>Ownership</b>	Texas Department of Transportation (TxDOT) is the promoter. A consortium that includes Zachry of Texas and ACS of Spain has won the concession.
<b>Operational Details</b>	The TTC I-69 is the Texan component of the planned 1,600-mile national highway connecting Mexico, the United States and Canada. The TTC I-69 will be an interstate-quality highway corridor running from the Lower Rio Grande River Valley to I-37 and continuing along the south and east portions of Texas from Corpus Christi through Houston all the way to northeast Texas.
<b>Type of privatization</b>	Comprehensive Development Agreement
<b>Date of Transaction</b>	The winning “partner” was identified in June 2008.
<b>Valuation</b>	Undefined – although the total corridor was said to require \$30 billion.
<b>Description of transaction</b>	In Apr 2006 TxDOT issued an RFQ for the project. In September 2006 two teams were short-listed to receive Request for Detailed Proposals. The two consortia were bidding to enter into a Comprehensive Development Agreement with the state to design, develop, finance, construct and maintain the 600-mile multi-use transportation corridor from Northeast Texas to Mexico. In March 2008 TxDOT received two proposals and in June 2008, the Zachry and ACS team won the contract. In June 2008 it was said they would need up to 18 months to complete the development and financial plans. There has been no announcement since.
<b>Other Features</b>	The contract included the right of first negotiation to perform work on certain projects. All of the planning work completed by the CDA Partner will be done within the constraints spelled out by the Texas Transportation Commission and state law. ACS and Zachry had proposed 7 projects and suggested toll revenues be used to help finance sections of US 77. The \$2.5 billion upgrade of US 77 was proposed to be the first of the projects developed under the TTC. TxDOT stressed that separate facility agreements would be needed if it move forward with the design, construction, financing, maintenance and operation of any specific projects identified within the master plan.

---

**I75/I575 Unsolicited Bid in Georgia**

---

<b>Item</b>	<b>Description</b>
<b>Ownership</b>	Georgia Department of Transport (GDOT) and a joint venture between Bechtel and Kiewit
<b>Operational Details</b>	The I75 (and I575) north of the I285
<b>Type of privatization</b>	Unsolicited Bid / Developer Service Agreement
<b>Date of Transaction</b>	The agreement was signed in May 2006 and terminated in November 2009
<b>Valuation</b>	\$38.5 million
<b>Description of transaction</b>	<p>In 2003, the Georgia legislature passed a law that allowed for unsolicited proposals to be submitted under what was then known as the Public Private Initiative, or PPI, program. The law allowed private-sector entities to submit proposals for public-sector projects. GDOT in May 2006 announced it has signed its first-ever Public Private Initiative (PPI) contract, a Developer Services Agreement (DSA) with Georgia Transportation Partners (GTP), a joint-venture company formed by Bechtel Infrastructure Corporation and Kiewit Southern Co. The DSA provided the procedural framework for the Georgia DOT and private-partner GTP to examine improvements to the Northwest Corridor. Congestion relief options to be studied under the DSA include a combination of High Occupancy Vehicle, High Occupancy Toll, Express Toll and Truck-Only/ Toll lanes, and a Bus Rapid Transit system. The entire scope of services for the DSA was to be completed no later than July 2009. The approach was for the Department to negotiate a Developers Service contract with the PPI team. This contract would spell out the PPI team's role in the environmental process. After the environmental process was complete, a Design/ Build contract had to be negotiated. If that contract was negotiated to each party's satisfaction, the PPI team would take over the final design of the project and the construction. However, in November 2009 GDOT confirmed that it was canceling all un-solicited P3 Projects and moving ahead with a solicited bidding procurement program. The I75/I575 is the first of those solicited proposals and is already in procurement.</p>
<b>Other Features</b>	Several unsolicited proposals were submitted, including GA316, GA400 and I285/I20, although only I75/I575 was ultimately progressed.

---

### Off-Street Garages, Chicago

---

Item	Description
<b>Ownership</b>	Morgan Stanley is the concessionaire. It has LAZ parking as its operator. The project sponsor was the Chicago City Council.
<b>Operational Details</b>	The parking system included within the deal is considered to be the largest downtown underground public parking system in the US. It is located under the Grant and Millennium Parks in downtown Chicago, has over of 9,000 spaces and four underground parking garages. The contract is a long-term agreement granting the private operator the exclusive right to operate the Parking System and to collect parking, advertising and retail concession revenue during the term of the agreement.
<b>Type of privatization</b>	99 year concession to maintain, operate and collect revenues from four off street parking garages.
<b>Date of Transaction</b>	Financial close December 2006.
<b>Valuation</b>	The winning team bid \$563 million for the 99 year concession sale and lease. The garages had 2005 income of approximately \$16 million, which equates to earnings multiple of 35 based on the bid price of \$563 million, or 39 based on the bid price plus \$65 million estimate of what was needed to rehabilitate the East Monroe Street garage.
<b>Description of transaction</b>	<p>The conditions of the sale were that the concessionaire must carry out certain improvements, particularly the rehabilitation of the East Monroe Street garage within five years. The city's estimate of the cost is USD65m. However, the actual cost was determined by the concessionaire and bidders were not asked to specify this.</p> <p>Funding Sources were all equity.</p>
<b>Other Features</b>	<p>The City used the proceeds from the sale as follows:</p> <ul style="list-style-type: none"><li>• \$122 million is for Chicago park improvements.</li><li>• \$120 million in a reserve to generate income to replace the Park District's annual parking fee income of \$5 million.</li><li>• \$278 million to pay off all debt associated with the garages.</li><li>• \$35 million to rebuild Daley Bicentennial Park when the East Monroe Street garage is re-built by the lessee.</li><li>• \$8 million is for banking, legal, and transaction fees.</li></ul>

---

### On-Street Metered Spaces, Chicago

---

<b>Item</b>	<b>Description</b>
<b>Ownership</b>	Morgan Stanley Infrastructure (MSI) is the concessionaire. It has LAZ as its operator. The project sponsor was the Chicago City Council.
<b>Operational Details</b>	Chicago's metered parking system comprises around 36,000 on-street metered parking spaces, many in the central business district. This project involved the replacement of most of the existing mechanical parking meters with electronic ones and then their maintenance and operation.
<b>Type of privatization</b>	75 year concession to maintain, operate and collect revenues from parking meters.
<b>Date of Transaction</b>	Financial close February 2009.
<b>Valuation</b>	The winning team bid \$1.15 billion for the 75 year concession.
<b>Description of transaction</b>	The conditions of sale were the city set the future parking rates and the concessionaire had to update and maintain the parking meter stock. There were some built-in protections for concession revenue related to actions by the City. The concessionaire was to operate and maintain the parking system and collect the revenues but the City would collect parking fines. The Concession Agreement included provisions for compensation to the Concessionaire for changes in the number of spaces, hours of operation, and parking rates. Funding Sources were originally all equity. However, in May 2010 the concessionaire closed a long-tenor, forward starting interest rate swap (IRS). Five banks acted as swap providers.
<b>Other Features</b>	The project has had numerous opponents. Firstly, not long after financial close, Chicago's Inspector General's Office released a report criticizing the deal, claiming Mayor Richard Daley and aldermen had moved too quickly in approving a \$1.15 billion contract with MSI. Then, in August 2008, a lawsuit was filed against the deal by tax payer organization, which a Cook County Circuit Court later in 2008 permitted to proceed. In May 2010 the case had still not been heard in court. The scheme also initially attracted a lot of bad press related to the period immediately following the take over by the private contractor, although that no longer appears to be an issue.

---



**Las Vegas Monorail, Nevada**

---

<b>Item</b>	<b>Description</b>
<b>Ownership</b>	The original scheme developed by two hotels. The current owner is the Las Vegas Monorail Company (LVMC), a not-for-profit company that acquired the original Monorail system. It is governed by its board of directors, appointed by the governor of Nevada. The project sponsors are the State of Nevada Department of Business and Industry, Clark County (franchise and ROW) and the Nevada Department of Transportation (ROW).
<b>Operational Details</b>	The number of passengers averaged 22,800 per day in 2008, with a maximum of 70,000 passengers a day during exhibitions. The system is 3.9 miles and has 7 stations/stops. It operates on a frequency of between 4 and 12 minutes from 7:00 A.M. to 2:00 A.M Monday to Thursday and 7:00 A.M. to 3:00 A.M Friday to Sunday. The Fares are \$5 (Single), \$14 (One day pass) and \$30 (Three day pass). Expansion of the Monorail to McCarran International Airport is under consideration.
<b>Type of privatization</b>	Originally there was a management contract for construction, operation and maintenance of the system. The Project Delivery / Contract Method was modified to a BOT/ DBOM when the system was extended.
<b>Date of Transaction</b>	The current LVMC franchise was signed in 2000.
<b>Valuation</b>	Cost of LVMC expansion project was \$650 million.
<b>Description of transaction</b>	The Monorail was originally a joint venture between MGM Grand and Bally's Hotel, creating a 1 mile system in 1993. In 2000, the non-profit public benefit corporation LVMC acquired the Monorail under a 50-year franchise. A key objective in 2000 was to expand the monorail using private sector funds. The funding source was Tax exempt revenue bonds (backed by fares and advertising). The limited liability company's rights to the initial monorail project, granted under franchise from Clark County, were granted to LVMC under the new franchise. The expanded Monorail suffered mechanical on reopening in 2004 although it now operates reliably.
<b>Other Features</b>	In January 2010 the Las Vegas Monorail filed for Chapter 11 Bankruptcy Protection. The filing is not expected to affect system operations or impact the Monorail's hours of operation or service to its customers.

---

### Boston Rail Operating Franchise

---

<b>Item</b>	<b>Description</b>
<b>Ownership</b>	Massachusetts Bay Transit Authority (MBTA) is the promoter of the operating franchise. The Massachusetts Bay Commuter Railroad Company (MBCRC) is the current franchise holder.
<b>Operational Details</b>	This is a fully integrated train operation for the 13-line urban rail network around Boston (i.e. it includes track maintenance, station management, ticket selling and train operation and control). However, there is no patronage revenue risk with the franchise holder.
<b>Type of privatization</b>	It is a concession, normally for 5 years, although it can be extended.
<b>Date of Transaction</b>	The current concession was awarded in July 2003 to the Massachusetts Bay Commuter Railroad Company (MBCR). The MBCR contract originally expired in July 2008 but included an additional five-year option. This option was taken, with the franchise was originally extended by three years to July 2011 and then later by another two years to July 2013.
<b>Valuation</b>	It was a fixed price franchise committed for length of concession although MBTA took risk on fuel costs. The value was around \$1 billion.
<b>Description of transaction</b>	The payments to MBCR are made based on performance and any major capital development, e.g. new rolling stock or stations, would involve additional payments to MBCR.
<b>Other Features</b>	The basic length concession included the opportunity to extend the franchise if it was progressing well. The concession required the franchise bidder to demonstrate how they would deal with extreme winter weather but the public sector set aside additional funding for the annual snow plan (i.e., the cost risk of severe weather was retained by the public sector). The franchise bid had to include discrete pricing for line extensions and any major changes planned within the period of the concession. The concession followed other State contracts in requiring a minimum percentage of the contract to be provided by “disadvantaged suppliers” which was 11.5% by value.

---

### Denver FasTracks

<b>Item</b>	<b>Description</b>
<b>Ownership</b>	The project promoter is Denver's Regional Transportation District (RTD). The winning consortium for the Eagle P3 project, known as Denver Transit Partners (DTP), comprises Fluor, Macquarie, Balfour Beatty, ACI, Ames Construction, Hyundai-Rotem and HDR. In June 2010 the deal had 60 days to reach financial close.
<b>Operational Details</b>	FasTracks was approved in 2004 and was intended to expand and improve the Regional Transportation District's (RTD) rail and light rail connections. The RTD now proposed to bridge a projected funding shortfall of over \$0.5m using alternative financing strategies, including P3s. The P3 consists of the East Corridor, Gold Line, Commuter Rail Maintenance Facility and an initial segment of the Northwest Rail Corridor. The East Corridor is a 22.8-mile commuter corridor from Denver Union Station to Denver International Airport. The Gold Line is an 11.2-mile commuter corridor connecting Denver Union Station to Ward Road. The Commuter Rail Maintenance Facility will serve the four FasTracks commuter rail corridors. The portion of Northwest Rail included in the P3 includes shared tracks with Gold Line plus an additional two miles north to the South Westminster Station. Phase I includes property acquisition, construction of the East Corridor, construction of the Maintenance Facility and control centre, purchase of Electric Multiple Unit rail vehicles and the electrical systems at Denver Union Station. Phase II includes the Gold Line and the short segment of Northwest Rail. Phase II is scheduled to begin following the award of a Full Funding Grant Agreement (FFGA) by the Federal Transit Administration in 2011.
<b>Type of privatization</b>	DBOM for 40 years.
<b>Date of Transaction</b>	The winning consortium was selected in June 2010 and has 60 days to reach financial close.
<b>Valuation</b>	\$2.085 billion – the RTD estimate was \$2.3 billion.
<b>Description of transaction</b>	The consortium will operate and maintain the project for 40 years after completion in return for annual performance-based payments.
<b>Other Features</b>	The deal is using a private activity bond (PAB) debt financing solution. The tax-exempt PABs will have a 30-year maturity and be callable after 10 years. The issue amount will be between \$400 million and \$500 million.

---

**Seagirt Terminal, Baltimore**

---

<b>Item</b>	<b>Description</b>
<b>Ownership</b>	The terminal is owned by Maryland Transportation Authority (MdTA). Ports America Baltimore, Highstar's existing operator at the port, is the parent company of Ports America Chesapeake (PAC), the project company.
<b>Operational Details</b>	Seagirt is the largest facility in Baltimore Harbor and commenced operations in the 1990. It has a current minimum annual capacity of 1.0 million TEUs across its three berths and in 2008, handled 500,000 TEUs. The concessionaire will expand (building an additional 50 ft berth) and operate the Seagirt Marine Terminal in Baltimore as part of a 50-year lease. The concessionaire will benefit from a revenue sharing structure, above a certain level of container volume use at the facility. The Port of Baltimore has been running for over 300 years. In 2008 the port handled about 40 million tons.
<b>Type of privatization</b>	Long term lease of existing asset; includes expansion plans.
<b>Date of Transaction</b>	January 2010
<b>Valuation</b>	\$334 million
<b>Description of transaction</b>	The transaction was launched on April 20, 2009. On July 1, 2009, the pre-qualified proponents were Ports America (Ports America Baltimore), Ceres and Alinda Capital Partners LLC. The preferred proponent, Ports America (Ports America Baltimore) was chosen on November 20, 2009. The financial close was reached on January 7, 2010. The equity and Debt split was: Equity: \$75 million, debt: \$259 million.
<b>Other Features</b>	MdTA plans to reinvest funds from this concession as part of a capital program that will allow major highway related projects to proceed including upgrades to I-95, US 40 Hatem Bridge and US 50/301 Bay Bridge. Under the terms of the deal, PAC will fund construction of a 50-foot deep berth at the Seagirt Marine Terminal and the purchase of four new cranes. It will fund a repayment to MdTA for investment in Seagirt, as well as provide ongoing revenues for administrative and other port purposes. The cost of building the new berth is put at slightly over \$100 million. The upfront payment is thought to be between \$200 million and \$250 million. The anticipated capital investment in projects at the port over the 50-year lease is \$500 million.

---

**Port of Oakland Outer Harbor**

---

<b>Item</b>	<b>Description</b>
<b>Ownership</b>	The Port of Oakland owns the five container berths. Ports America Outer Harbor Terminal, LLC is a partnership with Terminal Investments Ltd, an affiliate of Mediterranean Shipping Co and Ports America, parent company Highstar.
<b>Operational Details</b>	The Port of Oakland was established in 1927 and ranks as the 4 <sup>th</sup> busiest container port in the USA. The port has 20 deepwater berths, 35 container cranes, 10 container terminals and 2 intermodal rail facilities, which handle over 2 million containers a year. The long-term concession agreement includes the operation and improvement of berths 20 through 24. The area accounts for approximately 4,400 feet of berth with about 160 acres of storage space. Additionally, the concession agreement allows for the opportunity to acquire the adjacent berths 25 and 26 once the current use agreement for that area expires (as early as June 30, 2013). The combined areas (Berths 20-26) are the equivalent of five to six container ships in a row. The first phase of Ports America Oakland's operational plan includes the investment of up to \$150 million. During the life of its operational stewardship Ports America Oakland plans to invest significant additional capital to improve the competitiveness of the port for the benefit of its many served communities and customers.
<b>Type of privatization</b>	50 year lease
<b>Date of Transaction</b>	March 2009, effective January 2010
<b>Valuation</b>	\$700 million
<b>Description of transaction</b>	Ports America Oakland is paying a \$60 million up front fee to the Port of Oakland and an annual rent of at least \$19.5 million, with the figure rising each year. The deal was done within 10 months from RFP.
<b>Other Features</b>	Environmental benefits were considered in the bid. Port America Oakland estimate that when their build out is completed, emissions per TEU could be reduced by as much as 90% due to electric stacking cranes rather than diesel, no truck idling and fewer miles driven within the yard, ship to shore power and truck appointments.

---