

## **The Metamorphous of U.S. Transportation Concessions**

The concession model that develops in the U.S. will be within the context of the institutions that have resulted from a century of financing transportation infrastructure with fuels tax. While this seems obvious at the conceptual level, there may not be an appreciation of size of change that must occur. These institutions are not just the public sector organizations but the private sector organizations that deliver the infrastructure. Industry associations, think tanks, political groups and the public at large have nearly four generations of fuels tax tradition. This mix of institutions influences the political leaders who establish the laws and policies that will guide the development of the new model and the public at large will have their voices heard as well.

Unlike Europe, the United States has a long tradition of funding transportation on a pay-as-you-go basis. Surface transportation was first funded in the U.S. through a 2¢ gasoline tax that was established in 1916 and expanded in its use through the last century ultimately creating the Interstate Highway System.

The United States has firmly established transportation traditions associated with financial allocation, project development, operations and maintenance involving various regulatory and program management processes. These are deeply rooted in pay-as-you-go funding and the gasoline tax. The U.S. Department of Transportation, for example, wouldn't pay interest costs associated with loans taken by state agencies in the development of transportation projects until reauthorization bills of the 1990s. The federal funding process was founded on the principle of states spending their money first and then applying for reimbursement assuming those expenditures were eligible for federal participation. That process remains today with the exception of some grant programs. Transportation finance is deeply rooted in the fuels tax legacy.

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The entire transportation industry operates on the premise of Pay-as-you-go. Businesses engaged in providing transportation include construction companies, engineering companies, law firms, etc. built their businesses around this 100 year history of fuels tax funding.

Transportation public policy and the public understanding of how transportation is financed are influenced by the long history of fuels tax. There is little understanding of the amount of tax paid in relation to the use of a transportation facility. Transportation has evolved into a free public commodity. The connection between paying for a service and using the service has been lost.

Because of this vast history, changing to a concessions model will be challenging and yet the need to attract private capital to address unfunded transportation needs remains a necessity.

### **Concession Finance and Addressing the Funding Shortfall**

The increasing inadequacy of the gasoline tax to fund infrastructure in the U.S. has been well-documented and there is growing recognition that tolling and concessions will be a part of the solution. Though toll projects in the United States have traditionally used tax-exempt debt as a funding vehicle, the enormous backlog in public infrastructure has led to the realization that equity investment will also play a role. Recently, several U.S. applications of equity funding have occurred. The first application of equity, the Chicago Skyway purchase (\$1.82 billion), was in the form of a long term lease. This was quickly followed by the Trans-Texas Corridor preliminary negotiations (\$7.2 billion), a Greenfield project. Most recently, the long-term lease transactions involving the Indiana Toll Road (\$3.8 billion) and the Pocahontas Parkway in Virginia (\$611 million) were completed. Today, more than a dozen projects are under consideration for equity financing, either as long-term leasehold agreements for existing projects or as proposals for new Greenfield projects.

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The development of an acceptable U.S. concession model appears to be evolving. Long term leases, effectively the purchase of a future revenue stream and Greenfield projects agreements have incorporated provisions for increasing toll rates according to various economic indices. The agreements have attempted to address business, economic and public policy issues over very long periods of time. Concerns for unforeseen future impacts have precipitated some negative public reaction and spawned the creation of numerous research reports. The public nature of transportation and the need to ensure a long term partnership is perhaps the essence of the reaction.

The success of these projects has led to a debate about public works being controlled by the private sector. Because the funding of transportation infrastructure through taxation is deeply engrained in the U.S., it is generally accepted that highways, airports, and transit are all inherently public facilities. It stretches the nation's cultural psyche to accept tolling as an option for funding public roadways, yet landing fees and transit fares are accepted without question for air, bus, and rail transportation. Concessions should play a significant role in bridging the gap between public expectations and financial reality. A certain amount of time will be necessary for the full adoption of a long term sustainable approach for concessions in the U.S.

Concessionaires must have access to a large capital market and a track record of success in order to attract capital investors. To attract capital to the public infrastructure purpose, rates of return must be competitive with other options that compete for capital. Rates of return in the 10- to 12-percent range will be required. When contrasted with tax-exempt debt rates of 5 percent and taxable rates of 6 to 7 percent, equity financing begins to look like a poor alternative. Because the structure of most transportation concessions is composed of one quarter equity and three quarters debt, the effective rate of return on the entire project can attain the required return on equity. Further, the large needs for transportation funding in the U.S. will serve to spur a competitive equity market. When coupled with tax law that allows for accelerated depreciation, equity investments begin to become very competitive with other options of similar risk profile. Construction and operations risks are also a factor to consider and the reduced time needed to develop a project using design/build techniques will add to the case for concessions.

Initial concessions in the form of long term leases have been on existing facilities that have predictable revenue streams and that do not possess the risk of original construction. These projects also do not require the capitalization of a revenue ramp up period. Agreements commonly include provisions for raising toll rates commensurate with various economic indicators and other risks that would normally be attendant to a toll project. Consequently, concessionaires are willing to pay handsomely for existing toll-revenue projects. Once acquired, the value of the investment is enhanced through improved operations and maintenance procedures and refinancing takes place reducing the percentage of equity on the project. As the concession matures, financials improve and project risk is reduced, more of the original equity can be replaced with long term debt at lower rates. This reduction in invested equity, as a percentage of the total project investment, has the effect of increasing the rate of return on the remaining equity. The project can then be stabilized as a long term concession.

### **The Public Perspective**

The public perspective on transportation in the U.S. is driven by the perspective of transportation as a public good. The public purpose of transportation is to provide safe, efficient, economical travel to drivers, riders, and shippers. Public agencies are focused on providing the infrastructure while minimizing its environmental impact and doing so with the minimum financial impact on the user including low toll rates. A legal framework exists to ensure that those affected by a construction project or a toll-rate increase are given ample opportunity to provide input. It is fundamental to the concept of a government “of the people”.

The public perspective also includes the transportation facility’s effect on the local economy. Increased property values improve local property tax collection, and property development increases local sales tax receipts that can be used to fund other local government programs. A great deal of economic research has been performed that documents this relationship. Conversely, project noise, lack of access to the project, and inordinately high toll rates can hurt property values. Public-agency leaders strive to balance

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positive economic impact with environmental impacts and toll-rate increases. The overall perspective is one of equitably sharing a public asset.

Toll rates in the U.S. are greatly affected by public input. At the outset of a tax exempt bond project, the traffic and revenue projections and resulting debt service structure rarely shows major increases in toll rates over the life of the project. These slow toll rate increase scenarios are underwritten with pledged support from government sources or other older, existing toll facilities in case revenue projections aren't realized. Because of the reluctance of many elected and appointed officials to raise toll rates in the face of public opposition, rates are allowed to remain fixed for long periods and the inherent business value of the asset decreases. Rather than setting toll rates for maximum revenue generation, at best, the public agency sets toll rates to balance revenue with maximum utilization.

### **Factors Affecting Concessions**

Certain political and philosophical changes in the United States have occurred that provide a fertile environment for public infrastructure concessions. There is a general public perception that businesses can perform more efficiently than agencies and that less government is better. Though there is no inherent advantage to a business entity in terms of human resources, there are significant differences in process, giving the private company efficiency advantages.

As urbanization and suburbanization has occurred in the U.S. over the last century, transportation issues have extended beyond political jurisdictions. Hence, major urban projects serve more than one political subdivision and require cooperation amongst the effected parties as to the allocation of cost and benefit. Concession agreements can more easily accommodate these multi-jurisdictional project needs.

The involvement of the private sector in transportation has matured in the last decade. Techniques such as design-build procurements have become more prevalent for construction and asset-management has been

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increasingly adopted for contracting maintenance. As computer technology has proliferated, applications such as electronic toll collection, incident management, and geographic information systems have become commonplace and the private sector has provided much of the technological capability to produce these systems. Private sector contracts are common for traffic management centers operations, toll-equipment maintenance, and even toll collection. All these factors have led to greater acceptance of private-sector operation of public facilities.

New federal transportation initiatives have affected the involvement of the private sector as well. Federal programs for managed lanes, high-occupancy toll (HOT) lanes, and new toll highways have slowly expanded. It is likely that future federal programs will further expand the use of road pricing. Because the interstate system is considered complete, government programs have begun to focus on efficient maintenance and operation have resulted in a growth in asset management, privatized operations, and ultimately concessions.

### **The Model to Come**

U.S. experimentation with privatization will also influence the development of a U.S. concession model. Virginia, California, and several other states have developed specific statutes for privatization, but few states have realized new privately funded roads as a result. Among them are California's SR-91 and SR-125, Virginia's Dulles Greenway and Pocahontas Parkway, and a few others. An underlying philosophy of these developments has been the concept of a regulated utility.

An important characteristic of the regulated-utility model is that toll rates are set through periodic petitions to a state commission. These commissions control toll rates in much the same way that public-agency board members do with an emphasis on providing for public input and a concern for providing the optimum service at the minimum rate. Concessions however set rates according to negotiated agreements that are tied to various economic indices with the goal of maximizing return within the concession agreement provisions.

Long term concessions will no doubt continue to occur because of the tremendous needs for transportation funding that can be derived and leveraged. However, it seems likely that the U.S. concession model will develop in a manner similar to the European model, a kind of marriage between the regulated utility and the long term lease. The model will consider both the need for transportation funding and the need to address the public purpose of transportation. It will likely possess the characteristics of a long-term partnership between the public and private sectors. Rather than accepting a provision for toll rates that may extend five or more decades, concession periods will begin to resemble those of Europe, 15-30 years in length. Further, it is likely that renegotiation will be a significant provision for the benefit of both parties. Many of the European motorways are operated by concessions whose shares are owned by government and the private sector. Where motorway control doesn't rest with the public sector, concession agreements tend to set limits on toll-rate increases or provide for toll-rate increases on a frequent periodic basis. Currently, in Portugal and Spain, a maximum toll charge is specified in the concession contract. In France, toll charges are typically set under five-year contracts.

A major factor in the final determination of a concessions model in the United States is the need for infrastructure expansion rather than new alignment and this will amplify the importance of a close partnership between the public and private sectors.

Whatever the final form, concessions are coming to the U.S. The challenges will be amplified by the history of funding in the U.S. and the institutional momentum that exists but the need to attract private equity to fill the funding gap for transportation will be the prevailing element.

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