BY BOB MCQUEEN

THE TOLL MODEL AS THE BASIS FOR FUTURE TRANSPORTATION FUNDING AND SERVICE DELIVERY

There is a great deal of interest in new funding and delivery models for transportation. Conceivably, we have a new funding model right in front of us. Roughly 25 toll agencies in the United States have been operating under a locally funded business model for more than 25 years. Can we apply this business model more widely as a new yet well-proven way to fund and operate local transportation infrastructure and services?

THE CRITICAL FEATURE OF THE CURRENT TOLLING BUSINESS MODEL IS THE RING FENCING OF LOCALLY GENERATED TOLL REVENUE TO IMPROVE LOCAL TRANSPORTATION INFRASTRUCTURE AND SERVICES.

In this article, we explore the way in which the "pay as you go" business model emphasizes service and value delivery. We also look at the trend from central to local funding for transportation and ways to apply the tolling business model to transit and other modes. We recognize that adapting the current tolling business model to a broader transportation environment will need expert inputs from planners and practitioners. The big challenge that confronts new funding models is the risk associated with trying something brand new.

In the tolling community, however, we are much more than collectors of tolls. Many aspects of our business model could work very well in the wider world of transportation including highways, transit, and parking. This article suggests we may be on the verge of a "local transportation republic."

THE CURRENT TOLLING BUSINESS MODEL

The current tolling business model features local funding through pay as you go arrangements. The revenue collected from these activities flows back into development and operation of the local transportation network. This includes the development of highway and transit infrastructure in the local region.

In more recent times, toll revenues have supported the establishment and operation of electronic payment systems, advanced traffic and incident management systems, and advanced traveler information systems. We also see a trend towards the management of managed lanes, expressways, arterials, and transit as a coordinated system.

The critical feature of the current tolling business model is the ring fencing of locally generated toll revenue to improve local transportation infrastructure and services. In addition, future revenue generating capabilities are used as collateral to borrow capital on the bond market to fuel local transportation development and increase revenue-generating capability in a virtuous cycle. Toll agencies typically have an independent board of directors that seeks to manage the agency towards local transportation policy goals and provide stewardship for local interests and bondholders.

Experience shows that this arrangement places a special emphasis on management by results and the delivery of value to the customer. Experience also suggests that the customer reaction to "pay as you go" facilities such as toll roads is different from that of tax-funded facilities; they expect a higher level of service.

While there is a continuing need to support certain projects through taxpayer funding, establishing a clear connection between the payment for and provision of service is a powerful way to alter user expectations. In short, minimizing the distance between the point of payment and the point of service delivery provides immediacy to the customer relationship that changes the expectations of service providers and customers.

One could argue that "pay as you go" and payment/service alignment mechanisms are also present in transit system operations. Transit customers pay at the point of service and transit agencies have a customer service focus as a result. However, since funding for public transit systems in the U.S. involves not only the farebox but also local and central funding, it may not represent a "pure pay as you go" model.

DRAWING ON A COMBINATION OF PUBLIC AND PRIVATE RESOURCES, THE AUTHORITY WOULD FOCUS ON DEVELOPING THE REGIONAL TRANSPORTATION INFRASTRUCTURE AND ENHANCING SERVICE DELIVERY AND QUALITY.

APPLYING THE TOLLING BUSINESS MODEL ON A SYSTEMIC BASIS

So how can we take the lessons learned and experience gained from the long term application of the tolling business model and apply them more widely to transportation? Here are a couple of thoughts.

First, we can establish local transportation authorities along the organizational lines of toll agencies. (See the article on page 56 by Joseph M. Giglio for an expanded treatment of this topic.) Such agencies would have an independent board of directors to advance the agency's policy objectives of looking after local and bondholder interests. The agency would have the legal power to raise bond financing using tolls and/or local sales tax as collateral.

The development of an "income portfolio" would be a key activity for the board and the agency. One of the board's main tasks would be to conduct a thorough analysis of revenue possibilities that may include local sales taxes and vehicle registration fees to help fund system operations. The income portfolio would be designed to support both capital investment programs and system operations.

Second, we can establish the local transportation authority as a results driven, value delivery enterprise. Drawing on a combination of public and private resources, the authority would focus on developing the regional transportation infrastructure and enhancing service delivery and quality.

This would involve the definition of performance measures that focus on value delivery and results. Private enterprises that execute this superbly tend to have two tiers of performance measures.

The first tier is a high-level summary measure or small group of measures that can be easily communicated to a large number of people (the entire enterprise). The second tier is a drill down of the summary measures. There are usually multiple drill downs, each tailored to the needs of various planning, design, and operations managers.

A good candidate for the tier 1 measure for an existing toll agency might be "return on toll." Along the lines of the return on investment measures currently used to assess the financial effectiveness of projects and activities, this measure would compare the tolls paid by the system users to the return provided by the infrastructure and services delivered. This value probably lies in four major categories: safety, efficiency, environment, and customer service. This definition of what you get for your money is central to communicating the value proposition to the customer.

The clear definition of user value along with the alignment of payment and service points provides a stark contrast to the fuzzy connection between users and taxpayer funded activities. Using these metrics, users can clearly see the value being delivered in return for their contributions.

Some local transportation agencies, notably the leading metropolitan planning organization and many self help counties and transit agencies, are already implementing aspects of the model and have excellent practical experience in organizing for this type of delivery. Agencies that operate managed or express lanes (300 lane miles over nine implementation sites) are also applying many aspects of the model. The goal is to advance and extend the application of this well understood model.

While there is nothing radical in applying the tolling business model to other agencies and levels of government, the very lack of novelty is a positive feature from a risk management perspective. This feature not only minimizes risk but also maximizes the probability of adoption.

In conclusion, as noted above, we in the tolling business are so much more than collectors of tolls. Many aspects of our business model could be applied effectively to the wider world of transportation. We may indeed be on the verge of a “local transportation republic.”

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TOWARD A PURPOSE DRIVEN TRANSPORTATION POLICY

BY JOSEPH M. GIGLIO, Ph.D.,

Editor's Note: *Joseph M. Giglio, Ph.D., is Professor of Strategic Management in the Graduate School of Business at Northeastern University. He has written extensively on the topic of independent regional mobility corporations as institutional mechanisms to deliver transportation services more effectively and efficiently in major metropolitan areas. The article below is an excerpt from a speech he gave to the IBTTA Transportation Improvement Forum in Santa Monica, CA on March 20, 2006. He may be reached at j.giglio@neu.edu.*

In this talk, I have outlined a three-step process for applying pricing to the nation's roadway system.

This process begins by establishing independent regional mobility corporations in our major metropolitan regions, where traffic problems are most severe. These corporations would take over all responsibility for roadways in their regions and be owned by partnerships of government, private firms, and passive investors. They would support themselves by implementing user charges on their region's limited-access highways, based on a pricing structure that can generate enough revenue to meet all of their region's roadway needs.

The next step would be for regional mobility corporations in adjacent metropolitan regions to form jointly owned subsidiaries to take over responsibility for the rural transportation corridors that link them together. These subsidiaries would implement motorist user charges on the Interstate highways in these corridors to generate the revenue necessary to meet its roadway needs. As this concept spreads across the country, virtually all roadways would eventually become supported by motorists through user charges. Ending forever their dependence on fuel taxes and the general tax revenues of state and local governments. Able to generate the funds required to make the nation's roadways a spur to economic growth rather than a constraint.

The third step is the most radical. It involves using some of the revenue generated by motorist user charges as a source of funds to help support other surface transportation modes. There is no sensible reason why freight shipments that can be moved by rail should burden the roads — except that the nation's privately owned freight rail network currently lacks the capacity to accommodate more freight shipments and can't generate the funds on its own to support more capacity. The same is true of mass transit systems in major metropolitan regions. They could take many commuter trips off urban roadways during high demand periods if they had sufficient capacity — which they can't currently afford to build. Motorist user charges represent the only new source of transportation revenue. Doesn't it make sense to use some of it to help support complementary surface transportation systems rather than mindlessly struggle to build more roadway lane miles ad infinitum?

One of the most obvious advantages of these regional mobility corporations is their ability to generate significant amounts of equity cash by selling shares in the private sector. This reduces their need to issue debt for capital reconstruction and expansion. Therefore, they take the next step beyond the traditional public authority model by having a financial structure that is both equity-based and debt-based. Just like any large modern business enterprise. This is a sensible idea on its face, and the technology is already in place to put it to work.

But it is only an idea. To turn it into reality demands intelligent and aggressive leadership to craft the kind of political strategy that this vision requires. One of the critical goals of this strategy is to bring Congress and the White House on board for the legislation needed to provide the flexibility to implement user pricing on the nation's highways where it is applicable, and to involve the federal government in a broader spectrum of capital loan and loan guarantee programs.

Where is this leadership to come from? From my perspective, it should come from those of you who are already in the business of selling roadway access to motorists. Your successful track record building and operating toll bridges, toll tunnels, and toll turnpikes gives you the know-how to implement your basic concept of self-supporting roadways on a national basis. And in the process, turn the American roadway system into one of the most important contributors of its future economic growth.