

Public Works Financing

Published monthly since 1988
by William G. Reinhardt, editor
Westfield, NJ

PWFinance.net
PWFinance@aol.com

Reprinted from December 2011

Transportation Policy Review

Benefits of Revenue-Risk Concessions

By Robert W. Poole Jr., Director of Transportation Studies, Reason Foundation

My column last month on the limitations of availability-payment concessions generated a lot of feedback. One reader pointed out that in addition to Spain and Portugal having second thoughts on the large amount of government debt inherent in this model, the UK government now plans a major rethink of its availability-pay Private Finance Initiative (PFI), due to similar concerns. In late November, the UK Treasury announced that it will explore the use of toll-based concessions, and that it hopes to get UK pension funds involved as investors.

By far the most interesting feedback came from Nicolas Rubio, head of Cintra's operations in the United States. He pointed to additional benefits from concession agreements under which the concessionaire bears traffic and revenue risk. My column had cited three principal benefits of true toll concessions: generating net new transportation revenue (from tolls), fostering better project selection (the projects must pencil out as business ventures), and the transfer of traffic and revenue risk—inherent in greenfield toll projects—from the public to investors.

All true, said Rubio, but from his experience doing revenue-risk concession projects, there are several additional benefits. These all stem from a better alignment of interests when using this model—and the economic benefits that result. I'm going to quote some of his discussion, rather than paraphrasing it.

First is what he calls "the most economically efficient project configuration" from the standpoint of maximizing customer usage and hence revenue. In a revenue-risk concession, "The private partner will carefully review the project configuration to ensure that every single potential user has an easier access to the toll road. In our projects, it is not unusual to find connectivity

improvements (ramp configuration in interchanges, new ramps, etc.) involving higher initial investments that are justified because they bring much higher revenue increases. As a result, the final project will better serve its congestion relieving purpose.”

A related difference is in signage and marketing. “A revenue-risk developer has an interest in the new project being properly advertised through road signage that ensures that every potential user gets to know of the existence of the new road, the options he has to use it, and the benefits that would derive. Equally important, the developer has an interest in properly marketing the new road to potential users, to invest in the sale and distribution of electronic toll collection devices, etc.”

Rubio’s third point is what he calls a “better-oriented procurement process,” but which I would term a stronger focus on value engineering to deliver more bang for the buck. “Most actual projects have economic feasibility issues. . . . Developers [under a revenue-risk model] will focus all their efforts at finding solutions to improve the feasibility of economically unfeasible projects. For example, the NTE and LBJ projects in Texas were not feasible projects within the range TxDOT was expecting. It was only as a result of a long and hard-working industry review process when initiatives on project configuration, contract term, toll-setting mechanism, etc. could be combined to make feasible a project that originally was not feasible.” In the case of the LBJ project, one of the key value-engineering breakthroughs was replacing TxDOT’s proposed location of the new express lanes in a tunnel beneath the freeway with a different configuration, putting the new lanes in a center-located trench and rebuilding the general-purpose lanes cantilevered over them.

The revenue-risk concession model led to similarly impressive value engineering by the Fluor/Transurban team on the Capital Beltway HOT lanes project in northern Virginia. In this case, the unfeasible design concept that VDOT had been unable to fund was a \$3-billion project to add HOV lanes to the most-congested portion of the Beltway. Because that would significantly widen the right of way, there was huge political opposition to the plan due to the need to condemn and demolish some 300 homes and businesses along the corridor. The value engineering was intended to make the project fundable by toll revenue from the lanes being operated as HOT instead of HOV. It involved numerous design changes, including the elimination of concrete barriers separating the HOT lanes from the GP lanes, reduced breakdown-lane widths, etc., mostly aimed at eliminating nearly all of the property takes (hence reducing both political opposition and cost). VDOT ended up accepting most of these changes and design exceptions, but required more bridge reconstruction and other things that increased the original \$1- billion toll-concession project to \$1.9 billion, with VDOT then contributing \$409 million.

The key lesson from both the Texas and Virginia examples is that it makes a big difference when the developer/operator is actually in the business of selling improved mobility (faster and more reliable trips) to paying customers. In a hybrid toll/availability-pay concession, setting toll rates and billing customers is not the concessionaire’s job. Its focus is on building, operating, and maintaining the toll road or toll lanes, to the satisfaction of its sole customer, the state DOT.

That is an improvement over standard highway procurement in many ways, to be sure. Construction risk and completion risk do get transferred to the concessionaire, and the long-term nature of the concession agreement incentivizes the concessionaire to build the project to minimize life-cycle costs, not initial costs (as traditional procurement does).

There will continue to be a role for availability-pay and hybrid availability/toll concessions. But in my view, we will get more real value for highway infrastructure by putting the main emphasis on revenue-risk concessions. Transforming highways into genuine customer-serving businesses will generate more innovation and greater economic value than any other model.