



Toll Concession PPPs: Frequently Asked Questions

By Robert W. Poole, Jr.

What is a PPP?

A public-private partnership is a contractual agreement between a government agency and one or more private firms to carry out a project that is traditionally accomplished by government. For PPPs in infrastructure, such as highways, the types of PPP include (1) DB (design-build), in which a single integrated team does both the design and construction of the project, (2) DBOM (design-build-operate-maintain), in which a consortium of companies handles design, construction, and ongoing operations and maintenance of the facility for a period of years in exchange for annual payments from the state, and (3) DBFOM (design-build-finance-operate-maintain), in which a consortium is responsible for financing the project as well as the other tasks. These are all departures from traditional DBB (design-bid-build), in which the state first does (or contracts for) the design and then goes out to bid for a construction contract. Under DBB, selection of the contractor is based solely on the lowest cost to construct, ignoring the cost of decades of maintenance, which can be reduced by a more robust (but slightly more expensive) design.

What is a toll concession PPP?

A toll concession is a DBFOM highway contract in which the principal funding source is tolls charged to users of the highway project. The projected toll revenue stream is used to support long-term revenue bonds, in addition to covering operation and maintenance costs of the project. In a toll concession, the consortium that wins the right to do the project takes on the risks of (a) construction cost overruns, (b) late completion, and (c) inadequate traffic and revenue. Those risks would otherwise be borne by the government (and hence, the taxpayers).

Aren't toll concessions a form of crony capitalism? After all, smaller firms are excluded from bidding on these projects.

Toll concessions are used mostly for major projects (sometimes called mega-projects). Government seeks to reduce the odds that the project will turn out to be a boondoggle, due to large cost overruns or insufficient traffic and revenue. Therefore, standard practice worldwide is to do the competition in two stages. In the first stage, any firm or set of firms may submit its qualifications to do projects of this size and complexity. A key aspect of being qualified is having prior experience successfully carrying out DBFOM projects. An expert review board then selects the best-qualified three to five teams and invites them to bid, as stage two. Because preparing detailed proposals takes considerable time and money, it makes sense not to have a dozen firms invest that kind of time and money with only a small chance of winning. Both stages involve objective criteria.

Why aren't toll concessions awarded solely on who submits the lowest-cost proposal?

In a toll concession, the winning team is responsible not only to finance and build the project but also to maintain it for 35 to 70 years. So the sensible thing to minimize is not the *initial* cost but the *life-cycle* cost. Proper maintenance over the life of the concession can cost several times as much as the initial construction cost. It is penny-wise and pound-foolish to build a major highway as cheaply as possible if this will mean significantly higher maintenance costs over its 50-year design life. But that is what often happens with typical construction-only highway (DBB) contracts, awarded based only on lowest *initial* construction cost.

Doesn't most of the funding in these projects come from government?

No. Like most other large infrastructure (railroads, pipelines, electric utilities), toll concession companies *finance* these projects with a mixture of debt and equity. Equity is cash they put directly into the project (like the down payment on a home), typically around 20% in toll concessions. The debt may be a mix of revenue bonds and bank loans (analogous to the mortgage on a home). In some cases subordinated loans from the Federal Highway Administration are also used, under a program called TIFIA, enacted by Congress in 1998 to encourage PPP infrastructure. Toll revenue is intended to repay all the debt providers and to realize a return on the company's equity investment. In some toll concession mega-projects, the state DOT has imposed many costly requirements that make the total project cost more than the projected toll revenues can cover. In those cases, the state DOT may contribute 15 to 30% of the project budget, often with an agreement to share in the toll revenues if the project does better than forecast.

Don't the companies doing toll concessions get guaranteed profits?

No. A key feature of toll concessions is the transfer of major risks from taxpayers to the investors (the providers of debt and equity). In traditional highway construction-only projects (like the notorious Big Dig in Boston), contractors often bid low and later propose numerous "change orders" during construction, which can increase the cost well beyond the amount of their initial bid. That cannot happen in a toll concession, because the construction cost overrun risk has been taken on by the company. The same is true of the traffic and revenue risk. The only way a concession company can make a profit is if it keeps a lid on construction and operating costs and if its traffic and revenues end up equaling or exceeding what it projected in its financial model.

What happens if a toll concession project goes bankrupt? Do taxpayers bail it out?

In the two decades or so in which toll concessions have been used in the United States and Australia, four of the 22 U.S. projects have gone bankrupt, as have four of 16 Australian projects. In *none* of these cases did taxpayers bail out the investors. Typically, the equity providers lose their entire investment, and the debt providers negotiate reduced payments (referred to as a "haircut"). The lenders usually have the right to auction off the remaining term of the concession to another company, which must agree to the provisions of the original concession agreement. The highway in question remains in operation during and after the bankruptcy.

What about TIFIA loans? Don't federal taxpayers end up taking a loss on those in a bankruptcy?

Thus far, only two TIFIA loans for toll concession projects have experienced problems. The South Bay Expressway in San Diego filed for bankruptcy in 2010, due to insufficient traffic and toll revenue. A 2011 report from the Congressional Budget Office put TIFIA's potential loss at \$72 million.

Subsequently, however, the lenders sold the Expressway to the San Diego Association of Governments (which got a nearly brand-new toll road for 44% of its original cost). Under the revised financing deal, TIFIA is getting a higher interest rate on its investment-grade debt (paid for out of toll revenues), and the Federal Highway Administration now finds that "the TIFIA program is positioned to receive 100% of its original loan balance." In the case of the Pocahontas Parkway in Virginia, the lenders assumed ownership of the toll road after revenues fell short of projections. The lenders, including TIFIA, could choose to remain in the project and seek to recover the full principal over the life of the concession or sell their interest in the project. After one lender sold its loan at a percentage of face value, TIFIA opted to do likewise, selling its loan at 41.5% of face value. That loss—TIFIA's only one thus far—amounted to just 1.1% of the TIFIA program's total loans (as of 2014). Of these, 39 loans are active and nine have been repaid thus far.

Don't these projects amount to double taxation—paying tolls and gas taxes for the same project?

Using a toll road is a voluntary choice; people only use it if they value the improved travel as worth the cost of the toll. If the state DOT has provided part of the "equity" in the project (because it would not be viable based solely on toll revenue), then the state DOT does use gas tax money, because that is usually its only source of highway funding. In those cases, it *requires* both gas taxes and toll revenues to make the project possible. Some toll concession projects have been financed 100% by toll revenues—such as the 91 Express Lanes in Orange County, California and the Jordan Bridge in Chesapeake, Virginia. In those cases the toll payers should, in principle, receive rebates on the fuel taxes they pay for the miles driven on the tolled projects, but current law generally does not provide for that. Rebates *have* long been available on the New York Thruway and the Massachusetts Turnpike, two state-run toll roads. In the future, if worn-out and currently non-tolled highways are replaced (i.e., rebuilt and modernized) via toll concessions, highway users should insist that those new tolls *replace*, rather than supplement, existing gas taxes. That is not hard to do with today's all-electronic tolling technology.

Why should for-profit companies get tax-exempt loans from the government?

Congress in 2005 decided that state toll agencies and toll concession companies are in the same business of providing tolled infrastructure, and that both should have access to the same kind of revenue bonds. Since state toll agencies have long relied on tax-exempt bonds, Congress authorized tax-exempt status for “private activity bonds” (PABs) used for highway and transit projects with a dedicated revenue stream. These are not “government loans,” however. By law, they must be *issued* by a state agency on behalf of the PPP concession company, but that *company* is solely responsible for paying off the loans. There is no recourse to the taxpayers, any more than there is with any other revenue bond that is secured solely by the revenues generated by a project.

Won't the private concession company skimp on maintenance, so as to increase its profits?

Skimping on maintenance is a bad idea, since it will lead to poor pavement quality and unsightly appearance, both of which make the tolled highway less attractive to paying customers. In addition, the bond covenants, which the concession company must agree to in order to sell the revenue bonds, require proper ongoing maintenance precisely to keep the road in better shape than alternative “free” highways. And the concession agreement with the state DOT also provides for enforceable maintenance standards.

Do governments grant toll concession projects a monopoly?

There are very few situations in which there is only one road or highway between point A and point B. Some people object when a project once planned as a “free” highway is developed as a toll road instead because the state DOT does not have the money to build it using gas tax revenues. But that road is not a monopoly; there are almost always alternatives to using the toll road. (In Texas standard practice is to include multi-lane frontage roads on either side of a toll road.) Concerns have been raised about provisions in many (but not all) concession agreements that provide some limits on new “free” highways being added parallel to the toll road. When the first toll concession project (the 91 Express Lanes in California) was being financed, the debt providers insisted on protection for the toll revenue stream via the inclusion of a “non-compete” provision in the concession agreement, under which the state DOT agreed not to build any more non-tolled lanes in that corridor. That turned out to be overkill. Current practice is that the concession company agrees to accept all highway and transit projects in the current long-range transportation plan of the state or metro area. For any *other* projects that might be proposed and implemented later, if the company can prove that X% of its traffic diverts to the new free road, it is entitled to some degree of compensation for lost toll revenue.

Doesn't the long term of these agreements conflict with government sovereignty and sound transportation management?

Some have urged limiting toll concession agreements to 25 or 30 years, since nobody can know the future. That lack of a crystal ball is as true of governments as it is of concession companies. In deciding to use a toll concession to provide a needed new (or replacement) highway or bridge, the state DOT or the local Metropolitan Planning Organization (MPO) must weigh the trade-offs involved. In many cases, if they don't use a toll concession, the needed project might not be fundable for 20 years or more. If they do use a concession approach, the term of the agreement must be long enough to provide the possibility of the company earning a return on its investment—which can range between 35 and 70 years, depending on the project. The concession company takes many risks since it cannot know the long-term future of transportation—autonomous vehicles, major changes in where people choose to live and work, etc. The government also takes the risk that the project might turn out to be of low value many decades hence, but it cannot forecast the future any better than the concession company and its investors. Most concession agreements do include provisions for early termination, on a basis that is fair to both parties. That is probably the least-bad way to deal with the inherent uncertainties of the future.

Don't these projects convert free roads into toll roads?

There is not a single known case in the United States of a toll concession project converting a free highway or bridge into a tolled highway or bridge. This allegation appears to be based on either of two kinds of situations. In the first, an existing bridge or highway is worn out and must be replaced—but the only available funding source is toll revenues (e.g., the Jordan Bridge in Virginia). Another situation is when a highway that was originally intended to be upgraded into a freeway (with limited on-ramps and off-ramps, overpasses of local roads and no traffic lights) cannot be done due to lack of gas-tax revenue and is done instead as a tollway. This is what happened in the suburbs of San Antonio with SH 281. Texas DOT announced that instead of upgrading this signalized arterial into a freeway, the needed upgrade could only be built via toll finance. That set off a major political battle in which opponents claimed that this was “converting a freeway into a toll road”—but it was nothing of the kind.

Aren't these tolls just another kind of tax?

There is a fundamental difference between a toll and a tax. This question has been litigated extensively in California and Virginia. In 2013 the Virginia Supreme Court ruled that the tolls planned for a concession project to expand the tunnels under the Elizabeth River in Virginia were not taxes, for three reasons. First, those who pay the toll receive a specific benefit not available to those who don't pay. Second, drivers have a choice of other ways to cross the river (though maybe not quite as convenient), so paying the tolls is a choice. Third, the tolls are collected solely to fund the tunnels project, not to provide general revenues to any unit of government. There are some cases in which government toll agencies divert toll revenues to pay for other things—other highways, mass transit, canals, ferries, economic development, etc. In fairness, the *diverted* toll monies are essentially taxes. The projects they are used for should be paid for by all highway users or all taxpayers, not just those who use toll roads and bridges. Fortunately, this kind of diversion is not found in toll concessions.

Why should we let foreign companies control our highways?

Concession companies do not control highways. The several hundred pages of a long-term toll concession agreement do not cede “control” to the company. Via the agreement, it must comply with a wide array of state and federal requirements, and most such agreements include limits on the toll rates that can be charged. The agreements also provide termination clauses, both for cause (repeated failure to abide by the terms and requirements) and for convenience (if government policy changes—but in this case, the government must compensate the company fairly). It is true that in these early days of U.S. toll concessions (nearly all have been financed only since the early years of the 21st century), most concession companies have been joint ventures that have included one or more non-U.S. companies. There is a good reason for this. The United States, until recently, has had no private-sector toll road industry—so nearly all the experience and expertise is from countries that have such industries. Australia, France, Italy, Spain and Portugal are among the leading countries with well-established toll road industries. Companies with long track records in those countries have therefore been key players in the start-up of toll concessions in America. Much of the financing also reflects overseas investors, especially from Australia, Canada and France, but in recent years many U.S.-based infrastructure investment funds have become important financiers of toll concessions. Major U.S. engineering and construction companies increasingly team up with overseas toll companies and investment funds, so the industry will gradually take on a more home-grown character as experience increases.

Don't toll-concession highways cost a lot more to build than state-built highways?

Wild claims have been made that toll concession highways cost two or three times as much as ordinary highways. There is no factual basis for such claims. Installing state-of-the-art all-electronic tolling systems adds a few percentage points to the cost of a tolled highway. As noted earlier, a tolled highway is generally built more durably than a “free” highway, because doing so results in significantly lower maintenance costs over 50-odd years, minimizing life-cycle costs, not initial construction costs. So a toll concession project might cost 15% more to construct than a non-tolled highway—but nothing like two or three times as much. The value proposition here is that in exchange for a slightly higher initial cost, the highway will have significantly lower life-cycle costs, and taxpayers will be shielded from any cost overruns or revenue shortfalls. In addition, the needed bridge or highway may get built decades sooner via toll funding, compared with traditional DBB procurement based on gas tax money.

Why not have legislators vote yes or no on each PPP agreement?

This has been proposed by opponents of toll concessions, and also by well-meaning legislators. In fact, such a provision has been included in several state PPP-enabling statutes, with the result that no PPP projects were ever proposed in those states—until after the law was changed. The reason for this, especially for toll concessions (which are large, complex projects), is the following. The pre-qualified consortia that bid for such a project must invest large sums of money in analyzing potential traffic and revenue, estimating the cost to design and build the project, estimating maintenance costs, etc. The winning team must then spend many months negotiating the numerous provisions that constitute the concession agreement. The state DOT likewise invests its own senior staff time plus the expensive time of its legal and financial advisors. After all of that time and expense, to have elected officials either veto the project or change the terms of the deal (which may make it impossible to finance) creates a large risk that all of the companies' and the DOT's time and money will have been wasted. Companies faced with that kind of risk can take their expertise to other states and other countries that provide a PPP-friendly situation. The enabling legislation should spell out the general terms and conditions under which PPP concessions can be used by the state DOT, but leave the specifics of each competition and the negotiation of each agreement to the DOT and its legal and financial advisors.

Don't unions oppose PPPs such as toll concessions?

At this early stage in the history of U.S. toll concessions, there is no overall labor union position of this subject. As a broad generalization, building-trades unions are generally favorable to toll concessions, which they view correctly as expanding the amount of highway construction work that will take place. Public employee unions that work for state DOTs (as in California) generally oppose toll concessions (and even design-build), because they view these procurement methods as outsourcing jobs (such as project design) that they believe should be done only by government employees. Ironically, U.S. public-sector employee pension funds have begun seriously investing in PPP infrastructure, both here and overseas. Some of the largest ones (e.g., CalPERS) now have specialized staff that research PPP projects and recommend direct investment in specific projects (e.g., privatized London Gatwick Airport). Smaller pension funds more commonly place a portion of their investment portfolio with one or more global infrastructure investment funds, taking advantage of those funds' expertise and their diversified portfolios of projects.

About the Author

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For further information, please consult the following:

Robert W. Poole, Jr., "Frequently Asked Questions on Toll-Financed Interstate Reconstruction," Reason Foundation, May 2014
(http://reason.org/files/toll_financed_interstate_reconstruction_faqs.pdf)

Robert W. Poole, Jr. and Adrian Moore, "Ten Reasons Why Per-Mile Tolling Is a Better Highway User Fee than Fuel Taxes," Policy Brief 114, Reason Foundation, January 2014
(www.reason.org/files/why_tolling_is_better_than_fuel_taxes.pdf)

Robert W. Poole, Jr., "Value-Added Tolling: A Better Deal for America's Highway Users," Policy Brief 116, Reason Foundation, March 2014 (www.reason.org/files/value_added_tolling.pdf)