



# BUILDING NEW ROADS THROUGH PUBLIC-PRIVATE PARTNERSHIPS: FREQUENTLY ASKED QUESTIONS

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## What is a Public-Private Partnership?

Public-Private Partnerships (PPPs or P3s) are collaborations between governments and private companies that aim to improve public services and infrastructure in a manner which captures the benefits of private sector involvement (such as cost- and time-savings) while maintaining public accountability.

While PPPs can take a variety of forms, in transportation, long-term PPPs are increasingly being used for new road construction and modernizing existing roadways. These PPPs involve a private company investing risk capital to design, finance, construct, operate, and maintain a roadway for a specific term during which it collects toll revenues from the users. The public agency oversees all aspects of the agreement, from maintenance to setting toll rates. In some cases the private toll company pays the public agency an upfront fee for the contract, and in others the public and private partners share in the revenue generated by the road. When the contract expires, the government can negotiate a new arrangement or take over the facility at no cost.

## What are the benefits to state governments?

PPPs are an effective way of financing, managing and operating roads while minimizing taxpayer costs and risks. Governments across the country and around the world are seeking ways to finance much-needed infrastructure projects and trying to deliver better services to taxpayers. Public-private partnerships maximize the strengths of both the public and private sectors, offering taxpayers more efficiency, accountability, and cost- and time-savings. PPPs can be used to build roads and highway projects that may have been delayed or shelved altogether due to fiscal constraints.

In fact, the major highway funding shortfall is a key reason governments are increasingly turning to long-term PPPs to deliver new transportation projects. A recent Federal Highway Administration report estimated that the annual capital investment in our highways totals \$68 billion, which is \$6 billion less than what's needed simply to properly maintain the condition of our highways and bridges. Moreover, an additional \$51 billion per year would be needed to improve and expand the highway network just to keep up

with the increasing demand for auto and truck travel.

The existing state and federal fuel tax and highway trust fund system is unable to meet these investment needs. Neither Congress nor most state legislatures have increased fuel taxes to levels that would even offset increases in fuel efficiency and inflation, let alone funding needed road maintenance and increased travel demand. So increasingly, states are turning to toll finance and PPPs to begin to fill the funding gap.

## How common are public-private partnerships in the transportation world?

PPPs for complex, multi-billion dollar transportation projects have been used for decades in Europe, and more recently in Australia and Latin America. During the 1990s they began to be used in the United States and Canada as well. PPP toll projects are in operation in California, Texas, and Virginia, as well as several Canadian provinces. Large transportation PPPs in excess of \$1 billion are in operation or under construction in Melbourne, Sydney, Paris, Israel, Santiago, and Toronto.

## What is a long-term concession?

Concessions are essentially leases, and the term long-term concession is generally used to describe PPPs where the private toll road company designs, finances, constructs and operates a toll facility for anywhere from 30 to 99 years.

## How does a long-term concession PPP work?

In exchange for a long-term lease arrangement, an investor-owned company will finance, design, build, operate, modernize, and maintain a highway project, financing its expenditures from the toll revenues it is allowed to charge. However, the state or local government still owns the roadway and protects the public interest through negotiating and enforcing the terms of the concession contract.

Essentially this model extends the investor-owned utility concept from network industries like electricity and telecommunications to highways. Just as those industries are vital to the public interest, so too are highways.

Are there other ways of involving private enterprise in toll roads without large upfront payments to governments and nothing for taxpayers beyond that?



The state (or county or city) has flexibility in how it negotiates the lease payments. Texas and Virginia have both negotiated long-term leases which provide for a smaller upfront payment but a 50/50 profit share beyond a set rate of return. In Europe, concession agreements have been crafted which provide annual payments with no upfront fee. In Australia, the bidding on one particular project was not based on the size of the concession fee but on the lowest toll rates.

For a state entering into a concession deal, there are two key trade-offs between upfront payment versus ongoing lease revenues over the life of the agreement: (1) current capital needs versus long-term needs, and (2) a “sure thing” (upfront payment) versus some risk as to what future revenues may be. There is no right answer; each state must weigh the trade-offs involved with each individual project.

Regardless of how the state is paid for the concession, when it involves the construction of a new roadway, the taxpayers gain a state-owned asset that can continue to provide mobility and generate revenue long after the lease term.

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“Now, much of [our] vital infrastructure is showing its age [...] And at the very same time, our growing economy is placing increasing demands on every one of our systems, even while the funding sources we have relied on are less and less able to keep pace. If we are going to escape the forces of the perfect storm that are gathering before us, we must find fresh angles and creative ways to improve the performance of our transportation systems.”  
—U.S. Secretary of Transportation Mary Peters, Swearing-in Ceremony, Oct. 17, 2006

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## What are the advantages of PPP toll roads?

### 1. Delivery of needed transportation infrastructure:

PPPs offer governments and taxpayers a way to fund roads that otherwise would not be built. Many states are facing a “perfect storm” in transportation: growing transportation needs are outstripping available funding; the need for maintenance and renovation of existing systems is using up available resources; and congestion is getting worse by the day. In short, there’s just not enough funding to adequately maintain the roads we already have, much less build all of the new roads needed to relieve traffic congestion.

With long-term PPPs, not only does the private sector take on much or all of the responsibility of financing new roads, but governments can use the funds generated through upfront concession fees or revenue sharing agreements to invest in the rest of their transportation infrastructure. For example, Indiana will be using the \$3.8 billion payment it received for the Indiana Toll Road concession to cover a multi-billion dollar funding shortfall in the state’s 10-year transportation plan; planned transportation investments statewide that were previously unfunded are now able to be undertaken.

Further, taxpayers and drivers enjoy a double benefit through PPPs: not only do they benefit from new roads that reduce congestion, but the willingness of the private sector to finance highway projects offers policymakers an attractive alternative to tax hikes as a means of funding new roads.

**2. Ability to raise large, new sources of capital for toll projects:** Rebuilding and modernizing our freeways and

Interstates will be far more costly than most people realize. The long-term concession model can raise significant investment capital for new transportation infrastructure because it is attractive to many different types of investors, including equity investors and lenders. For example, highway infrastructure is increasingly appealing to institutional investors like pension funds that seek stable, low-risk investment opportunities.

There is also growing evidence that the long-term concession model can generate significantly more funding for a given toll project than the traditional government financing models. For a new toll road in Texas, for example, a toll traffic and revenue study estimated the state’s ability to finance \$600 million, less than half of the project’s total \$1.3 billion cost. Texas DOT turned to a long-term concession approach, in which the private sector will finance the entire \$1.3 billion project, in exchange for a 50-year concession. Four factors seem to drive these differences:

1. The concession agreement adds certainty to future toll rates that are less predictable under public toll agencies.
2. The private sector is more aggressive in both attracting motorists and in reducing costs (e.g., by making full use of electronic toll collection).
3. The private sector can take depreciation as a tax write-off, like any other business, but toll agencies can’t, since they pay no income taxes.
4. Infrastructure has become a fashionable asset class for a host of investors that do not normally invest in tax-exempt toll-agency bonds. Michael Wilkins of Standard & Poor’s recently estimated that \$100-150 billion in private capital was raised in 2006 alone to invest in infrastructure.

**3. Shifting risk from taxpayers to investors:** PPPs involve parceling out duties and risks to the party best able to handle them. The state is the party best able to handle rights-of-way and environmental permitting, so those roles remain with the state. The private sector in these deals nearly always takes the risks of construction cost overruns and possible traffic and revenue shortfalls. Given the difficulty of completing transportation mega-projects on time and within budget, being able to shift construction and traffic/revenue risk to investors is a major advantage.

**4. More businesslike approach:** Compared with government-run toll agencies, private toll road companies are less susceptible to pressure from narrow political interests

and are more customer service oriented, since it directly affects their economic viability. They are quick to adopt cost-saving and customer-service oriented technology and specialized products and services to meet customer needs.

**5. Major innovations:** One of the most important advantages of investor-owned toll road companies is their motivation to innovate in order to solve difficult problems or improve their service to customers. Today, we know that variable pricing (also known as value pricing) works very well to eliminate traffic congestion during peak periods, actually maximizing throughput while maintaining high speeds. It was a private toll company in California that took the initiative to introduce and perfect value pricing; no state toll agency was willing to take the risk of doing so.

Toll road companies are also good at value engineering—thinking outside the box to dramatically reduce the costs of new capacity. A case in point is the forthcoming High-Occupancy Toll (HOT) lanes project on the Capital Beltway in northern Virginia. The Virginia DOT’s plans to add two HOV lanes in each direction on that section of the Beltway would have cost taxpayers \$3 billion—money that Virginia did not have. The private sector team’s unsolicited proposal called for adding two HOT lanes in each direction—the same amount of physical capacity—for under \$1 billion. The savings came from value engineering that reduced or eliminated many expensive bells and whistles held little real benefit.

Private toll road companies are motivated to think outside the box, to solve difficult design problems. In France, an unsolicited proposal from a private toll firm resolved a 30-year impasse over how to complete the missing link of the A86 Paris ring road, which would need to pass through historic Versailles. The company is building a deep-bore tunnel underneath—instead of through—Versailles, and is financing the \$2 billion project with value-priced tolls.

### How is the public interest protected in a PPP? Won't the state be losing control of the public highways?

Roads built using public-private partnerships belong to the state. When drafting the contract with the private sector, the government can—and should—completely protect taxpayers by demanding accountability.

Concession agreements are typically several hundred pages long and may incorporate other documents (e.g., detailed performance standards) by reference. No detail is too small; for instance, the Indiana Toll Road lease specifies



that the private company has to clear dead animals from the road within eight hours and fill potholes within 24 hours. The public interest is protected by incorporating enforceable, detailed provisions and requirements into the contract to cover such things as:

- Who pays for future expansions and rebuildings;
- How decisions on the scope and timing of those projects will be reached;
- What performance will be required of the toll road and the private toll company (i.e., safety, maintenance, plowing, and many other requirements);
- How the contract can be amended without unfairness to either party;
- How to deal with failures to comply with the agreement;
- Provisions for early termination of the agreement;
- What protections (if any) will be provided to the company from state-funded competing routes; and
- What limits on toll rates or rate of return there will be.

Isn't 50+ years far too long to lease valuable roads? State governments are committing future generations when they cannot predict what the needs will be.

It is entirely possible that changing circumstances will require revisions to the lease. That is why all concession agreements have detailed provisions to permit changes during their term. Concession agreements have detailed provisions for negotiating and arbitrating disputes, and employing independent parties to make fair financial estimates. The only limit to changes in the terms of the conces-



sion is normally that neither side should be disadvantaged financially by the changes.

State governments regularly make commitments that impact taxpayers for longer than 50 years. Bonding for infrastructure and changing pension benefits are two examples. Because the capital costs for major infrastructure projects are so high, it is necessary to finance them over long periods of time.

### What happens if the private concessionaires go bankrupt after a new toll road is built?

If a concessionaire were to file for bankruptcy or close during a lease period, the contract would end and the state would take the toll road back without any obligation to repay concession fees. The state would essentially get the road for “free,” and it could then re-concession the toll road or run it itself.

### Where are PPPs being used to build new toll road projects?

There are more than \$25 billion in PPP highway projects planned or already approved across the United States. The largest is the Trans Texas Corridor-35 (TTC-35) where a private consortium has been chosen by the Texas DOT to build 316 miles of new toll road. The company will spend about \$7.2 billion—\$6 billion on construction plus \$1.2 billion in concession fees—in return for a 50-year concession agreement. This project will produce a completely new route between Dallas and San Antonio, providing an alternative to congested I-35. The new road will eventually be extended south to Mexico and north to the Oklahoma state line.

There are also several billion-dollar-plus proposals being negotiated in Virginia: new HOT lanes on the Capitol Beltway (I-495) and I-95/I-395 in northern Virginia, and a new Crossing complex in Hampton Roads. Colorado is also receiving private sector proposals, as are Florida and Georgia. In all, 21 states and one U.S. territory have passed legislation enabling the use of PPPs for highway projects.

Overseas, investor-built toll roads are far more common; in fact, they have become the conventional way to provide major new highway capacity in many countries. The private sector is financing, building, and operating most of the major new highways in countries as diverse as China, India, Canada, Britain, Ireland, France, Spain, Italy, Greece, Hungary, Poland, Pakistan, Turkey, Indonesia, Malaysia, Israel, South Africa, Australia, Philippines, Argentina, Brazil, Chile, and Jamaica. Most of the postwar toll motorway systems in France, Italy, Portugal, and Spain were also built using the concession model.

Though PPPs in transportation are relatively new to the U.S., over the past 15 years, the private sector has built several new toll roads under long-term franchise agreements with state governments, including the 91 Express Lanes in Orange County, California, the SR 125 in San Diego, the Dulles Greenway in Northern Virginia, and the Camino-Colombia Toll Road near Laredo, Texas.

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“Texas is showing the rest of the country how to expand major parts of its highway system by leveraging private capital. That is why more states need to follow Texas’ lead and pass legislation allowing the private sector a broader role in funding and operating transportation systems.” – former U.S. Secretary of Transportation, Norman Mineta

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### Why are so many of the companies building toll roads foreign companies?

Until recently the United States had used only public-sector agencies to build and operate toll roads, so there has been no opportunity for the industry to grow in the U.S. Foreign countries have been using transportation PPPs for decades, so it makes sense that foreign firms would be the most experienced toll road providers. A responsible state government will take experience and track record into account when choosing a private firm to operate a roadway.

As the U.S. market matures, we are starting to see the emergence of domestic toll road companies. Already, joint ventures between U.S. and global companies are bidding on





PPP projects—Fluor/Transurban, Zachry/Cintra, Kiewit/Macquarie, to name several recent examples. Likewise, U.S. financial institutions have been creating multi-billion-dollar infrastructure investment funds, so these deals will soon be tapping U.S. capital in a major way.

It's important to remember that even deals which only involve foreign companies are very good for the U.S. economy. Attracting billions of dollars in global capital (and expertise) to modernize America's vital highway infrastructure and provide local employment in both operation and construction is a large net gain for this country. Further investment in our transportation infrastructure only makes the U.S. more competitive in the global marketplace as well.

### Isn't it wrong to sell off a major government transportation asset to private or overseas interests?

Concessions are not the sale of an asset. Concessions are essentially a lease—only the right to do business under highly specified contractual conditions is being transferred to a private entity. The state retains full title and ownership of the asset itself.

### In the post 9/11 world, wouldn't we be safer if the government or U.S. companies—as opposed to foreign companies—were managing U.S. infrastructure?

Fears regarding the foreign management of domestic infrastructure are based on the prevalent, but false, myth that there is a greater risk of a security breach when American infrastructure assets are managed by foreigners. Foreign-owned companies have successfully operated numerous critical infrastructure systems and assets in the United States—from airports to highways to water and wastewater plants—for many years. The country has remained safe under these arrangements because these companies have a

strong interest in keeping their customers healthy and happy and maintaining their business. Further, foreign firms are subject to the same legal and regulatory security requirements as any domestic firm or public agency. Concession agreements usually provide for state police to do their policing on the road, as before. Security vetting of employees can be implemented, and improved surveillance systems made part of the concession agreement.

### Won't private companies just try to make a profit by raising tolls or reducing service?

Lowering service would lose the toll company paying customers, which is the last thing a business wants to do. Higher tolls can also drive customers away if they aren't accompanied by reduced travel times and better service. While it is true that many drivers aren't able to be flexible about the route they take to work, there are always enough drivers with options to keep the toll company focused on service. Toll road companies have a strong incentive to increase profits by greater efficiency—by doing more with less. A more efficient toll road will benefit users.

### But couldn't a private company double tolls and make just as much money with half the traffic?

The fear that PPPs will lead to uncontrolled, sky-high tolls is unjustified. Most concession agreements to date specify an annual cap on toll increases using various inflation indices. It is important to note that those caps are ceilings; the actual rates a company charges will depend on market conditions. Before entering into any toll road project, a company would develop detailed traffic and revenue forecasts to determine how many vehicles would use the toll road at what price; too high a toll rate means fewer choose to use the toll road, which generally means lower total revenue. So the toll road must select the rate that maximizes total revenue. Over time, a company may choose to set the toll rate lower than the caps provided in the concession agreement, especially in recession years, to attract more drivers.

By contrast, there are some types of PPP projects—such as HOT lanes or Express Toll Lanes—where tolling is used to manage traffic flow. Toll rates are allowed to vary throughout the day to keep these lanes flowing freely. In those cases, pre-defined limits on toll rates defeat the purpose. When such lanes are operated under a concession

agreement, instead of limiting the toll rates, the agreement can limit the rate of return the company is allowed to make, with surplus revenues going into a state highway or transportation fund. This is how California's original pilot program for long-term concessions dealt with the issue, as have similar deals in Texas and Virginia.

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"[O]ur economy depends on us having the most efficient, reliable transportation system in the world. If we want people working in America, we've got to make sure our highways and roads are modern. We've got to bring up this transportation system into the 21st century."  
—U.S. President George W. Bush, *Safe, Accountable, Flexible, Efficient Transportation Equity Act Signing Ceremony*, Aug. 10, 2005

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### Isn't this just a ploy by the major investment banks on Wall Street to earn big commissions?

Toll roads have to be financed, whether government toll authorities sponsor them or toll road companies do. Both public and private financings involve big commissions to the financiers who put together these transactions. Private transactions sometimes require smaller financing commissions than do the public equivalent because part of the money is private equity, and there is less need for large reserve funds. These services are paid for by the toll companies, who have every incentive to shop around for the best service and the lowest commission.

### Non-compete clauses in concession agreements prevent the construction or improvement of parallel roads, preventing competition. Isn't this bad?

Nearly all self-financing toll roads, whether government or privately owned, need some protection from tax-financed alternative roads. This is akin to the world trade rules that limit European governments subsidizing Airbus. Just as Boeing cannot be expected to sell in competition with a heavily subsidized Airbus, so toll roads cannot be financed if taxes are used in unrestricted fashion to provide equivalent parallel service free of charge.

Clauses designed to protect toll road operators from the construction of new, parallel "free" roads have evolved over the years. The earliest approach—an outright ban on alternative facilities—proved to be unnecessary as well as politically unpopular, giving rise to modern agreements that include a much wider definition of what the state may build: generally, everything in its current long-range



transportation plan. And for new roadways the state builds that are not in its existing plan and which do fall within a narrowly-defined competition zone, the current approach is to spell out a compensation formula. The idea is to achieve a balance between, on one hand, limiting the risk to toll road finance providers (of potentially unlimited competition from taxpayer-provided "free" roads) and, on the other hand, the public interest.

Two recent long-term lease transactions provide a useful illustration. For the Chicago Skyway concession, there were no protections for the private-sector lessee. For the Indiana Toll Road, the concession agreement set up a narrow competition zone alongside the toll road. The state may add short, limited-access parallel roads (e.g., local freeways), but if it builds a long-distance road within the competition zone, there's a formula for compensating the private sector for lost toll revenue.

### Couldn't the public sector raise just as much money as the private concession leases?

Not likely. The single most important factor driving the higher valuation accorded to concession toll road deals is the certainty of being able to set toll rates over the life of the agreement to ensure a return on investment. No one has yet devised a way to bind future elected officials from interfering in the toll-setting decisions of state toll agencies—and the capital markets take that into account in judging what they will finance. But by allowing the state to enter into concession agreements—which are legally enforceable long-term contracts—a legislature can choose to limit its future ability to intervene in toll-setting decisions, thus creating certainty and stability, which are essential to encouraging investment.

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