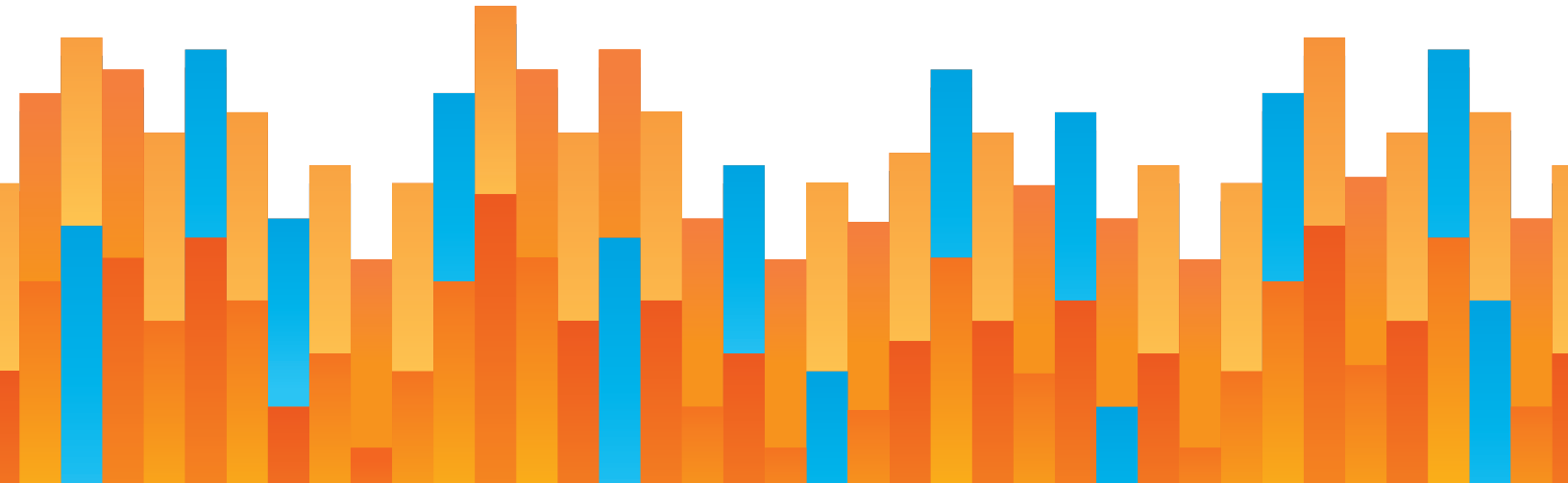
reason FOUNDATION

FREQUENTLY ASKED QUESTIONS: HIGHWAY P3S

by Austill Stuart and Baruch Feigenbaum
May 2018



Reason Foundation's mission is to advance a free society by developing, applying and promoting libertarian principles, including individual liberty, free markets and the rule of law. We use journalism and public policy research to influence the frameworks and actions of policymakers, journalists and opinion leaders.

Reason Foundation's nonpartisan public policy research promotes choice, competition and a dynamic market economy as the foundation for human dignity and progress. Reason produces rigorous, peer-reviewed research and directly engages the policy process, seeking strategies that emphasize cooperation, flexibility, local knowledge and results. Through practical and innovative approaches to complex problems, Reason seeks to change the way people think about issues, and promote policies that allow and encourage individuals and voluntary institutions to flourish.

TABLE OF CONTENTS

PART 1

INTRODUCTION

Soon after the advent of the automobile, federal, state and local governments combined to fund the bulk of highway building and upkeep in the U.S., with government funding of transportation starting in the early 1920s. Over the past couple of decades, however, state and local governments, facing increased commitments to health care, pension and other costs, have found making commitments to highway funding more difficult. During the same time period, the federal government's budgetary commitment to highway funding has also dwindled—from a 1965 peak of about 3.5% of federal outlays to 1.5% in 2016, according to the Eno Center for Transportation.

As state and local governments increasingly face fiscal challenges in making improvements to existing highways, adding highway capacity, and ensuring projects are sufficiently maintained to avoid deferred maintenance problems, public-private partnerships (or P3s) are emerging as a policy tool to help ensure efficient project delivery as well as maintenance and upkeep of highways over their design life.

While common in much of Europe and elsewhere, highway P3s remain a newer phenomenon in the U.S., and one not always well understood by both advocates and critics alike. This document answers some of the common questions individuals often pose about highway P3s, while clearing up some of the common misconceptions made about P3 agreements.

PART 2

QUESTIONS AND ANSWERS

#1 WHAT ARE P3S?

Public-private partnerships are agreements between a governmental entity and one or more private sector firms to carry out projects traditionally handled directly by the public sector alone, or "in-house."

#2 WHY ARE GOVERNMENTS INCREASINGLY TURNING TO P3S FOR HIGHWAY PROJECTS?

States increasingly face smaller budgets with which to build new roads and add lanes to existing roads, as well as maintain projects after completion. P3 arrangements are an improved procurement method and may also serve as a financing tool to tap into private sector resources. P3s also shift significant risks from taxpayers to companies and investors.

#3 WHAT TYPES OF ARRANGEMENTS QUALIFY AS TRANSPORTATION P3S?

Highway and other P3 agreements may take several forms, described by acronyms that specify the private sector role in the agreement:

Design-build (DB): Private entity designs and constructs project

Design-build-finance (DBF): Private entity finances, in addition to DB

Design-build-operate (DBO): Private entity operates asset after designing and building it, while public sector finances the project.

Design-build-transfer-operate (DBTO): Private entity transfers asset from DBO to public sector upon completion, after which the public entity leases back the asset to the private operator

Design-build-finance-operate (DBFO): Private sector finances the project, in addition to designing, building, and operating it

Design-build-operate-maintain (DBOM): Private entity performs daily operations and maintenance for the project after its completion of design-build phase, usually in exchange for annual payments from the government entity or, when tolled lanes are involved, revenues from toll road users.

Design-build-finance-operate-maintain (DBFOM): Private consortium handles full or partial financing of project, in addition to other duties described above

Build-operate-own (BOO): Private sector builds, operates and owns the asset

Build-own-operate-transfer (BOOT): Private sector entity owns asset after completion for a specified amount of time, after which it transfers ownership to the public entity

DBs and DBFs, which technically can be considered P3 agreements, usually aren't considered in the realm of traditional highway P3s, given their shorter terms, narrower focus, and resulting limited ability to capitalize on lifecycle savings over project life.

#4 HOW DO P3S DIFFER FROM TRADITIONAL DESIGN-BID-BUILD PROJECTS?

Design-bid-build (DBB) is the traditional government procurement method for construction projects. Unlike the P3-type acronyms used above, in a traditional DBB, the government agency creates or contracts for a detailed design of the infrastructure (the Design contract). Construction firms are then requested to submit fixed-price bids to build the facility, using the agency's detailed design. The winner is selected based solely on the lowest bid for construction.

By contrast, in a DB procurement, each team must design and build the project, working only from a preliminary design concept provided by the agency. This generally results in a more innovative and more buildable design. Since the designs (and their costs) differ, the agency uses a best-value selection process, weighing the proposals against a pre-defined set of criteria. By eliminating one of the two procurement steps, the DB process can cut months off the overall project schedule, and often saves money while producing superior design.

DBBs and DBs, however, do not take into account the long-term operating and maintenance costs of the facility. A superior road surface may cost more to deliver initially, but may make up for the initial cost premium in lower maintenance costs over time (i.e. less-frequent resurfacing). The result is to minimize total lifecycle cost, rather than only initial cost. This is a major advantage of DBFOM procurements, in which the developer is also the operator, responsible for properly maintaining the facility. In this way, DBFOM procurements create internal incentives for contracted firms to account for long-term maintenance as part of the project lifecycle. When a private operator assumes responsibility for an asset over a decades-long span and is under obligation to return the asset in good condition, it will spend the necessary money to meet those obligations. When the public sector operates an asset, funds get subjected to the political process, and transportation concerns often lose out to what taxpayers and lawmakers deem higher priorities, often leading to deferred maintenance problems with transportation infrastructure.

#5 WHAT ARE LONG-TERM CONCESSION P3?

A long-term concession is another name for the DBFOM model. "Long-term" typically means at least 30 years and up to 99 years.

#6 WHAT IS THE DIFFERENCE BETWEEN TOLL CONCESSION AND AVAILABILITY PAYMENT CONCESSION P3 AGREEMENTS?

With toll concessions, user fees from drivers on the tolled lanes pay for the capital and operating costs of the tolled facility. The tolls are paid directly to the concession company that is the developer/operator, and it bears the risk of insufficient traffic and revenue (which would otherwise fall on taxpayers). With availability payment concessions, the government entity pays the concession company periodic payments from its general fund or from transportation tax revenues, based on the project being available for use and in good condition.

Although rarer, agencies may enter into P3s that involve both tolling and availability payments, whereby the agency collects the toll revenue (and accepts traffic and revenue risk) and makes availability payments to the private operator. Fort Lauderdale's I-595 express toll lanes and the replacement Goethals Bridge connecting Elizabeth, NJ to New York City provide two examples.

#7 WHAT DO THE TERMS "GREENFIELD" AND "BROWNFIELD" MEAN?

Highway P3s are defined by whether the project is operating, replacing or upgrading existing infrastructure ("brownfield"), or building and operating new infrastructure on land previously unused for highway ("greenfield").

#8 HOW DO HIGHWAY P3S BENEFIT TAXPAYERS AND MOTORISTS?

Highway P3s shield taxpayers from various risks, including delayed completion, cost overruns, and regulatory compliance, by transferring those risks to the private entity. In conventional DBB projects, taxpayers are responsible for those costs, which can be very large when the projects are mega-projects. DBFOM P3s also guarantee proper maintenance over the life of the long-term agreement, which legislators often skimp on when state budgets are tight.

Toll concession P3s have the additional advantage of a dedicated revenue source. The users-pay/users-benefit revenue source provides most or all of the funding needed to build and maintain the road. Funding is not tied to a political process or prioritization list.

#9 WHY ARE MANY OF THE COMPANIES INVOLVED IN HIGHWAY P3S HEADQUARTERED OUTSIDE OF THE U.S.?

In the U.S., the public sector historically has handled all aspects of highway projects except actual construction (apart from occasional contracting out of specific services). P3 concessions are still new to the United States; therefore, skilled domestic operators of major highways are very few, if any. Other countries, particularly Australia and Europe, have used highway DBFOM P3s for decades, creating world-class highway developer/operator firms. Such firms have extensive experience and expertise, which states seek in entering into long-term P3s. As highway P3s become more common in the U.S., American firms are increasingly teaming with international firms as partners and are gaining P3 experience and expertise.

Even when P3s involve firms headquartered outside of the U.S., the U.S. economy still reaps significant benefits. Global capital and international expertise flowing into the U.S. results in new jobs and improved infrastructure, ultimately making the U.S. more competitive in the global marketplace for attracting new businesses across all industries. The substitution of private companies for government agencies also generates state and federal corporate income tax revenue, to the extent that these firms are successful businesses.

#10 WHY HASN'T THE U.S. UTILIZED HIGHWAY P3S ON A LARGER SCALE?

U.S. tax policy is generally cited as the main reason why P3s in the U.S. lag behind other countries. Since municipal bonds are tax exempt at the federal level, state and local officials often believe (incorrectly) that the cost of debt must be higher for projects that use P3s. But Congress authorized tax-exempt Private Activity Bonds (PABs) for highway projects in 2005, and PABs have been used on a majority of DBFOM highway P3 projects since that time.

The U.S. first implemented a federal tax on gasoline for transportation in 1956 and it has remained a consistently reliable source of highway funding, though the extent to which that's been the case has changed in recent decades. The biggest change in federal gas tax

revenues came with Congress' passage of the Intermodal Surface Transportation Efficiency Act of 1991, which established that a 20% share of the federal gas tax revenues be used for funding transit and added congressional pressure to prioritize the funding of local roads.

While a less direct financing mechanism than a toll, the federal gas tax and similar taxes at the state level follow the users-pay/users-benefit principle that ensures road users fund the infrastructure that they use.

ENSURING FUTURE USE OF THE USERS-PAY/USERS-BENEFIT PRINCIPLE

Diversions of the users-pay/users-benefit principle occur. The federal government and some states fund transit and active transportation with gas tax revenue. Drivers of alternative-fuel vehicles, which are becoming more common on American roads, do not pay a gas tax in many states. Additionally, the continued improved fuel efficiency of vehicles without corresponding increases in gas tax rates means tax revenues per mile driven will fall, regardless of what happens to the cost of building and maintaining roads.

Charging fees per vehicle-mile driven avoids those effects while adjusting to factors that more accurately reflect the changing conditions of road cost and use. Gas taxes inherently lack any mechanism to ensure against technologies that either eliminate or reduce gas usage in powering the automobiles that drive on the roads the gas tax is supposed to fund. Gas taxes can be raised, but doing so can be politically risky, and rate increases still won't reflect the actual cost conditions of building and maintaining the roads they fund. Some propose addressing future gas tax shortfall with other users-pay/users-benefit, such as mileage-based user fees.[1]

---

[1] http://onlinepubs.trb.org/onlinepubs/sr/sr285.pdf

#11 WON'T THE QUALITY OF THE ROADWAY DECLINE UNDER A P3? (PAVEMENT CONDITION, LANE MARKINGS, ETC.)

Long-term DBFOM agreements typically include provisions that enforce better condition under a P3 versus via state maintenance. Performance measures relating to road surface quality and maintenance-related factors, with penalties for noncompliance, ensure that the concession company maintains the facility to the standards defined by the state DOT. In addition, the long-term lease agreement includes a section spelling out required facility condition when handed back to the state. Some hand-back provisions even require the company to set aside extra funds in the years preceding the hand-back.

#12 ISN'T IT WRONG TO SELL GOVERNMENT ASSETS?

Long-term P3 concessions are leases, not sales. Governments retain policy control of the assets for the entire term of the agreement. What do get transferred to the private sector are duties surrounding building and maintaining the project, as well as various risks which can include (depending on the type of P3) costs overruns, on-time delivery, and (when direct tolling is involved) revenue risks related to inadequate traffic.

Of course, each risk transferred to the private sector will be priced accordingly by the terms of the agreement, so a major part of ensuring P3s are successful involves determining which risks are best transferred, and which are best handled in-house by the agencies involved.

#13 EVEN IF THE GOVERNMENTS AREN'T SELLING THE ASSETS, DON'T THE LONG LEASE TERMS (E.G. 50 YEARS) FORCE AGENCIES TO RELINQUISH CONTROL OF THE ASSETS BEING FINANCED?

P3 agreements for highways are long, detailed documents holding the private partner responsible for myriad performance measures and upkeep and maintenance standards for all aspects of the infrastructure—from surface condition to landscape standards. Such provisions incentivize private firms to provide upkeep of assets through the lease's duration, leaving control over outcomes in public hands while transferring risks associated with upkeep and maintenance to the private sector. A failure to fulfill contract terms by the private

entity results in the termination of the contract, and the asset's transfer back to the public sector. The long-term agreement also regulates the toll rates involved in toll concession agreement.

#14 WHAT IF THE PRIVATE PARTNER DECLARES BANKRUPTCY? WOULDN'T TAXPAYERS HAVE TO FINANCE A BAILOUT?

A concessionaire going bankrupt would result in the P3 contract's termination. Control of the facility reverts to the state and the debt-holder. Those parties generally agree on the best way forward: either government takes over operation and maintenance or the remainder of the concession is put out to bid. There is no taxpayer-funded bailout.

PART 3

CONCLUSION

As governments at all levels continue to face increased cost pressures from retirement benefits, health care, and other commitments, ensuring properly maintained highways with sufficient capacity becomes more difficult. Lower governments especially must "do more with less."

By entering into P3s, governments can transfer risks at all levels of a highway's lifecycle—from cost overruns related to construction delays to deferred maintenance risks as highways age over time—resulting in more fiscal certainty to governments increasingly burdened with sharply rising costs from other commitments. P3 agreements can help governments ensure effective highway performance, outcomes often made difficult-to-impossible without means of transferring risks to a committed private partner.

ABOUT THE AUTHORS

Austill Stuart, a policy analyst at Reason Foundation, serves as editor and co-author of Reason's *Annual Privatization Report* and its *Privatization Newsletter*. Since joining Reason, Austill has written extensively on matters related to infrastructure, privatization, and government reform, including public-private partnerships, state and local government budgeting, outsourcing of government services, and competitive sourcing in the federal government.

Prior to joining Reason, Austill worked with policy in a variety of settings—nonprofits, on Capitol Hill, and in fundraising—where areas of focus included small business regulation, privatization, health care, and labor. Before moving to the D.C. area in early 2009, he worked for five years in the financial services industry, mostly in wealth management.

Baruch Feigenbaum is assistant director of transportation policy at Reason Foundation, a non-profit think tank advancing free minds and free markets. Baruch has a diverse background researching and implementing transportation issues, including revenue and finance, public-private partnerships, highways, transit, high-speed rail, ports, intelligent transportation systems, land use and local policymaking.

Baruch is involved with various transportation organizations. He is a member of the Transportation Research Board Bus Transit Systems and Intelligent Transportation Systems Committees. He is vice president of Programming for the Transportation and Research Forum Washington Chapter, a reviewer for the *Journal of the American Planning Association* (*JAPA*)

and a contributor to *Planetizen*. He has appeared on NBC Nightly News and CNBC. His work has been featured in the *Washington Post* and *The Wall Street Journal*.

Prior to joining Reason, Baruch handled transportation issues on Capitol Hill for Representative Lynn Westmoreland. He earned his master's degree in transportation from the Georgia Institute of Technology.