

Public Private Partnerships in California

Phase II Report

Section V: Institutional Capacity

August 2012

Research Team

Dr. Genevieve Giuliano, Principal Investigator

Dr. Lisa Schweitzer, Co-Principal Investigator

Kevin Holliday, Project Administrator

Zachary Elgart, Research Assistant

**Sol Price School of Public Policy
University of Southern California
Los Angeles, CA 90089-0626**



Disclaimer

The contents of this report reflect the views of the authors who are responsible for the facts and the accuracy of the information presented herein. This document is disseminated under the sponsorship of the Department of Transportation, University Transportation Centers Program, and California Department of Transportation in the interest of information exchange. The US Government and California Department of Transportation assume no liability for the contents or use thereof. The contents do not necessarily reflect the official views or policies of the State of California or the Department of Transportation. This report does not constitute a standard, specification, or regulation.

Table of Contents

Table of Contents	iii
Table of Figures	v
List of tables	vi
Acronyms and Terms Defined	vii
Introduction	1
Background and Methodology	1
Experience Outside California	4
Texas	5
Overview	5
Enabling Legislation.....	5
Case Study.....	7
Best Practices Office.....	8
Summary	10
Virginia	10
Brief Overview.....	10
Enabling Legislation.....	11
Case Study.....	12
Best Practices Office.....	14
Summary	16
Puerto Rico.....	16
Brief Overview.....	16
Enabling Legislation.....	17
Case Study.....	19
Best Practices Office.....	19
Summary	21
International.....	22
Membership Fee Funded Office.....	25
Government Funded Office.....	26
Summary	26
Interview Responses	27
Overview	27
P3 Perceptions	28
Limited Knowledge.....	28
Advantages and Limitations of P3.....	30
All P3 Projects Are Unique	33
Advocates for P3s.....	33
Barriers to P3s	35
Financial Barriers.....	35
Labor Issues.....	36
Caltrans, PIAC and the State Legislature	37
Internal Policy Guidelines.....	39
Public Opposition	40
The P3 Paradox	42
Demand Forecasting and Risk Management.....	43
Analysis	44

Domestic Lessons Learned	44
International Lessons Learned	46
Summary of Interview Responses	46
Needs Improvement	47
Create a Best Practices Office	50
Performing Well	51
Conclusion	53
Sources	55
Appendix	65
Appendix 1: Interview Questions	65
Appendix 2: List of Participating Agencies	69

Table of Figures

Figure 1: Puerto Rico vs. California P3 Development Timeline	45
--	----

List of tables

Table 1: Acronyms and terms	vii
Table 2: International P3 Offices	24
Table 3: Categorized Interview Take Aways.....	47

Acronyms and Terms Defined

In the following table we outline the acronyms and terms we will use in the paper.

Table 1: Acronyms and terms

Acronym or Term	Definition
The Authority	Puerto Rico Public-Private Partnerships Authority
Best Practices Office	An office, operated by either the government or as a non-government entity, dedicated to the thorough and efficient implementation of P3 concepts and strategies
BMS	Business and Management Services (Virginia)
BOD	Board of Directors
CTC	California Transportation Commission
CoTC	County Transportation Commission
DB	Design-Build
EPEC	European Public-Private Partnerships Expertise Center
FAA	Financial Analysis and Assistance (Virginia)
FHWA	Federal Highway Administration
HOT	High Occupancy Toll (lanes within larger un-tolled systems)
HOV	High Occupancy Vehicle (lanes dedicated to multi-passenger vehicles)
IPD	Innovative Project Delivery Division (VDOT)
MPO	Metropolitan Planning Organization
NTTA	North Texas Tollway Authority
OTP3	Office of Transportation Public-Private Partnerships
P3	Public-Private Partnership
PECG	Professional Engineers in California Government
PIAC	Public Infrastructure Advisory Committee
PPA	Pocahontas Parkway Association (Virginia)
PPMS	Program and Project Management Support Services
PPTA	Virginia Public Private Transportation Act
PPuP	Public-Public Partnership: A partnership between two public agencies that functions similarly to a P3 without private investment or management.
PR-5	Puerto Rico Toll Road
PR-22	Puerto Rico Toll Road
PRP3A	Puerto Rico Public-Private Partnerships Authority
RFI	Request for Information
RFP	Request for Proposals
RPE	Responsible Public Entity (Virginia): “local governments and regional authorities that have the power to develop and/or operate the qualifying transportation facility” (FHWA Website)
RTA	Regional Transportation Authority
RTIP	Regional Transportation Improvement Program
SB 469	Senate Bill 469 (Puerto Rico)

Acronym or Term	Definition
SB 1048	Senate Bill 1048 (Texas)
SB 1420	Senate Bill 1420 (Texas)
SB 2432	Senate Bill 2432 (Texas)
SB 4 x2	Senate Bill 4 x2 (California)
SH-121	State Highway 121 (Texas): Toll road P3 that turned into PPuP due to public outcry.
SHCC	Self-Help Counties Coalition
SFCTA	San Francisco County Transportation Authority
TIFIA	Transportation Infrastructure Finance and Innovation Act (Federal)
TIP	Transportation Improvement Plan
TxDOT	Texas Department of Transportation
VDOT	Virginia Department of Transportation

Introduction

This report considers the institutional aspect of P3 formation and implementation. Our purpose is to identify best practices from around the US and the world, to understand how current practices in California compare to best practices, and provide recommendations for improving the capacity of California's state and local governments to effectively develop and carry out P3 projects. Our efforts include detailed examinations of the P3 experience in the US and overseas, an interview process with public sector representatives in California and an analysis of our findings.

We divide the report into four sections. The first section contains descriptions of how P3s are managed domestically (Texas, Virginia, and Puerto Rico) as well as a brief overview from eight international examples. The domestic case studies offer examples of enabling legislation and have a range of facilities delivered as P3s. Internationally, we looked to the United Kingdom, Canada, Australia, New Zealand, Germany, Ireland, and the European Union as models of central P3 best practices advisory offices. In the second section we undertake a detailed summary of the interview questions and their associated responses. Our interview process was designed to present an understanding of the levels of knowledge and experience currently harbored by the public sector as well as highlight opportunities for improvement to the P3 process in California. After detailing the interviews, we offer a comprehensive discussion of our recommendations as derived from both background research and the interview process. Finally, we include a brief conclusion.

Background and Methodology

In February 2009, Governor Arnold Schwarzenegger signed Senate Bill 4 X2 (SB 4 x2) into law after a bipartisan majority vote approved it. This bill enables Caltrans and the State's

Regional Transportation Authorities (RTAs) to enter into an unlimited number of P3s until January 1, 2017. Previous law allowed for four total projects, through 2012. This bill also established the Public Infrastructure Advisory Committee (PIAC), which has the responsibility to “identify transportation project opportunities for P3s and advise the Department of Transportation (Caltrans) and regional transportation agencies regarding infrastructure partnership suitability and best practices” (California Business, Transportation & Housing Authority 2010). The California Transportation Commission (CTC) is responsible for overseeing the approval of P3s and ensuring they meet four specific criteria (improve mobility, improve operation or safety, provide and air quality benefit, address known demand forecasts). Both the Legislature and PIAC must receive a proposal for all potential P3 projects at least 60 days prior to the initiation of each partnership so that it may be assessed.

Potential P3s in California must be approved within the Transportation Improvement Program (TIP). The TIP process in the State of California is complicated and includes many steps which every transportation project must pass before it can be implemented (Giuliano et al. 2011, pp. 18-20). Congress mandates a process of transportation improvement plans that are constructed from the bottom up. Local public sponsors propose projects of their design, or selection, which are then either included or rejected as the TIP moves upward through regional, state and finally, federal levels. Local public sponsors are required to propose new facilities along the associated potential financing strategies during a bi-annual call for projects process. Once a County Transportation Commission (CoTC) creates a county specific TIP the Metropolitan Planning Organization (MPO) then incorporates it as part of the regional transportation plan¹. Our interviews focus on the opinions of officials from CoTCs and MPOs because of their

¹Regional TIPs are occasionally contentious; see Orange County Toll Roads in Section VII, California Political Environment.

opportunity to encourage or discourage the inclusion of P3s at the beginning of the planning process. CoTCs or MPOs are required to provide budget estimates and funding sources as part of their initial proposals. Therefore, if a project is to include an element of private finance, the opportunity is greatest at the early stages of planning. If P3s are not considered (or included) during the initiation of a project it is very unlikely that a P3 strategy would be suggested at any following stage. It is therefore, up to local sponsors to suggest P3s, either upon initial submission during a call for projects or upon revision of an application if a project is to be completed as a P3. Presidio Parkway, in San Francisco, is the only P3 project in California that has satisfied the above requirements, proceeded through contract negotiations and initiated construction since SB 4 x2 was enacted in 2009.

Our goal for the interview portion of our efforts was to ask a broad range of questions that would best determine the level of P3 knowledge within each organization. We designed the questions so that the level of familiarity with P3s possessed by the interviewee can be easily understood. The questions are also designed to provide an understanding of the participants (and the participants' agencies') opinion of P3s. Additionally, we sought to learn about the political climate for P3s in each jurisdiction and whether they were currently seeking or operating any P3 agreements. If the public sponsor did not use P3s, we asked the ways in which the agency was undertaking infrastructure development, whether through outside consultants or in-house financiers, engineers, and planners. This line of questioning has helped us to determine how to encourage P3 delivery within the State of California. We highlight exactly where improvements to both legislation, as well as training, are needed. The interviews allowed us to gain a better understanding of the willingness of public sponsors to participate in P3 implementation in the future.

In preparation for our interviews we attempted to create a list of prospective interviewees that represented the spectrum of California’s political climate and constituency, including an even split between the Northern and Southern regions of the state. After we began requesting participation in our interviews, we removed many of the rural counties because of a lack of experience or interest (as expressed by potential interviewees). Finally, a few urban counties declined to participate due to a lack of interest. After the process of requesting interviews was completed we were left with 14 willing participants out of an initial prospective group of 21 (please see Appendix 2 for a complete list of participating agencies).

To complement our interview findings and present a better-balanced picture of P3s as they exist, both within the US and throughout the world, we include a series of focused investigations. Three of these target Texas, Virginia and Puerto Rico; governments that have embraced P3s to some degree and which are well known for the technique. Within the US portion of this section, we discuss the P3 enabling legislation of each jurisdiction and present brief case studies of high profile projects. We also studied eight international examples with a focus on their P3 specific offices so that a better understanding of the opportunities for such techniques could be better understood.

Experience Outside California

In this section of the report we look at how other jurisdictions (both domestic and international) implement P3s. We selected our domestic examples; Texas, Virginia, and Puerto Rico, based on the frequent citations of their work with P3s as well as Puerto Rico’s recent approval of P3 legislation. Our discussion of each domestic example explains the relevant P3 enabling legislation, presents a brief case study of a project completed within the jurisdiction and outlines the existing P3 office (or parties responsible for P3 implementation).

Internationally, we looked at Australia, Canada, Germany, Ireland, New Zealand, and Europe as a whole, and the United Kingdom. These jurisdictions were selected because of their prevalence in P3 literature; they are the locations that we found to be most frequently mentioned when discussing international P3s (South American jurisdictions were also mentioned frequently, however a language barrier exists). The international section discusses the structure and scope of international P3 best practices offices in these jurisdictions.

Texas

Overview

Despite avidly pursuing P3s as a method of financing its roadways, Texas does not have a centralized procedure for structuring P3 agreements; municipal governments plan and execute P3s independently. Furthermore, the state department of transportation does not offer consulting help for impending projects during any phase of P3 development and implementation and no independent consulting firm exists which operates statewide. In 2008, the Real Estate Council of Austin recommended that a “centralized entity” be created to manage P3s for the State of Texas (State of Texas 2008, p. 110). According to the National Conference of Legislatures, Texas has not, as of March 2012, acted on this advice². Additionally, the National Conference of Legislatures qualifies the legislation in Texas (outlined below) as “limited or project-specific legislation” (National Conference of State Legislature 2012, p. 1).

Enabling Legislation

A series of seven transportation code statutes govern Texan P3s (FHWA Office of Innovative Program Delivery: Public Private Partnerships, 2007); the statutes were enacted in 2003, amended in 2009, and revised by Texas Senate Bill 1420 (SB 1420) and Senate Bill 1048

² Please see the Conference’s “Public-Private Partnerships for Transportation - A Toolkit for Legislators” and the March, 2012 update document (National Conference of Legislatures 2010, p. 23; 2012)

(SB 1048) in 2011. The seven transportation code statutes are broken down by specific modes of transportation provision and provide P3 requirements for each.

A moratorium on toll-road implementation in the form of Senate Bill 792 (SB 792) was introduced in 2007. This legislation was passed by a vote of 127 in favor versus 19 against and signed by Governor Perry in June of the same year (Texas State Senate 2007). Under the new law, and until 2009, only those projects already under development could be financed using a P3 toll-road concession while the concept of such provision was studied by the associated committee (The Texas Council of Engineering Companies, p. 1). The moratorium was established in response to public outcry regarding P3 toll-roads. The public (and their legislators) fought for the moratorium by claiming that P3s allowed for foreign ownership of Texas' property and exorbitant toll prices. Those opposed to P3s also argued that lesser amounts of revenue could be generated for the local public authorities and that P3s preclude the local governments from constructing alternative roads (Poole 2007b, pp. 6-11). Despite research stating that none of the previously mentioned complaints are true (Poole 2007b, pp. 6-11), the Texas State Senate voted to approve the moratorium with a vote of 134 in favor versus five against (Project Finance Magazine 2007, p. 1).

Under the new law, public toll administration agencies were allowed to continue their operations and TxDOT was prevented from charging public toll authorities any form of fee in exchange for the rights to develop a toll road on DOT right-of-way (Williams et al. 2007, p. 1). Most importantly, SB 792 granted public toll authorities the right of first refusal for projects that would have previously been developed as P3s (Williams et al. 2007, p. 1) effectively ending, at least temporarily, P3 implementation in Texas.

While the moratorium was exceedingly preferential towards public toll agencies, it did have a specified list of projects that they were given first refusal on, therefore limiting the advantage public toll agencies received. Beyond this list, projects were mandated to undergo market valuation as a compromise with P3 advocates in Texas, such as Governor Perry himself. The inclusion of a market valuation was intended to bring a popular benefit of P3s to the Public-Public Partnership projects (PPuP, labeled as such because of the nature of a public transportation agency partnering with a public toll agency).

After the moratorium, SB 1420 was approved by unanimous vote in April 2011 (signed into law by Republican Governor Rick Perry in June, 2011; Texas State Senate, 2011c). This bill allows for the continued operation³ of the Texas Department of Transportation (Sunset Advisory Committee 2009, p. 12) and “re-embraces” P3s (Gilroy, 2011, p. 1). Governor Perry also signed SB 1048 in June of 2011. This bill allows P3s to be used in the provision of nearly every form of public infrastructure except transportation-focused efforts (Gilroy 2011, p. 1). SB 1048 may have the capacity to increase the acceptance P3s through greater exposure to the concept if the bill is embraced and well used (more P3 projects, across the spectrum of social infrastructure).

Case Study

An example of the challenges that disorganization, and mixed levels of P3 support present is seen in the State Highway 121 (SH-121) project (Battaglio and Khankarli 2008, p. 145). The entire P3 plan for SH-121 was scrapped in favor of a PPuP between TxDOT and The North Texas Tollway Authority (NTTA), a public tolling firm (further details of this failure can be accessed in our Phase I report, Giuliano et al. 2011, p. 31). Significant public outcry over a private, foreign firm managing their infrastructure as well as a toll-road moratorium (SB 792, as

³ Under Texas law, state agencies have a sunset clause limiting their existence if they cannot prove their own worth.

described above) that was enacted at the same time as the contracts were being developed led to the change of course. The project's failure⁴ as a P3 is a prime example of public disapproval and confusion regarding P3 agreements (Poole 2007b, p. 6-11) and the power that public sentiment has over P3s. According to Battaglio and Khankarli, the absence of "trust-building activities" and "productive and purposeful interaction" caused the public's anxiety surrounding SH-121 (2008, p. 140). Beyond making the TxDOT look untrustworthy, this last-minute re-arrangement also led the NTTA on to another project (State Highway 161) by singling out the agency as one of the few approved providers of toll collection services, under the moratorium. Taking on another project landed the agency with a "tripled debt burden" and a lower credit rating (Williamson, 2008, p. 1). Essentially, a public agency was allowed to take on the risks that are typically placed with the private sector in a P3 agreement.

Best Practices Office

Texas does not have any single agency that is actively organizing transportation P3 development in the state. There exist specialized consulting firms, however, none that work on the statewide scale and therefore none that are relevant to our research.

SB 1048 did create the Partnership Advisory Commission (Commission), however, this organization is solely responsible for the redevelopment of publicly held real estate in Texas through P3 financing strategies (Texas Facilities Commission 2011). The Public-Private Partnership Guidelines published by the Facilities Commission of Texas more specifically explain the creation of the Commission and its responsibilities:

⁴ We define this project as a failure because it was never allowed to exist as a P3, despite previous negotiations and contractual agreements. However, neither partner was at fault for its failed state.

Effective September 1, 2011, the 82nd Legislature of Texas enacted S.B. 1048, entitled the Public and Private Facilities and Infrastructure Act, Chapter 2267, Texas Government Code. Pursuant to Section 2267.052 of the Act, the Commission adopts these Guidelines for the purpose of encouraging private entity participation, creativity, and competition, and to guide the selection of qualifying projects in the public-private partnership development program (Texas Facilities Commission 2011, p.1)

The bill specifically states that this office will not be involved with any P3 projects that are within the state highway system or involve a transportation authority (Texas State Senate 2011a, p. 3 Sec. 2267.003). According to Brett Findley of Longbow Partners (as interviewed by Copelin 2011) SB 1048 does not allow for the use of P3s on road projects because of the controversial nature of P3 road projects. SB 1048 not only precludes the Partnerships Advisory Commission from participating in the development of transportation facilities, it provides unsatisfactory guidelines for a P3 best practices office and therefore cannot even be used a model for such an office. For example, all responsible public entities that seek to enter into a P3 must submit a proposal to the Commission for approval, however the legislation does not require any guidance to be provided by the Commission during the developmental stage of P3s (Texas State Senate 2011b, pp. 3-6). The two legislators who initiated SB 1048, Senator Mike Jackson (R) and Representative John Davis (R), have since asked the Facilities Commission to stop all P3 processes that have been started under the new law and the Facilities Commission's guidelines because, among other complaints, the guidelines were not approved by the Partnership Advisory Commission (Copelin, 2011). Interestingly, when the request of Jackson and Davis was made in October, the actual Commission had not been convened since the bill was passed in June of 2011 (Copelin, 2011).

Senate Bill 1048 has moved Texas closer to having something resembling a best practices office, however it has not instituted enough guidelines or structure for successful P3 implementation, nor has it included all possible public infrastructures that may benefit from P3 use, including transportation. A true best practices office would not only approve P3 projects after determining viability but also assist in the development of such projects, ensuring a streamlined and efficient procurement process as well as a probable cost savings through fewer failed proposals (therefore less wasted time).

Summary

Texas has experienced substantial amounts of both support and disapproval for P3 concepts. Ultimately, political will dictates the Texas P3 environment. Public perception of P3s powerfully constrained P3 opportunities by creating a moratorium on the practice, despite the fact that Governor Perry and the Department of Transportation advocate for P3s. Additionally, P3 enabling legislation and political support appear to be disorganized, volatile and ever changing. Texas lacks central organization for its P3 efforts and political support for P3s appears to be fickle at best and Texas' P3 implementation strategies remain decentralized. Texas has a large portion of the necessary legislation and is potentially capable of leading the country in P3s if it can simply streamline the process and garner more public buy-in through greater levels of communication and interaction with the constituents.

Virginia

Brief Overview

Virginia has a simple and straightforward P3 implementation process. P3s are enabled through a single, blanket legislation that governs all transportation focused P3s within the state, The Public-Private Transportation Act of 1995 (PPTA). The PPTA was proposed by the Joint Subcommittee Studying the Privatization of Certain State Government Functions, passed by near

unanimous vote and signed by then Republican Governor George Allen in March of 1995 (Commonwealth of Virginia, 1995).

Enabling Legislation

The PPTA remained in place (in the same form as it was passed) until 2005, when it was amended three times. First, the imposition of tolls was outlawed on existing public highways (Commonwealth of Virginia 2005, p. 1). Second, local public sponsors with the capacity to undertake large projects on their own, but which choose to enter into P3 agreements became defined as “Responsible Public Entities (RPEs)” and were given the power to enter into contracts independently (Commonwealth of Virginia 2005a, p.1). The amendment to the PPTA defines an RPE as “a public entity, *including but not limited to local governments*, that has the power to acquire, construct, improve, maintain and/or operate the applicable transportation facility” (emphasis in original, Commonwealth of Virginia 2005a, p. 1). Lastly, the third amendment to the PPTA allowed private entity’s to have their confidential information (intellectual property) protected while RPEs were allowed to enter into “comprehensive agreements” with private entities (Commonwealth of Virginia 2005b, p. 1). According to the text of the amendment, requirements such as project oversight, standing liability insurance, the exchange of appropriate financial statements when necessary, appropriate compensation of private parties and the agreement of a date for finalization are part of comprehensive agreements (Commonwealth of Virginia 2005b, pp. 6-8)⁵. By including such requirements within legislation that enables P3 implementation, Virginia has made a significant step towards a system that ensures efficient delivery of P3 agreements while maintaining public transparency through the requirement of agreed upon deadlines and specific contract requirements.

⁵ For a full list of the qualities of comprehensive agreements in Virginia see Chapter 562 of House Bill 2666 (Commonwealth of Virginia 2005b, pp. 6-8).

Beyond providing its public sponsors with the expertise necessary to innovate and acquire funding for infrastructure projects, Virginia has also included many details in its legislation that allow P3s to flourish. Most noteworthy is the range of opportunity and scope afforded P3 contract development. Virginia's P3 legislation is "quite broad and covers all modes of transportation" including the necessary administrative facilities as well as commercial facilities that are "necessary or essential for the transportation of goods and services" (Future of North American Infrastructure 2011, at 1:09). To quote Dr. Ronald Utt, "Virginia has enacted one of the most accommodative public private partnership laws to encourage qualified private sector enterprises to propose to the state transportation department (VDOT) partnership opportunities for investment in new road or transit capacity" (Utt 2004, p. 5). P3 projects may be assumed by any level of public agency within the State through any form of procurement and any RPE may enter long-term contracts with the private sector without prior legislation (FHWA Office of Innovative Program Delivery, 2006).

Case Study

The Pocahontas Parkway, a toll road P3 in Virginia, is 8.8 miles long and, as of 2011, includes a 1.58 mile connection to the airport in Richmond (part of a secondary agreement, not the initial plan). It was the first P3 developed under the PPTA Legislation of 1995 and used a non-profit 63-20 corporation⁶ called the Pocahontas Parkway Association (PPA) to raise the funds for the construction in 1998. The roadway opened in 2002 after a four-year construction period. The original contract specified a design-build approach with partners Fluor Daniel/Morrison Knudsen. This contract valued the project at \$318 million and required that

⁶ This enabled the partnership to sell tax-free bonds.

\$300 million come from private sources. Demand never reached the forecast and the private firm got into financial trouble.

In 2006, after submitting an unsolicited proposal to VDOT and winning the competitive process following their submittal, Transurban was awarded a new lease to operate the Parkway and took over with traffic at 60 percent of what was forecasted under the original contract. Their contract was structured as a Lease-Develop-Operate contract and requires the company's investment in new electronic tolling infrastructure, construct an airport connector, take over the operational costs and management and the maintenance and upgrades associated with the parkway. The financing for Transurban's lease consisted of \$420 million in senior bank debt, \$55 million in subordinated debt, \$141 million in equity contributions and a TIFIA loan of \$150 million⁷. This financing secured the lease for 99 years and the right to institute tolls and toll increases (capped at \$.50 a year through 2010 and \$.25 a year through 2016) with a revenue sharing scheme (between Transurban and VDOT) established if revenue exceeds expectations.

Despite struggling under the initial partnership, the Transurban re-financing of the Pocahontas Parkway has been successful so far and highlights the opportunities and usefulness for private capital in public infrastructure provision. Not only did a P3 provide a needed facility ahead of a typical financing schedule, a second P3 agreement fixed errors that were made during the first project while saving the State of Virginia substantial amounts of money and promoting additional investment in the state. For more information on this case please refer to: FHWA Office of Innovative Program Delivery - Project Profiles 2007; The National Council for Public Private Partnerships 2011.

⁷ For context, the original agreement consisted of tax-exempt revenue bonds for \$354 million, a State Infrastructure Bank loan worth \$18 million and \$9 million of federal funding (FHWA Office of Innovative Program Delivery: Project Profiles 2007).

Best Practices Office

In 2003, Philip Shucet, the then-Transportation Commissioner of the State of Virginia, created the Innovative Project Delivery Division (IPD) as a division of the Virginia Department of Transportation (VDOT) (Holcombe 2011). Until 2010 the VDOT operated the IPD, which was responsible for applying the PPTA as thoroughly as possible when creating highway P3s (Holcombe 2011). The individuals who were assigned to the IPD reported to the chief engineer and also provided supervision for the design-build teams and the various advisory services that the office sponsored (such as legal consulting for P3 contracts) (Holcombe 2011). Along with IPD, the Innovative Finance and Revenue Operations Division was created to work specifically on the financial issues associated with P3s (Holcombe 2011). In 2010, KPMG performed an assessment of the programs related to the Public-Private Transportation Act in Virginia and recommended to the governor that an independent office be created to focus solely on P3 development and procurement (Holcombe 2011).

Sean Connaughton, Virginia's Secretary of Transportation initiated the Office of Transportation Public-Private Partnerships (OTPP) in December of 2010 in order to increase the influence of the PPTA on statewide transportation (all modes) and streamline the provision of infrastructure through P3s in the state with the creation and use of an updated implementation manual (Holcombe 2011). OTPP works on a statewide scale with the Secretary of Transportation and all of the transportation authorities that exist in Virginia (Office of Virginia Public Private Partnerships 2011). The previous office, IPD, focused only on roadway P3s and was therefore found to be sub-optimal in terms of augmenting the overall transportation network (KPMG Corporate Finance LLC 2010, p. 8). The authorities that work with the OTPP are the Virginia Department of Transportation, The Port of Virginia, The Virginia Department of Rail and Public Transportation, the Virginia Department of Aviation and the Virginia Commercial

Space Flight Authority. Funding for the office (\$175,000) comes in the form of a single staff position transferred within the 2011-2012 Office of Transportation budget to that of the Secretary of Transportation (Virginia Office of Transportation, 2011, p. 3). Secretary Connaughton has tasked OTP3 with identifying, developing and procuring P3 agreements for all transportation modes under his jurisdiction (Office of Virginia Public Private Partnerships, 2011). The newly adopted processes for P3 assessment and approval are designed to create a pipeline of projects, labeled as “Short-Term” “Medium-Term” and “Long-Term” with regard to priority; these labels provide the opportunity for the private sector participants to plan ahead accordingly and therefore participate fully (Pedraza 2011, at 10:50).

Additionally, Secretary Connaughton approved the PPTA Implementation Manual and Guidelines to be used as a resource for public sponsors and private sector service providers (Holcombe 2011). The manual is written and published by OTP3 in order to allow both RPEs and private entities to follow the same guidelines and have a step-by-step process to undertake on the way to P3 project fulfillment. This document includes a series of intricate guidelines that outline the process of P3 execution in Virginia from start to finish as well as sample P3 contracts and information regarding State services that assess potential P3 deals. Furthermore, the document calls for constant re-evaluation of projects that are progressing as potential P3s to ensure that they are still viable P3 candidates (Pedraza 2011, at 9:10). It was updated in 2010⁸, at the same time as the OTP3 office was being established, and reflects the current best practices in P3 use as seen throughout the world (Virginia Department of Transportation 2010c, p. 2).

⁸ The manual can be found here: http://www.vappta.org/ppta_implementation_manual_guidelines.asp.

Summary

Virginia possesses legislation that enables P3s in powerful ways. Virginia's most influential legislative advantage is the Office of Transportation P3s. This office manages and pursues P3s in cooperation with all of the transportation agencies in the state, while creating a pipeline of future projects that has the potential to both maintain private sector interest in infrastructure provision and assure that public needs are met efficiently. Additionally, the state has published guidelines that outline the process of P3 use from the initial stages of proposal through contracting and fulfillment. These guidelines provide a tool for streamlining procurement and ensuring that both sides of the partnership know what is entailed when creating a P3. It is obvious from their willingness to amend the original PPTA of 1995, in 2005, and to reassess their performance in 2010 that the State of Virginia and the VDOT are fully committed to the concept of P3s.

Puerto Rico

Brief Overview

Signed by Governor Luis Fortuno in June of 2009, Senate Bill 469 (SB 469) represents a very substantial contribution to the advancement of P3s in the United States. Beyond enabling P3s, the law specifically calls for the creation of the Puerto Rico Public-Private Partnership Authority (SB 469 2009, p 1). The Puerto Rico Public-Private Partnership Authority (PRP3A or the Authority) works in association with Puerto Rico's Government Development Bank "as a public corporation [and is defined as the] sole government entity responsible for determining the functions, services or facilities for which P3s are to be established" (Horner 2009, p. 1). Five members of a board of directors and six executive staff-persons run PRP3A (Puerto Rico Public-Private Partnerships Authority 2010a). The board is made up of the individuals that hold positions as President of the Government Development Bank, the Secretary of the Treasury, the Chairman of the Planning Board and two individuals appointed by the governor himself (Puerto

Rico Public-Private Partnerships Authority, 2009a). Additionally, PRP3A has a long list of pre-approved consulting firms (234) that they can call on as needed, depending on the demands of the project (Puerto Rico Public-Private Partnerships Authority 2010b). The PRP3A employed a qualification process with each firm on the list and established that the firms are qualified to consult on P3s on the island (Puerto Rico Public-Private Partnerships Authority 2010b). PRP3A provides funds to pay the fees associated with these consultants (Puerto Rico Office of Management and Budget 2010b, p. 4) instead of passing the cost of consulting on to the local public sponsor of each P3 project.

The Commonwealth created the Puerto Rico Public-Private Partnership Authority to assuage the dearth of infrastructure investment in Puerto Rico, both in terms of maintenance and new development. Additionally, Puerto Rico has a lower level credit rating than what is necessary to secure financing for such large-scale projects themselves (Alvarez 2010, pp. 4-7), therefore partnerships with private entities that have higher credit ratings will allow for greater infrastructure investment. After assessing the current conditions in 2009 and their various options Governor Fortuno and his advisors decided that a Public-Private Partnership program capable of initiating and financing such projects was necessary to fix the problems the government was facing (Alvarez 2011). The government of Puerto Rico is using P3 strategies specifically to augment their own economic shortcomings while improving infrastructure to support economic growth and recovery.⁹

Enabling Legislation

SB 469 effectively removes much of the politics involved with elected officials and their need to answer to the greatest number of voters by appointing a staff whose directive is to

⁹ Please refer to pages 5-6 of SB 469 for greater detail.

achieve the greatest public benefit¹⁰. According to Macquarie Managing Director D.J. Gribbin, “What Puerto Rico did is said ‘Listen, public-private partnerships are going to be part and parcel of our government-reform package. What we want to do is we want to develop infrastructure and provide it to the public in a manner that’s cheaper, that’s more cost effective and that’s a higher quality, so we’re going to incorporate P3s just as what we do as part of our business.” (as quoted, Slone 2011). The guidelines of the legislation as implemented by the PRP3A create a strict assessment process. The PRP3A pre-selects projects that are potentially relevant for P3 implementation and places them into the pipeline of projects they are developing (Puerto Rico Public-Private Partnerships Authority 2009b). Once this process is underway there are various checkpoints that will either pass the project to the next phase or automatically remove it from contention as a possible P3 (Puerto Rico Public-Private Partnerships Authority 2009b). Allen and Overy summarize the legislation and outline the guidelines for a P3 as follows:

Flexible Criteria for Both Project Inventory and Proposal Awards. The Authority is empowered to evaluate proposals from government entities for partnership projects. Under the Act, the Authority must consider a wide variety of factors including economic considerations, social impact and feasibility, technical and functional feasibility, justification of choice of procurement structure, operational and technological risks, environmental effects, and local market considerations. In addition, the Act does not require legislative approval prior to the receipt of a proposal, potentially eliminating conflicts between the executive and legislative branches. The Authority may also consider services and facilities for P3s at its own initiative—i.e., services and facilities which have not been submitted through the project inventory procedure established by the Act—and the corresponding government entity must consider such projects accordingly. Similarly, under the Act, the Authority may consider unsolicited proposals from contractors, and the criteria for the award of proposals are numerous. Factors of note include income to be received by the partnering government entity and the priority of hiring employees from the partnering government entity. Other proposal award criteria include, but are not limited to, reputation, capacity, and experience of the person/entity seeking to enter into the partnership (the Proponent), quality of the design, engineering and estimated building time (as applicable), pledged capital, and economic and financing considerations (2009, p. 1).

¹⁰“greatest public benefit” is defined here as: the most financially beneficial and fiscally responsible contract possible, despite new infrastructure that may not directly serve the entire population, the benefit associated with smart fiscal policy will.

Case Study

Due to the unfinished nature of any P3s under SB 469 we have chosen to highlight effectiveness of Puerto Rico's legislation thus far as well as its public relations strategy regarding P3s. Project development has been swift in Puerto Rico. As of September 23, 2011 a contract for a brownfield toll road concession on the PR-5 and PR-22 routes reached financial close (Puerto Rico Public Private Partnerships Authority 2011b). Puerto Rico has also established an agreement to refurbish juvenile institutions, selected a partner for an airport P3 (Burton 2012), released a request for qualification for a new system of aqueducts and sewers, begun refurbishing 28 schools through a multi-phase P3 and is researching the best way to use P3 concepts for energy production and provision (Puerto Rico Public-Private Partnership Authority 2012). Puerto Rico and the PRP3A promote the concept of P3s to the citizenry in an informative and forthright manner. They operate a website (<http://www.app.gobierno.pr/?lang=en>) which explains, in common terms, the ways in which P3s operate, how they can benefit a community and what is currently taking place in Puerto Rico. In the first year (approximately) that P3 legislation in Puerto Rico existed there was nearly \$1.5 billion of transportation P3s proposed and approved (Puerto Rico Public-Private Authority, 2010c).

Best Practices Office

PRP3A operates with an independent board of directors and a staff of six, which allows increased freedom to target the techniques that will best suit each form of P3 when compared to a typical government agency (Khankarli 2009, p. 58; Reuters 2011, p. 2; Roach 2011, P. 91). This freedom is due to their independent functionality and the ability to make decisions without approval from a managing political body (Khankarli 2009, p. 58; Reuters 2011, p. 2; Roach 2011, P. 91). According to Samuel Roach (2011, p.91), "while the creation of an independent auditor will not remove PPP policy and practice from the political sphere, it could operate in a manner that avoids some of the local bias and inter-departmental disputes that currently serve to hinder

PPP policy and continually threaten its existence, much less, its development and refinement.” There will always be decisions made due to political influence. However, an office dedicated to P3s that is removed from the immediate realm of political influence has greater opportunity to invoke positive policy quickly and efficiently; this, of course, assumes that the P3 office and P3s in general have broad public support.

In terms of P3s, an office like PRP3A is capable of structuring agreements with the best interest of the project, and the public, in mind regardless of political motivations that may influence a typical government agency (Khankarli 2009, p. 58; Reuters 2011, p. 2; Roach 2011, P. 91). Puerto Rico designed the PRP3A to be insulated from political influences well as lobbying from the very companies that would bid for projects. First, Puerto Rico established the PRP3A as an independent entity (without needing legislative approval for decisions) and the sole government body to deal with P3s in order to prevent political influence. Second Puerto Rico funds the office out of the general fund rather than charging P3 firms membership fees, therefore ensuring that private firms cannot assert pressure on decisions based on the fact that they pay for such services (as may happen in Australia, New Zealand, and Canada; see Table 2: International P3 Offices for more information). The PRP3A has a budget of \$15,189,000 for the fiscal year of 2011-2012 (Puerto Rico Office of Management and Budget 2010a, p. 5). Of the total budget, salaries account for \$504,000, just over \$14 million are spent on “professional services” and the rest of the budget is devoted to miscellaneous operations related costs (Puerto Rico Office of Management and Budget 2010b, p.4). For 2012-2013, the salary cost is projected to rise to \$677,000 while the cost for professional services is projected to drop to about \$12.5 million (Puerto Rico Office of Management and Budget 2010b, p.4). Less consulting work will be necessary for smaller or fewer projects in 2012, compared to 2011. Funding such work in this manner allows for a small core staff to work continuously on the development of P3

projects and promotion of the P3 concept in an effort to sway public opinion and garner more support from the constituency of Puerto Rico. Beyond the everyday work of the PRP3A, as necessary, professional services can be used for the detailed and specific work required by each P3 that comes through the pipeline.

Summary

The PRP3A is responsible for the entire Commonwealth's scope of P3s and for: "the requirements and conditions applicable to partners, the evaluation criteria and the procedures to be carried out to qualify potential proponents, select proponents and negotiate contracts through which the [P3s] shall be established" (Puerto Rico 2009, p1). Legislators made it clear in the enabling statute that all P3s should be held to the same standard, fed through the same system, and be undertaken in the same manner (Puerto Rico 2009, pp. 1-2). This uniformity in procedure and organization of ideas for all of Puerto Rico allows for a process that is apolitical in nature and strives only to gain the most value for money from every project it approves. The process is streamlined and simple (Alvarez 2011, p.3). There is only one organization for the private sector to work with and the same guidelines are used consistently for all P3s (Alvarez 2011, p.3). This consistent process has the capacity to create predictable results and avoids time spent creating new contractual structure for each P3 that may develop. In just two years the Authority has seen "accelerated investment" in public infrastructure (Alvarez 2011, p. 5) in the form of a rehabilitation program for their public schools and plans for improved sewage and energy programs as well as the newly approved toll-roads. As the authority becomes more established within Puerto Rico, public sponsors and their private partners may be able to further cut the time from proposal to procurement and construction of P3 projects simply because the process will be well known and well-practiced by both the PRP3A and the private sector contractors and developers.

International

Outside of the US, public sponsors routinely use P3s to deliver transportation facilities. Due to the very different legislative climate internationally, we chose to focus our brief case studies on offices dedicated to P3s rather than cloud the subject with discussions of legislation and financing that are irrelevant in the US. In some international jurisdictions, best practices offices dedicated specifically to the efficient and useful implementation of P3s thrive (Kearsarge Global Advisors et al. 2009, p. 8). Similar to Virginia and Puerto Rico, many other nations have offices that are dedicated to making P3s as feasible as possible through the provision of consulting assistance to public sponsors and implementation guidelines for P3 projects. However, these international offices are typically constructed and operate in a way that removes their actions from direct governmental control (Fischer, Jungbecker and Alfen, 2006, p. 543). The independent functionality of best practices offices is key to their success according to Fischer et al. (2006, p. 542). They must be able to freely contribute to the process of P3 development without fearing consequences from politically motivated administrators (Fischer et al. 2006, p. 542).

There are two types of P3 offices. The first type are private entities (non-profit corporations) made up of dues paying members. These P3 offices operate in the best interest of their members. We refer to them as non-government offices. The second type of P3 office is an office operated by the local government. These P3 offices are constructed as independent advisory entities and include a board of directors and a range of independent decision-making capabilities (e.g., no legislation is necessary for the approval of decisions). Government offices offer services only to public agencies, without fees (see the list of sources for Table 2).

All non-government P3 offices are membership based and have varying fees dependent on the level of benefits required by the member organization (see the list of sources for Table

2). Memberships include entitlement for the member, or member organization, to the research conducted by the organization, tickets to conferences and seminars, access to consulting sessions, and P3-centric lobbying of the current government administration in order to promote further enablement of P3 strategies (Fischer et al. 2006, pp. 541-543). Memberships may also provide an advantage during the project bidding process due to the closer connections they provide with decision makers however this is unverified. Additionally, the separation of these agencies from the rest of the governmental mechanisms in their respective environments allows for public sponsors seeking advice to get information that is less likely to be influenced by political aspirations. Also, non-government organizations have much more experience and skill with public relations and can therefore educate the public in a more concise and successful manner¹¹ (Forrer et al. 2010, p. 481). Lastly, The P3 best practices offices in the countries we researched make themselves easy to access online and provide significant amounts of P3 information to the general public in order to support their members' initiatives (e.g., PPP Canada, 2011b; see also, Infrastructure Partnerships Australia, 2008a; New Zealand Council for Infrastructure Development, 2008b).

Government offices operate in similar fashion to their non-government counterparts. They provide P3 specific research and advice; however they limit their assistance to public sector "clients" only. Also, government offices do not charge fees for their services. It is likely that this type of office presents the most appropriate international model for California to follow because it fits most easily into our current government practices and requirements, while enabling greater capacity for independent thought and efficient workflow.

¹¹ We speculate that had Texas employed a similar office, a pro-P3 public relations team working on the SH-121 project may have produced a different outcome.

Table 2 depicts the agency's name, home country and whether they are privately (non-governmental, membership/fee based) or publicly operated (a government agency) as well as their fee structure, number of members, the size of their staff and the sector they serve.

Table 2: International P3 Offices

Agency	Country	Public (government) or Non-Profit (non-government)?	Fees	Number of Members	Staff	Sector Served	Source
Infrastructure UK	United Kingdom	Public	Unpublished Information	n/a	-14 (+ ~60 advisors)	Public	a
Canadian Council for Public-Private Partnerships	Canada	Non-Profit	\$350-3,600 (CAD) annually	367	-3 permanent employees -Contract employees and consultants also used	Both	b,c
PPP Canada	Canada	State Owned Corporation	None	n/a	-8 person Board of Directors (BOD) and 5 executives	Both	d,e
Infrastructure Partnerships Australia	Australia	Non-Profit	-\$25,000 annually (AUD)	~140	-12 full time employees	Both	f,g
The New Zealand Council for Infrastructure Development	New Zealand	Non-Profit	\$1,000-9,000 (NZD) annually	80	-3 full time employees -1 part time consultant	Both	h,i
The National Development Finance Agency	Ireland	Public	none	n/a	-8 person Board of Directors	Public	j,k
Partnerships Germany	Germany	Public-Private Partnership	Unpublished Information	n/a	-2 person BOD, 8 person supervisory board and 3 executives	Public	l
European PPP Expertise Centre	Europe	Public	Time and Expertise	35	-19 executives	Public	m,n

Sources, a: Infrastructure UK, 2011; b: The Canadian Council for Public-Private Partnerships, 2011; c: Walmsley 2011; d: PPP Canada, 2011b; e: Coates 2011; f: Infrastructure Partnerships Australia, 2008b; g: Whitney 2011; h: New Zealand Council for Infrastructure Development, 2008a; i: Armstrong 2011; j: National Development Finance Agency, 2011a+b; k: Redmond 2011; l: Partnerships Germany, 2011; m: European PPP Expertise Center 2010; n: Fitzpatrick 2011.

Notes: as of September 23, 2011, USD\$1 =, AUD\$0.98, NZD\$1.29, and CAD\$0.97; n/a = not available.

As Table 2 demonstrates, there are various funding schemes undertaken internationally yet all offices operate with a small core staff of experts, which makes them cost effective to run. These experts have backgrounds in finance, construction, business, law and, perhaps most importantly, public relations (Leonie Armstrong 2011); Diana Whitney 2011). They have gained hands on experience implementing P3s and use this knowledge to advise on future deals. Furthermore they understand how to present their ideas and goals in a concise and understandable fashion in order to garner the most support for the concept of P3s (Fischer, Jungbecker and Alfen, 2006, pp. 544-545).

Membership Fee Funded Office

Infrastructure Partnerships Australia is a not for profit, non-government agency that has 140 members from both the public and private sectors (Diana Whitney 2011). Their members include financial institutions, construction corporations, accountancy firms, consulting firms and government departments of varying levels. Based on a flat-rate membership fee of \$25,000 and 140 members they have annual revenue of at least \$3,500,000 AUD which pays for 12 full time employees. This core staff has backgrounds in planning, law, economics and policy development. Additionally, as a cost saving and streamlining measure, some of their back office functionality is provided by an external service agency that is shared between Infrastructure Partnerships and a sister-organization (Diana Whitney 2011).

Functioning with a private, easy to forecast revenue source provides a best practices office such as Infrastructure Partnerships the capacity to assert a substantial level of influence over P3 development consistently while remaining as a small organization. Elements of this

office, and its structure may be helpful to emulate when designing a similar organization, specifically, the existence of a small core staff with a diverse background and pertinent experience.

Government Funded Office

The European PPP Expertise Center operates without membership fees, but on a membership basis. Members receive the collective knowledge of the organization and its lobbying power in turn for supplying employees who will devote their time and expertise to the overall goals of EPEC. We believe that this is an innovative method of providing assistance for public sponsors that seek P3s while also generating increased institutional knowledge throughout the public sector.

If EPEC were to be used as model for the creation of a similar best practices office this form of labor sharing should be copied. Increasing the experience that a public sponsor has with P3s across a larger spectrum will improve that agency's capacity to implement P3s on its own while also streamlining the process of P3 implementation for all public sponsors involved with the best practices office. Staff members that have been trained in the same way by the same main organization will then be able to return to their home agency and further that organizations P3 knowledge increasing P3 capacity across the spectrum of participants.

Summary

International P3 best practices offices possess a large amount of experience with P3 arrangements. They have been functioning for at least the past ten years and are consistently innovating in order to gain the best value for money from each P3 that is undertaken. Because of their forward thinking stance on P3s the vast majority of private investment in transportation infrastructure takes place outside of the US (Kearsarge Global Advisors et al. 2009, p. 8). These

agencies represent a series of best practices in action and would be ideal models when undertaking the creation of a similar office in the United States.

Interview Responses

Overview

This section of the report discusses the interview process we employed, the data we collected through these interviews and our interpretation of its relevance to the P3 discussion in California. Our interviews focused on public sector P3 stakeholders across the state; therefore, we spoke with staff level representatives of transportation departments, councils of government, metropolitan planning organizations and regional transportation planning authorities. We found that many of these representatives were significantly challenged when asked to highlight specific P3 projects or programs that are standouts. It also became apparent that some respondents believe each P3 is unique and, therefore, requires a clean slate every time such a partnership is implemented. The Professional Engineers in California Government (PECG) union was widely identified as the most significant constraint on the execution of P3s in California. Lastly, none of the participants had an active P3 project within their agencies' jurisdiction. Therefore, all participant's statements were made in terms of "what if" conceptualizations or previously pursued yet unapproved (or failed) P3s and projects which they had direct or indirect involvement with (e.g., SR-125 or SR-91).

We interviewed 14 staff members from California public agencies representing counties of all sizes. Specifically, we spoke with staff persons from: Kern County Roads Department, Los Angeles Metropolitan Transportation Authority (Metro), Metropolitan Transportation Commission (MTC), Orange County Transportation Authority (OCTA), Placer County Transportation Planning Agency (PCTPA), Riverside County Transportation Commission (RCTC),

Sacramento Area Council of Governments (SACOG), San Diego Association of Governments (SANDAG), San Joaquin Council of Governments (SJCOG), San Mateo County Transportation Authority (SMCTA), Santa Clara Valley Transportation Authority (VTA), Southern California Association of Governments (SCAG), Ventura County Transportation Commission (VCTC).

The structure of the interviews was designed to account for agencies with and without existing P3 agreements within the jurisdiction and was made up of 20 total questions (please see the Appendix for a complete list of questions). Interviews lasted between 30 and 75 minutes and were conducted via phone. A complete summary of the interview findings as well as an assessment of their implications follows. In order to elicit the most candid and truthful responses from our participants during the interview process we chose to maintain their complete anonymity. We will not be reporting any respondent's names, titles or agency affiliations. To further protect the participants' identities, any identifying statements have been paraphrased and included in brackets so that context and the original structure of the statement are maintained.

P3 Perceptions

The general perceptions regarding P3s presented in our interviews were varied; based on previous experience or a low-level knowledge regarding what has taken place elsewhere. Despite this, participants cited both substantial advantages and substantial limitations related to P3s. We will discuss our results in detail below.

Limited Knowledge

After the completion of our interview process it became apparent that detailed knowledge of P3 projects, programs, and techniques is quite limited among our respondents. Many respondents seemed unfamiliar with federal financing programs (or at least unaware of whether their jurisdiction had used them). Finding such a rudimentary understanding of P3

concepts and other alternative financing schemes may highlight the need for better dissemination of information by Caltrans and other State level offices dealing with transportation finance to ensure that the people initiating and managing projects fully understand the scope of their options and responsibility. Currently, the Self-Help Counties Coalition (SHCC) conducts a series of conferences and seminars dedicated to educating its members about P3s (among other pertinent public policy/administration information), however, the non-self-help jurisdictions are left out of these proceedings. We found that the SHCC is a relatively common source of knowledge (three respondents cited it directly) regarding P3s and therefore it may be appropriate to expand such practices statewide. Finally, the low level of detailed knowledge exhibited by participants in our study may have resulted in responses that are similarly lacking in their depth. The justification for the responses we received often lacked any empirical evidence to support the claims and was often limited to the personal opinions of each participant. We interpreted the shallow nature of the responses as knowledge that may have been retrieved from newspaper sources instead of either industry or academic publications.

The respondents were able to cite a small number of both successful and unsuccessful P3 projects and programs around the world (international examples were limited to the P3 program in British Columbia, Canada and the way P3s are done in Europe, without any specific project/program examples). Of the domestic examples, most were within California. Many respondents highlighted the SR-91 managed lanes as a failed P3 project due to the non-compete clause that was initially part of that project. However, two participants specifically cited the SR-91 managed lanes project as a successful project. These respondents pointed out, that while the public partner should have addressed the non-compete clause at the beginning, the project as a whole was beneficial for the region and brought needed capacity at a time when the public

sector could not provide it on its own. One of these respondents said, “I think the 91 was very successful. I also think the public buy out of the 91... was very successful. I think they both served their purpose for the time.” Other participants looked to Colorado, Florida, Virginia and Texas for good examples of P3s, without being able to provide substantial specific reasoning for their opinion. Lastly, the P3 program that exists in British Columbia, Canada was cited as a good example of P3s (essentially, the participants stated that the office continually creates successful partnerships). One participant said, “[British Columbia is] very innovative in how they program to develop quite a bit more than what... they can afford. I know that the Sea to Sky highway... actually provided more in terms of improved development along that coastal corridor [than the agency in Canada had included in their initial scope].” If the State of California wants to encourage more P3s, more information about a) P3 case studies (successes and failures), b) P3 formation, and c) P3 strengths and weaknesses, must be disseminated to the local officials who actually program the transportation projects. Currently, knowledge levels are so low that there is a high potential for public sponsors to, at best, experience costly misunderstandings during contracting or, at worst, be taken advantage of by more P3 savvy private entities.

Advantages and Limitations of P3

The majority of respondents were able to cite both advantages and limitations of P3s. Nine interviewees mentioned advantages while eight spoke of limitations. In terms of the advantages of P3 procurement, six of nine respondents cited the transfer of risk that is possible with well-written contracts. One respondent summarized the sentiment of the others regarding risk transfer when they said, “One of the biggest [advantages] is risk allocation, risk shift. I think one of the things that the public sector does very badly is manage large contracts in terms of on-time performance and cost containment. That’s because they often get very political. As soon as big contracts start to go bad somebody runs to the political forces. It tends to get to be a

mess. If you've got private financing and private risk allocation... [I]f the contract starts to go late or go over you've got that risk on the private side and Goldman-Sachs is out there beating up on the contractor rather than us ...” The remainder of the participants that cited risk allocation or transfer as a benefit of P3s were similarly confident in the private sectors ability to control risks and weather the consequences associated with potential failure of large projects and substantial up-front expenditures.

Other advantages mentioned by interviewees include the speed and efficiency with which the private sector operates, “immediate” access to financing, lower costs and the ability to fund projects that struggle to obtain traditional funding. Nine participants believe that P3s present an opportunity for cost savings, either through increased efficiency or the direct transfer of risk to the private partner. One interviewee was particularly detailed in their explanation of the costs savings they believe to be possible: “The public sector has a tendency to build the facility just based on the revenue that it receives as opposed to building the facility based upon handling the demand that is there and then incrementally making improvements if the demand continues to rise.” This respondent described the “use it or lose it” mantra that is typical of public sector financing, which forces agencies to either spend the money they receive or forfeit it and often inspires massive infrastructure projects that are not necessarily immediately justified. The strength of the private sector is its “great flexibility in where it uses its next dollar... [The private sector can direct its funds] to the area where the demand and need is greatest...”. The ability to direct funds to projects as needed is a considerable advantage that the private sector brings to the table when negotiating a P3 project. Others respondents believe that the advantage of P3s is that they can “deliver the project faster and spend somebody else’s money first”. Speedier projects incur lower financing costs and have greater purchasing power due to the avoidance of inflationary effects. Similarly, “there are costs that are associated with

a government agency doing things,” “and that process that they follow seems to be very cumbersome and may not be the most efficient way to deliver projects.” These interviewees work in the public sector, yet they still believe that their own methods of procurement and infrastructure provision are lethargic and unwieldy.

The “tradeoffs” associated with P3s, political unpredictability, “loss of control,” unfamiliarity with the concept of P3s, a lack of infrastructure that has the potential to generate revenue and the notion that small jurisdictions may not benefit from what are currently considered typical P3s (large infrastructure projects worth hundreds of millions of dollars) are all limitations of P3s that were mentioned by respondents. With a greater understanding of the current P3 best practices, the “loss of control” cited by some participants may become less of a concern because they would understand that their agency and its constituency could be protected by well-designed contracts. Furthermore, a more complete understanding of P3 programs throughout the country and the world could assuage the fear that smaller jurisdictions may be left out of the ‘P3 party’ simply because of their size. It is readily apparent that jurisdictions of all sizes are served by P3s in both Virginia and Puerto Rico, as well as many overseas locations, however in these locations the concept of P3s is better understood and implemented (both in terms of contracting practices and breadth of projects).

Most of the rural district representatives we spoke with felt that they did not have any projects that would be ripe for P3 procurement. They gave three main reasons. One, there is simply not “enough” congestion; therefore there is no desire to increase the capacity of local roadways. Two, in cases where there is some congestion and capacity improvements would be desirable the potential for toll revenues, capable of financing the entire cost of the additional capacity, is too low to warrant pursuing a P3. Three, the problem these smaller jurisdictions

actually face (instead of congestion) is the need to perform ongoing maintenance on their existing infrastructure. The need for improved maintenance capacity does not warrant a P3 because the type of financial exchange (predictable user fee revenue) that attracts private firms to P3 investments is not present and (according to the respondent's perception) P3s operate in the realm of innovation and cannot provide basic public services such as road maintenance.

All P3 Projects Are Unique

Five of our respondents specifically stated that P3s are all unique and should be approached as such. We believe that P3s cannot be viewed like this if they are to succeed in California. When discussing guidelines for future P3 implementation one respondent said, "I think what we will do is... look at this on a project by project basis. I don't see us adopting a policy because, actually, the policy would just say 'depends on the project... adjust accordingly'." Respondents are not convinced that there is common knowledge and expertise that can be helpful in considering each possible project, because the project goals are unique (which is potentially misleading to the uninitiated). This understanding of P3s highlights a need for education and access to the knowledge necessary to successfully execute an agreement in the most efficient way possible. Simplifying what is needed, one respondent suggested that a "boilerplate" type document could be created so that, after the initial P3 undertaking, each future agreement would have a basic framework to work from. In order to accommodate the necessary differences between each partnership contractual clauses can be added to the base contract established by the "boilerplate" creating a unique partnership from a shared P3 structure.

Advocates for P3s

Ten of 13 respondents stated that they had advocates for P3 techniques including alternative financing, private partnering and user fees or tolling within the agency. One of the

negative responses to this question was: "Within this area there is a desire for privatization, it's not in our agency per say, not necessarily even in the county, but there is always a desire by the contractors as a whole to privatize." Another respondent stated that they had no active advocacy efforts taking place within the agency but consistent encouragement from the board of directors to keep an open mind to all types of financing. Those that acknowledged the existence of P3 advocates ranged from very enthusiastic to cautious but optimistic: "Almost from the executive director on down... P3s [and other] ways to get transportation funded and built that are not necessarily orthodox are always welcomed as concepts so we can take a look at them. I think it's a pretty open agency that way"; "I wouldn't necessarily say that they're out there championing it, but certainly it's on the table for discussion." The level of enthusiasm expressed during the responses to this question varied considerably between interviewees, however a substantial majority stated that their agency has internal advocates for P3 procurement practices.

Despite the majority of respondents advocating P3s, of the 14 interviewees, only three stated that they had been directly advised to pursue P3 procurement by a consultant that their agency hired. None of our participants had been advised by a political decision maker, below the level of state government, to pursue P3s. The ten participants that had not been urged to pursue P3s by a consultant stated that the agency's staff initiated their interest in alternative methods of financing, including P3s. Consultants did not enter into the P3 discussions within these agencies until after they were interested in pursuing such financing and hired P3 specific consultants. One interviewee discussed another source of P3 advocacy, "We're being lobbied heavily by the industry, firms that are existing concessionaires, foreign firms; you name it. Everybody wants to meet with our CEO, myself, our staff." Significant private sector interest in

California P3s, as described by this participant, is expected to exist currently and expand in the future as public funding throughout the State continues to decline.

Barriers to P3s

Interview participants were well-versed when discussing the barriers that keep P3s from becoming a regularly used method of procurement and provision. The smaller counties, by definition have smaller projects; new facilities in those counties are unlikely to attract interest from private firms even if the counties wanted to pursue a P3. Amid those counties with projects ripe for P3s, popular sentiments regarding P3 barriers refer to: financial complications, organized labor, State level governance issues and agency inexperience. We will summarize each of these opinions below.

Financial Barriers

The financial hurdles associated with P3 implementation include the need for projects that are capable of generating revenue, the fact that P3s do not provide access to “new money” or correct financial problems that already exist within a jurisdiction’s transportation provision strategies and a lack of evidence that a P3 can provide a cost savings. Multiple participants referred to the need for a project to generate revenue as a barrier to their agency actively pursuing a P3 project. Without a level of demand that would indicate a willingness to pay for the use of a new facility, a P3 (which many participants directly associate with user-fee financed projects) is impractical. “Ultimately, we have to be there with our financial share of the partnership and that’s going to be a challenge” said a respondent when discussing issues of revenue generation. If the required revenue can be generated and the project is put through as a P3 “it doesn’t mean it can outweigh the project’s financial state” and simply fix any previously acquired deficits or mistakes that have been made. Continuing this explanation, the same respondent said that “funds are not unlimited” and that “you have to build in a rate of return,

which adds complexity” implying both increased costs as well as increased difficulty directly related to the fact that a project is a P3. Despite nine participants agreeing that there could be a cost savings associated with P3s, one respondent disagreed entirely with the notion that a P3 could cut costs: “How can a private entity borrow at a cheaper rate than a public entity? I have not seen any evidence of [cost savings] yet... It comes down to each individual project’s finance package and it comes down to the availability of money”.

When asked if a project would cost less, the same, or more when done as a P3 (compared to a traditionally financed project) one respondent said, “I’m not sure we would think there’d be any difference... it’s a matter of whether or not the financing is available. Unfortunately there isn’t \$200 million [randomly selected cost for the example scenario] out there in the conventional ways of paying for transportation these days, so that’s why we’re having to... consider different ways of finding the right transaction.” Another respondent said, “I don’t see cost savings, I see perhaps cost certainty. I think that design-build is what could bring cost efficiency to a project. I don’t buy in to the theory that everything private does is cheaper than what public does. So I think an advantage could be cost certainty, to the owner.” Our interviewees stated that private sector firms are more capable of enforcing a specific budget than public sector agencies.

Labor Issues

Labor unions, specifically the Professional Engineers in California Government (PECG), were a frequently cited source of anti-P3 sentiment and referred to as the most vexing barrier to the implementation of more P3s in the state of California. Six of the twelve respondents referred to PECG as a major obstacle diminishing the success of P3s. One respondent said, “I am sure, under any P3 arrangement, that the Professional Engineers of California Government will not be comfortable with a P3 approach and I am sure that they will dispute it.” The same

participant continued to explain that they avoided pursuing a P3 project because PECG expressed the desire to “lead in every area of delivery” which would have directly hampered the agency’s efforts. Without finding a way to appease the demands of the PECG, P3s may not have a chance despite any legislation that empowers such procurement. Another interviewee expressed concerns that all forms of innovative project delivery are at risk: “I think the biggest risk [for] innovative delivery in California is the opposition of the public employees’ unions. That is the single biggest risk to any kind of innovative delivery in California, P3 or not”. The respondents that cited PECG as an obstacle are also the representatives of the larger, more urban, areas of our study. When discussing PECG, one participant highlighted this California-wide influence, “They have friends in the legislature and there are some folks who just see it [P3] as a threat”. The size and the power of PECG have allowed the organization to fight and successfully slow (or stop) numerous P3 projects, most recently the Presidio Parkway in San Francisco¹². On the Presidio project, PECG was able to delay the initiation of construction and the financial close of Phase II for so long that the project took 4 years and 5 months to reach closure (see Figure 1 **Error! Reference source not found.**). Furthermore the local public agencies that are involved with the Presidio project have had to inject an additional \$31 million to keep it on track (SFCTA 2012, Attachment 2).

Caltrans, PIAC and the State Legislature

Throughout the interview process it became apparent that, in the opinion of the participants, both Caltrans’ and the legislative P3 process present significant barriers to P3 implementation in California. Unlike typically financed transportation projects (approved by

¹² Additional evidence of their activity fighting P3 projects across the state can be seen on their dedicated anti-P3 website ([PECG 2011](#)). On this site they focus on the three P3 transportation projects in California (The Presidio Parkway, SR-125 and SR-91), as well as others that have “failed” from around the world. This page also provides access to a series of PECG whitepapers on the various problems with P3 infrastructure provision, news articles that discuss the same, links to “P3 Disasters” and examples of the ways traditional procurement can save public funds.

CoTCs), chapter 2, section 5 of SB 4 x2 states that, “all lease agreements first be submitted to the California Transportation Commission for approval, then to the Legislature and the Public Infrastructure Advisory Commission... for review...” (State of California 2009, p. 96). Seven out of 13 interviewees spoke specifically of problems at the state level that prevent or hinder execution of P3s, implying that the process would be much simpler if the entire process were streamlined to be less “cumbersome” and more accessible. What follows is a brief snapshot of the concerns raised by our respondents:

- “It doesn't seem like the state's statutes and process and procedures are completely wide open for usage of this method. It still seems like it's a little difficult to try to angle your way through. If there was any way to make that better or simpler or to set up, kind of what British Columbia has done, that might be a good thing to be able to assist this really working better. It is still kind of a 'you're on your own' kind of thing. Boy is it difficult to get through [Caltrans].”
- “There has been some resistance in terms of Caltrans doing this type of thing. Change is always difficult. Somehow a case needs to be made, why a P3 is in Caltrans' best interest because that's really what's going to convince Caltrans on this stuff. You know, there is a loss of control, which I think is a big concern of theirs and it needs to be addressed because that's going to reach every single P3 contract. So, they need to establish some level of comfort with this.”
- “We want to do a P3. As a matter of fact, when PIAC was first created I was going to all the PIAC meetings and then I saw that, that process... was a very cumbersome process... In my observation of the way PIAC worked, I thought it was extremely cumbersome. I mean the first thing they did was break in to you know, like 15 subcommittees. It just seemed that, if you want to get projects done you have to cut down the overhead. If you look at PIAC, I think the only project that's been approved is Presidio Parkway and nobody likes the fact that that has been done. It's a cumbersome process.”
- “Nobody wants to take on getting a permit from Caltrans. It's a nightmare. We actually had projects designed by their own people that couldn't get through their permit shop. So permitting is always an issue. Are we any more experienced at it [when compared to the private sector]? I think we're just more tenacious about it and willing to do what it takes to get it done. The private guys, again, don't understand the hurdles that are involved in it.”

We believe that these issues target the major problems plaguing California P3 implementation. As a process, it is unwieldy and confusing. As a concept, it is superficially

understood and poorly researched (within public sector agencies). P3s in California are limited in both scope (restricted to transportation projects only) and in time, due to the sunset of SB 4 x2 in 2017. These issues contribute to confusion, disillusion and frustration at all levels of government as well as within the private sector¹³, therefore leading to slow adoption and poor execution of the concept.

Internal Policy Guidelines

No participant agency has a set of policy guidelines enacted specifically to govern the P3 implementation process. The lack of policy guidelines is unsurprising since none of the agencies we spoke with had a P3 agreement. The need for such guidance was acknowledged by five respondents who all agreed that the policies would be developed on an as needed basis. One participant did state that they have an internal charter that deals with the P3 process, which had been presented to the board but not approved. Another participant explained previous attempts to pursue multiple P3s, describing the projects as unable to “pencil out,” however they did establish P3 guidance, (limited, and unique for each project) that was not approved because the projects did not come to fruition.

None of the participants had anything substantial to say about P3 policy guidance. The lack of existing policies along with the lack of planned, or previously experience with, policy actions mentioned by participants has led us to believe that a lack of detailed P3 knowledge (as discussed above) may be preventing public agencies from protecting themselves appropriately, while inadvertently discouraging the concept of P3s due to a lack of opportunity as perceived by the private sector.

¹³ See Section VI, Market for Private Capital.

Public Opposition

The belief that, if a P3 project were being put into action, there would be public opposition specifically because the project was a public-private partnership was limited to two participants. Furthermore, these participants believed any potential public opposition would be related to a “loss of [public] control” that could be potentially associated with the financing technique instead of opposition toward the inclusion of private sector entities and funding sources in public infrastructure provision. These respondents explained that, if you have a partnership with a private sector entity there may be a lack of definition, in the opinion of the public, regarding who is actually in charge (the public sponsor or the private firm). Expanding on this notion, other interviewees said, “When it’s purely public you can hold elected officials responsible” while, “on the private side it’s not that transparent”; “[the public likes] the control under the public policy body”. These participants make it clear that transparency in contracting as well as public faith in the process may ultimately be a key milestone for P3s in California to strive for.

The rest of the interviewees expressed the opinion that the general public does not really know about P3s and will not care how their roads and other infrastructure are provided. Some agreed with the notion that “it really hasn’t been much on the political radar screen at all” while others felt the lack of public opposition to P3s was because the public is more concerned about the cost of something and not how it comes to be built. In the words of one participant, “the larger issue is what is visible to the consumer and the customer. For example, the tolls are what will matter to people. So, the arguments we would hear would be ‘people don’t like toll lanes, they don’t think they should have to pay, they think it should be free.’ That’s what would generate controversy.” According to our participants, if users are required to pay for the right

to use public infrastructure, there will be pushback on the part of the constituency regardless of the procurement or financing methods used to provide the amenity.

While tolling was cited as a cause for public opposition (any form of user fee supported facility, as opposed to P3s specifically) by some participants, others believe that tolling and user fees are becoming accepted by the public and would not be a cause for concern when implementing a P3 or other user fee funded infrastructure. One interviewee explained, “People are beginning to recognize that, the traditional form of providing... infrastructure through higher tax rates...benefits specific people without [creating] general benefits [for] everybody... [A] better way to fund [such projects] is to figure out how to get the users to help pay for their proportional... share of that project... I think that’s why HOT lanes have been accepted [because there is a choice between paid and free facilities].” User fees and tolling have the potential to be popularly accepted if the users themselves understand that they are paying for a specific amenity and a prescribed set of benefits without paying for anything that they are not directly benefitting from.

Other respondents believe that public opposition can be avoided through education. One participant said, “I am not sure the public is all that educated about the concept [of P3s]... Managing the public and making sure that you're transparent and organized and explain what the plan is and how you chose a method... is something that public agencies need to take responsibility for, so if you turn your back on that there [are] some potential problems.” Another stated that, “ we have to make sure that we are totally transparent and bring the constituency on board as a stakeholder right up front. I mean, that’s how we have been successful in passing our sales tax measures.” Insightfully, one respondent highlighted the fact that much of the public opposition directed towards P3s is actually because of ulterior motives,

“because the project itself may be controversial” so it’s opponents may, “try to bend what a P3 does or doesn't do.” This tactic gives the opponents of a project an additional piece of evidence that shows why the project should not be built, whether or not the evidence is factual.

The statements made by our respondents regarding public opposition to P3s suggest that the public constituency within California should be considered accepting of well-written, well-managed and transparent P3 projects. This finding highlights the need for greater P3 organization at all levels of California governance as well as substantial public oversight of all P3 proceedings to ensure that public interest is consistently maintained.

The P3 Paradox

Public sponsors do not necessarily consider P3s as most appropriate for high demand projects. Our interviews revealed that high demand, high profile projects with strong constituent support are likely to be publicly financed: the public is often willing to tax themselves in order to get popular projects built. Many urban counties in California have passed “self-help” sales tax measures to finance a specific list of new transportation infrastructure projects. Washington has increased its fuel tax in support of a set of congestion mitigation projects. Projects with lower priority are then considered for P3s, only because traditional funding sources are not available. One of our respondents described this as the “P3 paradox.” When we asked this individual why there were not P3s in their jurisdiction they said, “Because we never found an opportunity for it... where we could actually identify a project that would generate enough revenue [to draw private sector interest]”. He continued: “If it’s popular enough to create sufficient traffic to pay for itself, through a revenue stream, it’s probably popular enough for the local agency to find sufficient public funds to pay for it.” Projects that are suitable for P3s often have plenty of public funding, and the projects that need

funding are not suitable for P3s. If P3s were used to fund high profile, high demand projects, resources would be freed to fund lower demand (yet vital) projects.

Demand Forecasting and Risk Management

Throughout the interview process, our questions regarding how agencies forecasted demand for new projects and how they protected themselves from risk were met with very similar answers from all respondents. Participants generally operate with large coverage ratios for all bond activity and cite this practice as the main method of managing their risk. Expanding this basic explanation significantly, one respondent said, “If you're talking about project delivery, we have taken a more active role in oversight of projects.” This respondent continued to explain that, because of a large project and other smaller projects that went over-budget (managed by Caltrans and local agencies) that their organization hired a full time construction manager to help ensure that projects are delivered at budget. Whether it is accomplished through a dedicated staff position, or policies internal to the agency, all participants stated that their agencies were very conscious of the need to protect the agency’s finances. They described exceptionally careful fiscal practices and explained that they undertook every opportunity to ensure the stability of their investments and the financial fortitude of public sector coffers.

In terms of demand forecasting, those agencies with constituencies that are large enough to influence demand on a regional scale employ proprietary models. When analyzing the model data most agencies perform at least the basic analysis work in house. Many respondents said they use third-party consultants to analyze modeling data for complicated or large projects, or when assessing various financing techniques (including P3s) to determine the best method of procurement available. Questions regarding forecasting did not present any innovative concepts or unusual responses.

Analysis

After researching P3 practices as they exist in Texas, Virginia and Puerto Rico as well as internationally we have developed a set of lessons-learned, which are presented and briefly discussed below. Additionally, we summarize and analyze the interview responses so that a series of take away recommendations can be presented.

Domestic Lessons Learned

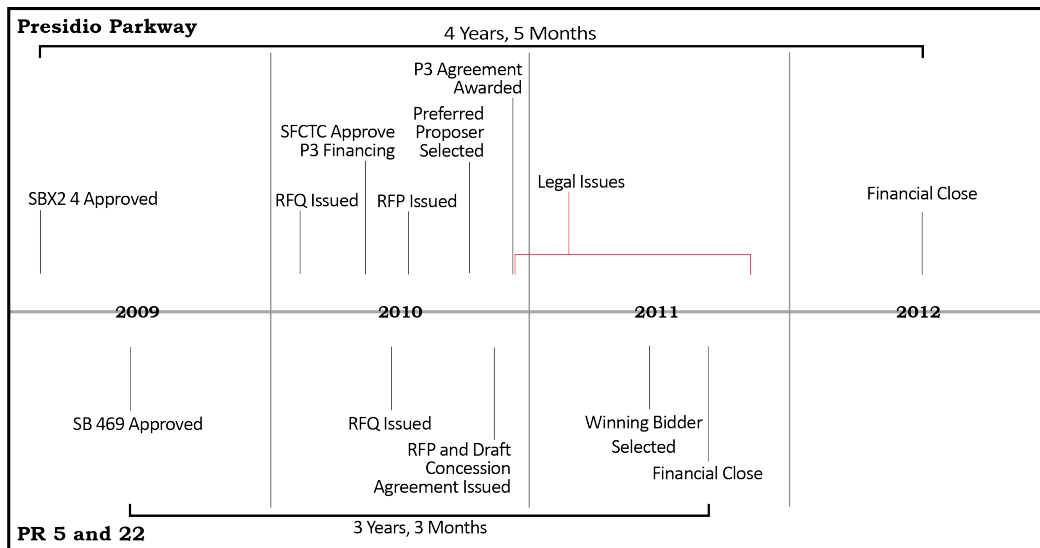
California ought to look to Virginia and Puerto Rico as models; while Texas does have a large number of P3s, its lack of dedicated office and the on-again/off-again nature of it enabling legislation should not be replicated in the State. Virginia's established P3 program 1) develops projects for all types of transportation infrastructure provision, 2) is directed by a dedicated best practices office, and 3) has a set of guidelines that organize and direct all P3 efforts in the state. Virginia displays a willingness to innovate and adapt to current P3 standards. In Puerto Rico, a well-structured assessment plan for potential P3 projects allows for a large portion of the human element (opinion and emotion) to be removed from the process of P3 implementation. Like Virginia, Puerto Rico has a set of guidelines established that manage the bulk of P3 development, leaving very little of each P3 agreement to be developed from scratch or without a template to work from.¹⁴ Additionally, Puerto Rico's P3 legislation and best practices office does not focus solely on transportation. Puerto Rico's transparency and the diversity of P3 projects helps achieve public support for the projects (Russell 2011, p. 1). Both Puerto Rico and Virginia offer lessons for California on how to increase the use of P3s.

As a comparison between Puerto Rico and California, we have developed a time-line which relates the approval date of each government's latest P3 legislation as well as the

¹⁴ See [Puerto Rico](#) on page 21.

milestones of the only transportation P3s undertaken since the respective legislation packages passed. See **Error! Reference source not found.**Figure 1. Puerto Rico passed its P3 legislation after California, yet it reached financial close on its first transportation P3 well before California (three years and three months for Puerto Rico, and four years and five months for California). The time from the enactment of legislation to the award of contracts is virtually the same for both jurisdictions. However, California was hampered by legal problems; the PECG-filed lawsuits slowed the progress of the Presidio Parkway. Puerto Rico benefitted from less political turmoil over the concept of P3s, fewer complications during the process and the efficiency and dedicated workflow of a best practices office.

Figure 1: Puerto Rico vs. California P3 Development Timeline



Sources, Nossaman, LLP 2012; Puerto Rico Public-Private Partnerships Authority 2011a, 2011b; Saage 2011; Samuel 2011

Of course, Texas, Virginia, and Puerto Rico have different political environments. Texas and Virginia have right to work legislation and all three tend to elect conservative governments (NRTW 2012). Texas lacks any form of organized P3 office, as does California, and both states

struggle with implementing P3s and avoiding pushback from stakeholders. In Virginia, they were faced with a complete reworking of their P3 office in order to remain effective and competitive, however the office is now functioning well and out-performing California. Finally, Puerto Rico has been exceptionally successful with its P3 legislation and dedicated office (accessing a broad range of social infrastructure projects through P3 concepts) since it was created in 2009, while California has struggle to implement one P3 in the same time period. To the extent that California wants to encourage more P3s, it will have to address the political differences between it and the jurisdictions presented here that have more fully embraced P3 delivery.

International Lessons Learned

P3 strategies thrive overseas (Hodge and Carsten 2007) and the use of these advancements and best practices as a model for the California P3 climate has the potential to fast forward California's P3 development by many years. Modeling practices and a P3 office after these examples will effectively skip years of trial and error as well as vast amounts of research. Using foreign styles of P3 propagation is not an original idea. Most recently this has been undertaken to establish the Puerto Rico Public-Private Partnerships Authority mentioned above. According to Governor Fortuno, of Puerto Rico, he and his team traveled around the world observing various P3 models and best practice offices and proceeded to model their office after those of Canada, Australia and Europe (Welch, 2011, p22).

Summary of Interview Responses

We can sort interview responses into two categories: "needs improvement" and "performing well". The needs improvement section of responses deals with those responses that refer to problems with the P3 process, impediments to successful implementation and a general lack of P3 knowledge. The performing well section organizes interviewee statements

that lend promise to the future of P3s in California. They are statements that support the concept, describe innovative thought processes at work and highlight areas of government that do not need direct intensive attention from policy makers and consultants. What follows is a series of recommendations and observations based on these two types of responses. See Table 3 for an outline of responses by category.

Table 3: Categorized Interview Take Aways

<i>Needs Improvement</i>	<i>Performing Well</i>
Current, detailed, P3 knowledge	High percentage of P3 advocates within the agencies interviewed
All P3 projects should be approached as one-of-a-kind undertakings	Public opposition towards future projects will not likely be because of the P3 concept
Participants unfamiliar with the concept of P3, the enabling legislation and the PIAC taskforce	Environmental permitting is not a P3 specific barrier to infrastructure implementation
Professional Engineers in California Government Caltrans and the legislative P3 approval process	Local level organized labor is supportive of P3s
Lack of internal P3 policies and guidance	Long-term contracting/increased upfront costs are not viewed as barriers
The P3 Paradox	Participants operate with large debt coverage ratios and are fiscally responsible
Politics affect the chances of P3s being popularly implemented	
Current P3 concepts do not address new planning ideas	

Table 3 does not include financial complaints, as these are likely to exist independent of procurement and financing techniques.

Needs Improvement

Based on these statements we have developed a broad recommendation for the State of California. In order to focus and enhance its P3 implementation and success rate, the State should: educate its staffs, develop a more effective and efficient approvals process for P3s, broaden the State’s approved definition of a P3 and its capabilities, and manage the impact of political dissonance on public-private partnership endeavors and approvals. Ultimately, all of these tasks should be managed and maintained by a P3 best practices office. Each of these goals is outlined in greater detail below.

Enhance Knowledge Base

While we acknowledge that consultants are important knowledge augmentation tools we believe that understanding and experience that are native to an agency allow for a more streamlined P3 development process as well as enhanced protection of public assets and less costly endeavors. Many respondents were unfamiliar with alternative financing techniques in general, including some of the federal level grants and loans we asked about. It is conceivable that a greater depth of knowledge may enlighten the staffs of California thus allowing those P3 elements that are currently viewed as limitations, to be reassessed and at least understood if not embraced. Given this greater level of knowledge regarding the concept of P3s we believe that more agencies, particularly those with a stated interest in P3s, would have internal agency guidance regarding the method of procurement. A lack of such guidance is not only limiting for the agency, it likely discourages private sector entities from working (or seeking work) with such agencies because of a perceived lack of opportunity.

Caltrans should disseminate information regarding P3 concepts and alternative finance in the same manner as the Self-Help Counties Coalition¹⁵. Efforts such as this will not only provide better levels of education for public sector staff, they will provide opportunities for private consulting firms to introduce themselves to their potential clients through workshops and professional development seminars.

Streamline the Approvals Processes

Many of the complaints that were shared with us repeatedly dealt with the process of achieving approval for projects. Many respondents stated that any project, P3 or otherwise, is extremely difficult to guide through the Caltrans and state level permitting processes. Others

¹⁵ Please see our discussion of the Self Help Counties Coalition's efforts to educate its members in the Limited Knowledge section of this document.

described the Caltrans and legislative processes as confusing, frustrating, time consuming and generally exasperating.

Furthermore, the approvals process should include a method for analyzing potential projects and creating a project pipeline (Puerto Rico does this best). This pipeline should consist of projects that have been pre-assessed in terms of P3 suitability and have passed initial viability tests. A central P3 office completes research that is undertaken to determine the viability of P3 projects. Pre-screening in this way allows for a cost savings on both sides of a P3 and ensures that private partners will always have ways to invest and contribute to public infrastructure while ensuring that all potential P3 projects are pursued so that the amount of time spent between determining a need and meeting that need is greatly diminished. A pipeline strategy would also allow for the creation of a systematic analysis, of all projects and programs, dedicated to determining the ways in which P3s can facilitate implementation.

Broaden the Scope of P3s

As a long-term objective, P3s in California should be broadened in their scope as they have been in Puerto Rico. Puerto Rico has legislation that allows P3s to be used for most public infrastructure needs. For example, they are currently using P3 procurement to refurbish multiple schools. A broad P3 scope allows Puerto Rico to be more efficient in their procurement processes as well as develop closer relationships with consulting partners and the lawyers representing the public. If California, and the rest of the US, continues to limit the scope of P3s to transportation the public will experience a substantial disservice because there are many services and facilities that could benefit from increased access to financing and the potential for more efficient development processes.

Five participants specifically stated that every P3 project is a unique; the belief that each partnership is unique is likely a key contributor to the current lack of P3s in California. The sunset on P3s that is included in SB 4 x2 should be removed to allow for projects that might start after 2017 to be built as P3s.

Avoid Political Dissonance

Legislative assessment is necessary for all agreements related to SB 4 x2 (Cogdill 2009, p. 7). Therefore, P3 agreements are placed at risk because of the variability of political will. Beyond the legislature, political will impacts P3s at all levels of public sector participation. The typically short attention span of politics allows for decisions to be made based on the immediate future and in order to assuage public concern/demand, degrading long-term planning and infrastructure provision efforts. Agencies that are governed by elected decision makers that disagree with the concept of P3s may not be allowed to pursue such procurement strategies. Changeover that occurs with political leaders may lead to large swings in attitude, which result in feelings of either support or derision. Furthermore, multiple respondents stated that the Professional Engineers in California Government are a pronounced barrier to P3 implementation and that they are the “greatest risk [to] innovative delivery.” We heard that PCEG is extremely powerful and uses its power against P3s.

Create a Best Practices Office

To achieve a streamlined approvals process, better levels of knowledge for public sector staffs, a broader scope for P3s and a diminished level of political interference a dedicated P3 best practices office should be established that emulates the design and work structure of the office that exists in Puerto Rico. As in Puerto Rico, a P3 best practices office should offer current and innovative research, contracting guidance, a structured approvals process that is not

legislatively controlled and act as a manager of a P3 pipeline so that infrastructure projects that can be financed get financed as soon as possible.

According to our research the most influential best practices offices offer impartial advice based on facts. These offices operate as consulting practices that provide information supported by their in-house research regarding industry best practices, development of appropriate contractual language, and understanding of current public policy as well as their staff's experience and expert opinion. They are typically made up of a small staff (usually under ten and maximum 18) and use consultants to complete the exceptionally specific task work of P3s while managing the contractual procedures and the big picture of each P3 for their respective jurisdictions. All of the offices we researched, both in the U.S. and internationally, operate as self-managing entities. Some operate with boards of directors and have completely independent decision-making processes. As can be seen in Table 2, many of the international best practices offices are privately run and fully removed from political influence and public payrolls. Independence from political will ought to be the goal; however it may not be entirely feasible in the US. Therefore, we believe that a second-best option for the State of California is a P3 development and consideration cycle that is systematic, allows for a transparent process with provisions for participation from all stakeholders, and avoids the political pitfalls (such as legislative review) that make getting through current processes appear to be impossible.

Performing Well

Positively, the staff people we spoke with were exceptionally open-minded regarding P3s and other alternative finance techniques. They also believe that the general public will not have many complaints regarding P3 financing (they may complain about tolls, but that is a separate issue from the method of financing) and that organized labor forces at local levels are supportive of P3s and simply "want to work." A majority of our participants advocate for P3s

and almost every one stated that the P3 interest and research within their organization was staff driven. A majority of respondents also stated that environmental clearance requirements would be no more difficult for P3s than they are for any other project. Long term contracting and decreased flexibility for the public sponsor of a P3 is not something that concerned most of our participants. Instead, many stated that it came with the procurement method and as long as it was planned for it was not a reason to disregard P3s. Finally, every agency we interviewed explained very safe fiscal policy and risk aversion that highlights a well-managed county level transportation provision infrastructure. The cautious financial behaviors revealed in the interview process also present an ideal environment for less risk-averse private sector investors to participate in a complimentary fashion.

Many respondents supported the notion that the general public does not have a problem with the concept of P3s based their opinion on the belief that most people do not know about P3s. Despite the perception of public acceptance, we believe that providing educational opportunities that allow the public to understand the meaning, method and viability of P3s would create greater public buy-in and confidence in projects. Specifically, a better understanding of how such tactics operate will avoid a failure, such as that of State Highway 121 in Texas and maintain the initial P3 agreements. Avoiding public outcry and the potential for dissolution of P3 agreements could further enable the provision of more facilities and re-enforce the idea that P3s can be functional options for the provision of infrastructure (Battaglio and Khankarli 2008). Multiple respondents stated that tolls are what people complain about, no matter who is implementing the toll, therefore this is already an issue being expressed by constituencies across the state and should be dealt with immediately if P3s are to be successfully embraced by the State.

Conclusion

To summarize and assess global experiences we examined the P3 process domestically and abroad. As examples of current American P3 practice we investigated Texas, Virginia and the Commonwealth of Puerto Rico. These three governments offer examples of enabling legislation and have a range of P3-delivered facilities. Internationally, we examined the United Kingdom, Canada, Australia, New Zealand, Germany, Ireland, and the European Union. These overseas examples provided additional models of central P3 best practices advisory offices. Additionally, we conducted interviews with public officials throughout California to further understand the current P3 climate in the State. Texas showed us what is possible, both in a positive and negative sense, without a best practices office. Virginia represents a longstanding P3 program that has continued to adapt and improve. Puerto Rico is currently the state of the P3 art and developed its legislation and best practices office based on years of observation throughout the world. Finally, international offices and policies represent substantial research and hands-on experience. These various lessons led us to the conclusion that California would be best served by emulating Puerto Rico's innovative and forward thinking P3 activities.

Through the interview process we found that, in California, many staff members find it difficult to identify specific P3 projects. Some respondents believe each P3 is unique and requires a novel approach every time a partnership is implemented. The participation of the Professional Engineers in California Government (PECG) in the P3 process is extremely influential and unfortunately counterproductive. Despite issues with PECG and State level approvals, twelve participants cited internal agency support for the concept. It is clear that most interviewees understand that user fees and alternative forms of financing are necessary for the adequate provision of public infrastructure.

If California modifies its policies and practices to reflect those modeled by other jurisdictions as outlined above, P3s can be a successful form of financing and procurement for public infrastructure. It is clear that P3 success is largely determined by the willingness of the public partner to create a viable business environment for the private sector. Private investment dollars follow the path of least resistance and seek profit, therefore, if California is to benefit from the wealth of resources housed in the private sector it must embrace the needs of these would-be partners and undertake a comprehensive restructuring of its current policies, practices and advisory office.

Sources

- "Future of North American Infrastructure." CSGovts. (2011). Youtube. Retrieved on May 20, 2012. Available at: <http://www.youtube.com/watch?v=gOP63Tvl-AI>.
- Alameda Contra Costa Transit District. (2008). Transit Project Listings. *AC Transit 2009 TIP*. Retrieved on November 20, 2011. Available at: http://www.mtc.ca.gov/funding/tip/2009/final/Project_Listings_Final.pdf
- Allen & Overy. (2009). Puerto Rico Enacts Broad Public-Private Partnership Statute. *eBulletin*. Retrieved July 19, 2011. Available at: <http://elink.allenoverly.com/getFile.aspx?ItemType=eBulletin&id=64a70d5e-f180-4cbd-8f9b-a9550f7a3ded>
- Alvarez, David. (2010). Benefits of the Public-Private Partnerships Legislation in Puerto Rico. Presentation. Retrieved: September 17, 2011. Available at: http://www.app.gobierno.pr/wp-content/uploads/2010/05/Benefits-of-the-Public-Private_Partnerships_Legislation_PuertoRico.pdf
- Alvarez, David. Interview by Leonard Gilroy. (2011). Building a World-Class Infrastructure PPP Program in Puerto Rico: Interview with David Alvarez, executive director of the Puerto Rico Public-Private Partnerships Authority. Reason Foundation. Retrieved: September 17, 2011. Available at: <http://reason.org/news/show/puerto-rico-ppp-infrastructure>
- Armstrong, Leonie. (2011). "Public-Private Partnerships Research." Email to Zachary Elgart. September 14 and 18, 2011. Copies available from author.
- Battaglio, Paul R. Jr. and Ghassan A. Khankarli. (2008). Toll Roads, Politics, and Public-Public Partnerships: The Case of Texas State Highway 121. *Public Works Management Policy*. Volume 13, pp. 138-148. Available at: <http://pwm.sagepub.com/content/13/2/138>
- Brown, Kathleen. (2007). Are Public-Private Transactions the Future of Infrastructure Finance? *Public Works Management & Policy*. Volume 12, pp. 320-324.
- Buendia, Vanessa. (2011). IJ Special Report: US Transport and Social Infrastructure Survey. *Infrastructure Journal Online*. Retrieved: October 31, 2011. Available at: http://www1.ijonline.com/region/north-america/us-transport-and-social-infrastructure-report/_nocache.
- Burton, P. (2012). Mexican Firm Wins P3 Bid to Operate Puerto Rico Airport. *The Bond Buyer*. Retrieved: July 30, 2012. Available at: http://www.bondbuyer.com/issues/121_140/mexico-aerostar-puerto-rico-p3-1042093-1.html.
- Buxbaum, Jeffrey N. and Iris N. Ortiz. (2007). Protecting the Public Interest: The Role of Long-term Concession Agreements for Providing Transportation Infrastructure. *The Keston Institute for Public Finance and Infrastructure Policy Research Paper Series*. Retrieved: October 25, 2011. Available at: <http://www.usc.edu/schools/sppd/keston/pdf/20070618-trans-concession-agreements.pdf>
- California Business, Transportation & Housing Authority. (2010). Public Infrastructure Advisory Commission Proposed Work Plan for 2011. Retrieved: July 21, 2011. Available at:

<http://grovesite.com/GSLibrary/Downloads/download.ashx?file=sites/1832/17450/392666/PIAC%20Proposed%20Workplan%202011.pdf>

- California Business, Transportation & Housing Authority. (2011). California's Emerging Pipeline of Transportation Public-Private Partnerships. *Public Infrastructure Advisory Commission*. Retrieved: July 19, 2011. Available at: <http://grovesite.com/page.asp?o=cabth&s=PIAC&p=383078&i=305336>.
- Central Intelligence Agency. (2011). Puerto Rico. *The World Factbook*. Retrieved July 19, 2011. Available at: <https://www.cia.gov/library/publications/the-world-factbook/geos/rq.html>.
- Coates, Michelle. (2011). "Public-Private Partnerships Research." Email to Zachary Elgart. September 14 and 16, 2011. Copies available from author.
- Cogdill, Dave. (2009). SB 4 X2 Senate Bill, 2nd Ext. Session- Bill Analysis. Retrieved on April 1, 2012. Available at: http://www.leginfo.ca.gov/pub/09-10/bill/sen/sb_0001-0050/sbx2_4_cfa_20090215_133546_asm_floor.html
- Commonwealth of Virginia. (1995). *SB 856 Public-Private Transportation Act of 1995*. Richmond, VA: April 3, 1995. Retrieved: August 24, 2011. Available at: <http://leg1.state.va.us/cgi-bin/legp504.exe?951+sum+SB856>.
- Commonwealth of Virginia. (1995a) Code of Virginia, Chapter 22: Public-Private Transportation Act of 1995, Section 56-563. Retrieved: October 17, 2011. Available at: <http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+56-560>
- Commonwealth of Virginia. (1995b) Code of Virginia, Chapter 22: Public-Private Transportation Act of 1995, Section 56-563. Retrieved: October 17, 2011. Available at: <http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+56-563>
- Commonwealth of Virginia. (2005). *HB 1348 Public-Private Transportation Act; prohibits imposition of tolls on existing interstate highways*. Richmond, VA: January 22, 2004 (Continued to House for 2005). Retrieved: September 14, 2001. Available at: <http://lis.virginia.gov/cgi-bin/legp604.exe?051+sum+HB1348>
- Commonwealth of Virginia. (2005a). *HB 2443 Public-Private Transportation Act; allows local governments to act as responsible public entities*. Richmond, VA: January 12, 2005. Retrieved: September 14, 2011. Available at: <http://leg1.state.va.us/cgi-bin/legp504.exe?051+ful+HB2443>
- Commonwealth of Virginia. (2005b). *HB 2666 Public-Private Transportation Act; provisions for streamlining and enhancing*. Richmond, VA: March 22, 2005. Retrieved: September 14, 2011. Available at: <http://leg1.state.va.us/cgi-bin/legp504.exe?051+ful+CHAP0562>
- Commonwealth Transportation Board. (2007). A Resolution Authorizing a Loan from the State Infrastructure Bank to Fluor Virginia, Inc. and Transurban (USA) Development Inc. for the I-95/I-395 HOT Lanes Project. *Resolution of The Commonwealth Transportation Board*. Retrieved: October 25, 2011. Available at: <http://www.ctb.virginia.gov/resources/cm11-95I-395HOTLanes.pdf>.
- Czerwinski, David and R. Richard Geddes. (2010). Policy Issues in U.S. Transportation Public-Private Partnerships: Lessons from Australia. *Mineta Transportation Institute Report*. Source: http://transweb.sjsu.edu/mtiportal/research/publications/documents/2807_09-15.pdf

- Engel, Eduardo, Ronald Fischer and Alexander Galetovic. (2011). Public-Private Partnerships to Revamp U.S. Infrastructure. *The Hamilton Project*. Retrieved August 18, 2011. Available at: http://www.brookings.edu/~media/Files/rc/papers/2011/02_partnerships_engel_fischer_galetovic/02_partnerships_engel_fischer_galetovic_paper.pdf
- English, Linda M. (2006). Public Private Partnerships in Australia: An Overview of Their Nature, Purpose, Incidence and Oversight. *University of New South Wales Law Journal*. Volume 29, pp. 250-262.
- Ernst & Young Orenda Corporate Finance. (2006). Canadian P3 Survey: Issues Facing the Canadian P3 Market. Retrieved July 19, 2011. Available at: http://pages.interlog.com/~bobhayes/Canadian_P3.pdf.
- Esty, Benjamin C. (2004). Why Study Large Project? An Introduction to Research on Project Finance. *European Financial Management*. Volume 10, pp. 213-224.
- European PPP Expertise Center. (2010). Members Website. Retrieved August 16, 2011. Available at: <http://www.eib.org/eppec/about/members/index.htm>
- Ewoh, Andrew I. E. (2007). Public-Private Partnerships in a Texas Municipality: The Case of the City of Houston Tax Increment Reinvestment Zones. *Public Works Management & Policy*. Volume 12 pp. 359-369.
- FHWA and TxDOT. (2006). Stewardship/Oversight Agreement for Design and Construction. Retrieved August 16, 2011. Available at: ftp://ftp.dot.state.tx.us/pub/txdot-info/cst/cah/fhwa_oa.pdf
- FHWA Office of Innovative Program Delivery: Project Profile. (2012). Puerto Rico PR-22 and PR-5 Lease. Retrieved on June 25, 2012. Available at: http://www.fhwa.dot.gov/ipd/project_profiles/pr_pr22_and_pr5_lease.htm
- FHWA Office of Innovative Program Delivery: Project Profiles. (2007). Pocahontas Parkway/Richmond Airport Connector. Retrieved: October 28, 2011. Available at: http://www.fhwa.dot.gov/ipd/project_profiles/va_pocahontas.htm
- FHWA Office of Innovative Program Delivery: Public Private Partnerships. (2007) *State P3 Enabling Statutes: Analysis for State of Texas*. Retrieved July 6, 2011. Available at: http://www.fhwa.dot.gov/ipd/p3/state_legislation/texas.htm.
- FHWA Office of Innovative Program Delivery: Public Private Partnerships. (2006) *State P3 Enabling Statutes: Analysis for State of Virginia*. Retrieved July 6, 2011. Available at: http://www.fhwa.dot.gov/ipd/p3/state_legislation/virginia.htm.
- Fischer, Katrin, Andrea Jungbecker and Hans Wilhelm Alfen. (2006) The Emergence of PPP Task Forces and Their Influence on Project Delivery in Germany. *International Journal of Project Management*. Volume 24 pp. 539-547.
- Fitzpatrick, Sean. (2011). "Questions regarding EPEC's structure and funding." Email to Zachary Elgart. September 16 and 20, 2011. Copies available from author.
- Forrer, John, James E. Kee, Kathryn E. Newcomer, and Eric Boyer. (2010). Public-Private Partnerships and the Public Accountability Question. *Public Administration Review*. pp. 475-484.

- Gaffey, David W. (2010). Outsourcing Infrastructure: Expanding the Use of Public-Private Partnerships in The United States. *Public Contract Law Journal*. Volume 39 pp. 351-373.
- Geist, Richard A. (2007). Public-Private Partnerships Can Work. *Transport Topics*. p. 5
- Gilroy, Leonard, Harris Kenny, Lisa Snell, Shirly Ybarra and Tyler Millhouse. (2011). Annual Privatization Report 2010: State Government Privatization. *The Reason Foundation*. Retrieved August 23, 2011. Available at: http://reason.org/files/state_annual_privatization_report_2010.pdf.
- Gilroy, Leonard. (2011a). Getting Infrastructure Partnerships Right in Ohio. *The Reason Foundation news page*. Retrieved August 23, 2011. Available at: <http://reason.org/news/show/ohio-infrastructure-partnerships>
- Gilroy, Leonard. (2011b). Texas Enacts New Infrastructure PPP Law, Expands Use Beyond Transportation. *Out of Control Policy Blog*. Retrieved July 23, 2011. Available at: <http://reason.org/news/show/texas-enacts-new-infrastructure-ppp>
- Giuliano, Genevieve, Lisa Schweitzer, Kevin Holliday, Theodore Minch. (2011). Public Private Partnerships in California – Report #2 and #3. METRANS Transportation Center. Retrieved February 25, 2012. Available at: http://www.metrans.org/Other_Research/PublicPvtPart-CA7-2011.pdf
- Giuliano, Genevieve, Lisa Schweitzer, Yin Wang and Theodore Minch. (2010). Public-Private Partnerships in California - Report One, Best Practices. METRANS Transportation Center. Retrieved February 25, 2012. Available at: http://www.metrans.org/Other_Research/BestPractices9-2010.pdf
- Hinojosa, Ruben. (2011). S.B. 1420 Bill Analysis. Retrieved: July 18, 2011. Available at: <http://www.legis.state.tx.us/tlodocs/82R/analysis/html/SB01420H.htm>
- Hodge, Graeme A. and Carsten Greve. (2007). Public-Private Partnerships: An International Performance Review. *Public Administration Review*. Volume 67, pp. 545-558.
- Holcombe, Dusty. (2011). “VDOT IPD Division VS OTP3.” Email to Zachary Elgart. July 28 and September 1, 2011. Copies available from author.
- Horner, David. (2009). Puerto Rico Enacts Broad Public-Private Partnership Statute. *Allen & Overy Areas of Expertise*. Retrieved: July 19, 2011. Available at: <http://www.allenoverly.com/AOWEB/AreasOfExpertise/Editorial.aspx?contentTypeID=1&itemID=53564&prefLangID=410>
- Infrastructure Partnerships Australia. (2008a). Best Practices website. Retrieved: September 21, 2011. Available at <http://www.infrastructure.org.au/Content/bestpractice.aspx>
- Infrastructure Partnerships Australia. (2008b). Our Services website. Retrieved: August 17, 2011. Available at: <http://www.infrastructure.org.au/Content/ourservices.aspx>
- Infrastructure UK. (2011). About IUK Website. Retrieved: August 16, 2011. Available at: http://www.hm-treasury.gov.uk/iuk_about_us.htm
- Jacobson, Carol and Sang Ok Choi. (2008) Success Factors: Public Works and Public-Private Partnerships. *International Journal of Public Sector Management*. Volume 21, pp.637-657.
- Kearsarge Global Advisors et al. (2009). Benefits of Private Investment in Infrastructure. Retrieved on August 16, 2011. Available at:

http://www2.vlaanderen.be/pps/documenten/benefits_of_private_investment_in_infrastructure.pdf

- Khankarli, Ghassan A. (2009). The Politics of Public-Public Partnerships: The Case for Toll Roads. *Doctoral Dissertation, The University of Texas at Dallas*. Retrieved: October 7, 2011. Available from Proquest.com (with subscription)
- KPMG Corporate Finance LLC. (2010). Virginia PPTA Program Assessment – Phase I Diagnostic Report. Confidential Governors Working Papers. Retrieved: July 27, 2011. Available at: http://www.virginiadot.org/news/resources/Statewide/PPTA_Assessment_Report_Final_052410.pdf
- Levy, Sidney M. (2008). Public-Private Partnerships in Infrastructure. *Leadership and Management in Engineering*. Volume 8, pp. 217-230.
- Maldonado, Victoria and Ana M. Gregorio. (2011). Puerto Rico to get \$1.4 Billion in its First P3 Toll Road Deal. *Press Release*. Retrieved on June 25, 2012. Available at: <http://www.app.gobierno.pr/wp-content/uploads/2011/06/News-Release>
- Maskin, Eric, Jean Tirole. (2008) Public-private Partnerships and Government Spending Limits. *International Journal of Industrial Organization*. Volume 26, pp. 412-420.
- Maxwell, Jo Anne. (2009). Overview of the Virginia Public Private Transportation Act of 1995 (As Amended) and Guidelines. Retrieved August 4, 2011. Available at: <http://dls.state.va.us/GROUPS/ports/MEETINGS/081209/overview.pdf>
- Mineta, Norman Y. (2006). Public-Private Partnerships Strengthen Transport Investment. *Journal of Transportation Law, Logistics, and Policy*. Volume 73, pp. 401-409.
- Murphy, Timothy J. (2008). The Case for Public-Private Partnerships In Infrastructure. *Canadian Public Administration*. Volume 51 pp. 99-126.
- Nasir, Tahir M. (2007). Risk Management in Public-Private Partnership Contracts. *Public Organization Review*. Volume 7, pp. 1-19.
- National Conference of State Legislatures. (2012). Public-Private Partnerships for Transportation: A Toolkit for Legislators - March 2012 Updates and Corrections. Retrieved on June 5, 2012. Available at: <http://www.ncsl.org/documents/transportation/PPPTOOLKIT-update-March2012.pdf>
- National Development Finance Agency. (2011a). Board Members website. Retrieved: August 17, 2011. Available at: http://www.ndfa.ie/board_members.html
- National Development Finance Agency. (2011b). Home website. Retrieved: August 17, 2011. Available at: <http://www.ndfa.ie/home.html>.
- National Right to Work Committee. (2012). Right to Work All Top 10 vs. Compulsory Unionism All Bottom 10. Retrieved: August 10, 2012. Available at: <http://www.nrtwc.org/right-to-work-all-top-10-vs-compulsory-union-all-bottom-10/>
- New Zealand Council for Infrastructure Development. (2008a). Membership Options website. Retrieved: August 16, 2011. Available at: <http://www.nzcid.org.nz/membershipoptions.html>
- New Zealand Council for Infrastructure Development. (2008b). Publication and Resources website. Retrieved: August 16, 2011. Available at: <http://www.nzcid.org.nz/resources.html>

- Nossaman, LLP. (2012). Presidio Parkway : Infra Insight Blog. Infrsight Blog. Retrieved on Jun 17, 2012. Available at: <http://www.infrainsightblog.com/tags/presidio-parkway/>
- Office of Virginia Public Private Partnerships. (2011). Innovation in Virginia Transportation (home page) Website. Retrieved: August 14, 2011. Available at: <http://www.vappta.org>
- Parsons, Jim and Aileen Cho. (2010). Public-Private Partnerships Need an Educated Public. *Engineering News-Record*. Volume 265 No. 4, pp. 14.
- Partnerships Germany. (2011). Who We Are website (German). Retrieved August 16, 2011. Available at: <http://www.partnerschaften-deutschland.de/wer-wir-sind/>.
- Pedraza, Ryan. (2011). Virginia's P3 Program: Ryan Pedraza. *Future of North American Infrastructure*. Retrieved: March 18, 2012. Available at: <http://www.youtube.com/watch?v=gOP63Tvl-AI>.
- Perez, Benjamin and Steven Lockwood. (2006). Current Toll Road Activity in the US: A Survey and Analysis. Federal Highway Administration, Office of Transportation Policy Studies. Retrieved: October 5, 2011. Available at: http://www.fhwa.dot.gov/ipd/pdfs/toll_survey_0906.pdf
- Philpotts, Tim. (2007). Canada warms up to public-private partnerships. *CAMagazine.com*. Retrieved July 19, 2011. Available at: <http://www.camagazine.com/p3s/>.
- Pikiel, Michael E. and Lillian Plataa. (2008). A Survey of PPP Legislation Across the United States. *Global Infrastructure*. Volume 1, pp. 52-65.
- Podgorski, Kaethe V. and Kara M. Kockelman. (2004). Public Perceptions of Toll Roads: A Survey of the Texas Perspective. *Transportation Research Part A, TRB*. Retrieved September 2, 2011. Available at: http://www.ce.utexas.edu/prof/kockelman/public_html/TRB05PublicResponsetoTRs.pdf
- Poole, Robert W. Jr. (2007a). Democrats and Public-Private Partnership Toll Roads. *Innovators in Action*. Editor: Geoffrey F. Segal for Reason. Retrieved: October 5, 2011. Available at: <http://reason.org/files/e9f414aa6feb85192849cbfc177dcecd.pdf>
- Poole, Robert W. Jr. (2007b). Tolling and Public-Private Partnerships in Texas: Separating Myth from Fact. *Reason Foundation Working Paper*. Retrieved July 26, 2011. Available at: <http://reason.org/files/f4b3060c451c35f004519f3971d05fb3.pdf>
- Posner, Paul, Shin Kue-Ryu, and Ann Tkachenko. (2009). Public-Private Partnerships: The Relevance of Budgeting. *OECD Journal on Budgeting*. Volume 1, pp. 49-74.
- PPP Canada. (2010). Annual Report 2009-1010. Retrieved: August 16, 2011. Available at: http://www.p3canada.ca/files/file/PPP_Canada_Annual_Report_2009-10_en.pdf
- PPP Canada. (2011a). Learn About P3s website. Retrieved: September 21, 2011. Available at: <http://www.p3canada.ca/learn-about-p3s-overview.php>
- PPP Canada. (2011b). Overview website. Retrieved: August 17, 2011. Available at: <http://www.p3canada.ca/about-ppp-canada-overview.php>
- Professional Engineers in California Government (PECG). (2011). Public-Private Partnerships: a Proven Failure for Taxpayers. Professional Engineers in California Government. Retrieved March 18, 2012. Available at: <http://www.pecg.org/Issues/ppp.htm>.
- Project Finance. (April, 2007). Texas Toll Moratorium Passes. *Project Finance Magazine*

- Project Finance. (September, 2009). PFI/PPP/P3. *Project Finance Magazine*.
- Puerto Rico Office of Management and Budget. (2010a). Consolidated Budget by Agency Fiscal Years 2009 to 2012. Retrieved August 9, 2011. Available at:
http://www2.pr.gov/presupuestos/BUDGET20112012/Tables%20Of%20Summary/PFP000MR_ENG.pdf
- Puerto Rico Office of Management and Budget. (2010b). Puerto Rico Public-Private Partnership Authority Budget. Retrieved: September 17, 2011. Available at:
<http://www2.pr.gov/presupuestos/BUDGET20112012/Aprobado2012Ingles/app.htm>
- Puerto Rico Public-Private Partnership Authority. (2009a). Governor Signs Off on Public-Private Partnerships Legislation. Website. Retrieved: September 17, 2011. Available at:
<http://www.app.gobierno.pr/?p=943&lang=en>
- Puerto Rico Public-Private Partnerships Authority. (2009b). Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Public-Private Partnership Contracts Under Act NO. 29 of June 8, 2009. Retrieved: October 9, 2011. Available at:
http://www.p3.gov.pr/wp-content/uploads/2010/05/Reglamento_final.pdf.
- Puerto Rico Public-Private Partnerships Authority. (2010a). About P3A. Website. Available at:
http://www.app.gobierno.pr/?page_id=885&lang=en
- Puerto Rico Public-Private Partnerships Authority. (2010b). Advisors. Website. Available at:
http://www.app.gobierno.pr/?page_id=904&lang=en
- Puerto Rico Public-Private Partnerships Authority. (2010c). Toll Roads website. Retrieved: September 21, 2011. Available at: http://www.app.gobierno.pr/?page_id=925&lang=en
- Puerto Rico Public-Private Partnerships Authority. (2011a). Partnership Report: For the Procurement to Acquire a Concession to Finance, Operate, Maintain, Rehabilitate, Expand and Toll PR-22 and PR-5. Retrieved on June 25, 2012. Available at:
<http://www.app.gobierno.pr/wp-content/uploads/2011/06/Final-Partnership-Report-June-9-2011-FINAL-FINAL.pdf>
- Puerto Rico Public-Private Partnerships Authority. (2011b). Toll Roads Brownfield Transaction Successfully Completed Financial Close. *Press Release*. Retrieved: October 4, 2011. Available at: <http://www.p3.gov.pr/?p=3963&lang=en>
- Puerto Rico Public-Private Partnerships Authority. (2012). Partnerships. Retrieved: July 9, 2012. Available at: http://www.app.gobierno.pr/?page_id=889&lang=en.
- Puerto Rico. (2009). Senate Bill 469. Retrieved: 7/27/11. Available at:
<http://www.app.gobierno.pr/wp-content/uploads/2010/06/A-29-2009-PPP-Act-English.pdf>
- Ratcliffe, R.G. (2007). Perry signs compromise bill slowing toll road projects, But compromise doesn't affect six projects slated for Harris County. *Houston Chronicle*. Retrieved September 11, 2011. Available at: <http://www.chron.com/news/article/Perry-signs-compromise-bill-slowing-toll-road-1807413.php>
- Redmond, Aislinn. (2011). "Public-Private Partnerships Research." Email to Zachary Elgart. September 15 and 19, 2011. Copies available from author.

- Reuters News. (2011). Puerto Rico Near Locking in Privatization Deals. *Forexyard*. Retrieved: October 7, 2011. Available at: <http://www.forexyard.com/en/news/Puerto-Rico-near-locking-in-privatization-deals-2011-05-19T183559Z>
- Roach, Samuel A. (2011). Law and Politics in Public Private Partnerships: Transparency, Conflict of Interest, and Renegotiation in Concession Agreements. *Doctoral Thesis, The University of Texas at Arlington*. Retrieved: October 7, 2011. Available at: http://dspace.uta.edu/bitstream/handle/10106/5845/Roach_uta_2502D_11103.pdf?sequence=1
- Russell, Edward. (2011). Puerto Rico Juggles Defeasance and Dependability. *Project Finance Magazine*.
- Saage, Lee. (2011). Presidio Parkway Project Public Private Partnership. *Presented at the NCPP Workshop*. Retrieved on November 21, 2011. Available at: http://ncppp.org/Publications/SAC_1101/Saage-Asijo_SAC_1101.pdf
- Samuel, Peter. (2011). Goldman Sachs, Abertis Close on 40 year \$1,136m Concession of Puerto Rico's PR22 & PR5 Tollroads. *Tollroads News*. Retrieved on June 25, 2012. Available at: <http://www.tollroadsnews.com/node/5494>
- San Francisco County Transportation Authority (SFCTA). (2012). Resolution Number 12-44, Doyle Drive Funding Commit Revised. *San Francisco County Transportation Authority*. Retrieved: March 9, 2012. Available at: <http://www.sfcta.org/images/stories/Executive/Meetings/board/2012/03marspecial/R12-44%20Doyle%20Drive%20Funding%20Commit%20Revised.pdf>
- Slone, Sean. (2011). State Take Their Time with Public-Private Partnerships. *Capitol Ideas*. Retrieved: February 1, 2012. Available at: http://www.csg.org/pubs/capitolideas/enews/issue72_2.aspx.
- State of California. (2009). Senate Bill 4 x2. Retrieved on January 23, 2012. Available at: http://www.leginfo.ca.gov/pub/09-10/bill/sen/sb_0001-0050/sbx2_4_bill_20090220_chaptered.pdf
- State of California. (2011). The Governor's Budget 2011-12 Department of Transportation website. Retrieved: September 21, 2011. Available at: <http://www.ebudget.ca.gov/Enacted/StateAgencyBudgets/2000/2660/department.html>
- State of Texas. (2008). Report of the Legislative Study Committee on Private Participation in Toll Projects. Retrieved on June 5, 2012. Available at: http://www.recaonline.com/docs/arc/arc2007/Regional_HwyPriv_Report_Dec2008.pdf
- Sunset Advisory Committee. (2009). Guide to the Sunset Process. Retrieved: August 26, 2011. Available at: <http://www.sunset.state.tx.us/guide.pdf>.
- Texas Facilities Commission. (2011). Public-Private Partnership Guidelines. Texas Facilities Commission. Retrieved: December 19, 2011. Available at: <http://www.tfc.state.tx.us/divisions/facilities/prog/planning/TFC-P3Guidelines-v11-01.pdf>
- Texas State Senate. (2007). S.B. 792. Retrieved: October 10, 2011. Available at: <http://www.legis.state.tx.us/billlookup/History.aspx?LegSess=80R&Bill=SB792>
- Texas State Senate. (2011a). S.B. 1048. Retrieved: September 21, 2011. Available at: <http://www.capitol.state.tx.us/tlodocs/82R/billtext/html/SB01048F.htm>

- Texas State Senate. (2011b). S.B. 1048 Bill Analysis. Retrieved: November 4, 2011. Available at: <http://www.legis.state.tx.us/tlodocs/82R/analysis/pdf/SB01048F.pdf#navpanes=0>.
- Texas State Senate. (2011c). S. B. 1420. Retrieved: October 10, 2011. Available at: <http://www.legis.state.tx.us/billlookup/History.aspx?LegSess=82R&Bill=SB1420>
- The Canadian Council for Public-Private Partnerships. (2011). Member Categories Website. Retrieved August 16, 2011. Available at: <http://www.pppcouncil.ca/about-ccppp/membership/membercategories.html>
- The National Council for Public-Private Partnerships. (2011). Pocahontas Parkway. Retrieved: October 28, 2011. Available at: <http://www.ncppp.org/cases/pocahontas.shtml>
- The Texas Council of Engineering Companies. Senate Bill 792 and the Debate Over Transportation Concessions. *American Council of Engineering Companies, Texas*. Retrieved September 11, 2011. Available at: http://www.cectexas.org/research_&_policy_issues/documents/SB792andtheDebateOverTransportationConcessions.pdf
- Utt, Ronald. (2004). Opportunities for Private Sector Participation in Surface Transportation Investment and Operations. *The Heritage Foundation*. Retrieved: January 31, 2012. Available at: <http://www.heritage.org/research/testimony/opportunities-for-private-sector-participation-in-surface-transportation-investment-and-operations>.
- Virginia Department of Transportation. (2010). Business and Management Services (BMS). *Staff Augmentation Contract Consultants section of VDOT PPTA Website*. Retrieved July 12, 2011. Available at: http://www.virginiadot.org/business/resources/business_and_management_services.pdf
- Virginia Department of Transportation. (2010). Financial Analysis and Assistance (FAA). *Staff Augmentation Contract Consultants section of VDOT PPTA Website*. Retrieved July 12, 2011. Available at: www.virginiadot.org/business/resources/financial_services.pdf
- Virginia Department of Transportation. (2010a). PPTA Implementation Manual and Guidelines. Retrieved: July 11, 2011. Available at: http://www.vappta.org/ppta_implementation_manual_guidelines.asp
- Virginia Department of Transportation. (2010b). Program and Project Management Support Services (PPMS). *Staff Augmentation Contract Consultants section of VDOT PPTA Website*. Retrieved July 12, 2011. Available at: <http://www.virginiadot.org/business/resources/PPMS.pdf>
- Virginia Department of Transportation. (2010c). Responses to Questions Received at the PPTA Webinar. Retrieved August 9, 2011. Available at: http://www.virginiadot.org/business/resources/ipd/PPTA_Webinar_QA_Final.pdf
- Virginia Office of Transportation. (2011). Financing of the Office of Transportation. Retrieved: September 8, 2011. Available at: <http://dpb.virginia.gov/budget/buddoc11/pdf/partb/transportation.pdf>
- Walmsley, Carla. (2011). "Public-Private Partnerships Research." Email to Zachary Elgart. September 14 and 16, 2011. Copies available from author.

- Welch, Matt. (2011). The Governor Who Cut Government. *Reason*. Volume 43, pp.19-22.
Retrieved: September 21, 2011. Available at: <http://reason.com/archives/2011/04/24/the-governor-who-cut-governmen/singlepage>
- Whitney, Diana. (2011). "Public-Private Partnerships Research." Email to Zachary Elgart.
September 14 and 15, 2011. Copies available from author.
- Williams, et al. (2007). Senate Bill 792 Analysis. *Senate Research Center*. Retrieved September 13, 2011. Available at:
<http://www.legis.state.tx.us/tlodocs/80R/analysis/pdf/SB00792F.pdf#navpanes=0>.
- Williamson, Richard. (2008). Texas OKs Guarantee For NTTA; Allows Building of \$1.3B Turnpike.
The Bond Buyer. Published Oct. 31, 2008, pp.1.

Appendix

Appendix 1: Interview Questions

Introduction and brief overview of project

- First, let us thank you for agreeing to help. You are currently on speakerphone and [Zach] is here with me.
- We will both be taking notes. We are making an audio recording of this call to insure that we accurately capture your responses.
- The interview should take about 90 minutes depending on your responses.
- You should have received our “informed consent” letter by now [get confirmation that they received the letter].
- Just to remind you, your responses will be anonymous in our report, but your organization’s name will appear in an appendix.
- You may stop the interview at any time for any reason.
- You may also opt to skip, or decline to answer, any question.
- Caltrans contracted us to look at Public Private Partnerships in California; the funding comes from an FHWA grant.
- We will submit a report to Caltrans and eventually publish it on the METRANS Website.
- There are six sections to the report, and you will be helping us with the institutional capacity section.
- Just to define our terms, we’re talking about projects that are large transportation facilities costing at least \$100 million to construct in the United States.
- Before we begin, do you have any questions for us?

BASIC AGENCY INFORMATION

The first set of questions will ask you about the size of your agency, its projects, and the experience it has had with different financing tools.

1. We are going to ask about some federal funding sources. Has your agency or your contractors used any of the following? If not, why not?
 - 1.1. (TIGER) grants - Transportation Investment Generating Economic Recovery
 - 1.2. (TIFIA) Loans - The Transportation and Infrastructure Finance and Innovation Act(PAB) - Private Activity Bonds
 - 1.3. (SEP – 15) - Special Experimental Project – 15 → FHWA Definition: “experimental process... to identify, for trial evaluation, new public-private partnership approaches to project delivery” focused on: contracting, environmental compliance, right-of-way acquisition, project finance
 - 1.4. (RRIF) - Railroad Rehabilitation and Improvement Financing
2. Are there any P3 agreements that are currently under your agency’s jurisdiction? **[If no P3s, skip to question 4]**
 - 2.1. Comparing P3s to traditionally financed projects, do your management and project administration practices differ?
 - 2.1.1. If so, how?
 - 2.2. Do you believe the level of managerial control your agency has over the P3 is adequate? Why or why not?

3. With regard to P3s, does your agency have a general set of policies or guidelines?
 - 3.1. Specifically how does it affect the following?
 - 3.1.1. Construction?
 - 3.1.2. Design?
 - 3.1.3. Operations?
 - 3.1.4. Maintenance?
 - 3.2. How do these guidelines differ from those that govern traditionally financed projects?
[SKIP TO NEXT SECTION IF RESPONDENT HAS P3 PROJECTS]
4. Why do you think your agency is currently NOT using P3 procurement?

PERCEPTIONS OF P3 PROJECTS

We would like to ask your thoughts regarding P3s in general. [If agency has P3s → Then we'll ask you questions about your agencies' P3s]

5. Are there any existing P3 projects or programs (of any financial scale) in the US that you feel represent good examples of P3s?
 - 5.1. Why are these good examples?
 - 5.2. Are you aware of examples of P3s that you would consider poor or fail to meet expectations?
 - 5.2.1. What were the problems with these projects?
6. What do you perceive as the advantages of P3s?
7. What do you perceive as the limitations of P3s, if any?
8. How would you describe your agency's history with P3s?
9. Do you have advocates for privatization, alternative financing or tolling within your agency?
10. Do you regard toll-roads or other facilities that charge user fees as viable options for the provision of services in your jurisdiction?
 - 10.1. Why or why not?
11. Are there cost savings associated with P3 agreements versus a traditionally procured facility?
 - 11.1. If so, WHERE do you think the savings come from?
 - 11.2. If not, why do you think P3s fail to generate cost savings?
12. Has your agency been advised by third-party consultants or political decision makers to pursue P3s in the past?
 - 12.1. If so...
 - 12.1.1. Who suggested a P3?
 - 12.1.2. On what projects?
 - 12.1.3. Based on what advantages?
 - 12.2. Did your agency follow the recommendation?
 - 12.2.1. If not, why did your agency decide against the recommendation?

DEMAND FORECASTING AND RISK MANAGEMENT

We'd like to ask you about demand forecasting and risk management for traditional and P3 projects.

13. Are the demand forecasts for your agency's projects performed in-house or by third-party consultants?
 - 13.1. Is the forecasting model used by your agency proprietary?? If not, why not?
 - 13.1.1. Is it trip or activity based?
 - 13.1.1.1. **[If trip based]** Is there a mode choice component?

- 13.1.2. Do you know the software your agency uses for forecasting?
- 13.2. **[Applicable only to Agencies with P3s]** Do any of your P3 partners prepare their own forecasts?
 - 13.2.1. Or do they use yours?
 - 13.2.2. If they do prepare their own forecasts, are those done in-house, or do they use third-party consultants?
 - 13.2.3. **[In the case of forecasts from both sides of the P3]** Have you ever had a problem reconciling the results of in-house forecasts with what your P3 partners forecast?
 - 13.2.3.1. If so, how were those differences reconciled?
 - 13.2.3.2. Would you consider this solution optimal?
- 14. In general, how does your agency protect itself from financial risk or losses associated with new projects?
 - 14.1. Do you use municipal bond insurance?
 - 14.2. In the case of P3s, how do your partners in the private sector protect their investments?
 - 14.3. For P3s as well as general contracting with any entity do you include clauses that allow you to break the contract?
 - 14.4. Do P3s make it easier or harder for agencies like yours to manage financial risk? How so?

EXPERIENCE WITH P3s WITHIN THE AGENCY

This last section asks you about experiences with proposed and implemented P3s.

- 15. Does your agency have a general set of policy guidelines on p3s?
 - 15.1.1. **[IF YES]** Would you be willing to share a copy of that policy guidance with us?
- 16. Have any of the following issues arisen, during proposed or implemented P3s, for your agency?

[If at any point the respondent says yes, ask them to explain what happened and whether the P3 died or survived at that point. If they survived, ask how the agency or P3 managed the conflict to survival.]

Have you had any...

 - 16.1. Issues navigating the NEPA or CEQA approval process.
 - 16.1.1. Were any of those issues unique to the fact that the project was a P3?
 - 16.2. Disputes with organized labor in general, or with the unions your agency works with because of the P3?
 - 16.2.1. If so, what happened?
 - 16.3. Complications during the approval process because of the P3?
 - 16.4. Changeover in political leadership from pro- to anti- privatization, or vice versa?
 - 16.4.1. Do you see this as something that may become a problem in the future?
 - 16.5. Negative experience or conflicts within the agency, such as with false economies (spending more to get less on a previous P3 project?)
 - 16.6. Lack of flexibility in structure or long-term lease negotiation prompting your agency leadership to withdraw from a P3 contract.
 - 16.7. P3 partner's willingness to withdraw because of the agency's desire to avoid non-competition clauses and other restrictions on the part of your agency?
 - 16.8. Added/increased cost and complexity associated with P3 implementation.

17. If there has been public opposition to P3 projects: what are the most common issues voiced by the public?
 - 17.1. Do you think that private sector involvement (and the potential for private sector profits) exacerbated opposition, or was there no difference?
18. In what ways did you or your P3 partners adjust practices to satisfy the desires of the public and manage the conflict?
19. [OPTIONAL, IF TIME PERMITS]Are there any issues we haven't raised that you think we should know about?
20. Who else should we talk to?

Appendix 2: List of Participating Agencies

- Kern County Roads Department
- Los Angeles Metropolitan Transportation Authority (Metro)
- Metropolitan Transportation Commission (MTC)
- Orange County Transportation Authority (OCTA)
- Placer County Transportation Planning Agency (PCTPA)
- Riverside County Transportation Commission (RCTC)
- Sacramento Area Council of Governments (SACOG)
- San Diego Association of Governments (SANDAG)
- San Joaquin Council of Governments (SJCOG)
- San Mateo County Transportation Authority (SMCTA)
- Santa Clara Valley Transportation Authority (VTA)
- Southern California Association of Governments (SCAG)
- Ventura County Transportation Commission (VCTC)