

EXPLORING THE NETWORKS OF ORGANIZATIONS
THAT ENABLE AND GOVERN
INFRASTRUCTURE PUBLIC PRIVATE PARTNERSHIPS:
AN ORGANIZATIONAL FIELD-LEVEL PERSPECTIVE

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ABSTRACT

The use of Public Private Partnerships (PPPs) for infrastructure development has received significant scholarly attention of late. Much of this attention emanates from a recognition of the challenges inherent in this move towards greater private participation in infrastructure delivery. Scholars agree that PPPs require new types of public sector capacity from governments in order to address these challenges. Unfortunately the locus and structure of this new capacity remain poorly understood. In this dissertation I propose that the need for this “PPP enabling capacity” has not been addressed by a reformation of public agents alone. Rather, a network of new “enabling organizations” (public, private and non-profit) has emerged in response to the emergent need for new capacity. Adopting the concept of “organization field” from institutional theory, I define this network of organizations as the “PPP-enabling field.” I employ a qualitative case-based methodology to investigate the novel concept of the “PPP-enabling field” from four distinct perspectives. In the first, macro perspective, I lay the groundwork by clarifying the typical types of enabling organizations and illustrating some of the combinations of such organizations that have been assembled in varying international contexts. In the other three perspectives I zoom in on three leading cases of PPP-enabling fields in largely analogous institutional contexts: the Canadian province of British Columbia, the Australian state of Victoria, and South Africa. First, I examine these three fields in some detail. I identify differences in various field attributes, including the salient organizational actors, specific roles and responsibilities, dominant institutional logics in the field, and the governance arrangements that guide action in the fields. Next, I turn to historical accounts of field formation in each of the three cases in an attempt to explain the reasons for the observed differences. My fourth and final perspective considers the impacts of these field differences on the overall “success” of PPP enablement in a region. To do this, I identify various measures of PPP program “success” and theorize about the linkages between PPP-enabling field characteristics and PPP program outcomes. This dissertation contributes to a more complete understanding of PPP-enablement by delineating, in some detail, contemporary forms of PPP-enabling fields. In this way I move beyond the normative approach that characterizes so much of the current literature on PPPs, to show how and why PPP-enabling fields emerge quite differently in different countries, and to propose functional and outcome implications of the field differences.

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If there is one thing I have learned in this study, it is that research is a social endeavor. This dissertation would not be possible without the support, guidance, brainstorming, and motivation of others. I gratefully mention a few by name.

Most importantly I wish to thank my Heavenly Father for the grace He has bestowed on me to be able to undertake this study. The opportunity to attend Stanford, and the grace to succeed here is from His hand alone. *“He gives wisdom to the wise and knowledge to the discerning. He reveals deep and hidden things; he knows what lies in darkness, and light dwells with him”* (Daniel 2:21-22). The glory is His.

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TABLE OF CONTENTS

ABSTRACT.....	V
ACKNOWLEDGEMENTS.....	VII
TABLE OF CONTENTS.....	IX
LIST OF FIGURES	XI
LIST OF TABLES.....	XI
LIST OF APPENDIXES.....	XII
CHAPTER 1 – INTRODUCTION	1
Observed problem	1
Research Questions and Theoretical Framework	2
Research Approach.....	3
Format and Flow of this Dissertation	5
CHAPTER 2 – ORGANIZATIONS ENABLING PPP PROJECTS: AN ORGANIZATION FIELD APPROACH.....	7
Background: Increasing the Sustainability of PPP Projects	7
Identifying Typical Types of PPP Enabling Organizations	10
Assessing the Combined Use of PPP Enabling Organizations.....	13
Organizational Fields as a Theoretical Lens	13
Three Levels of PPP Fields	14
Comparing PPP Enabling Fields	19
Selected Examples of PPP Enabling Fields	19
Towards a Classification of PPP Field Characteristics	28
Concluding Statement	29
CHAPTER 3 – THE PUBLIC PRIVATE PARTNERSHIP ENABLING FIELD: EVIDENCE FROM THREE CASES.....	31
Abstract	31
Introduction	32
Laying the groundwork	34
Identifying typical types of “PPP-enabling organizations”.....	34
Organizational fields as a theoretical lens.....	36
Method.....	37
Field comparison	39
PPP units	39
Other field actors.....	42
Key Issues.....	46
PPP unit structure.....	46
Implementation Authority of the PPP unit.....	47
Role of the PPP unit	48
Sponsoring Department Capacity.....	49
Project Governance arrangements.....	50
Institutional Logics.....	53

Intermediaries.....	55
Conclusion and Implications	56
CHAPTER 4 – BEYOND “ONE SIZE FITS ALL”: HOW LOCAL CONDITIONS SHAPE PPP-ENABLING FIELD DEVELOPMENT	59
Abstract.....	59
Introduction	60
The emergence of the “PPP-enabling field”.....	61
Empirical puzzle.....	62
Overview of this paper.....	62
Theoretical underpinnings	63
Institutions and Structuration Theory.....	63
Mechanisms.....	64
Selected Theories on Policy Reform.....	65
Method.....	65
Accounting for Convergent change – the diffusion of PPPs	66
Overarching reform trends	67
PFI – Birth of a Concept	67
Diffusion and carriers.....	68
Accounting for Divergent change – Local Adaptation Of Diffused Practices	71
British Columbia	71
Victoria.....	73
South Africa	78
Conclusion.....	83
CHAPTER 5 – ASSESSING THE IMPACT: THE PROGRAM LEVEL OUTCOMES OF PPP FIELD CONFIGURATIONS	85
Abstract.....	85
Introduction	85
Measuring Success - Clues From The Literature	86
Literature on PPP programs	87
Identifying tasks needed for PPP program success	88
Aims of PPP programs and characteristics of success	91
Method.....	92
Results	94
Competitive PPP market	94
Program efficiency	96
Flow of PPP projects.....	97
Acceptance and legitimacy of PPPs	98
Opinion of central field actors.....	101
Summary of findings.....	101
Implications For PPP Field Configurations.....	103
Conclusion.....	105
CHAPTER 6 – CONCLUSION.....	107
Contributions	107
Perspective 1: PPP enabling organizations	107
Perspective 2: Field details.....	109
Perspective 3: Field formation and change	110
Perspective 4: Outcomes	112
Directions for future research	113

REFERENCES	115
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LIST OF FIGURES

Figure 1 - Theoretical framework	3
Figure 2 – Diagrammatic representation of four research perspectives.....	5
Figure 3 - Graphic representation of South African PPP enabling field.....	21
Figure 4 - Graphic representation of British Columbian (Canada) PPP enabling field	24
Figure 5 - Graphic representation of Korean PPP enabling field.....	26
Figure 6 - Annual PPP deal flow (\$ mil)	97
Figure 7 - Annual PPP deal flow (number of deals signed).....	98

LIST OF TABLES

Table 1 - Distribution of interviewees	38
Table 2 - Summary of PPP-enabling field actors.....	43
Table 3 - Classifying the PPP project arrangements.....	53
Table 4 - The main PPP field intermediaries	56
Table 5 - PPP Program Development Tasks.....	89
Table 6 – Measuring “Ideal” PPP Program Characteristics.....	92
Table 7 - Summary of Newspaper article coding data.....	94
Table 8 - Summary of results.....	95
Table 9 - Dominance of two largest projects in total PPP deal flow value.....	98
Table 10 - Results of newspaper article review	99
Table 11 - Summary of findings	102

LIST OF APPENDIXES

Appendix A: Project data

Appendix B: Newspaper article selection and coding protocol

Appendix C: Survey response details

CHAPTER 1 – INTRODUCTION

OBSERVED PROBLEM

The use of Public-Private Partnerships (PPPs) for infrastructure development has received significant scholarly attention of late (Gil & Beckman, 2008; Kwak et al., 2009). The term PPP refers to developments in the vein of the UK's Private Finance Initiative (Weihe 2008:10). These are arrangements whereby private parties take responsibility for some aspects of the financing, development, and operation of infrastructure assets on behalf of government, where the transfer of risk to the private sector is a key component.

Unfortunately the international experience of infrastructure PPP implementations has been far from perfect (Milmo et al., 2009). There have been multiple, highly publicized cases of public opposition to private provision of infrastructure and large numbers of contract renegotiations and cancellations. Moreover, Guasch, Laffont, and Straub (2002) have illustrated the complexity of delivering public benefit through these arrangements. There is a growing understanding among scholars that the move towards private participation in infrastructure does not simply substitute private sector capacity for public sector capacity; rather it requires that new forms of public sector capacity be developed to overcome the challenges that PPPs face (see, for instance, Dutz et al. 2006).

The majority of the work recognizing this need for public sector capacity is silent on where this capacity needs to be created. A notable exception is the growing literature on PPP units (Burger, 2006; Dutz et al., 2006; Farrugia, Reynolds, & Orr, 2008; PPIAF, 2007), i.e. those specialized governmental organizations that oversee PPPs in a region. Unfortunately even this

literature greatly underplays the institutional settings of units, and the way that they interact with other governmental departments. I propose that the need for PPP “enabling capacity” has not been answered by a reformation of public agents alone. Rather, a network of new “enabling organizations” (public, private and non-profit) has emerged in response. These organizations, in varying ways, attempt to enable the development and continued operation of PPPs for the benefit of public, private, and civic actors. These “PPP enabling organizations” include: Sponsoring Departments, PPP Units, Transaction Advisors, Transaction Auditors, Public Regulators, Non-public regulators, Advocacy Associations, and Local, Regional and Multinational Development Agencies. Specifically I argue that these organizations need to be combined in varying constellations of field configurations to overcome the multiple challenges that infrastructure PPPs face.

The concept of organizational field (DiMaggio, 1991; Scott and Meyer, 1991; Scott et al., 2000), found within institutional theory, can be usefully employed here as a theoretical lens to understand the panoply of PPP organizations. DiMaggio and Powell (1983: 148) define an organizational field as “those organizations that, in the aggregate constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services and products.”

In this dissertation I investigate the emergence of this concept of the “PPP-enabling field.”

RESEARCH QUESTIONS AND THEORETICAL FRAMEWORK

My investigation of the concept of the PPP-enabling field seeks to answer four main research questions:

- Question 1: Which networks of organizations do governments employ to enable and govern PPPs at a project and a program level?
- Question 2: Why do these networks differ in different cases?
- Question 3: How and why do these networks evolve over time?
- Question 4: What are the impacts of these network arrangements on the functioning and performance of PPP programs?

Figure 1 shows the theoretical framework that guided the investigation. The core of the framework is a description of the characteristics of PPP-enabling fields. This entails the fundamental elements of organizational fields as defined by Scott et al (2000): actors, logics and

governance arrangements (see Chapter 2 for more details), with the roles and responsibilities of field actors included as a distinct fourth field element.¹ These field characteristics are (at least to some extent) a product of the way in which the field emerged and developed. The field development histories are therefore added as an input element in the framework. Lastly I investigate the impact that these field characteristics have on outcomes at the PPP program level. Figure 1 shows how the four research questions relate to different elements of the framework.

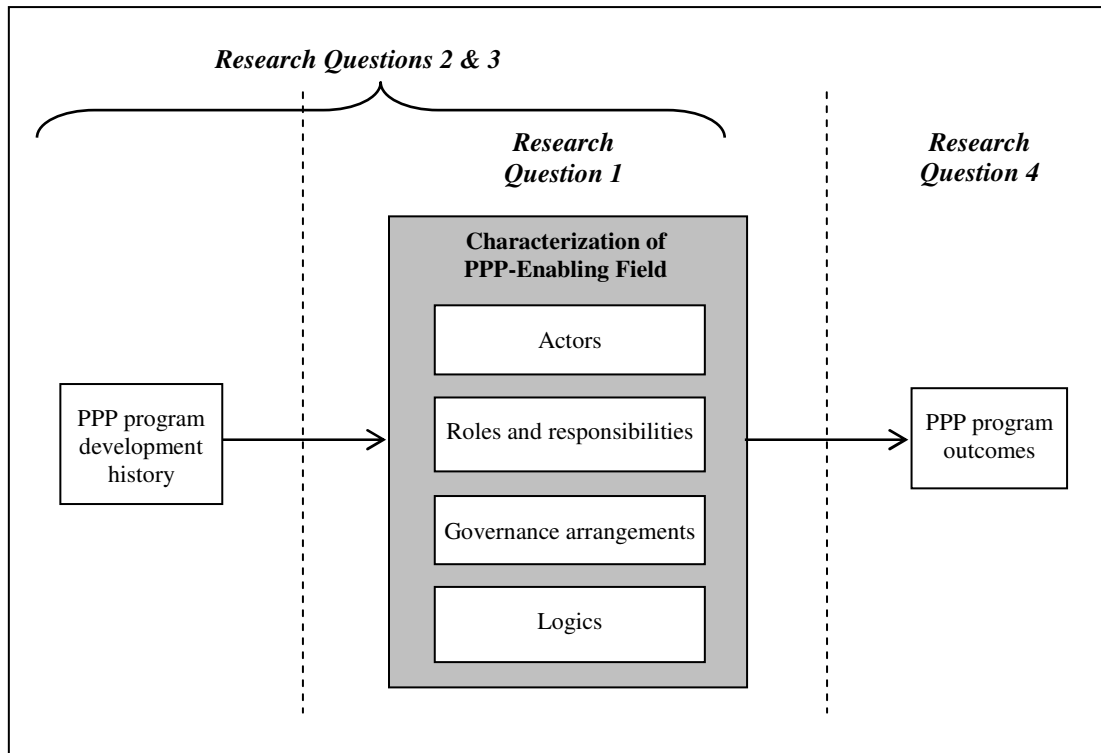


Figure 1 - Theoretical framework

RESEARCH APPROACH

My research is organized around four distinct perspectives on PPP-enabling fields. The **first perspective** approaches the concept of the “PPP-enabling field” from a high level. This entails identifying the typical types of organizations in these PPP-enabling fields, and illustrating some of the combinations that have been assembled in varying international contexts. The focus here is on width rather than depth – I attempt to show how the concept of the PPP-enabling field plays

¹ This departs from the literature on organizational fields which would view roles and responsibilities as part of the “actor” element. The way that actors are arranged on projects and the wider PPP program, is however especially salient for my analysis. I therefore treat it as a separate component of the theoretical framework.

out in a variety of international contexts. The results of this first perspective are presented in Chapter 2 of this dissertation.

This high level approach lays the groundwork for more detailed investigations in the other three perspectives. For these perspectives I zoom in on three cases of PPP-enabling fields in largely analogous institutional contexts: the Canadian province of British Columbia, the Australian state of Victoria, and South Africa. The rationale for my choice of these cases is elaborated in the chapters that follow, but essentially the choice is an attempt to control for external variance in my cases to help me theorize more clearly about the reasons for, and implications of, field differences. The first of these more detailed investigations, my **second perspective**, examines these three fields in some detail. I identify differences in various field attributes, including the salient organizational actors, specific roles and responsibilities, dominant institutional logics in the field, and the governance arrangements that guide action in the fields. This more detailed assessment is included in Chapter 3.

In the second of my more detailed investigations I attempt to explain the reasons for differences observed in my three case fields. For this, my **third perspective**, I turn to the historic accounts of field formation in each of the three cases in Chapter 4. This is also helpful to show how these fields evolve over time. In Chapter 5 I present my **fourth perspective**. Here I consider the impacts of these field differences on the overall “success” of PPP enablement in a region. For this I identify various aspects of PPP program “success” and theorize on the linkages between PPP-enabling field characteristics and PPP program outcomes. Figure 2 relates the four perspectives to the previously defined theoretical framework.

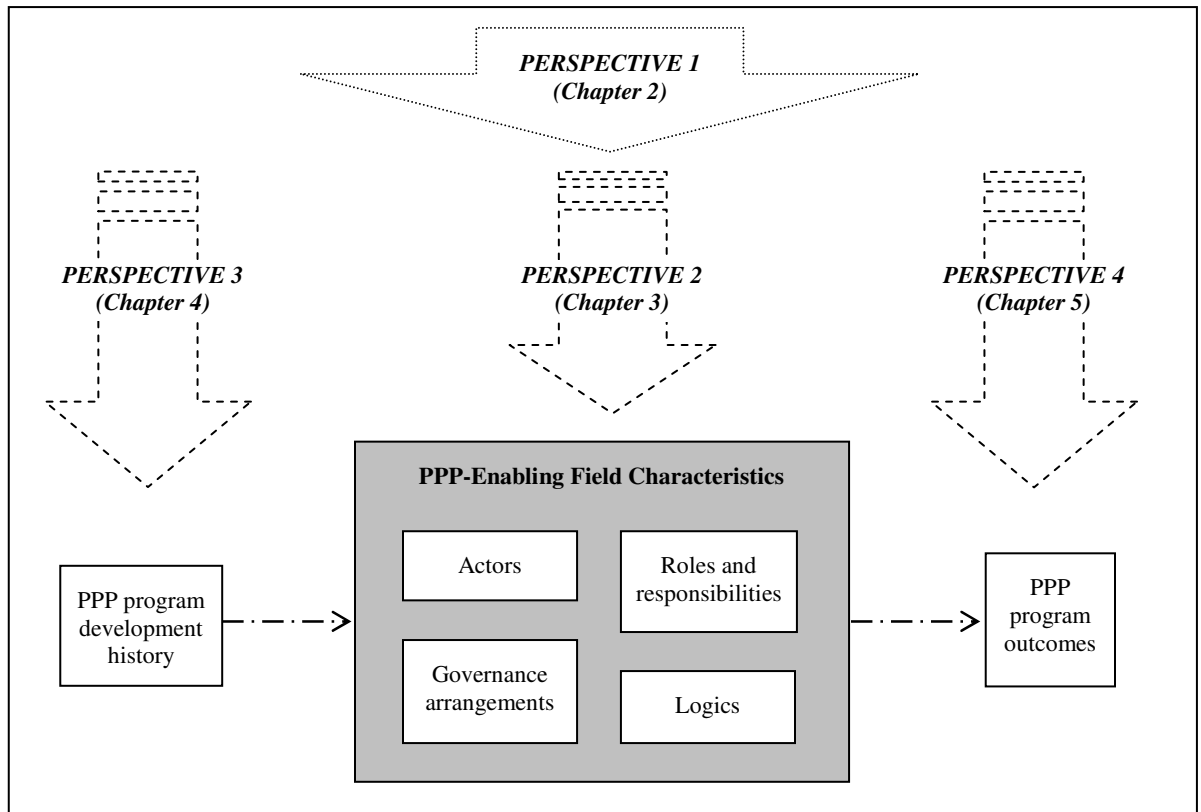


Figure 2 – Diagrammatic representation of four research perspectives

FORMAT AND FLOW OF THIS DISSERTATION

This dissertation follows the “three journal paper” format. Chapters 2, 3 and 4 are all independent papers that have been submitted to peer-reviewed publications. Chapter 2 reports the results of an early study that Professor W. Richard Scott and I conducted into the concept of the PPP-enabling field. It has been included in a forthcoming book on Global projects, edited by Professor Scott, Professor Raymond E. Levitt, and Dr Ryan J. Orr. Chapter 3 presents a more detailed review of the PPP-enabling fields in my three cases. It is again co-authored by Prof Scott, and has been revised and resubmitted to the journal *Administration & Society*. Chapter 4 presents the historical accounts of field construction in my three cases, and was co-authored by Professors Scott and Levitt. The paper was presented at the first annual conference of the Engineering Project Organization Society (formerly LEAD) in November 2010. In addition to the paper will be submitted to the forthcoming Engineering Project Organization Journal that this society is launching. I appear as first author on each of these articles.

As they were written with one or more co-authors, these chapters employ plural possessive pronouns such as "we," "us" and "our" (in contrast to the singular possessive pronouns

used elsewhere in this dissertation). Each paper is intended to stand as an independent publication. This leads to inevitable overlap between the chapters of this dissertation. I have left these papers largely unaltered from their publication form, and have aggregated the references into a unified list at the end of the document.

Beyond these three core chapters, I include two more chapters to complete the dissertation. Chapter 5 is an unpublished article that investigates the impact of PPP-enabling field characteristics on the efficacy and success of PPP programs (Perspective 4). In Chapter 6 I conclude the dissertation by summarizing the contributions of my work, and identifying possible avenues for future research.

CHAPTER 2 – ORGANIZATIONS ENABLING PPP PROJECTS: AN ORGANIZATION FIELD APPROACH²

BACKGROUND: INCREASING THE SUSTAINABILITY OF PPP PROJECTS

The pivotal role of civil infrastructure in enhancing public health and accelerating economic growth has been widely acknowledged in the literature (Estache, 2004). It thus remains a central part of improvement initiatives in both developed and developing countries. Although responsibility for infrastructure development has alternated between private and public provision over the past century, in recent time it has largely been the responsibility of the public sector.

The last two decades have seen significant changes in the modes of government intervention in many developed countries. Reforms in countries like Great Britain and New Zealand have been at the forefront of this movement, largely driven by two broad factors: perceived public sector inefficiencies, and the ascendance of liberal economic ideology (Salamon, 2002). Changes have broadly involved a reduction in the role of government or, more accurately, a change in the functions it performs, and greater private sector involvement (Hood, 1991; Kaul, 1997; Osborne & Gaebler, 1992; Peters & Pierre, 2002; Rhodes, 1996; Salamon, 2002). For infrastructure development this has meant a move toward increased reliance on Public Private

² This paper was co-authored with Professor W. Richard Scott and was published as a chapter in a book on Global Infrastructure Projects. The original form did not contain an Abstract, and it therefore appears without one here as well. The citation is as follows:

Jooste, S. F., & Scott, W. R., (Forthcoming) “PPP-enabling organizations: an organizational field-level analysis,” In W. R. Scott, R. E. Levitt & R. J. Orr (Eds.), *Global Projects: Institutional and Political Challenges*, Cambridge, UK: Cambridge University Press.

Partnerships (PPPs) that involve private companies in the financing and provision of infrastructure. In most countries these PPP arrangements have been aimed at overcoming two broad public sector constraints: (1) a lack of public capital; and (2) a lack of public sector capacity – the resources and specialized expertise to develop, manage, and operate infrastructure assets (Bovaird, 2004; Kumaraswamy & Zhang, 2001).

The 1990's saw proliferation of PPPs in both developed and developing countries, totaling almost \$755 billion in private investment across nearly 2,500 private infrastructure projects globally in developing countries alone (Harris, 2003), an amount estimated to account for more than 20 percent of all infrastructure investment during this period (Izaguirre, 2005). However, after peaking in 1999, private investment in infrastructure fell off dramatically at the beginning of the first decade of the twenty first century, only recently returning to its former level. A number of reasons have been proposed for this downturn, including highly publicized cases of public opposition to private provision and large numbers of contract renegotiations and cancellations (Guasch, Laffont, and Straub, 2002).

These pervasive failures of infrastructure PPPs in recent years (Guasch et al., 2002) illustrate the need to address four challenges: (1) market failures associated with private infrastructure provision (rooted in the natural monopoly characteristics and externalities of infrastructure) (Goldberg, 1976; Mody, 1996; Savas, 2000); (2) agency failures relating to the limited capacity of public entities; (3) perceived legitimacy issues surrounding private provision of public infrastructure; and (4) government opportunism stemming from the fact that infrastructure is plagued by what has been called the “obsolescing bargain” —once the facility is completed and in operation, the private developer loses much of its bargaining power in subsequent negotiations over tariffs or other matters (Ramamurti and Doh, 2004; Woodhouse, 2005).

Because of these and related problems, current levels of private investment in infrastructure are insufficient to address the growing global needs (Gil & Beckman, 2008). This shortfall has been exacerbated by the recent global financial crisis, which has seriously curtailed the availability of private financing.³ If PPPs are to play a part in the global infrastructure solution, the sustainability of PPP arrangements clearly needs to be addressed.

³ The recent inability of concessionaires to raise sufficient private financing has led to a number of contentious governmental “bailouts” of PPP projects. Examples include the Port Mann bridge and highway project now being undertaken as a Design-Build arrangement (rather than the originally planned Design-Build-Operate-Maintain arrangement), and a number of controversial cases of governmental assistance to distressed PFI projects in the United Kingdom (Milmo et al, 2009).

A significant amount of work on increasing PPP effectiveness and sustainability has focused on the constraints from the private perspective, stressing the limits employing private incentives to overcome public problems. A number of scholars however have recently highlighted the critical role that the public sector plays in ensuring PPP success (Estache & Serebrisky, 2004; Van Slyke, 2003). For instance, based on a review of the World Bank's experience with infrastructure PPPs, Harris proposes that

... if private provision is to be sustainable and to benefit consumers of infrastructure services, governments will have to address many of the problems overlooked in the initial rush towards private participation (Harris, 2003: vii).

Rather than alleviating a deficit in the institutional capacity of the public sector, the use of PPPs actually depends for its success on the development of a variety of new types of capacity from governments. As Dutz, Harris, Dhingra, and Shugart (2006) propose:

This shift from traditional public sector methods places new demands on government agencies. They need the capacity to design projects with a package of risks and incentives that makes them attractive to the private sector. They need to be able to assess the cost to taxpayers, often harder than for traditional projects because of the long-term and often uncertain nature of government commitments. They need contract management skills to oversee these arrangements over the life of the contract. And they need advocacy and outreach skills to build consensus on the role of PPPs and to develop a broad program across different sectors and levels of government. (Dutz et al, 2006: 1)

This assertion makes it clear that ensuring the success of PPP projects goes beyond successfully governing the projects that have been developed; indeed, the recent history of PPPs seems to suggest that some projects are flawed from the outset (Klijn and Teisman, 2000). Of critical importance are the choices made in deciding which projects to pursue, and developing these projects in a way that make them attractive to private investors while still protecting the interest of users and tax-payers in general, including securing legitimacy and curtailing corruption. Moreover, actions are required that do not only focus on the success of single PPP projects in isolation, but rather aim to sustain the wider portfolio of PPP projects, the PPP program.

The global recognition of these challenges presented in both developing and governing infrastructure PPPs has led to the emergence of a variety of new organizational forms internationally. These organizations, in varying ways, attempt to enable the development and continued operation of PPPs, for the benefit of public, private, and civic actors. Moreover, to be

successful, these organizations need to be combined in varying constellations of field configurations. The remainder of this paper describes this collection of new forms and illustrates some of the combinations which have been assembled in varying international contexts.

Identifying Typical Types of PPP Enabling Organizations

The first to emerge were *Public Regulators*, organizations focused on regulating the performance of the private providers after the contracts were awarded. These agencies have often been set up to be independent from the executive branch, thereby seeking autonomy, transparency, and accountability (Andres, Gausch, Diop, and Azumendi, 2007). Their optimal structuring has been widely debated in the literature, specifically the trade-off between centralized versus decentralized agencies, and sector-specific versus multi-sector agencies (see for instance Laffont, 2005). For contemporary PPPs the form of regulator is highly dependent on the type of arrangement regulated. The formal independent regulator model was developed specifically to address sectors that faced comprehensive privatizations (such as energy and telecoms). More recent Greenfield PPP projects have seen the regulatory function residing within the Line Agency which “owns” the project, rather than in a separate entity. To achieve independence in regulation, many governments have made use of an auditor (such as the Auditor General in Australia and South Africa) or non-public regulators in addition to the line-agency regulatory body. In general, the public regulatory bodies address the issue of agency failure and the need for improved legitimacy.

Non-public regulators emerged in support of public regulators. This group of actors includes private consultants, technical specialists, such as academic institutions or experts, and nongovernmental organizations (NGOs). Tremolet (2007) has divided this type of service into two broad groups: (1) “advisory outsourcing” bodies are external advisors providing input to regulatory decision-makers which they are not obliged to follow⁴, in contrast to (2) “binding outsourcing” groups whose recommendations must be heeded. Clearly, the motive underlying the latter is curbing the discretion of public regulators, or increasing their legitimacy, while the former is more generally aimed at providing specialist input to decision makers. A number of advantages have been proposed in support of the use of non-public regulators. Since regulatory workflow can be very cyclical in nature (Eberhard, 2007), with major regulatory reviews occurring only every few years, it is difficult for public agencies to retain qualified staff throughout. Regulatory outsourcing therefore provides regulating agencies with highly skilled

⁴ It should be noted that even in cases where recommendations are strictly of an advisory nature, public disclosure of such information will pressurize decision-makers into complying therewith.

resources at a lower cost (due to economies of scale for service providers),⁵ while increasing organizational flexibility. In addition, it also improves the legitimacy of regulatory bodies by fostering regulatory independence (Trémolet, 2007). Contemporary examples of non-public regulators include the “probity auditor” in use in Australia, and the “fairness advisor” which is used in British Columbia (Canada).

The use of non-public service providers has been expanded by the introduction of *Transaction Advisors*.⁶ These organizations are private service providers who assist public agencies in the formulation and negotiation of PPP arrangements. In general they play a strictly advisory role, assisting governments to overcome technical capacity shortfalls when developing PPPs. Their focus is specifically on setting up the initial “transaction” by developing the project concept, managing the tender process, and guiding the contract formation. These types of organizations operate primarily to increase the capacity of the public agencies to manage PPP programs.

PPP Units (sometimes referred to as “PPP Coordination Agencies”) are a more recent addition to the PPP enablement spectrum (Dutz et al. 2006, PPIAF 2007). Although the concept of PPP Unit is not new, research into these public sector organizations has only recently emerged. These agencies have been established as governments realized the difficulty of consistently identifying, setting up, and managing PPP relationships. Generally the Units aim to improve the sustainability of PPP arrangements by: (1) undertaking research and disseminating PPP information and best practices, (2) setting policy and proposing legislation on PPPs, (3) proactively identifying projects and developing them, (4) providing a consulting service to other public agencies when engaging in PPPs, (5) funding PPP studies or project development, (6) playing a role in the monitoring (regulation) of PPP contracts, and (7) approving which projects are undertaken or, secondarily, giving advice to decision makers in the approval process. In their study of eight PPP Units, Farrugia et al (2008) identified two broad types of agencies: (1) “Review Bodies” are primarily responsible for reviewing project business plans and providing recommendations to decision makers; (2) “Full Service Agencies” perform review services but, in addition, take on pro-active roles to develop the PPP market, providing consulting services to service agencies and, in some cases, supplying capital for proposed projects. PPP Units are an

⁵ In many cases however, highly skilled consultants might come at such a premium that their cost offsets the gains from economies of scale. This is specifically the case where the consultants are not local to the developing country.

⁶ We employ the term “Transaction Advisors” to collectively represent all the advisors that support government in the development and execution of PPP project, including Financial, Legal, and Technical Advisors. This would include private organizations that play a project management type role on behalf of government, which are sometimes exclusively referred to as “Transaction Advisors”.

attempt to address virtually all of the challenges confronting PPP projects, including market and agency failures, legitimacy, and attempt to increase the stability of governments allowing them to serve as reliable partners. PPP units are generally public entities, but their organizational structure can take different forms – see Chapter 3 for more details.

An interesting recent trend is the creation of private and non-profit *Advocacy Associations* that emerge as private infrastructure providers and other proponents of PPPs band together to form organizations for collective action. These associations specifically aim to develop the local PPP market, and can take both informal and more formal (and permanent) forms. The development of the Tirurpur water supply project in India is an example of a temporary advocacy organization, where a group of Textile manufacturers came together to present an unsolicited bid to the state government. The project was aimed at implementing a PPP to develop a water system that would solve the water supply problems of the specific textile factories involved. More formal associations focus on local advocacy, as is the case of the Slovak PPP association. This association represented the interests of more than 40 private companies, and was tasked with creating favorable conditions for the development and implementation of PPP projects in Slovakia. In general, Advocacy Associations focus primarily on the problems of increasing stakeholder participation and transparency, thus enhancing legitimacy.

A final, but significant type of PPP enabling organization consists of a variety of *Local, Regional and Multinational Development Agencies* that assist public sectors in emerging markets. These include trans-national actors such as the Bretton-Woods organizations (World Bank, IMF, ADB, IADB, etc.) who have been at the forefront of promoting private participation in developing countries. These Regional and Multinational agencies have taken leading roles in supporting governments in initiating--often choosing which projects to pursue--developing, and sustaining PPP infrastructure projects, through varying levels of direct involvement (advice, funding, or even taking on some of these roles themselves). Not only have they provided invaluable assistance to governments lacking the necessary expertise and experience in contracting private providers, they have also attempted to constrain opportunistic behavior of both private and public actors by bringing international influence networks to bear. Another mode of intervention is the involvement of local development agencies. Often a product of multinational development assistance, local development agencies are governmental organizations mandated to initiate and develop major infrastructure projects on behalf of the government. With the growth in popularity of PPPs, many local development agencies have responded by including PPP project development as part of their mandates both locally and

regionally (Viljoen, 2006). The Development Agencies address issues of both market and agency failures.

ASSESSING THE COMBINED USE OF PPP ENABLING ORGANIZATIONS

While it is clear that a variety of enabling organizations have emerged in the last two decades to assist organizations to address the challenges faced by infrastructure PPPs, as noted, most of them address only a subset of the problems confronted. Thus, it appears that these organizations do not ordinarily confront these challenges in isolation, but rather work together to collectively enable and sustain PPP projects. For this reason, we think understanding will be advanced by considering how these organizations function in combination, including exploring how these combinations are shaped by their institutional environments. By “institutional” we mean the elements that create shared meanings and controls thereby providing order to social action. These elements include regulatory and legal frameworks, norms and value systems, and cultural elements and beliefs (Scott, 1995, 2008).

Organizational Fields as a Theoretical Lens

The remainder of this paper seeks to develop this approach by drawing on the notion of organizational fields, as developed within institutional theory (see Chapter 2). DiMaggio and Powell (1983: 148) define an organizational field as “those organizations that, in the aggregate constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services and products.” This is very congenial to Scott and Meyer’s (1983, 1991) concept of a “societal sector,” which includes both organizations in a given domain delivering similar service or products, as well as the other organizations that “critically influence their performance,” stressing functional interrelation over geographical proximity. While DiMaggio and Powell focus on the ties (reflected in aspects of “connectedness” and structural equivalence) and mechanisms of influence operating between the organizations in a field, Scott and Meyer focus attention on the structural characteristics of the field itself and their impact on organization characteristics.

Scott, Ruef, Mendel, and Caronna (2000) identify three salient components that undergird organizational fields: *actors*, including both types of roles for individuals and types of organizations, *logics*, and *governance arrangements*. More recently Hoffmann and Ventresca (2002) have expanded this by identifying two additional field elements: *intermediary institutions*, and *local sense-making activities*.

Together these components both constrain and enable action within fields, and thereby shape the behavior and characteristics of organizational participants (Campbell, 2004; DiMaggio and Powell, 1983; Meyer and Rowan, 1977; Scott and Meyer, 1983, 1991). The concept of a field points to an “empirical trace” (Hoffman and Ventresca, 2002) that is helpful because it defines the boundaries within which these shaping processes (such as competition, influence, coordination and innovation) take place (DiMaggio, 1991).

The use of the field concept is of specific relevance to the present examination of PPP enabling organizations, because it provides a way of considering these organizations in combination and in interaction with their institutional contexts. We build on the five components identified above as a foundation for exploring the fields in which these organizations are located.

Three Levels of PPP Fields

Although enabling organizations participate in a number of organizational fields, we believe fields at three levels are of particular significance: (1) the local field within which specific PPP projects are carried out, (2) the state or national field within which the enabling organizations operate, and (3) the wider transnational PPP field that spans national contexts (see also, Chapter 2).⁷

Local Project Field

At the most basic level, PPP enabling organizations are involved in developing and sustaining specific PPP projects in their project locale. At this level the interests of local participants and affected parties are more visible, and therefore the local field is dominated by this broad group of actors, which, in addition to the types of PPP enabling organizations described above, include:

- *End users* are all the local citizens that will make use of the PPP assets once they are constructed, whether they pay for the privilege or not (e.g., in projects based on shadow tolls or direct subsidies).
- *Local stakeholders* consist of actors that are in any way affected (both positively and negatively) by the PPP project under concern. This would include local land-owners, residents, and local tax payers, where impacts range from environmental and social effects, to employment opportunities, and even tax implications (where projects might be funded through local tax measures).

⁷ See Scott, Levitt & Orr (2008) for a related discussion of fields operating at varying levels on global infrastructure projects. Defining field boundaries is a heuristic exercise in which boundaries vary depending on the problems of interest to the analyst.

- Stakeholder interests will often be represented by *non-governmental organizations* (NGOs) or groups mobilized through *local social movement organizations* (see also, Chapter 3).
- *Local governmental organizations* include all sub-national/state governmental organizations that affect the work of the public regulatory agencies having specific jurisdiction over the project implementation. In many cases PPP projects will not be subject to local regulatory approvals because they will fall under the jurisdiction of national or state line agencies (such as ministries of transportation, health or education) as described in the following section. However, most PPP projects are implemented in coordination with local government agencies including local municipalities, water boards, and health agencies. Obviously these organizations are even more salient in projects that are implemented solely at a local level (such as municipal PPPs).
- *Local trade unions* are often important players in the local PPP field. Such organizations have historically been quite vocal in the PPP debate on both sides of the spectrum: on the one hand public sector unions have argued against private involvement in infrastructure, while private sector unions have seen PPPs as a way to increase employment opportunities for their members.

National / State Level Field

PPP enabling organizations generally operate at a national level in most countries; this is sometimes narrowed to states in a federalized system. Although organizations occasionally focus on a single infrastructure sector (transportation, water, etc.), the organizational field spans all these sectors at the nation/state level. At this level PPP enabling organizations are joined by the following diverse group of salient actors/organizations:

- *Governmental agencies* include all bodies within the nation state that play a role, have a stake, or are impacted by the PPP projects under concern, in addition to the PPP enabling organizations. Most important, this includes the line agencies or departments that initiate and take responsibility for these projects. In addition, various other departments are involved in providing project approvals, including cases where overall project approval is centralized under departments such as the ministry of finance.
- *Private for-profit firms* include those having influence on the PPP projects themselves (including developers, lenders, financiers, designers, contractors, and operators), and those that are indirectly involved with current projects (such as various service providers) or hope to participate in future projects.

- *Local normative organizations* provide input to PPP projects based on concern for values such as environmental protection, health standards, and equity considerations. These include research and academic organizations and professional associations.
- *National NGOs* includes advocacy (non-profit) organizations who seek to stimulate the PPP market and increase deal flow, such as those found in Canada, the US, and Australia. To a lesser extent, various other national NGOs play a part in shaping the national PPP field on issues such as employment, fairness, and sustainability. These organizations also in some cases become involved in normative issues at the project level.
- *National trade unions* are the higher level equivalents of the local unions discussed above.

Transnational PPP Governance Field

In addition to the local and national fields in which PPP enabling organizations operate, they also form part of a wider transnational field of organizations that together form the global infrastructure PPP market. We prefer the term transnational rather than global to indicate that this field does not necessarily include all nations, but rather those that have an active PPP market.

In addition to the enabling organizations themselves, the primary actors in this field are:

- *International consulting firms* supply international experts that work at multiple levels, including the local level, and serve to convey information and best-practices through professional networks.
- *International infrastructure design, construction, and development firms* (often connected to the for-profit firms in the local PPP field) work on PPP projects in a variety of different countries, and bring with them the technical, financial and negotiating skills and experience needed to execute the PPP assignment. Ironically enough, these actors use their specialized skills and experience both to benefit governments (ensuring they get a first-class development) and to exploit them (through aggressive contract negotiations and renegotiations).
- *International NGOs* are very active at the trans-national level, applying normative controls through mechanisms such as “naming and shaming” campaigns via the media, voluntary audits and peer controls (Djelic & Sahlin-Andersson, 2006). They are often activated by their local counterparts to participate in PPP developments.

- *Professional associations and research and academic institutions* also apply cognitive framework and normative controls through standard setting, educational programs and professional forums for information sharing.
- *Bilateral and multilateral donor agencies* are involved in a number of ways, including normative input, research and information dissemination. Were these organizations can also be grouped as “development agencies” (in our definition of PPP-enabling organizations) when they act as funding organizations (either directly to projects or in support of the enabling field).

Other Field Components

The above discussion highlights the primary types of *actors* (or organization archetypes) that are found in the three fields within which PPP enabling organizations are located. However, our examination of these fields can also be elaborated by utilizing the four other field elements identified earlier: governance arrangements, institutional logics, intermediaries, and local sense-making activities.

Governance arrangements may be subdivided into those relying primarily on (1) regulatory controls, based on the use of formal authority backed by sanctions, and (2) normative controls, based on the exercise of influence stemming from shared values and actors who elicit compliance based on moral, obligatory, and prescriptive arguments (Scott 2008). No fully legitimate regulatory organizations operate at the transnational level, but the multi-national and regional development agencies, such as the World Bank described above, do control important financial sanctions and exercise some suasion based on normative claims. International NGOs and transnational professional associations employ primarily normative influence, as they attempt to set standards and promulgate best practices related to their areas of expertise.

Organizations operating at the national and state levels, by contrast, include governmental actors—political leaders and agency executives—who employ regulatory powers based on occupancy in positions of authority backed by the legitimate exercise of coercive power. These organizations are joined by—often, opposed by—a variety of NGOs who challenge and attempt to influence their exercise of control. And, at the local level, we find the same types of actors, local governance organizations and NGOs, and, in addition, social movements that arise in reaction to the project—some in support, others in opposition.

Projects operating under PPP arrangements entail an effort to create a partnership among types of organizations operating with quite dissimilar *institutional logics* (Friedland and Alford, 1991). Institutional logics “are the cognitive maps, the belief systems carried by participants in

the field to guide and give meaning to their activities” (Scott et al., 2000, 20). Public leaders are highly sensitive to the election cycle and often concentrate on short-term objectives. They attend to shared beliefs and public sentiments, and most attempt to comply with widely-shared norms regarding their legitimate role. Government agency officials stress conformity to rules and procedures and often emphasize transparency and the use of structures fostering wide information sharing and participation from affected parties. These agencies typically are highly specialized, so that officials are likely to concentrate on a relatively narrow set of concerns to the exclusion of broader performance objectives. This narrowness of focus is also likely to occur among NGOs and professional associations. By contrast, for-profit firms are likely to embrace market-efficiency logics and to be guided by the standards and operating procedures largely drawn from professional and craft sources. Developers must attend closely to cost-containment measures, protecting the financial interests of owners and shareholders. Clearly, PPP structures are complex coalitions of partners with divergent identities guided by diverse interests following varying and often contradictory institutional logics.

A majority of the new types of actors in the PPP field act as *intermediaries* among the main players. Between the primary organizations—government agencies, project firms, local stakeholders and end users—a growing collection of information brokers, advisors, consultants, and watch-dog organizations have arisen. The most prominent intermediaries at the transnational level are the regional and multi-lateral development agencies. These organizations affect diffusion of practice within PPP fields in a number of ways: using normative influence to shape player decisions; employing coercive pressure by threatening to withhold development assistance; and sponsoring advisory projects to foster capacity building in local areas. When we talk about the changing “structure” of a field, we refer not only to more regularized patterns of interaction among the main players but also to growth in the number and importance of organizations whose principal function is to oversee, steer and mediate the transactions among the primary players.

Finally, *local sense-making activities* arise in the local project field as the diverse players converge around the focal project and begin to interact, often for the first time. Some of the players have come from distant locations and bring with them beliefs and practices shared from earlier projects. Others, at the national and the local level, may be involved in such international construction projects for the first time and must find ways to interpret unfamiliar demands and events and develop modes of reacting to them. All groups must adapt their expectations and behavior to accommodate these varying interests. Each type of organization confronts novel situations and unknown types of actors. Hence, sense-making is the order of the day as organizations in these novel fields strive to understand the situation they are in and what course of

action to pursue (Weick, 1995; Weick, Sutcliffe and Obstfeld, 2005). The confluence and interaction of these diverse players results in, at best, a pragmatic fusion of institutional logics as organizations adapt to their new partners and novel circumstances. At its worst, serious misunderstandings, disappointment, and conflicts may arise among the host government, the private provider and the end-users, as illustrated by the failure of the Cochabamba water concession in Bolivia. Such public failures can have transnational repercussions, shaping user resistance to private water supply projects globally (Davis, 2005).

COMPARING PPP ENABLING FIELDS

The preceding discussion presents the kinds of actors and processes that may characterize the organizational fields that surround PPP enabling organizations. In surveying the current scene, however, we can identify significant differences internationally in the composition of, in particular, the National / State level field. For this reason we present three contemporary examples of State level fields in this section. In addition, we attempt to make preliminary sense of the variety of present-day field compositions by drawing on previous work by Scott and others (Scott and Meyer, 1991; Scott, et al., 2000; Wooten and Hoffman, 2008) on organizational field characteristics.

Selected Examples of PPP Enabling Fields

To illuminate the divergence of PPP enabling fields, we present three contemporary examples: South Africa, the Province of British Columbia in Canada, and the Republic of Korea. Although they are not archetypes of typical field compositions, these cases provide a useful indication of variations in the types of players and configurations to be found in diverse regions.

South Africa

The South African context has seven principal types of organizational actors in the national PPP enablement field. The first can be referred to as the *sponsoring agency*, and is the government department or agency that contracts for the private infrastructure provision. The sponsoring agency is responsible for identifying and developing the project concept, carrying out the feasibility study, conducting the procurement phase, and obtaining Treasury approval after each step. After contract signature the sponsoring agency is also responsible for monitoring and regulating performance, dispute resolution, and reporting to the Auditor-General. In this way they act as the public regulator of the PPP project.

Due to the complexity of the project development process, sponsoring agencies generally appoint *transaction advisors* to carry out the project preparation and approval process on their behalf. These advisors most often comprise a team of private consultants that include legal, financial, and technical experts. Many of these consultants have direct (in the case of an international consulting firm) or indirect (by way of personal or professional ties with consultants in other countries) links with international consultancy organizations, thereby enabling them to draw in best practices from abroad.

Less common than the use of transaction advisors, sponsoring agencies can also make use of *regulatory consultants* in performing their functions during the project term (after contract award). The aim of using these consultants is almost exclusively aimed at overcoming skill and capacity shortages that the Line Agency might face in executing their regulatory functions.

A fourth actor is the *PPP Unit* located within National Treasury, responsible for controlling progress of the PPP project development through four distinct approval steps (Levinsohn and Reardon, 2007). In this way the Unit is focused on ensuring the quality of PPPs and protecting the larger government against imprudent commitments made by sponsoring agencies. In addition it provides advice to agencies interested in PPPs, mostly through periodic publications and their internationally commended PPP guides. The PPP unit is focused exclusively on the pre-award process. Final approval of all PPP transactions is conferred by *National Treasury*, based on the recommendation provided by the PPP Unit.

External auditing of the sponsoring agency's oversight activities during the project term falls to the *Auditor-General* of South Africa. The Auditor-General is an independent government entity focused on safeguarding the public interest in governmental expenses. It can therefore be viewed as "an independent auditor acting on behalf of taxpayers, and auditing and reporting on the activities of all government institutions" (Treasury, 2004). The Auditor-General reviews the PPP project's annual progress reports, and conducts various audits as required.

Finally, local *development agencies* play a role in helping sponsoring agencies to identify and develop possible infrastructure projects. The two most prominent of these public players are the Development Bank of South Africa (DBSA) and the Industrial Development Corporation (IDC). These agencies have however played a decreasing role in PPP projects since PPP authority was centralized in the PPP Unit. Multinational development agencies (such as USAID) were instrumental in the initial surge of PPPs during the late 1990's, but are no longer active in this field.

The above description does not hold for sectors that have been fully privatized, most notably the communications and energy sectors. Private participation in these sectors is regulated

by dedicated public regulatory agencies, such as the National Energy Regulator (NERSA) and the Independent Communication Authority (ICASA). In addition, the South Africa National Road Agency (SANRAL) and TRANSNET handle all transactions that involve road, commercial rail, port and pipeline infrastructure, without the oversight of the PPP Unit (Farrugia et al., 2008).

A graphic representation of the South African field is presented in figure 3.

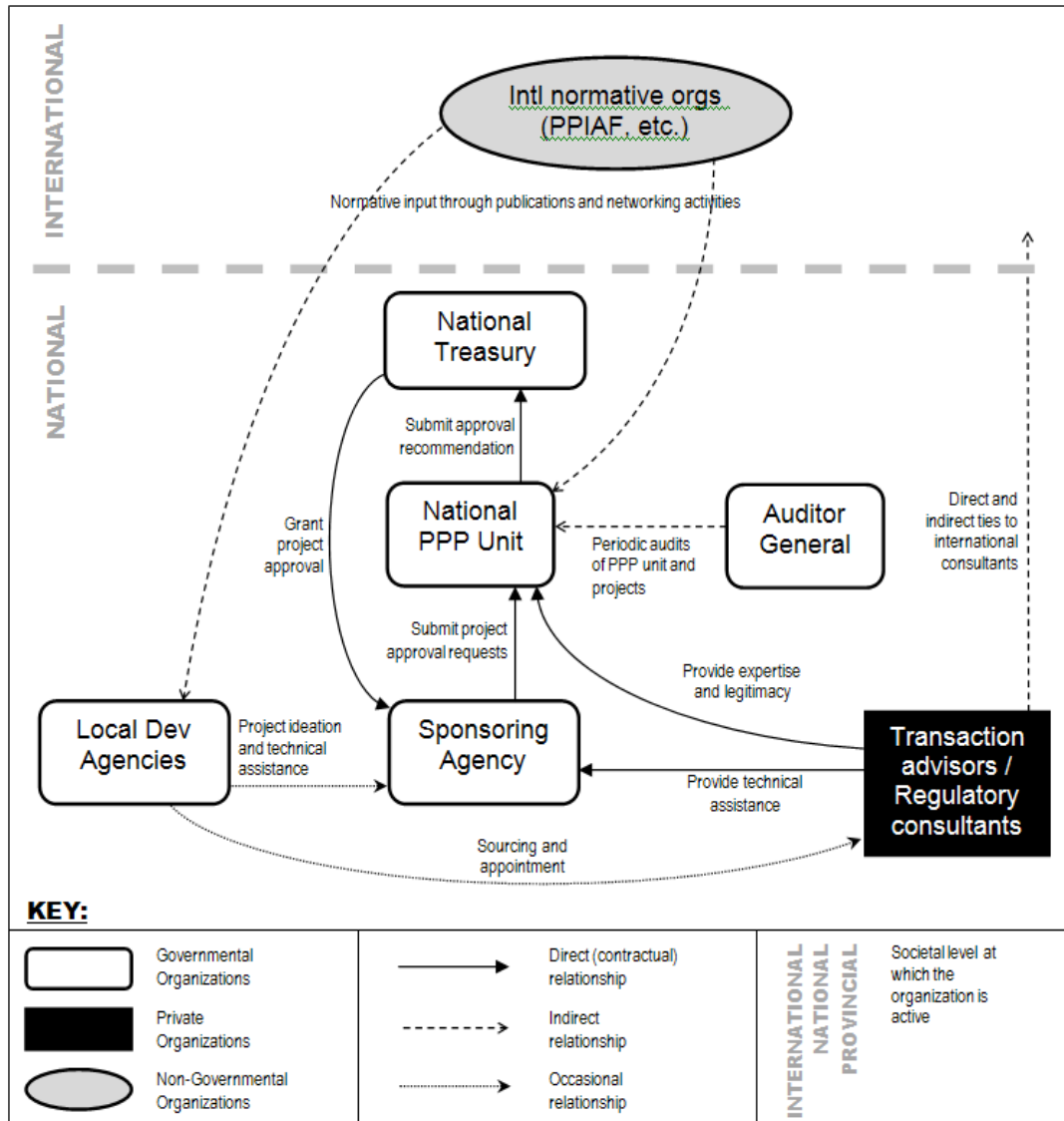


Figure 3 - Graphic representation of South African PPP enabling field

British Columbia, Canada

In comparison with the South African case, PPPs are viewed as much more central to infrastructure delivery in the Canadian province of British Columbia. All public infrastructure investment initiatives with an estimated project value over \$50 million are required to pass

through a PPP qualification review, with normal procurement only followed if there is a compelling reason not to undertake the project as a PPP. In addition, projects between \$20 million and \$50 million are generally also evaluated for PPP appropriateness. Again, we can identify six main actors in this field.

Project concepts are developed by various governmental *sponsoring agencies*. These agencies are the governmental agents who ultimately sign the PPP contract, and they therefore retain the main responsibility for project oversight and regulation throughout the life of the project.

Sponsoring agencies are at liberty to appoint any private consultants for the PPP qualification process (or business case development), but generally they make use of the provincial *PPP Unit*, Partnerships BC (PBC), for this task. The reason for preferring PBC over private consultants is that PBC is responsible for assessing all business case evaluations and making a recommendation (based on value for money and affordability assessments) to the *Ministry of Finance* for final approval. Involving PBC early on in the process improves the chances of eventual project approval. Sponsoring agencies also often retain PBC during the options analysis phase and subsequent competitive procurement processes. However, the extent of PBC services utilized depends greatly on the expertise and experience of the sponsoring agency⁸: their role can range from completely managing the PPP development process to taking only an advisory role. PBC sometimes provides input to sponsoring agencies during the construction phase as well, but is generally not involved during the operational period.

It should be emphasized that PBC, a fully publicly owned crown corporation, takes on a much more pro-active role in developing the local PPP market, than is the case with the South African PPP unit. They actively identify possible PPP projects, as well as serve as a center of PPP excellence, distributing best-practice information to governmental departments through positional papers, recommended procedures, and policy input. PBC's forward-leaning stance to PPP development is partially motivated by the organization being financed through a fee for service funding structure. Some critics have suggested that this incentive, coupled with significant influence on the PPP approval process, might lead to more PPPs being approved than is optimal. The Government of British Columbia has attempted to combat this possible agency dilemma by providing strict oversight by the Ministry of Finance. In addition, PBC contracts with independent *private consultants* on most projects to ensure impartiality: each project includes a "conflict of interest consultant" and a "fairness advisor." PBC also employs legal, financial or

⁸ Agencies that have had more experience with PPPs (such as in Transportation) mostly only require advisory services, while agencies that are newer to PPPs (such as in Health Care) would employ PBC to manage the whole process.

technical consultants to supplement their in-house expertise where needed. Private consultants can therefore either be employed by the Sponsoring Agencies directly (where PBC has not been appointed for management of advisory services) or (more commonly) as consultants to PBC.

Two players at a national level complement these provincial actors. First, the Canadian federal government has also been involved in developing the PPP market through the establishment of a *federal PPP Unit*, known as “PPP Canada Incorporated” (GoC, 2009). The office is primarily tasked with managing and investing the Government of Canada’s \$1.25 billion Public-Private Partnerships Fund that supports “innovative projects that provide an alternative to traditional government infrastructure procurement” (Building-Canada, 2009). In addition, the office advises the Government of Canada on the execution of PPP projects, and requires that PPPs be considered in connection with other federal infrastructure programs. The focus of the Federal PPP office is therefore exclusively on federal PPP projects.

Second, the *Canadian Council for Public-Private Partnerships* (CCPPP) also operates at a national level in Canada. The council primarily focuses on promoting and increasing the success of PPPs through industry wide research and information disseminating via various publications.⁹ In addition it facilitates knowledge sharing and networking by way of annual conferences, regional PPP events, and focused workshops. Lastly the CCPPP acts as a normative force by recognizing leading projects through their Canadian Council National Awards for Public-Private Partnerships (CCPPP, 2009).

A graphic representation of the British Columbia field is presented in figure 4.

⁹ Publications sponsored by CCPPP include informative newsletters, research papers, case studies, guidelines, opinion surveys and national inventories on key public-private partnership subjects (CCPPP, 2009).

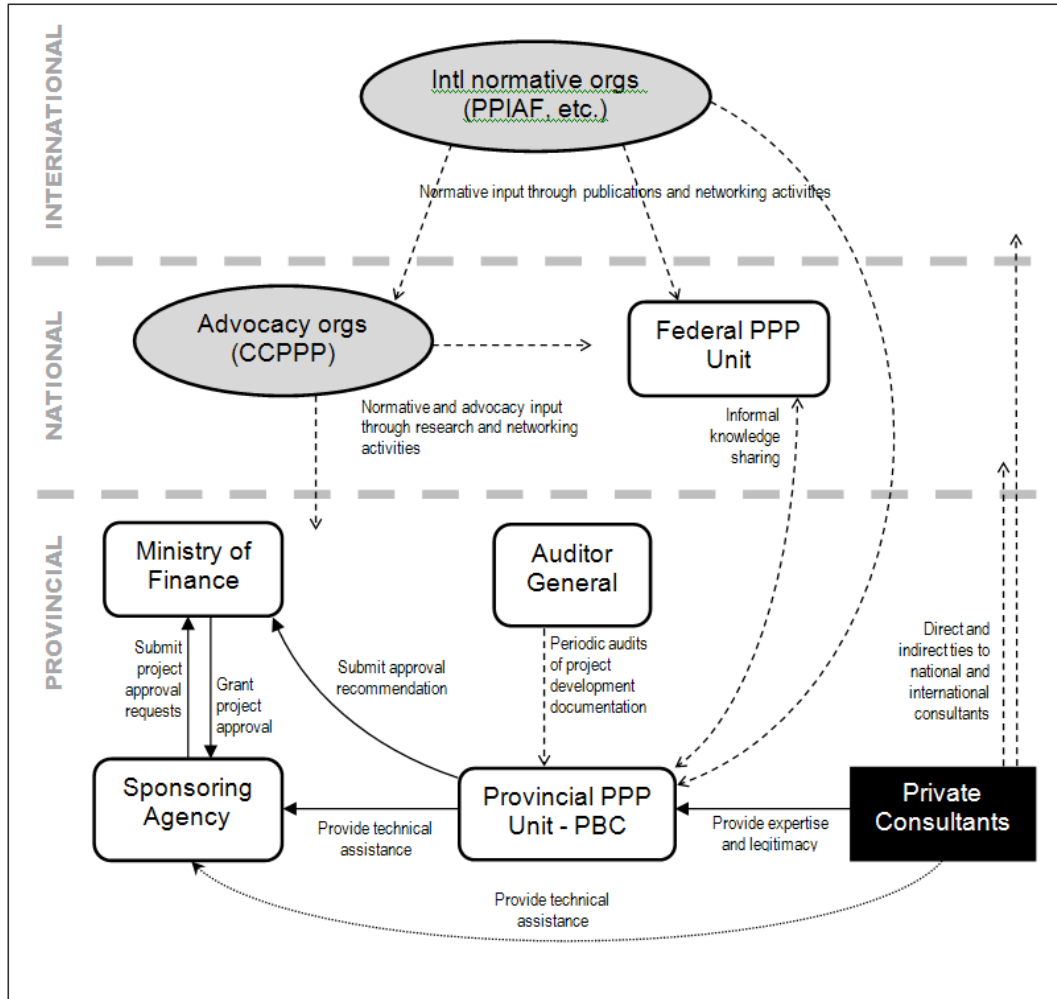


Figure 4 - Graphic representation of British Columbian (Canada) PPP enabling field

Republic of Korea

A final case for consideration is the Republic of Korea (or South Korea) where extensive PPP activity has taken place since 1994 (most recently under the Build-Transfer-Lease program) (Nam, 2006). Korea presents an interesting alternative to the other two cases because its public PPP enabling organizations are highly centralized and insulated, with little involvement of private or non-governmental agents. We can identify five main players in this field, all governmental agencies.

The responsibility for overseeing Korea’s PPP program is concentrated in the *Ministry of Strategy and Finance* (MOSF). The MOSF is responsible for developing PPP policy and establishing the Korean government’s comprehensive PPP investment plans, through the creation

of an annual PPP plan and guidelines document¹⁰. The MOSF controls the quality of projects delivered by Line Agencies through the review of quarterly PPP implementation status reports. Most of the decisions on large PPP deals are delegated to a specialized entity within the MOSF, the Project Review Committee (Kim, 2009). This Committee generally is staffed by high ranking governmental officials, but may also include private consultants as “technical experts” (Ibid).

The primary work of PPP project implementation is undertaken by various Korean *Sponsoring agencies*, (such as the Ministry of Land, Transportation and Maritime Affairs in the case of a national transport infrastructure project). The relevant agency undertakes the necessary work to develop the project, including conducting a project feasibility study and Value for Money appraisal, undertaking the procurement process, identifying the preferred bidder, approving the engineering plan, and confirming project completion. Although private consultants are sometimes employed by line agencies, their use is much less prevalent than in the other two cases.¹¹

Instead of using consultants, Line Agencies often request technical assistance from the *Public and Private Infrastructure Investment Management Center (PIMAC)* during the execution of their project development tasks. The general reluctance to involve private consultants in the project development process means that PIMAC plays a much larger supporting and execution role on specific projects than in the other cases discussed. PIMAC is the “central government’s primary administrative entity for interfacing with the private sector on infrastructure investment projects” (Nam, 2009). The role of PIMAC includes reviewing project proposals, helping to negotiate concession contracts and mediating disputes. In addition, PIMAC offers educational workshops to increase private sector interest in infrastructure finance and conducts research on the infrastructure market (Kim, 2009). To assist under-skilled local governmental authorities, PIMAC specifically works to protect the interests of government in their dealings with private sector concessionaires (Nam, 2009).

The *public auditor* of Korea is known as the “Board of Audit and Inspection” (BAI). This agency works to make “sure that administrative practices and services of government and public bodies are fair, reasonable and appropriate” (BAI, 2009). The BAI provides independent

¹⁰ “The purpose of this plan and guidelines is to weigh national and regional infrastructure priorities, provide administrative rules governing the PFI program, and announce any adjustments in public support to be provided for new projects under the program. Although it does not carry the enforceability of law, the annual plan provides guidelines to which all levels of government have shown commitment when implementing their relevant PPP project” (Nam, 2009).

¹¹ Two reasons are mentioned for the small role that private consultants play: (i) the high levels of technical competence within the public organizations we mention here, and (ii) a general resistance within the Korean government to involve private entities in public decision making.

oversight of the PPP process, auditing the practices (specifically in terms of procurement) of the line agency.

A final player in the Korean PPP enabling field is the *Korean Infrastructure Credit Guarantee Fund* (KICGF), which provides funding guarantees to Private Providers. Guarantees can take the form of a term loan structured to protect the project’s senior debt service (available upon demand), or a revenue guarantee loan. These guarantees serve to minimize the risks borne by the Concessionaire, thereby developing the local PPP market by making investment more attractive to private providers (Ibid). The KICGF partly matches our definition of a local development agency, but their program development activities are limited to these financial measures.

A graphic representation of the Korean field is presented in figure 5.

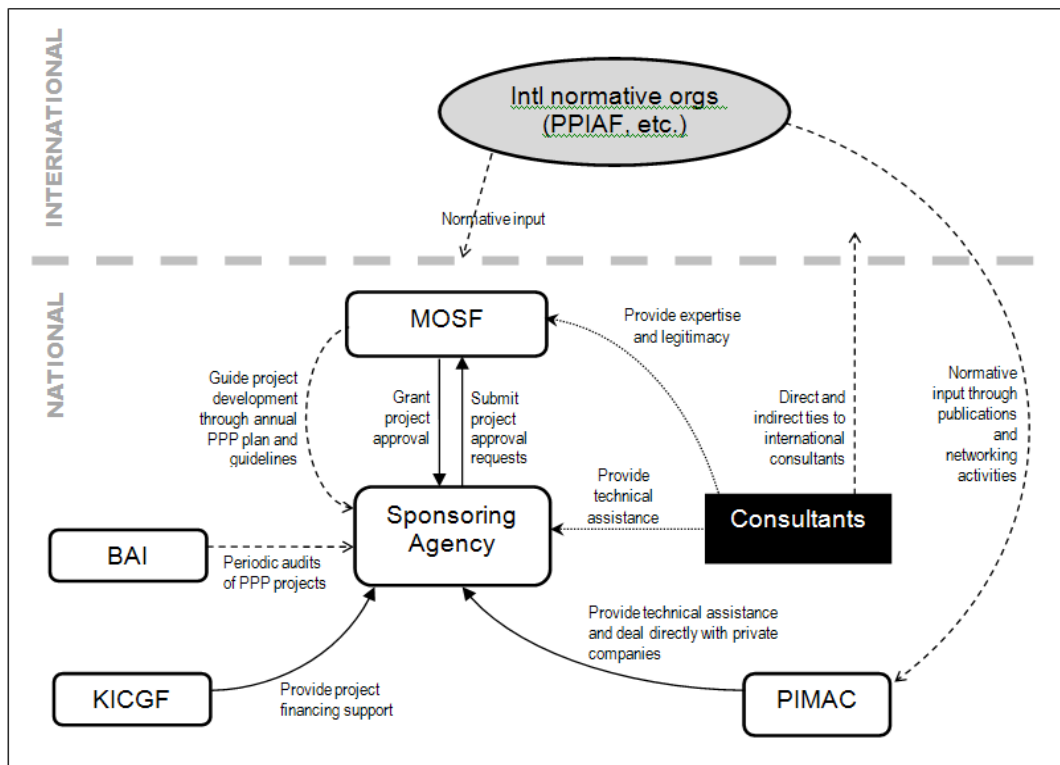


Figure 5 - Graphic representation of Korean PPP enabling field

Other Examples

Four other cases can help us further distinguish differences between national fields, and are therefore worthwhile mentioning here:

- As mentioned earlier, in many developing countries the development of PPP projects are heavily dominated by Multinational Development Agencies. The formation of the

Maputo water Concession in *Mozambique* is a case in point. Not only was the project concept proposed by the World Bank, the subsequent procurement and appointment process was dominated by Bank employees and selected private consultants (Zandamela, 2001). In addition, the Bank executed the restructuring of the governmental organizations that oversaw the PPP, creating the public asset holder and the public regulator. Consultants (mostly employed directly by the World Bank) were heavily relied upon to assist these public organizations in managing- the PPP contract.

- The *Chilean* case is also of interest due to the centrality of decision making and strong political commitment for pursuing PPPs. The Minister of Public works has historically taken responsibility for the implementation of the program, with only partial scrutiny by the Minister of Finance and the public auditor (“Contraloría General”). The result has been a rapid, but somewhat controversial history of PPP development (culminating in a series of corruption and irregularity trials). Other features of the program are a substantial reliance on international consultants in project development, and low accountability and transparency of PPP policy formulation and project selection.
- The *Indian* case is of interest due to the highly fragmented and decentralized nature of the program. Reflective of Indian bureaucracy in general, a multitude of governmental organizations provide alternative routes for project implementation in an uncoordinated manner. These organizations include PPP Units at the national and state level, as well as within some sector specific-bodies. In addition, a variety of local development agencies (most remnants of earlier project financing initiatives) litter the landscape of project identification and development.
- A final example is the *Chinese* PPP field, where two broad tiers of projects can be identified: (1) interprovincial projects or projects that are of national significance, requiring major financial investments, and (2) provincial or local projects that are of much more modest scale (generally involving urban infrastructure). Approval of both types of projects is centralized under the National Development and Reform Commission (NDRC),¹² but nationally significant projects require approval at the State Council level as well (GoPRC, 1995). The responsibility for project development and procurement falls to the applicable authority (local, provincial, or department within the central government) for both types of projects (GoPRC, 2004, 2005). Consultants

¹² The NDRC approval ensures that “the project complies with the maintenance of economic security and rational exploitation of resources, protection of the ecological environment, optimization of the layout of industry, protection of the public interest and prevention of monopoly” (GoPRC, 2005).

are more prevalent than in the Korean case, but afforded limited responsibility, mostly acting in a supporting role.

Towards a Classification of PPP Field Characteristics

The examples presented above illustrate the diversity of application in contemporary PPP enabling fields. Although an in-depth classification of present day examples is beyond the scope of this paper, we can identify several broad dimensions along which the case examples (and selected others) vary.

Scott and Meyer (1983; 1991) were among the first to identify some of the ways in which one field differs from another, and these efforts have multiplied over time (e.g., Campbell, Hollingsworth and Lindberg 1991; Scott et al. 2000; Whitley 1999). A number of broad dimensions along which fields vary have been identified, including the extent of centralization of decision-making, the mixture of public and private sector players, and the number of levels (e.g., local, state, national, transnational) at which actors operate. Reflecting on the case of PPP, we propose that fields appear to vary on at least five salient dimensions:

- *Centralization of governance* entails whether the responsibility for project enablement and governance is located within a central agency, or duplicated within various line agencies. The Korean and British Columbia cases present examples of highly centralized enablement, while the Indian case is much more decentralized.
- *Sectoral consistency* represents the extent to which PPP enablement is consistent across different infrastructure sectors (transportation, energy, telecoms, and water and sewerage). In many countries, (South Africa and India for example) the transportation sector has taken the lead in developing PPPs (due to the ease of applying direct user-fees), leading to a separated PPP program in these sectors. In other countries (such as British Columbia and Korea in our sample) PPP programs have been developed as a single coherent initiative across all sectors.
- *Involvement of private enablers* signifies the extent to which governmental agents make use of private consultants for the PPP enablement process. Extreme cases in our sample are Korea on the one hand (where there is very limited use of private consultants), and India on the other (where governmental agents are very reliant on private providers).
- *Influence of Multinational Development Agencies* entails the extent to which Multinational Development Agencies like the World Bank and IFC have an influence on both the choice of PPP projects, and the way they are developed. A higher level of

influence (such as Mozambique in our sample and to a lesser extent India) generally signifies a lower level of governmental capacity within the host government, with the MDAs often stepping in to ensure project success and protect both local and private interests.

- *Dominant Logics* refer to the types of institutional logics that guide the emergence and use of enabling organizations. They appear to vary from an emphasis on control to a concern for empowerment. The “logic of control” stresses the need for central government control of private service provision, specifically to limit market failures associated with infrastructure provision – natural monopoly characteristics and significant externalities (Goldberg, 1976; Mody, 1996; Savas, 2000). This logic has also been the driving force behind measures to ensure control of governmental discretion, both the discretion of local government (applied through central government) and central government (applied through independent auditors and measures of transparency and accountability). In the spectrum of enabling organizations, this “logic of control” has led to the emergence of public regulators, private consultants that provide “binding outsourcing” services (Trémolet, 2007), and PPP Units that function as “review bodies” (Farrugia et al., 2008). A contrary “logic of empowerment” views the challenge of PPP sustainability as a process of increasing the ability of the players involved in the service delivery relationship. Most notably this logic has been the driving force behind initiatives aimed at empowering public actors, but it has also led to governmental programs focused on developing the environment for private participation.

CONCLUDING STATEMENT

In this study we have investigated the emergence of a collection of diverse organizations designed to enable and govern Public Private Partnership projects for infrastructure development. We have observed that these enablement and governing responsibilities are not restricted to a single governmental body, but rather are shared between networks of public and non-public organizations. These organizational networks are being used in varying combinations in efforts to address multiple challenges that PPPs face internationally. We utilize the concept of organizational fields as a theoretical lens to help us investigate these combinations of organizations in a comparative way. Based on a review of a small number of cases, we identified five dimensions that can be used to distinguish field-level differences between cases.

The work to date is no more than an initial step towards a more complete understanding of these networks of enabling organizations. More work is needed to better document the range of networks that have developed, unearth the reasons why these fields differ along the dimensions identified, and more importantly, to assess what the impacts of these differences might be on PPP success at both a project and a program level.

CHAPTER 3 – THE PUBLIC PRIVATE PARTNERSHIP ENABLING FIELD: EVIDENCE FROM THREE CASES¹³

ABSTRACT

In this study we investigate the emergence of a collection of diverse organizations designed to enable and govern Public Private Partnership projects for infrastructure development. Specifically we argue that this set of organizations, that collectively brings a required portfolio of capabilities, can be combined in varying constellations of field configurations to overcome four challenges that infrastructure PPPs face. We utilize the concept of organizational fields as a theoretical lens to help us investigate this panoply of organizations in three international contexts: British Columbia (Canada), Victoria (Australia) and South Africa. We observe a similar set of actors in each of these “PPP-enabling fields,” but detect significant variation in the characteristics of these actors. In addition we find that, even within each field, the actors are arranged in varying combinations on different projects. Lastly, we theorize on a number of aspects of these PPP-enabling fields, including the typical ways in which actors are arranged on projects, predominant field intermediaries, and salient institutional logics.

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INTRODUCTION

The pivotal role of civil infrastructure in enhancing public health and accelerating economic growth has been widely acknowledged in the literature (Estache, 2004). It thus remains a central part of improvement initiatives in both developed and developing countries. Although responsibility for infrastructure development in the previous century rested largely with the public sector, the last three decades have seen a shift toward greater participation by private actors. This shift formed part of a wider movement to reform the role and functioning of the public sector, driven by perceived public sector inefficiencies, and the ascendance of liberal economic ideology (Batley & Larbi, 2004). Reforms broadly involved a reduction in the role of government—or, more accurately, a change in the functions it performs—and greater private sector involvement (Hood, 1991; Kaul, 1997; Osborne & Gaebler, 1992; Peters & Pierre, 2002; Rhodes, 1996; Salamon, 2002). This move towards private participation in infrastructure delivery has most recently involved Public Private Partnerships (PPPs): arrangements that involve private companies in the financing and provision of infrastructure, broadly aimed at overcoming public sector financing, incentive, and capacity constraints¹⁴ (Bovaird, 2004; Kumaraswamy & Zhang, 2001).

Unfortunately the international experience of infrastructure PPP implementations has not been perfect (Milmo et al., 2009). There have been multiple, highly publicized cases of public opposition to private provision of infrastructure and large numbers of contract renegotiations and cancellations. Moreover, Guasch, Laffont, and Straub (2002) have illustrated the complexity of delivering public benefit through these arrangements. We propose that these failures show up four main challenges that infrastructure PPPs face: (1) market failures associated with private infrastructure provision rooted in the natural monopoly characteristics and externalities of infrastructure (this would encompass issues of protecting user and societal interests beyond tariff levels, to also include aspects of equity in access and ensuring the adherence to standards for health, environmental impact, etc.) (Goldberg, 1976; Mody, 1996; Savas, 2000); (2) agency failures relating to the limited capacity of public entities; (3) perceived legitimacy issues surrounding private provision of public infrastructure; and (4) government opportunism stemming

¹⁴ Our definition of PPPs is sufficiently wide to accommodate various forms of private infrastructure provision. What is specifically excluded here are full privatization forms (where asset ownership is transferred to the private party) and arrangements that exclude a construction component (such as management contracts or asset leases). This is line with the common understanding of the PPP concept in our three case regions.

from the fact that infrastructure is plagued by what has been called the “obsolescing bargain” — once the facility is completed and in operation, the private developer loses much of its bargaining power in subsequent negotiations over tariffs or other matters (Ramamurti and Doh, 2004; Woodhouse, 2005).

There is a growing understanding among scholars that the move towards private participation in infrastructure does not simply substitute private sector capacity for public sector capacity; rather it requires new forms of public sector capacity to be developed to overcome these four challenges. The following quote from Dutz, Harris, Dhingra, & Shugart (2006:1) serves to illustrate:

This shift from traditional public sector methods places new demands on government agencies. They need the capacity to design projects with a package of risks and incentives that makes them attractive to the private sector. They need to be able to assess the cost to taxpayers, often harder than for traditional projects because of the long-term and often uncertain nature of government commitments. They need contract management skills to oversee these arrangements over the life of the contract. And they need advocacy and outreach skills to build consensus on the role of PPPs and to develop a broad program across different sectors and levels of government.

This assertion makes it clear that ensuring the success of PPP projects goes beyond successfully governing the projects that have been developed. Indeed, the recent history of PPPs seems to suggest that some projects are flawed from the outset (Klijn & Teisman, 2000). Of critical importance are the choices made in deciding which projects to pursue, and developing these projects in a way that make them attractive to private investors, while still protecting the interest of users and tax-payers in general, including securing legitimacy and curtailing corruption. Moreover, actions are required that do not only focus on the success of single PPP *projects* in isolation, but rather that aim to sustain the wider portfolio of PPP projects, the PPP *program*.

Unfortunately the majority of the work recognizing this need for public sector capacity is silent on where this capacity needs to be created. A noted exception is the growing literature on PPP units (Burger, 2006; Dutz et al., 2006; Farrugia, Reynolds, & Orr, 2008; PPIAF, 2007), but even this literature greatly underplays the institutional settings of units, and the way that they interact with other governmental departments. We propose that the need for PPP “enabling capacity” has not been answered by a reformation of public agents alone – rather a network of new “enabling organizations” (public, private and non-profit) has emerged in response. These organizations, in varying ways, attempt to enable the development and continued operation of

PPPs for the benefit of public, private, and civic actors. We propose that the concept of organization field, found within institutional theory, can be usefully employed as a theoretical lens to understand the panoply of PPP organizations. Specifically we argue that these organizations need to be combined in varying constellations of field configurations to overcome the four challenges that infrastructure PPPs face.

This paper attempts to underline this argument by looking at the way in which these networks of enabling organizations have been set up in three contemporary contexts, all belonging to the British Commonwealth: British Columbia (Canada), Victoria (Australia) and South Africa. This paper forms part of a larger study on PPP-enabling organizations. Elsewhere (see Chapter 2 of this volume) we attempt to make preliminary sense of the global variety of present-day PPP-enabling field compositions by drawing on previous work by Scott and others (Scott & Meyer, 1991; Scott, Ruef, Mendel, & Caronna, 2000; Wooten and Hoffman, 2008) on organizational field characteristics. In this chapter we hope to deepen that discussion by looking at three leading PPP-enabling fields in a comparative manner. It should be noted that our purpose here is not to comment on the efficacy of one field configuration over another. Rather our intent is a detailed comparison of our three leading PPP fields, to theorize about the implications of the observed similarities and differences.

LAYING THE GROUNDWORK

Identifying typical types of “PPP-enabling organizations”

In previous work (see Chapter 2 of this volume) we identified eight main organizational forms that together form our concept of “PPP-enabling fields.” These organizations are as follows:

- *Sponsoring Departments* are the governmental departments that were traditionally responsible for infrastructure development. These agencies generally retain a central role in the development and regulation of PPPs. Examples of Sponsoring Departments include Public Works Ministries, Governmental Departments (such as those focused on Health Care, Transportation, Education, or Justice), or sub-national governmental divisions (such as Governments at the Provincial, or Local / Municipal level).
- *PPP Units* are one of the most striking developments in response to the need for PPP-enabling capacity. These mostly governmental agencies have been established as central actors to develop and sustain PPPs in a region (Burger, 2006; Dutz et al., 2006; PPIAF, 2007). Generally the Units aim to improve the sustainability of PPP arrangements by: (i) undertaking research and disseminating PPP information and best practices, (ii) setting policy and proposing legislation on PPPs, (iii) pro-actively

identifying projects and developing them, (iv) providing a consultancy service to other public agencies when engaging in PPPs, (v) funding PPP studies or project development, (vi) playing a role in the monitoring (regulation) of PPP contracts, and (vii) approving which projects are undertaken or, secondarily, giving advice to decision makers in the approval process.

- The use of non-public service providers has been expanded by the introduction of *Transaction Advisors*.¹⁵ These organizations are private service providers who assist Sponsoring Departments and PPP units in the formulation and negotiation of PPP arrangements. In general they play a strictly advisory role, assisting governments to overcome technical capacity shortfalls when developing PPPs. Their focus is specifically on setting up the initial “transaction” by developing the project concept, managing the tender process, and guiding the contract formation.
- A related organization type is what we refer to as *Transaction Auditors*, often referred to as Probity Auditors or Fairness advisors, or Fairness Monitors (Vogel, Kerans, & Casson, 2008). These are advisors who are appointed for the purpose of “verifying that the process culminating in the choice of a successful proponent was fair and even-handed” (Ibid: 1). The role of Transaction Auditor has also at times fallen to the Auditor General (Ng and Ryan, 2001).
- *Public Regulators* are organizations focused on regulating the performance of the private providers after the contracts were awarded. For contemporary PPPs the form of regulator is highly dependent on the type of arrangement regulated. The formal independent regulator model was developed specifically to address sectors that faced large-scale privatizations (such as energy and telecommunications). More recent Greenfield PPP projects have seen the regulatory function residing within the Sponsoring Department (not in a separate entity). To achieve independence in regulation, many governments have made use of an auditor (such as the Auditor General) or non-public regulators in addition to the sponsoring-agency regulatory body.
- *Non-public regulators* have emerged in support of public regulators. This group of actors, which includes private consultants, technical specialists, and noted academics, are employed to either curb the discretion of public regulators (and increase their

¹⁵ We employ the term “Transaction Advisors” to represent collectively all the advisors that support government in the development and execution of PPP project, including Financial, Legal, and Technical Advisors. This would include private organizations that play a project management role on behalf of government, which are sometimes exclusively referred to as “Transaction Advisors”.

legitimacy), or to provide them with specialist input and technical support (Tremolet, 2007). In modern Greenfield PPPs, governments have generally retained the services of transaction advisors to serve as non-public regulators (mostly in an ad-hoc fashion).

- An interesting recent trend is the creation of private and non-profit *Advocacy Associations*, specifically aimed at gaining support for the concept of PPPs in a region, and taking actions that develop the local PPP market. The organizations can take both an informal and more formal or permanent forms.
- A final, but significant type of PPP-enabling organization is the variety of *Local, Regional and Multinational Development Agencies* that assist public sectors in emerging markets. These include trans-national actors such as the Bretton-Woods organizations (World Bank, IMF, ADB, IADB, etc.) who have been at the forefront of promoting private participation in developing countries. In addition, local development agencies in a number of developing countries play a role in supporting PPP project developments in the form of either funding or technical assistance (Viljoen, 2006). We note here also the emergence of other influential transnational actors, such as the European Union, which is still in the process of determining the role they will play in the PPP-enabling field (Petersen, 2010 Forthcoming).

It is clear that a variety of enabling organizations have emerged during the last two decades to help public sector organizations address the challenges faced by infrastructure PPPs. However, it appears that these organizations do not ordinarily confront these challenges in isolation, but rather work together to enable and sustain PPP projects collectively. For this reason, we think understanding will be advanced by considering how these organizations function in combination, including exploring how these combinations are shaped by their institutional environments. By “institutional” we mean the elements that create shared meanings and controls thereby providing order to social action. These elements include regulatory and legal frameworks, norms and value systems, and cultural elements and beliefs (Scott, 1995, 2008). As mentioned above, we believe that the notion of organizational fields, as found within institutional theory, is a helpful theoretical lens.

Organizational fields as a theoretical lens

DiMaggio and Powell (1983: 148) define an organizational field as “those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services and

products.” This is very congenial to Scott and Meyer’s (1983, 1991) concept of a “societal sector,” which includes both organizations in a given domain delivering similar service or products, as well as the other organizations that “critically influence their performance,” stressing functional interrelation over geographical proximity. While DiMaggio and Powell focus on the ties (reflected in aspects of “connectedness” and structural equivalence), and mechanisms of influence operating between the organizations in a field Scott and Meyer focus attention on the structural characteristics of the field itself and their impact on organization characteristics.

Scott et al. (2000), identify three salient *components* that undergird organizational fields: *actors*, including both types of roles for individuals and types of organizations, *logics*, and *governance arrangements*. More recently Hoffmann and Ventresca (2002) have expanded this by identifying two additional field elements: *intermediary institutions*, and *local sense-making activities*. Together these components both constrain and enable action within fields, and thereby shape the behavior and characteristics of organizational participants (Campbell, 2004; DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott & Meyer, 1983, 1991). The concept of a field is an “empirical trace” (Hoffman & Ventresca, 2002) that is helpful because it defines the boundaries within which these shaping processes (such as competition, influence, coordination and innovation) take place (DiMaggio, 1991).

The use of the field concept is of specific relevance to the present examination of PPP-enabling organizations. It provides a way to consider these organizations in combination and in interaction with their institutional contexts. In addition the five field components mentioned above are helpful to direct our attention to salient aspects for our present comparative study of three PPP-enabling fields.

METHOD

Our research design is a multiple-case study (Eisenhardt, 1989) of three leading PPP-enabling fields. We chose a grounded-theory building approach due to the lack of previous work on PPP-enabling fields (Glaser and Strauss, 1967). The multiple case approach is useful as it helps us to abstract results that are more generalizable (and therefore reliable) than those drawn from a single case study (Taylor, Dossick, & Garvin, 2009; Yin, 2003).

Our case selection was based on three factors: (i) all three cases are widely recognized as leading examples of well established PPP programs (Cuttaree, 2007; Davies & Eustice, 2005; Farrugia et al., 2008; PPIAF, 2007); (ii) the cases present a large variation in the role that the most central field actor, the PPP unit, performs; and (iii) as Anglo Saxon Parliamentary Democracies with roughly similar common law legal systems, these cases provide at least some

control for external variance in the institutional settings, thereby enabling us to theorize (albeit preliminarily) about the implications of different field compositions. Although they do not represent the full breadth of field compositions, these cases provide a useful indication of some of the variations in the types of players and configurations that exist.

The analysis is based on semi-structured interviews with leading representatives of enabling organizations in each of the case regions. We selected informants based on suggestions made by managers in the respective PPP units, and then supplemented the initial interviews in a “snowball survey” approach with suggestions made by the initial informants. We conducted a total of 42 interviews with 50 informants distributed evenly between the three regions and the enabling organization types. The distribution of interviewees is summarized in table 1 below.

Firstly, we asked our informants to describe their organization’s role on a typical PPP project, citing specific project examples. Next we asked them to identify other field actors, and to indicate how they would interface with these other actors throughout the project development process. This enabled us to triangulate our findings by using multiple informants. Also, we asked them questions relating to the wider PPP program, including the guidelines and legislation that direct their work, the way that knowledge is shared among the field actors, their opinion on the effectiveness of the local PPP program (citing suggestions for improvement), and their opinion of the PPP method in general terms.

Table 1 - Distribution of interviewees

Enabling organization	British Columbia	Victoria	South Africa
PPP Unit	6	4	1
Sponsoring Department	3	6	4
Financial advisor	2	2	2
Legal Advisor	1	4	1
Other consultant	1	1	1
Auditor general	1	1	1
Advocacy organization	1	1	1
Fairness advisor	1	1	0
Development Agency	0	0	2
Federal PPP unit	1	0	0
Total	17	20	13

Interviews were recorded, transcribed, and then coded in a systematic iterative manner with the use of the qualitative coding software QSR Nvivo. This software is specifically useful for drawing out trends from large amounts of qualitative data (Bazeley & Richards, 2000). We supplemented our interview data with other data sources, including documents and secondary

data that were either publicly available or provided by our informants, to increase the validity of our findings (Eisenhardt, 1989).

FIELD COMPARISON

We start our comparative analysis of our three cases with a look at the various actors that each play a role in the enabling fields. We first consider the respective PPP units, and thereafter broaden the lens to compare the other actors in each of our case fields.

PPP units

Previous work by the PPIAF (2007) has shown how important PPP units are to the success of PPPs in a region. We propose that PPP units not only present a central type of field actor, but could also be viewed as the very embodiment of governance in the field. We therefore firstly consider these most central of field actors, focusing on three subjects: (i) the structure of the unit, (ii) the role it takes on PPP projects, and (iii) the role that it takes in developing the wider PPP program.

British Columbia

The PPP unit in *British Columbia*, known as Partnerships BC (PBC), is structured as a fully publicly owned incorporated company. It is funded through user fees paid by the Sponsoring Departments that it assists in project development. Of our three cases, PBC takes the most central role in PPP delivery. On projects, this role entails three separate functions. First, PBC is responsible for running all business case analyses to determine if projects should be delivered as PPPs. The government of British Columbia has mandated that all projects over \$50 million dollars now need to be evaluated for PPP applicability. The business cases are presented to the PBC board for endorsement, which ultimately sends it forward to the Treasury Board for final approval. PBC secondly acts as the procurement manager once a project is approved as a PPP. This means that PBC is part of the project team, often taking the lead in developing and procuring the project (dependent on the capacity of the sponsoring department as we discuss below). PBC will also mostly engage legal and financial advisors on behalf of the Sponsoring Department, and manage these advisors through the life of the project. A third project role that PBC sometimes take is to act as delivery agent on behalf of the Sponsoring Department during the construction phase.

PBC also takes a strong role in developing the wider PPP program in British Columbia. It serves as a center of PPP excellence by developing and distributing best-practice information to

governmental departments through positional papers, recommended procedures, and policy input. In addition, PBC spends a lot of time ensuring learning from project experience through actions such as lessons learnt reports, and facilitating cross-project meetings. PBC also takes the lead in engaging formally (through the Pan-Canadian forum) and informally with other jurisdictions both within Canada and abroad. PBC lastly undertakes actions aimed at building the capacity and understanding for PPPs in British Columbia, which includes: (i) workshops with government officials, (ii) information sessions with industry, (iii) speaking at conferences, and (iv) publishing information on their website. PBC attempts to address three of the four PPPs challenges: Agency failures, Legitimacy issues, and Governmental opportunism.

Victoria

The *Victorian* PPP Unit, “Partnerships Victoria” (PV) takes a much less central role in PPP delivery. Structured as a unit within the Commercial Division of the Victorian Department of Treasury and Finance (DTF), PV only gets involved on projects late in the Business Case phase once it becomes clear that the project will go ahead as a PPP. Throughout procurement PV then acts the interface between the project team (in the Sponsoring Department) and the rest of DTF. PV’s participation on projects is mostly limited to an oversight and advice-giving role, achieved via PV representatives placed within both the project team and project steering committee. This enables PV to not only make informed recommendations to the Treasurer, but also to influence the decisions that are made in the project development process (specifically with an aim to achieve consistency between projects and with the PV policy and guidelines). In addition, project quality is controlled by an independent gateway review process conducted by a different unit within DTF (the Commercial Risk Management Team). Independence of the PPP program is further strengthened by the fact that the Funding Commitment recommendation is made by a separate unit within Treasury (the Commercial Advisory Services Team).

PV does play a central role in developing the wider PPP program (similar to PBC). Program level actions include: (i) PV facilitates knowledge sharing between projects (to increase consistency and to ensure that the project documents are best practice); (ii) PV engages with the private sector through activities such as conferences, individual meetings, market soundings and even policy input sessions; and (iii) in the past PV also took sole responsibility for developing and keeping the exhaustive PV policy and guidelines updated. These have now been subsumed

into the Federal PPP policy,¹⁶ which falls under the jurisdiction of the Federal PPP unit, Infrastructure Australia.

Although not formally recognized as a PPP unit, we propose that another organization shares the role of PPP unit in Victoria: Major Projects Victoria (MPV). MPV is a division of the Victoria Department of Innovation, Industry and Regional Development and focuses on providing “expert project delivery services to Victorian Government departments and other agencies engaged in the delivery of complex, technically challenging, and invariably unique projects of state significance” (MPV, 2009). In terms of PPPs, MPV therefore assists under-capacitated line agencies (or those unfamiliar with project delivery) in developing and delivering PPPs in their sector. MPV also supports departments with delivery of projects under more traditional delivery models. This is similar to the centralized delivery function that PBC performs in British Columbia. In combination PV and MPV together address all four of the PPP challenges: MPV addresses Agency failures, while PV addresses the other three challenges.

South Africa

Our final case, the South African National *PPP Unit* (SA PPP Unit), lies somewhere between our other two cases. The unit is nearly identical to PV in terms of structure – it is located within National Treasury, and reports directly to the Minister of Finance. From its inception, the unit’s primary focus has been on project oversight (as is the case with PV), to ensure both the quality of PPPs and to protect the larger government against imprudent commitments made by sponsoring departments. The general incapacity of departments in developing and delivering PPPs (85% of our South African informants listed this as one of the key challenges in the local market) has resulted in the SA PPP unit also being forced to take a strong assistance and advisory role through both the business case and procurement phases. This generally includes sourcing both the Project Officer (sponsoring department project leader) and advisory team on behalf of the sponsoring department. Applicable legislation however restricts project delivery accountability to reside with the sponsoring department, and therefore the PPP unit never takes the lead on any PPP projects (in contrast to PBC).

The PPP unit also undertakes a number of actions to develop the wider PPP program. Most prominently this entails educating governmental agents on PPP fundamentals and the PPP framework, and proposing their use among governmental agents. The unit also acts as the central

¹⁶ The Federal policy and guidelines were developed as an attempt to create a standardized PPP market in Australia (thereby, it was hoped, providing bidders with a more consistent project stream). PV was instrumental in this initiative, and it took a leading role in developing the Federal policy. The new Federal documents therefore greatly resemble the original Partnership Victoria documents.

carrier of knowledge between projects, helping to standardize documents and project implementations. In addition the unit has recently developed various practice notes and implementation toolkits intended to help departments understand and execute project developments. The South African PPP unit attempts to address three of the four PPPs challenges: Market failures, Legitimacy issues, and Governmental opportunism.

It should lastly be noted that national road PPPs (toll roads) are not overseen by the PPP unit. This is due to the National Department of Roads having set up their own unit in the form of the South African National Roads Agency Limited (SANRAL), a government owned corporation.

Other field actors

There is great similarity between the other field actors that are involved in each of our case studies. Table 2 lists the different organizations, and explains the main characteristics in each of the cases. The table also highlights our findings on which of the four PPP challenges (if any) each of these organization aims to overcome.

Table 2 - Summary of PPP-enabling field actors

Actor	British Columbia	Victoria	South Africa
Sponsoring departments	With PBC taking a leading role in project development, sponsoring departments have a smaller role in BC than in our other two cases. This role however increases as the project moves from development through delivery. Projects have largely been limited to two sectors: health and transportation. Health projects are delivered in a decentralized manner by regional health authorities, while all transportation projects are delivered at the provincial level. <i>Challenge addressed: Market failures</i>	A large number of line departments have now undertaken projects, including Primary Industries, Infrastructure, Human Services, Justice, Education, and Sustainability and Environment. Most departments have however delivered more than one project, and have been able to build up some internal capacity to deliver PPPs. The toll road projects are delivered and managed by a separate statutory authority. <i>Challenge addressed: Market failures</i>	Accountability for project delivery rests firmly with the sponsoring department (legislated under the PFMA). A wide variety of sponsoring departments have delivered mostly one-off projects. This low level of repeat projects, among other reasons, means that departmental project development and delivery capacity remains a challenge in the South African PPP program (elaborated below). <i>Challenge addressed: Market failures</i>
Transaction advisors ¹⁷	A small number of private consultants, (mostly members of the “Big 4” accounting firms) act as financial advisors in BC. A similar number of mostly local private law firms act as legal advisors on projects. Governmental lawyers (employed by the Ministry of the Attorney General) also play a small role in the delivery of Transportation projects. All the advisors we interviewed also advised private clients on some transactions. <i>Challenge addressed: Agency failures</i>	The financial advisors employed are also mostly the big 4 accounting firms. A small number of national law firms dominate the legal advisory services for PPPs across all sectors in Victoria. They work on projects in all Australian States (which is different from the BC set up). In addition, there are some instances of consultants acting as project leaders on behalf of sponsoring departments. <i>Challenge addressed: Agency failures</i>	The financial advisors in South Africa include a couple of the “big 4” firms, augmented by a number of more local organizations (often affiliated to international investment advisors). The legal advisors are mostly local legal firms (similar to the other two cases). Advisors in South Africa take a much stronger leading role than the other two cases, generally in response to the lack of departmental capacity. <i>Challenge addressed: Agency failures</i>
Other advisor	Not applicable	Not applicable	One type of advisor in the south African context merits being noted. PPPs in South Africa are widely viewed as a vehicle for delivering on the government’s affirmative action policy, (locally refer to as Black

¹⁷ Technical advisors are very similar in all three cases, and are therefore not discussed in detail.

Transaction auditor	<p>The use of Transaction auditors (Fairness advisors and Conflict of Interest Adjudicators) is still quite nascent in BC. Their involvement is not legislated, and there is no clear guideline yet for their role on projects. Still, PBC has employed such auditors since 2003, a practice it adopted from elsewhere in an attempt to increase the accountability and transparency of PPP procurement. Fairness advisory is mostly dominated by a small number of retired judges who work exclusively in BC. <i>Challenges addressed: Legitimacy issues, Governmental opportunism</i></p>	<p>Probity has a rich history in Australia, and stems from a number of high profile contentious public procurements in Australia (including the infamous Hughes Aircraft Case). Victoria has developed very clear and elaborate guidelines for Probity services, and their use is mandated on all governmental procurements. Conflict of interest adjudication also falls to the Probity Advisor. A number of our respondents were of the opinion that the probity industry has become too dominant in Victoria, and is limiting the flexibility of communication during PPP procurement. <i>Challenges addressed: Legitimacy issues, Governmental opportunism</i></p>	<p>Economic Empowerment or BEE), due to both the unique procurement process and the high profile of these projects. This drive toward including BEE aims in projects has led to the emergence of BEE advisors on both the public and private sides of these deals. This role is sometimes fulfilled by legal advisors, but dedicated BEE advisors are a recent trend. <i>Challenge addressed: Agency failures</i></p> <p>The only South African PPP to date where Transaction auditors were used was on the recent Gautrain project. A local Legal Firm was appointed in this role. The Gautrain project is more than 5 times the size of the next biggest South African PPP, and transaction auditors were used both due to the high profile of this project (with significant international involvement) and in response to the Arms Scandal that had emerged in South Africa close to the start of the project. No clear guidelines for transaction audit exist in South Africa. <i>Challenges addressed: Legitimacy issues, Governmental opportunism</i></p>
Advocacy Organization	<p>The Canadian Council for PPPs (CCPPP) is arguably the world's leading advocacy organization that focuses solely on the promotion of PPPs. It promotes, and builds capacity and understanding of PPPs in both the public and private sectors across Canada. This is achieved through their annual PPP conference, publication of a variety of research publications, and more focused workshops that bring together representatives from different</p>	<p>The main advocacy organization in Australia, Infrastructure Projects Australia (IPA), does not focus only on PPPs, but rather promotes infrastructure development in general. The promotion on the PPP delivery approach does however form a significant part of their activities, which includes research publications, organizing workshops to bring different sectors together, and engaging the media on issues pertaining to PPPs. <i>Challenges addressed: Agency failures, Legitimacy issues</i></p>	<p>No local advocacy organization currently exists in the South African PPP field. The International Project Finance Association attempts to fulfill this role through their local chapter. They however play a much less visible advocacy role than those played by the CCPPP or IPA. Their main activity involves organizing periodic seminars and discussion forums to both bring field actors together around pertinent issues, and to inform them of developments in other regions (through IPFA's</p>

Auditor General	<p>sectors. Of our three cases the CCPPP was the most oft mentioned by our local informants. <i>Challenges addressed: Agency failures, Legitimacy issues</i></p> <p>The Auditor General in BC has had very limited involvement in the BC PPP market. They were asked by PBC to do performance audits of three PPP transactions, but have not done anything since 2006. They do not anticipate being involved in the near future. <i>Challenge addressed: Legitimacy issues</i></p>	<p>The Victoria Auditor Generals Office(VAGO) has been very active in the PPP market. They have done audits of six projects, and are looking into doing a long term audit of the actual performance of the projects. Their involvement on PPPs stems to a great extent from the initiative of one VAGO representative who has taken an interest in PPP projects. <i>Challenges addressed: Legitimacy issues, Governmental opportunism</i></p>	<p>international reach). <i>Challenges addressed: Agency failures, Legitimacy issues</i></p> <p>The South African Auditor General has not played a role on PPPs to date, but is viewed as something that might be done in future. <i>Challenges addressed: None</i></p>
Development agencies	Not applicable	Not applicable	<p>International development agencies (specifically the IFC and USAID) played a leading role in the formative days of the South African PPP program, but are no longer involved. Two local development agencies, the Development Bank of South Africa and the Industrial Development Corporation, have only played a minor role in the PPP field by providing high risk loans to Affirmative Action companies (a central part of South African PPPs as discussed above). <i>Challenge addressed: None</i></p>

KEY ISSUES

Our preceding comparison of the fields in these three cases leads us to here theorize on a number of key issues of PPP-enabling fields. Our discussion includes aspects of the PPP unit, characteristics of various field actors, and typical arrangements under which they are applied on projects. In addition we draw conclusions on the types of logics that are prevalent, and the intermediary actions that are undertaken in PPP-enabling fields.

PPP unit structure

Our cases present two archetypes of PPP unit structures: A governmental unit (PV, MPV and the SA PPP unit) versus a government owned corporation (PBC and SANRAL). The organizational form impacts a number of aspects of the operation of the PPP unit. Firstly, a corporation is not tied to prevailing public sector remuneration scales, and can therefore more easily attract and retain the highly skilled staff needed to oversee and assist with PPP development. This is underlined by the following quote by one of the founding actors who set up PBC:

You had to have a separate entity, you had to be able to pay people market rates to get them in, ... to get the kinds of people that you need.

We secondly propose that the corporation form is less likely to be involved in activities that do not directly impact their mandate. For example, representatives of the Victorian and South African units appear to be more willing to participate in non local PPP capacity building initiatives than the PBC representatives. This is underlined by this quote by a senior manager in PBC:

I actually went with the World Bank last spring. I went to a conference that they put on in [country name]. And, I mean it was a great experience and it was really interesting to do, but it didn't really contribute to fulfilling our company mandate. And I was gone for a week! That's far away, you know. So, like it's nice to do but really within our mandate, it's difficult for us to do that.

This quote can be usefully contrasted with a quote by a senior manager in PV also in reference to non-local capacity building work:

We do find we get a lot a requests from particularly I guess from multilateral organizations like the World Bank Institute, Asian Development Bank, the Commonwealth Secretariat in London to provide assistance to particularly developing

countries. So we've been trying to put together a more systematic approach to dealing with those requests, that's sort of a developing area for us, a bit outside our core work. ... so it's another opportunity for us to provide some more formal interaction and assistance.

A third and final impact is that the corporation form also will more generally take actions that improve its livelihood, rather than purely deliver on its mandate. This is exemplified by this quote by a senior manager in PBC of how they are trying to reposition the organization to not be susceptible for a loss of political support (through a change in government):

There is always a challenge to maintain your... political support. ... So we're giving a lot of thought here to some shift of emphasis where we would be seen to be applying commercial skills to the procurement of major projects for government rather than... being fixated on one particular type of procurement and through that which is really what we do anyway so it's a kind of a repositioning and, and through that perhaps we can become more neutral because there is no reason for us not to be absolutely neutral.

Implementation Authority of the PPP unit

A 2007 study by the PPIAF found that one of the main drivers of success of a PPP unit is the power the unit has, or the extent to which they are able to enforce their will over the other actors in the PPP enablement field, specifically over other governmental departments (PPIAF, 2007). Our research supports this finding, as is clear from this quote by a manager in the South African PPP unit:

You know if I look also at what I would classify as successful early models, Partnerships Victoria, Partnerships UK, the common theme is the fiscal oversight. Money and the allocation of funding drives behavior, there's absolutely no doubt about it.

This aspect is further supported by the case of MPV in Victoria: MPV has only been able to assist two Sponsoring Departments (the Department of Primary Industries and the Department of Innovation Industry and Regional Development) in project delivery¹⁸, and have been unable to expand their client base to other departments. For example we found that the Victorian

¹⁸ It was suggested in one interview that a main reason why MPV was able to play this role on the DPI projects was because both projects (the Royal Melbourne Showgrounds Redevelopment Project and the Biosciences Research Center), involved a Joint Venture between DPI and another entity (the Royal Agricultural Society of Victoria and the La Trobe University respectively). MPV independence from either Joint Venture partner was therefore seen as advantageous.

Department of Education chose to employ a consulting project manager to deliver the first Schools PPP rather than turn to MPV. This resistance to using MPV is expressed well in this quote by one of the Transaction Advisors interviewed:

People don't want them [MPV] because it's sort of saying "Well who are you anyway?" You can understand if treasury [PV] takes over, cause they own it, they gotta pay the check ... so you can understand, you might not like it but you can understand.

Role of the PPP unit

From the three examples, we can surmise three broad actions that PPP units take to enable PPPs in a region: (i) all units will take various functions at a program level to both develop and sustain the use of PPPs in a region, (ii) in all our cases the unit would also oversee the projects that are developed to ensure their quality and adherence to the PPP guidelines; and (iii) in some cases the unit will take the lead in developing and delivering the project. All three units investigated were heavily involved in both developing the wider PPP program, and overseeing project delivery. Our three cases present a sliding scale of the PPP units taking a lead in project delivery: PBC is heavily and frequently involved in leading delivery, this task is occasionally delegated to MPV in Victoria, and the SA PPP unit does not take on this role at all.

We can theorize four implications regarding the role that the PPP unit takes on:

- Having the PPP unit drive project delivery decreases the need for project delivery capacity within Sponsoring Departments. This approach is therefore quite useful in cases where Sponsoring Departments do not have historic project development and delivery skills. This is exactly the role that MPV fulfills in Victoria, becoming involved on projects where departments do not have the internal capacity to develop and deliver the projects themselves.
- Having the PPP unit drive delivery might be viewed as an erosion of sponsoring department accountability. For this reason PBC only drives the business case phase, while the procurement and delivery phases of projects are run by an project team that integrates both PBC and the department. PBCs role on this team is generally limited to the financial and legal aspects (which require more specialized PPP expertise), and decreases as the project progresses through the development lifecycle. The need for department accountability is even more pertinent in South Africa (as mentioned above) where it has prevented the SA PPP unit from driving project delivery.
- Having the PPP unit both drive project delivery, and approve projects (or make approval recommendations as is the case with PBC) might also be viewed as a conflict

of interest and thereby erode the legitimacy of the PPP program. For this reason PBC takes a smaller approval role that is the case in Victoria and South Africa. Victoria has circumvented this conflict by having a separate agency (MPV) drive delivery where needed.

- The drawback of having a separate delivery agent (which does not control funding approval) such as MPV is that they do not have sufficient implementation authority to convince Sponsoring Departments to make use of their services or adhere to their suggestions.
- A further drawback of having such a separate delivery agent stems from the fact that these agents do not always have the same appreciation of the anticipated long-term service delivery outcomes (and business case benefits) on projects. In this way their project decisions may lead to sub-optimal outcomes.

Sponsoring Department Capacity

At this point we wish to highlight the importance of capacity within the sponsoring department, specifically in the absence of a PPP unit that drives project delivery. The following quote from a local development agency representative in South Africa serves as illustration:

The project officer [sponsoring department project leader] is crucial and the overall understanding of the PPP process is critical in moving it forward progressively through the steps... Over and above that there is the, you know the department as well needs to have a good grasp on the project financing issues in order to have the negotiations with the private party. So these are specialized areas and unless the department have done it before it's highly unlikely that you're going to have a PPP expert sitting in that department that is not executing PPP's.

Our South African and Victorian cases can be usefully contrasted in terms of sponsoring department capacity. Victoria has been able to build up significant capacity within sponsoring departments while South Africa has not. In fact our South African informants regarded the incapacity of the sponsoring department as the single most important issue in the local PPP market. This aspect accounted for no less than 38% of all references to issues that need to be addressed to improve the South African PPP program. Specifically the role of departmental project leader, referred to as the “project officer” is viewed as critical to project success. As one of our South African legal advisors mentioned:

On the PPP that we're advising [sponsoring department] on, the project officer's just not there. It's a massive, massive issue. I would say that one of the key issues is the personality of a project officer. And I think the problem is that government has been significantly unable to attract good project officers.

In isolated cases this lack of capacity has led to transaction advisors filling in this gap in an attempt to move these South African projects forward. A sponsoring department representative explains the problem as follows:

Yeah you know I worked a little bit on [sponsoring department project] at a certain point and in [that project] the advisors basically wrote the submissions to the director general of the department because the project officer saw his job as whatever he gets must leave his office within 24 hours. That's how he saw his role. So then you have advisors, you know, over stepping. So we need to protect advisors against themselves. They know a lot but there's a point at which, if they overstep, they cause trouble.

Therefore, in cases where the PPP unit does not drive project delivery, the capacity of sponsoring departments is of utmost importance to ensure timely project delivery. Where this is not the case, the appointed transaction advisors will often overstep their assigned role, and take a leading role in developing and delivering the project. This invariably results in projects that do not meet either the sponsoring department or national treasury requirements. Failure in this respect is at least partly due to the presence of conflicting logics held by public and private actors in the PPP-enabling field (which we elaborate on below).

Project Governance arrangements

Our investigation revealed that the way that field actors are arranged on different projects is not consistent between the three regions, or even within each region. Specifically there is great variation in the structure that the Sponsoring department puts in place to execute the project. Naturally this impacts the roles that the PPP unit and Advisors play. We can identify five main arrangements from our three cases:

- *In-house Development* – In this case the project development team has been developed within the Sponsoring Department, with the Project Leader generally being a full-time employee. The project team will have a representative from the PPP Unit, but they will take on a supporting role (specific application differs between regions). Examples of this type of arrangement are the Ministries of Transportation in both BC and Victoria.

- *Dedicated In-sourced Capacity* – In this arrangement the Sponsoring Department has contracted in a project delivery team that works exclusively on PPP projects. The project leader will generally not be a full-time employee of the Sponsoring Department, and can therefore sometimes work on projects in other agencies as well. The PPP Unit will take only a supporting role on these projects. The Department of Health in Victoria is an example of this arrangement, and a few Health Authorities in British Columbia have also recently started moving toward this arrangement type.
- *Ad-hoc In-sourced Capacity* – This arrangement entails the appointment of a project delivery agent which will only deliver a one-off project (without the expectation of delivering other projects in future). The agent could either be sourced into the department (from another department or as a consultant) or could be an internal departmental employee who gets reassigned for the length of the PPP delivery. This arrangement has been most often used in the South African PPP field, specifically on a range of accommodation deals.
- *Special Project Company* – Where projects bring together funding (and therefore representation) of a number of different governmental agencies, projects have been set up as separate public sector “companies.” This enables the project to be executed in a way that is not entrenched within one of the agencies involved. The foremost examples of this arrangement are the Canada Line project in British Columbia and the Gautrain project in South Africa.
- *External Delivery Agent* – In some cases a dedicated delivery agency, either the PPP Unit or a similar agency will take the lead in delivering the project on behalf of the Sponsoring Department. The Sponsoring Department will still have significant representation on the project team, but they will be strongly assisted by Delivery Agent. The majority of health projects in British Columbia and projects by the Department of Primary Industries in Victoria follow this arrangement.

We propose that a number of different factors shape which of the five abovementioned project arrangements will be used on a PPP project. We already mentioned two above: the mandate of the PPP unit, and the capacity of the sponsoring department (broken down further as discussed above). In addition we propose the complexity of the project ownership and funding structure plays a role. These four factors play a role as follows:

- *PPP unit delivery mandate* – We already discussed how the mandate of the PPP unit greatly impacts the role that sponsoring departments take on projects – specifically in

regions where the PPP unit drives project delivery, sponsoring departments will naturally tend to play a smaller role (gravitating to the “External Delivery Agent” arrangement identified above).

- *Project development history* – Whether the Sponsoring Department Agency which “owns” the project has historically been involved in major project delivery. Agencies with long project development histories will gravitate towards In-house Development, even when the PPP unit has a mandated delivery role, as is the case with the Ministry of Transportation and Infrastructure in British Columbia. The Transportation ministries in our other two cases also present examples of long project development histories leading to in-house developments.
- *PPP deal flow history* – The extent to which the Sponsoring Department in question has delivered a number of PPP projects, or foresee to do so in future. Departments with a strong PPP deal flow history will tend to either build up in-house capacity (as is the case with Transportation Departments) or develop dedicated in-sourced capacity over time (as is the case with the Department of Health who deliver health projects in Victoria).
- *Project ownership complexity* – The extent to which the project is funded (and therefore “owned”) by more than one governmental agency, or by a government agency and another partner. The complexity of multiple project ownership is invariably leads to the formation of Special Project Company, which can both provide a unified governmental interface to private proponents and can integrate the interests of the different “owners”. In some of our Victorian cases (notably the Royal Melbourne Showgrounds Redevelopment Project and the Biosciences Research Centre) this complexity has also contributed to the appointment of an external delivery agent to ensure that the project delivery is independent of either party.

These factors are correlated to each of the arrangement types as listed in table 3 below.

Table 3 - Classifying the PPP project arrangements

Project arrangement	PPP unit delivery mandate	Project development history	PPP deal flow history	Project ownership complexity
In-house development	Low or High	High	High	Low
Dedicated in-sourced capacity	Low	Low	High	Low
Ad-hoc in-sourced capacity	Low	Low	Low	Low
Special project company	Low (High)	Low	Low	High
External delivery agent	High	Low	Low	Low or High

Institutional Logics

Projects operating under PPP arrangements entail an effort to create a partnership among types of organizations from the public, private, non-profit and NGO sectors operating with quite dissimilar *institutional logics* (Friedland & Alford, 1991). Institutional logics “are the cognitive maps, the belief systems carried by participants in the field to guide and give meaning to their activities” (Scott et al., 2000: 20). In an attempt to get at the underlying logics, we asked our informants to state what they viewed as the most important advantages and disadvantages of the PPP concept. In addition, we scoured the rest of our interview data for quotations that embody underlying field logics.

Our analysis revealed a range of different logics that exist within PPP-enabling fields: some that are shared among field actors, providing the foundation for collaboration, and others that expose conflicting understandings and approaches among a diverse group of field actors.

Shared logics

Per definition our field actors are united around the attempt to develop and deliver infrastructure Public Private Partnerships. In broad terms PPPs are founded on a “market efficiency logic” (Lounsbury, Geraci et al., 2002) which stresses the efficiencies stemming from market-based private incentives over central government control. Our analysis therefore revealed a common belief in the efficacy of private enterprise under ideal conditions. What was striking was how these explanations were presented using a consistent vocabulary, which included concepts such as “on time and on budget,” “risk transfer” (Bing, Akintoye, Edwards, & Hardcastle, 2005) and “value for money” (Grimsey & Lewis, 2005). It was however interesting how these terms do not necessarily have a static (or uniform meaning), but rather seem to change across time and contexts. The following quote by a manager in Partnerships Victoria illustrates the transient nature of the PPP vocabulary:

You might have seen the Melbourne University and Allen Consulting research done here on the relative performance of PPPs and traditional projects, and that sort of puts the

focus a bit more on, not so much for value for money savings against the PSC, but certainly a delivery on time and on budget. Which is something we've always advocated those advantages to PPPs but sort of been a bit in the background compared to the value for money focus. But in a sense they are some really core components of value for money, the fact that your project is going to be delivered on time and on budget. And with the global financial crisis, a lot of government stimulus spending and so on, a lot of projects being delivered to very tight timelines as well, just that certainty of delivery on time and on budget has come into more focus as one of the key value outcomes rather than necessarily a particular quantitative saving in dollar terms.

Conflicting Logics

PPP-enabling fields bring together a diverse group of actors from different societal sectors. The existence of conflicting logics in these fields should therefore not surprise us. We wish to highlight two sets of conflicting logics that we believe are fundamental to understanding the dynamics of PPP-enabling fields.

The first pair of conflicting logics relates to the general approach to PPP enablement that specifically governmental actors take in the field. On the one hand a *logic of control* stresses the need for central government control of private service provision, specifically to limit market failures associated with infrastructure provision – natural monopoly characteristics and significant externalities (Goldberg, 1976; Mody, 1996; Savas, 2000). This logic has also been the driving force behind measures to ensure control of governmental discretion, both the discretion of local government (applied through central government) and central government (applied through independent auditors and measures of transparency and accountability). A contrary *logic of empowerment* views the challenge of PPP sustainability as a process of increasing the ability of the players involved in the service delivery relationship. Most notably this logic has been the driving force behind initiatives aimed at empowering public actors, but it has also led to governmental programs focused on developing the environment for private participation.

The PPP units in our three cases provide a helpful contrast of these control and enablement logics: PBC actions are steeped in an enablement logic, while PV and the South African PPP unit predominantly draw on a logic of control. The South Africa PPP unit illustrates an instance where these two conflicting logics come to a head, as their dual role of both regulating and driving project delivery forces them to draw on both of these logics. Some of our informants suggested that this has in some cases lead to confusion within the field.

The second set of logics that intersect in PPP-enabling fields are the fundamentally different approaches of governmental field actors versus private consultants. We term these logics respectively a *bureaucratic logic* and a *rational efficiency logic*. In PPP-enabling fields these two approaches come to a head most visibly in the interaction between Sponsoring departments and Transaction Advisors. One of our South African informants, a project leader in a Sponsoring department, highlighted this conflict in explaining the bridging actions that need to take place between the logics of the transaction advisors and the sponsoring department:

And get your consultants to move out of things that they don't understand. You know it's very easy for a consultant. We had a big issue on this thing about who signs the contract. That you will, you know ask the legal advisor and the legal advisor will say: "Well let's just look at the documentation, it says here there's no law anywhere. So [informant name] just write a letter to the president and tell him, "Mr. President, public works has got nothing to do with this just give me the authority." That is the legal advice and it's probably correct legal advice. [But] working in government you know that, protocol wise, that's not what we do. So you need to be there in the middle to say, okay, I hear the advice, [but] in government circles we don't do things like this.

Intermediaries

There are three ways to think about intermediaries in PPP-enabling fields. *Intra-field intermediation* refers to actions that bring together the different actors of the local enabling field. This would include putting sponsoring departments in touch with possible advisors, or even introducing new types of organizations to an existing field. *Sectoral intermediation* involves actions that bridge the gap between the two sides of the PPP deal: the enabling field and the wider market of private companies that participate as service providers on PPPs in the region. Finally, *Regional intermediation* happens when actors intermediate between the local PPP-enabling field and PPP-enabling fields in other regions. This could include sharing knowledge and bringing in international best practice from other states or provinces (in the case of Australia and Canada) and other countries.

Our analysis revealed that predominantly three organizations act as intermediaries in PPP-enabling fields: PPP Units, Transaction Advisors, and Advocacy Organizations.

- *PPP units* – We already mentioned the central role that PPP units take in the PPP-enabling field. This means that they act as intermediaries in two ways. Firstly PPP units are the foremost intra-field intermediaries, as they endeavor to bring together actors within the enabling field. Secondly PPP units take a regional intermediary role by

keeping in contact with non-local actors to draw in international best practices as needed.

- *Transaction Advisors* – There are two ways in which Transaction Advisors act as intermediaries in PPP-enabling fields. First, all the advisors we interviewed work on both the public (advisors to government in structuring projects) and private (advisors to proponents in structuring their bids) sides of PPP projects. In this way they translate experience between these two spheres, bringing down the transaction costs. In addition, the majority of financial advisors are international accounting firms, who therefore have access to an international network of advisors who play similar roles in other regions. In this way they are able to draw on skills and experience from other regions. Because legal principles are not as consistent between different regions, legal advisors play less of an intermediary role between different regions. The advisors we interviewed were for the most part much more locally focused.
- *Advocacy Organizations* – Advocacy organizations are focused on developing the market of PPPs in each region. This often requires bringing together actors from different regions and spheres. We already mentioned how these organizations are able to bring together public and private actors through sectoral intermediation. Advocacy organizations also play a role in regional intermediation, achieved primarily by hosting events such as conferences, seminars or workshops.

These findings are summarized in table 4 below.

Table 4 - The main PPP field intermediaries

Intermediary	Intra-field intermediation	Sectoral intermediation	Regional intermediation
PPP Units	High	Low	High
Financial Advisors	Low	High	High / Low
Advocacy Organizations	Low	High	Medium

CONCLUSION AND IMPLICATIONS

In this study we have investigated the emergence of a collection of diverse organizations designed to enable and govern Public Private Partnership projects for infrastructure development. We have observed that these enabling and governing responsibilities are not restricted to a single governmental body, but rather are shared between networks of public and non-public organizations. We utilize the concept of organizational fields as a theoretical lens to help us investigate these combinations of organizations in a comparative way. We purposely selected our

cases for restricted variance, and therefore observed very similar organizations (or field actors) in each of our three fields. Even so, we detected significant variation in the characteristics of these actors in our three cases fields. We showed how this variation is closely related to the role that the PPP unit takes in each field. In addition we highlighted that even within each field, the actors are arranged in varying combinations on different projects. Our cross-case comparison was useful here to show that these combinations are at least somewhat consistent across different fields, and that their use flows from four characteristics that relate to the experience of the sponsoring department, the role of the PPP unit, and the complexity of the project funding stream.

We also presented an initial discussion on the typical field logics that guide actions in these PPP-enabling fields. Although PPP-enabling fields bring together actors around a shared logic of “market efficiency,” the divergent nature of the organizations involved led us to also observed logics that conflict with each other. Lastly our study identified three main actor groups that play a helpful intermediary role, both between field actors, and with actors outside the field.

Our findings serve to highlight the complexity of initiating PPPs in a region. The simple construction of one governmental body to oversee and execute PPP projects is clearly not sufficient to ensure the success of a wide range of projects in a region. Rather, PPPs require a combination of public, private and non-profit organizations that bring diverse capacities to overcome the demands of these projects on governments. In addition they require institutional flexibility to accommodate the varying demands of different projects, and to absorb the forces applied by existing institutional contexts.

CHAPTER 4 – BEYOND “ONE SIZE FITS ALL”: HOW LOCAL CONDITIONS SHAPE PPP-ENABLING FIELD DEVELOPMENT¹⁹

ABSTRACT

The use of Public Private Partnerships (PPPs) for infrastructure development has received significant scholarly attention of late. However, there remains a need for more work at the program level. We argue that there is a specific need for work that recognizes the way that PPP programs are implemented differently in different regions, thereby progressing beyond an effectively “one size fits all” view of PPP programs. To enable this approach, we employ the concept of a “PPP-enabling field” (see Chapters 2 and 3 of this document), which can be defined as the collection of organizations, public, private and not-for-profit, who together attempt to enable the development and continued operation of PPPs in a region.

This paper offers a comparative analysis of the historical development trajectories of three contemporary PPP-enabling fields: in British Columbia (Canada), Victoria (Australia), and South Africa. We recognize the role played by the UK’s Private Finance Initiative (PFI) as a first “PPP-enabling field” and an exemplar for other countries (particularly those in the UK orbit of

¹⁹ This paper was co-authored with Professor Raymond E. Levitt and Professor W. Richard Scott, and has been submitted to the 2010 Engineering and Project Organization Society Conference. The citation is as follows:

Jooste, S. F., Levitt, R. E., & Scott, W. R., (Forthcoming) “Beyond one size fits all”: How Local Conditions Shape PPP-Enabling Field Development,” Proceedings of the Engineering Project Organization Conference, Fallen Leaf Lake, CA, November 2010.

influence). We then show how this model was adapted and modified in each of our cases, leading to very different field structures. We find that PPP field development does not follow one set path towards a standard, unified program model. Rather, programs are shaped by the institutional and political contexts in which they are constructed, and bear the markings of the political actors who play a hand in their crafting. We draw heavily on theories of institutional change and structuration in this regard. In addition, we reference selected prior work on policy change.

INTRODUCTION

The use of Public-Private Partnerships (PPPs) for infrastructure development has received significant scholarly attention of late (Gil & Beckman, 2008; Kwak et al., 2009). The PPP concept is still somewhat contested (Hodge and Greve, 2005; Weihe, 2008), but the use of the term for infrastructure developments in the vein of the UK's Private Finance Initiative (PFI) have dominated policy rhetoric internationally²⁰ (Weihe 2008:10). These are arrangements whereby private parties take responsibility for the financing, development, and operation of infrastructure assets on behalf of government, where the transfer of risk to the private sector is a key component.

Previous research has primarily focused on various elements of PPP project development, including types and bearers of risk (Li et al. 2005a), value for money (Akintoye et al., 2003; Heald, 2003; Nisar, 2007), critical success factors (Li et al., 2005b; Zhang, 2005), project finance (Pretorius et al., 2008; Yescombe, 2007), project governance (Bult-Spiering and Dewulf, 2006; Klijn and Teisman, 2000), and the theoretical underpinnings of the PPP model (Bovaird, 2004; Hellowell and Pollock, 2010; Hodge and Greve, 2005; Savas, 2000; Yescombe, 2007).

PPP projects are, however, invariably situated within larger PPP programs, i.e., more or less coordinated collections of PPP projects undertaken in a given politically sovereign area.²¹ Research that looks at this collective level has been much more limited (Aziz, 2007; Clark and Root, 1999; Flinders, 2005; Garvin and Bosso, 2008; Greenaway et al., 2004; Kumaraswamy and Zhang, 2001; UNECE, 2007). We agree with Rachwalski and Ross (2010) that more work is needed that examines at how governments might best organize their PPP programs.

²⁰ That is, outside the United Kingdom, where the term PFI is used. To clear this confusion, a number of European authors have now started using the acronym "PFI/PPP" (see for example Li et al 2005a and b, or Bult-Spiering and Dewulf, 2006), while others have suggested Long Term Infrastructure Concession (LTIC) PPP (Hodge and Greve, 2010) and Private Finance Project – PFP (Johnston, 2010). We prefer "PPP" here to be consistent with contemporary practice in our three case study regions.

²¹ Our identification of a PPP program refers to the dominant international practice of PPP implementation across different sectors being coordinated, to varying extent, by a superordinate PPP unit (Dutz et al., 2006; Farrugia et al., 2008; PPIAF, 2007).

We argue that a shortcoming of the PPP literature to date is its normative approach to the subject, creating, in effect, a “one size fits all” view of PPP programs (i.e. an implicit view that there exists one ideal form of PPP program to which all programs should attempt conformance regardless of institutional context). For this reason there remains a need for work that recognizes the way that PPP programs are implemented differently in different regions. To enable this approach, we employ the concept of a “PPP-enabling field” (see chapters 2 and 3 of this dissertation).

The emergence of the “PPP-enabling field”

There is a growing understanding among scholars that the move towards private participation in infrastructure does not simply substitute private sector capacity for public sector capacity; rather, it requires that new forms of public sector capacity be developed to overcome various challenges that infrastructure PPPs face (see for instance Dutz et al., 2006). Unfortunately, the majority of the work recognizing this need for infrastructure delivery sector capacity is silent on *where* this capacity is located—the underlying assumption being in most cases, that it must reside in public agencies.

The growing literature on PPP units (Burger, 2006; Dutz et al., 2006; Farrugia, et al., 2008; PPIAF, 2007) has helpfully recognized the formation of new centralized “units tasked with implementing or advising on PPPs” in a region (PPIAF, 2006:1). A more recent study by Rachwalski and Ross (2010) has gone further to illustrate trade-offs between building capacity within sponsoring departments versus building it within a PPP unit. Still, we believe current work falls short of recognizing the variety of institutional structures that have evolved to develop and govern (i.e. “enable”) PPPs. In previous work (see chapters 2 and 3 of this dissertation), we have shown that this PPP “enabling capacity” has not been answered by a reformation of public agents alone – rather a network of new “enabling organizations” (public, private and non-profit) has emerged. These organizations, in varying ways, attempt to support the development and continued operation of PPPs for the benefit of public, private, and civic actors. These “PPP-enabling organizations” include: Sponsoring Departments, PPP Units, Transaction Advisors, Transaction Auditors, Public Regulators, Non-public regulators, Advocacy Associations, and Local, Regional and Multinational Development Agencies.

We have proposed that the concept of an organizational field (DiMaggio, 1991; Scott and Meyer, 1991; Scott et al., 2000), found within institutional theory, can be usefully employed as a theoretical lens in this regard. DiMaggio and Powell (1983: 148) define an organizational field as “those organizations that, in the aggregate constitute a recognized area of institutional life: key

suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services and products.” We have termed this network of PPP-enabling organizations the “PPP-enabling field” (see chapters 2 and 3 of this dissertation). This enabling field differs from others that might be identified, for example, the organization field (dominated by private providers) that arises to construct, oversee, and operate the private side of a specific PPP project.

We believe the concept of “field” is more helpful than that of “program” in that it draws attention to both the organizational and institutional aspects of PPP implementation in a region, and allows consideration of the broader political and societal environment affecting the conception and design of PPP programs.

Empirical puzzle

In previous work (Ibid) we examined the characteristics of three leading²² PPP-enabling fields: British Columbia, Canada; Victoria, Australia; and South Africa. We specifically chose these cases for their institutional similarity – as British Commonwealth, Anglo Saxon parliamentary democracies, we anticipated finding quite similar field structures. Our findings however revealed striking differences in a number of aspects, including the structure and institutional location of the PPP unit, the roles that different enabling organizations took in the field, and the cognitive frames that guided action in each field.

Explaining this surprising variation of enabling field structure in quite similar institutional settings is the motivation for the current paper. We believed that examining the historical trajectories of how these fields were constructed might shed light in this regard. Specifically we propose to show that PPP field development does not follow a single set path towards a unified program model. Rather, programs are shaped by the institutional and political contexts in which they are constructed, and bear the markings of the political actors that take a hand in their crafting.

Overview of this paper

This paper offers a comparative analysis of the development of PPP-enabling fields in British Columbia, Victoria, and South Africa. In addition we recognize (and briefly explore) the wider context of public sector reform, of which PPPs played a part. We emphasize the important role played by the UK’s Private Finance Initiative (PFI) as the first “PPP-enabling field” and an

²² See Cuttaree, 2007; Davies & Eustice, 2005; Farrugia et al., 2008; and PPIAF, 2007

exemplar for other countries, particularly those in the UK orbit of influence. Then we describe the creation of our cases as influenced by transnational and by more localized events and actors. Our analysis is based on semi-structured interviews with leading actors in each of the regions and on archival materials, including histories. We draw heavily on theories from institutional change and structuration in this regard. In addition, we reference selected prior work on Policy Change. It is to these theoretical foundations that we turn to next.

THEORETICAL UNDERPINNINGS

Before turning to our study of PPP-enabling fields, we provide a brief overview of our underlying theoretical conception. We rely on a combination of institution and structuration theory as well as on ideas from previous work on policy change.

Institutions and Structuration Theory

Social scholars have long been interested in “institutions”—i.e. the symbolic elements that create shared meanings and controls that provide order to social action. These elements include regulatory and legal frameworks, norms and value systems, and cultural elements such as schemas and beliefs (Scott, 1995, 2008). The study of institutions is helpful for our current work on the formation of PPP fields. It expands the focus beyond the explicit,²³ intendedly rational aspects of the PPP construction to incorporate elements of the political and social context in which these fields were constructed.

Institutions are socially constructed frameworks of symbols and resources that both enable and constrain social action (Scott 1995, 2008). Although they are sources of stability, they themselves undergo change, and much recent attention has recently been devoted by theorists and researchers to the nature of institutional change. Thinking about change processes has been advanced by the theoretical work of Anthony Giddens (1979; 1984) who developed “structuration theory”: a conception of social structure and its relation to social actors. In this formulation, social structure is comprised of two elements: symbolic systems (institutional elements) and material systems, including both human and nonhuman resources. Symbolic structures give meaning to resources while resources are required to build—both to reinforce and change—symbolic structures. Social structures are both the context for and the product of the activities of social actors. If social structures are to persist, they must be enacted by social actors; if they are to change, actors are the agents of change.

²³ The focus moves from what Scott (1995, 2008) terms “regulative” institutional elements to also include “normative” and “culture-cognitive” elements.

Individuals vary in their “agency”—the capacities they have to introduce change into any system. Depending on their natural endowments, their access to resources, their relationships (social capital), some are in a better position to induce change than others. Of particular importance are the “entrepreneurs”—those able to assemble resources into new combinations of material resources (Schumpeter 1961) and “institutional entrepreneurs” (DiMaggio 1988)—those actors capable to combining symbolic resources into new frameworks supporting and guiding action.

As noted, social structure provides the context for action. All actors are situated in specific contexts bounded by time and space and, as a result, social structures are “sticky”—resistant to change. Most social change is a “path-dependent”, incremental process (David 2001), as later developments build upon and are shaped by earlier developments. Change can occur, both through developments internal to the sector or because of broader forces operating in the environment of the field. Being symbolic, institutional elements are readily transported from one social arena to another.

Mechanisms

Scholars have identified a number of specific “mechanisms” associated with change. Mechanisms focus on the process of change—on *how* certain effects are produced. For example, Stinchcombe (1965) has identified the mechanism of imprinting—observing that populations of organizations frequently are founded in spurts, each cluster exhibiting similar structural features, reflecting the limited range of material and cultural elements available at that time. Once founded, these imprinted features tend to remain in place for many years. One of the most studied mechanisms of change involves the diffusion of institutional elements and practices from one place to another. Ideas—models, ideologies, policies—are readily transported by varying “carriers”—including the media, relational networks, and consultants (Scott 2003). It would appear that the mechanisms of imprinting and diffusion would often result in the spread of similar institutions—in “isomorphic” or “convergent” change—across organizations or fields; but diffusion is often combined with other mechanisms that create “divergent” change. When institutional elements diffuse they may be variously theorized or translated by their carriers or recipients (see Czarniawska and Joerges 1996; Strang and Meyer 1993). To be carried, cultural models must be simplified and codified, and those who do this work are likely to transform the meaning of the models transmitted.

An additional mechanism of change is termed bricolage (Douglas 1986; Campbell 2004: chap. 3), and refers to the creation of novel combinations of existing elements. Bricolage can

also work in connection with translational processes to combine new externally derived elements received through diffusion with existing local beliefs and practices. Such practices ease the acceptance of new, foreign elements into varying environments and hence foster institutional change.

Selected Theories on Policy Reform

To augment our theoretical framework, we employ selected arguments from previous work on policy change. Indeed many concepts from this literature parallel the institutional change theories discussed above. There are however two specific ideas that are useful additions for our current theoretical discussion. The first is drawn from the work of Lawrence Brown (1983), who proposed that most policy change develops as a response to the problems exhibited by previous policies: “policy as its own cause”. Brown terms these rationalizing policies, contrasting them to prevailing explanations of breakthrough policies, that is, those policies that arise when some crisis overcomes the policy deadlock inherent in decentralized political institutions.

In addition we utilize the concept of a policy window (Kingdon, 1984) as that opportunity when “governments within established democratic, political systems [are] willing and able to launch ambitious reform programs” (Keeler, 1993: 433), that is, to engage in breakthrough policies. These windows are related to both the size of the incumbent government’s mandate and the severity of the crisis it is facing (Ibid).

We illustrate the application of some of these ideas regarding institutional change and policy change as we consider the case of the introduction and spread of PPP-enabling fields in recent decades.

METHOD

Our research design is a multiple-case study (Eisenhardt, 1989) of three leading PPP fields: in British Columbia (Canada), Victoria (Australia) and South Africa. Although these regions have long histories of public and private interactions, our focus here is on the recent history of PPP field development (in all three cases after 1990). Time and space requirements preclude our providing an in-depth historical account in this regard, so we have attempted to supplement our high-level review with explanatory footnotes while citing references that provide further detail.

We chose a grounded-theory building approach due to the lack of previous work on PPP field development (Glaser and Strauss, 1967). The multiple case approach is useful as it helps us to abstract results that are more generalizable (and therefore reliable) than those drawn from a single case study (Taylor et al., 2009; Yin, 2003).

We selected our cases based on three factors: (i) all three cases are widely recognized as leading examples of PPP-enabling fields (Cuttaree, 2007; Davies & Eustice, 2005; Farrugia et al., 2008; PPIAF, 2007); (ii) the cases present a large variation in the ideological foundations of the ruling political party; and (iii) as British Commonwealth, Anglo Saxon parliamentary democracies, these cases provide at least some control for external variance in the underlying institutional settings, thereby simplifying the comparative analysis. In this way these cases help us to theorize about the nature and trajectories of PPP field development.

For our analysis we drew from three separate but complementary data sources. Our primary source is semi-structured interviews with leading actors in both public and private organizations in each of the case study regions. We selected informants from a range of organizations intricately involved within the PPP field, including the PPP units, sponsoring departments, and private advisors. We conducted a total of 42 interviews with 50 informants distributed evenly between the three regions and the enabling organization types. Interviews were recorded, transcribed, and then coded in a systematic iterative manner with the use of the qualitative coding software QSR Nvivo. This software is specifically useful for drawing out trends from large amounts of qualitative data (Bazeley & Richards, 2000). We supplemented our interview data with other data sources, including documents and secondary data that were either publicly available or provided by our informants, to increase the validity of our findings (Eisenhardt, 1989).

We complemented and triangulated our interview data with a review of existing literature on PPPs in the three regions. This included academic articles, reports, newspaper articles, and online data sources.

ACCOUNTING FOR CONVERGENT CHANGE – THE DIFFUSION OF PPPS

This paper focuses primarily on divergent change. Still, we would be remiss if we did not recognize the overlaying process of convergent change that ushered in the use of PPPs for infrastructure delivery in the cases under question. Indeed the fact that our case regions all implemented the use of PPPs since 1990 could easily be framed as narrative of isomorphism (the diffusion of structurally similar forms). For this reason we start our historical review from this perspective.

We distinguish here between two distinct (but related) diffusion processes: i) diffusion of the broad reform trends which ushered in the consideration of PPP-type arrangements; and ii) diffusion of the use of the more specific PPP forms and the related concept of a PPP-enabling

field. Our focus in this section is on the latter process, but we begin by briefly describing the former.

Overarching reform trends

The involvement of private enterprise in the delivery of public services is not new. In fact, some have traced back this practice to previous centuries (Garvin 2007; etc.) and even ancient times (Ghobadian et al., 2004). The last three decades have however seen a striking resurgence of this approach, leading to widespread and deep reforms in the way that public services are delivered globally. Reforms driven by perceived public sector inefficiencies and the ascendance of liberal economic ideology (Batley & Larbi, 2004), entailed a move towards “New Public Management” (Hood, 1991; Osborne & Gaebler, 1992; Rhodes, 1996) and the adoption of neo-liberal economic policies (Henisz et al. 2005).

PPPs represent a late incarnation of these reform movements.²⁴ Having aggressively pursued privatization of large parts of the public sector, the UK government was looking for a new way of engaging with the private sector (Broadbent & Laughlin 2003). Specifically it hoped to move from selling off existing state assets, to an approach that entailed the development of new assets in “partnership” with the private sector. In this way the UK government hoped to overcome public financing constraints (Clark and Root 1999; Parker, 2009). Although PPP-type projects were carried out with ad hoc arrangements prior to 1992, the establishment of the Private Finance Initiative (or PFI) in this year was the first systematized program aimed at encouraging PPPs (Ghobadian et al., 2004; Allen 2001). As such it presents the birth of the concept of PPPs as well as the PPP-enabling field.²⁵

PFI – Birth of a Concept

The Conservative government of John Major launched the PFI in the Autumn of 1992. By 1993 the precursor of a PPP unit emerged with the establishment of the Private Finance Panel (PFP), a group of high ranking private and public officials whose role was to encourage greater PFI deal flow (Allen, 2001). The next five years however saw only limited implementation of PFI projects

²⁴ The exact “birth date” of PPPs in our definition is somewhat unclear. Some have argued that the genesis lay in transportation projects that first emerged during the 1960’s and 1970’s in the form of tolled motorways in Spain, France, Japan and the US (Ghobadian et al., 2004). We believe projects that emerged in UK and Australia during the mid-1980’s bear closer resemblance (see also Broadbent & Laughlin, 2003; Parker, 2009; and).

²⁵ It should be noted that similar PPP-type arrangements also emerged in Australia at this time. One-off projects in New South Wales were undertaken in the early 1980’s. As we discuss below, the Kennett government in Victoria also pursued a dual privatization and PPP reform program through the 1990’s. The first manifestation of a PPP-enabling field however dates to the start of the PFI.

(Broadbent & Laughlin 2003). Clark and Root (1999) provide a detailed review of the difficulties that the PFI program faced in getting off the ground during this time, including ideological opposition, misconceived notions on the ease of risk transfer, and a resistance by local councils to the Major government's "central control of the PFI process" (Ibid:356).

When Tony Blair's Labor government came to power in 1997, many anticipated that it would be the death knell for PFI – indeed, in opposition, they had been severely critical of the program (Flinders 2005: 217). Instead, Labor set about giving the PFI a substantial facelift. This included rebranding it with the "warmer partnership ethos" (Hodge and Greve 2005: 310) by coining the term "PPP" (Wettenhall 2005). In addition, the Labor government radically altered the PPP field, most notably by establishing the first PPP unit within Treasury, known as the Treasury Taskforce (Allen 2001). This greatly decentralized the implementation of PPPs, with the PPP unit viewed as a "guardian of policy principles and promoter of best practice" that worked in parallel with "highly skilled Departmental procurers pursuing their projects without central support" (HM Treasury, 1997: 2, quoted in Clark and Root, 1999: 357).

After three years (in 2000) the taskforce was replaced by a permanent organization, Partnerships UK (PUK). PUK was itself formed as a partnership, with the organization formed as a Public Limited Company that was majority owned by private investors (51 percent, while government owns the remaining 49 percent). In addition, PUK was to be funded from project fees on a non-profit maximizing basis (Farrugia et al. 2008). The part of the Treasury Taskforce responsible for policy formation was taken over by the Office of Government Commerce (OCG) in Treasury.

We note here that PPP projects in the UK have to date remained "off-balance sheet." The future liabilities (of unitary payments for the length of the concession) do not show up on government books (Allen 2001). This has continued to draw criticism in the UK (see for instance Flinders 2005). Other notable aspects include a high level of contract standardization between PPP deals, and the retention of core services (such as clinical services in hospitals, education services in schools, and custodial services in prisons) by the public sector.

Diffusion and carriers

The PFI emerged as an archetype of PPP implementation, forming a seedbed of ideas that were carried to each of our three case regions. Far from being a one time transfer, this diffusion continued as fields were formed and reconfigured over time. This diffusion relied on a number of carriers to transport these institutional concepts across borders, including:

- *Relational networks* – PPP ideals were conveyed along relational networks between actors in each of our case regions and actors in the United Kingdom. The Anglo-Saxon roots of our three cases made these relationships particularly influential, so the rapid diffusion should not be surprising.
- *Local advocates* – A second type of carrier emerged as local advocates for private participation in infrastructure embraced the developments abroad. These advocates included both public and private actors, and in some cases these advocates organized their efforts around more formal “advocacy organizations” (see chapters 2 and 3 of this dissertation).
- *Consultants* – Third, diffusion was facilitated by consultants employed by local governments in search of solutions to infrastructure problems. These consultants most prominently included UK expatriates who had participated in early PFI projects and were employed in temporary or more permanent capacities.
- *Multilateral and International Development Agencies* – The fourth type of carrier propagated the use of PPPs and the formation of PPP-enabling fields as one component in a wider normative drive for the adoption of neo-liberal economic reforms. This carrier group notably included Bretton Woods organizations (the World Bank and the IMF) and other actors in the donor community (for example USAID and GTZ).
- *Artifacts* – Last, we recognize the way that artifacts (Scott 2008: 83-85) served as carriers in the diffusion process. We refer, for example, to various PPP documents such as project agreements, policy documents, and implementation guidelines. These documents, embodying standardized practices in the UK PPP-enabling field, travelled to our case regions when local actors searched for baseline documents in the formative days of those fields.

Diffusion was not a uniform process in our three cases. The clearest case of diffusion happened in British Columbia (BC), where a combination of relational networks, local advocates and artifacts lead to a very purposeful adoption of UK models. Representatives from BC’s Provincial Treasury had undertaken a reconnaissance trip to the UK to study the PFI as early as 1994, and they conducted a more comprehensive investigation soon after Liberal Party leader Gordon Campbell came to power. Local advocacy through the Canadian Council for Public Private Partnerships lent additional support at this time, with this non-profit organization even flying in specialists from the UK to support ministers attempting to launch pilot projects. The following quote by a representative of the BC PPP unit, unsurprisingly called Partnerships BC (or PBC), mimicking

the UK group called Partnerships UK, highlights the purposeful diffusion process that was followed in establishing the PPP-enabling field:

We looked to them [Partnerships UK] a lot. I think we started with Partnerships UK's Standard Concession Agreement and have kind of adapted it to ours. We have gone over and done tours of projects and met with people to learn how they do things and that's with Partnerships UK.

The later emergence of PPPs (2002) in BC meant that documentation had evolved very far by the time that the documents were diffused to British Columbia. In addition, British consultants readily traveled across from the UK to work on pilot projects in BC (often in association with local firms). The variety of carriers and their reception, led to the BC field having the closest resemblance to the UK model among our three cases.

In contrast, the relatively early emergence of PPP type projects in Victoria means that a diffusion account does not so readily explain the emergence of the PPP field. Specifically, the early (1992 – 1999) incarnation of a PPP field under the Kennett government suggests that it emerged at least somewhat independently from the PFI. However, reformation of the field under the Bracks government (after 2000) reveals many more traces of diffusion, specifically carried through consultants and artifacts. In fact, an expatriate consultant who had been involved on a number of projects in the UK was employed by the Bracks government to reformulate the PPP policy. In an interview he described how they used the proposals of a central player in the PFI to structure their field:

That's why I say we learned from the UK because ... he [the central player] was taking a look back and saying, that's what you need: political will; focus on value for money; rules and guidelines; training; and of course projects. And [even] they [the UK] didn't have all of them. And so, we just looked at that as a model to adopt, because he obviously knew what he was talking about and it makes intuitive sense.

In addition, field actors have continued to rely on documentation from the UK. The early local experimentation with PPPs in Victoria, however, meant made this case less reliant on external models.

Our final case, South Africa, reveals the central role that multilateral and international development agents can play in the diffusion of PPPs. As we will show below, this led to a decentralized emergence of a PPP field. In addition, relational networks with Britain meant that

Treasury officials relied heavily on UK experience when they set about forming a PPP-enabling field. An informant from the South African PPP unit explains:

And I think that we were lucky at the time that the UK was quite far advanced in terms of its PPP model and the Treasury task team had been through a learning curve and had set up systems that were quite replicable in South Africa. Similar judicial system, similar budgeting system. There was [sic] a lot of common elements there. ... We sat down and we actually within eight months of sort of kick off, we had issued practice notes that weren't the most comprehensive and they were largely borrowed from what we saw then as being best practice ... from the UK

This quote also reveals the way that diffusion was conveyed through the adoption of various artifacts. We also observe that international consultants have continued to play an influential role, most recently on the Gautrain project, where local consultants were paired with British counterparts to ensure international best practice.

ACCOUNTING FOR DIVERGENT CHANGE – LOCAL ADAPTATION OF DIFFUSED PRACTICES

These diffused structures and practices were not adopted unchanged in each of our cases. Rather they were subject to local translation and editing, and were combined with existing institutions in a process of bricolage. In order to paint a more detailed historic picture of each field; we consider each case in turn.

British Columbia

The use of PPPs as an infrastructure procurement method was not introduced in British Columbia (BC) until Gordon Campbell's (fiscally conservative) BC Liberal Party came to power in 2001. The political conditions in BC leading up to this election are important for understanding the introduction of infrastructure PPPs at this point in time.

During the 1990's taxpayer debt increased rapidly under the (pro-labor) New Democratic Party (NDP) administration²⁶. This was due in part to the NDPs reluctance to raise taxes, a failure to recognize the extent of the accumulated debt burden (addressed later by the introduction of the Consolidated Capital Plan), and a penchant for state-centric development (Milke 2001). The latter was epitomized by what came to be known as the "Fast Ferries scandal" (Stewart, 2008) – an

²⁶ This debt burden was partly inherited from the Social Credit Party term in office, but the total BC government debt more than doubled through the two NDP terms between 1991 and 2001.

ultimately unsuccessful governmental project to design and construct a fleet of high speed ferries, aimed at reviving the shipbuilding industry in British Columbia. Beyond revealing the NDPs ideological foundations, Fast Ferries also highlighted the left's longstanding "love affair" (Milke 2001: 25) with organized labor, including the public sector unions engaged in infrastructure delivery. It is this bond that prevented the NDP from introducing PPPs for infrastructure development, even after it had investigated the UK's budding PFI program. BC's deep fiscal problems and the ferries controversy, among others, culminated in the most one-sided election victory in the province's history: the Liberals won all but two of the 79 seats in the provincial legislature.

This strong voter mandate created a unique "policy window" (Kingdon 1984, Keeler 1993) for Campbell as he started his first term as Premier. He responded by implementing extensive reforms²⁷ which included the introduction of PPPs as mechanism for large infrastructure delivery. One of our informants (a leading financial advisor) explained it as follows:

And I think what Campbell was able to do particularly in the early days was to say "well you know, I'm basically the government." In his early [days] he had all but [two seats] so he was able to do whatever he wanted to do, and he wanted to change government, and he did it at all kind of stages.

Even through the introduction of PPPs followed a very purposeful adoption of the UK model, which is reflected in the close structural resemblance between Partnerships BC (PBC) and Partnerships UK, it is possible to identify two main differences between the BC field and the UK archetype. First, as a result of translation processes, the field was infused with a *centralized top-down approach*, as evident from the way that PPPs were implemented. Two of the three pilot projects undertaken faced significant Sponsoring Department resistance, and only went ahead when the provincial government refused to consider non-PPP delivery (for details see Cohn, 2008: 78, 79). The development of the Capital Asset Management Framework (CAMF, effectively the guiding PPP legislation) gave central priority to PPP delivery:²⁸ public officials were required to show why a project should not be done as a PPP.²⁹ As Cohn notes, this policy

²⁷ Reforms included the sale of a number of state assets, various tax cuts, and serious cutbacks in the size (and budget) of the civil service.

²⁸ This was strengthened further by the implementation (in late 2006) of the "Capital Standard", a stipulation which requires that all state infrastructure investments over a certain value need to be considered for PPP applicability.

²⁹ The CAMF requires the preparation of business plans with a procurement options analysis. This specifically includes an analysis of a partnership delivery model. Although the PPP is considered the base case, the requirement

“turn[ed] the tables on the procurement process, making it necessary to justify *not* using mechanisms such as [PPPs] rather than forcing public servants to defend their use “ (Ibid: 92). In addition, some of our informants indicated that Campbell directly incentivized newly appointed ministers within sponsoring departments to pursue PPPs in the early days of the PPP program. We have argued elsewhere (see chapter 3 of this dissertation) that this centralized top- down approach led to the emergence of a “logic of enablement.” This is especially reflected in the role that PBC took on projects, driving project delivery rather than only overseeing it (as was the case in Victoria and South Africa.

Second, the translation process reflected the Campbell administration’s *opposition to organized labor*. From the outset PPPs projects in BC followed what can be described as a “puritan approach” to the allocation of services between public and private parties. Many activities that were retained in other jurisdictions (such as cleaning and portering in hospitals³⁰) were outsourced with apparent disregard to the strong public sector unions that dominated some of these industries. This has contributed to criticism leveled against PPPs by many of these public unions have remained critical of PPPs, as has the pro-labor NDP. As a result, PPPs have continued to be a politically polarizing issue, as is evident by the airplay it received during the 2009 BC elections (which Campbell’s Liberal party won). The BC government has softened this puritan approach somewhat in more recent health projects, where some of these services have now been excluded from PPP delivery.

Victoria

We have already alluded to the fact that Victoria has a much longer history of private participation than BC. This history of the PPP-enabling field can be divided into two periods (English, 2006; and see also Maguire and Malinovitch, 2004): (1) early field development under the Kennett government, and (2) a substantial revision under the Bracks government.

of the CAMF is that a variety of procurement options be analyzed, in order to determine which delivery model will be the best option for the project.

³⁰ It’s important to note that the legislation that enabled health authorities to contract out non-clinical services was introduced prior to the introduction of PPP agreements in health care. This legislation was introduced in January 2002 whereas the first hospital PPP agreement was only concluded in December 2004.

Pre 2000 - Early formation under Kennett³¹

From the late 1980s until 1992, the ruling Australian Labor Party (ALP) used PPP-type arrangements (not full PPPs in our definition, due to very low risk transfer taking place) as a way to achieve off-balance sheet financing to circumvent the limits set by the Australian loan council.³² This off-balance sheet financing contributed significantly to a burgeoning of public debt levels, up to around \$30 billion when Jeff Kennett's (fiscally conservative) Liberal Party took over in 1992.

As was the case with Campbell in BC, the fiscal failures of the Labor government not only paved the way for a landslide victory for the Liberals, but presented Kennett with his own policy window. He responded with vigor. Between 1992 and 1999 the Kennett government implemented a fierce and radical program of budget-cuts and fiscal reforms³³, which he himself dubbed the "Kennett Revolution" (Parkinson, 2000). This included the privatization of a number of state services (most notably the gas and electric utilities), and the construction of various large scale infrastructure projects under early PPP arrangements. These first pilot PPP projects included the CityLink highway project, various water and wastewater treatment plants, the Latrobe and Mildura Hospitals, and a number of prisons PPPs.

Three aspects of these early projects merit highlighting (Maguire & Malinovitch, 2004) as they show substantial diversion from the UK model. First, in response to the debt burden that resulted from prior projects, the Victorian Auditor General *revised the tax treatment of PPPs*, recognizing debt commitments "on balance sheet." Second, projects entailed a *full transfer of services* from the public to the private sectors (even more so than the UK practice at that time). This was seen as an attempt by Kennett to break the power of public sector labor unions, as illustrated by this quote from one of our informants (involved as a legal advisor at the time):

I've always characterized this as, Kennett came in with a union-busting attitude. So they were seeing PPPs as a vehicle for reform, reducing the strength of public sector unions which are very strong in Victoria. ... So the Kennett government approach was to actually outsource the whole thing. ... Not only were they building the fabric and

³¹ We recognize some similarities between the Kennett PPP implementation and that of Campbell (noted earlier), albeit nearly a decade apart. The Kennett reforms were however undoubtedly more severe, as they relied much more heavily on a full "privatization" approach (highlighted by the transfer of asset ownership and full service delivery), while being pursued under a much less developed policy framework.

³² This included the redevelopment of the St. Vincent Hospital and the Melbourne Magistrates Court.

³³ Although this period bears similarity to Campbell's first term as BC premier, the changes that Kennett implemented were arguably more widespread and radical.

maintaining the fabric, but they were outsourcing the clinical services in hospitals and custodial services in prisons.

A third notable aspect of PPPs under Kennett was that *asset ownership* for social infrastructure was transferred to the private sector (English, 2005) for the length of the PPP contract. This practice also differed from the PFI projects from this time. In addition, these projects were pursued under a very limited PPP policy (known as the Infrastructure Investment Policy of Victoria) and framework, although this resembled the approach taken in the PFI. As one informant (a treasury employee under Kennett), put it:

“prior to 2000 it would be fair to say our guidelines weren’t particularly strong and we just went out and did projects.”

Post 2000 - Reform of the field under Bracks

By the end of Kennett’s second term, the reform program had begun to draw widespread criticism. The primary objection was the severity of the reforms (specifically the erosion of public sector jobs). Opponents also pointed to the limited rigor applied in project development (Hodge and Greve, 2005; Maguire & Malinovitch, 2004), and the lack of transparency and perceived probity issues surrounding government procurement at this time (exemplified by the Crown Casino project).

These factors paved the way in 1999 for the unexpected election victory by Steve Bracks’ Labor Party. Bracks had replaced long-time opposition leader John Brumby as Labor party candidate shortly before the election, as he was seen to provide “a softer face” to Kennett’s reformist approach. Some feared that a Labor victory at this point would signal the end of PPPs in Victoria, but as had been the case in the UK, Bracks’ Labor government set about amending the model, and then expanding the PPP field. The role of Brumby in this process should not be overlooked. In fact, in many respects Brumby was the central driver behind much of continued use of PPPs. One of our informants, who was intimately involved in amending the PPP model, explains:

I spent two years in John Brumby’s private office advising him at that time as finance minister but he soon became the treasurer and much later premier. Back then, as now, he was the major political supporter and champion of PPPs in Victoria. [The] PPP policy was John Brumby’s policy and he gets the credit for driving it forward and realizing the many benefits that it has brought to infrastructure development in Victoria.

The amendments that Brumby implemented during Bracks' first term were a prime example of rationalizing policies (Brown, 1983), directly responding to the shortcomings of PPPs under Kennett. As noted, local models were reconfigured and partially infused with changes that had taken place in the UK, exemplifying a process of bricolage.

Four changes are worth highlighting. A first step was to *develop a clear PPP policy*, and to make it freely available. The Partnerships Victoria (PV) policy as it was coined, adopted in 2001, was widely touted as the foremost international PPP framework at the time³⁴. It included the adoption of project development processes that had become standard in the UK (including the development of a Public Sector Comparator and a Value for Money assessment) while adding new innovative practices (such as the formal public interest test). In this way the Bracks government attempted to address the dual criticisms of a lack of development rigor and transparency.³⁵ An informant who was involved at the time explains:

The guidelines were written and ... they were much more comprehensive than they ever were and much more detailed and all the rest. But I think in part that was also allowed the labor government to demonstrate how its approach was to be more transparent.

In addition, in order to get buy-in from the wider Labor party, Brumby (and Bracks) set in place a *more balanced contracting-out of services* in PPPs, an approach that was non-threatening to public labor unions. Not only were core clinical and custodial services retained in hospitals and prisons respectively, but on many projects non-core services such as cleaning were also retained by government. This change widened the definition of “core services” beyond that set out in the British model.

A related change was an attempt to distance the PV field from a term that had grown increasingly contentious: privatization. This was done by *taking back the ownership of assets* under PPP deals. Together with the retention of core service, this change was aimed at presenting a “softer face” of PPPs. To this day the Victorian government (and proponents of PPPs in Australia in general) is at pains to highlight the distinction between PPPs and privatization.

A final noteworthy change that the Bracks government implemented was the *reformation of the PPP unit* within Treasury. Although a similar unit had existed under Kennett, the new unit took a much less hands-on approach to project implementation, as it was mainly tasked with

³⁴ The PV policy was replaced by the Federal Infrastructure Australia policy in 2008 and 2009.

³⁵ The latter criticism has however continued to hound PPPs in Victoria (see for instance English, 2005).

overseeing the implementation of the PV policy. An informant, who was employed by Treasury at the time, explains:

When I was in treasury [under Kennett] I was leading the project and treasury ran up the project and then gave it back to the department. This government [under Bracks] said well you can't sort of force things down people's throat... So they changed that.

Clearly this change was implemented both to increase buy-in by Sponsoring Departments, and to convey the “softer face” of the PPP field, as noted earlier. This change mirrored to a large extent the decentralization that had taken place under the UK Labor government. The PPP unit that was formed took on a similar role³⁶ to that of Partnerships UK, but its institutional structure was closer to that of the Treasury Taskforce (Partnerships UK's predecessor).

The revised approach by the PPP unit also led to other instances of bricolage, as existing organizations adapted to fill new roles in the field. A prime example is Major Projects Victoria (MPV), a specialized project delivery unit within the Department of Innovation, Industry and Regional Development. MPV had been established in the Kennett years, when government set about delivering a number of large high-profile infrastructure projects (not under the PPP regime). With the move to a more decentralized PPP delivery model under Bracks, some departments were not able to build up the necessary project delivery capacity needed to develop and deliver projects immediately. MPV's existing expertise in project delivery made it the natural choice to assist low capacity departments in this regard.

Both the Victoria and BC cases entail the centrally coordinated and purposeful construction of a PPP field (albeit through more than one iteration in the Victorian case). Not all PPP fields emerge in this way. Some fields, it would seem, follow a much more evolutionary path, with various streams progressing in parallel at times, before merging later. Such was the case in the development of the South African PPP field.

³⁶ The new unit only oversaw project implementation. They developed detailed guidance material to help the sponsoring departments who now had to take responsibility for project delivery. These guidance documents, published by 2002, became instrumental in not only guiding PPP implementation in Victoria, but throughout Australia, as it formed the basis for the Federalized Infrastructure Australia published in 2008 and 2009.

South Africa

The first democratic government in South Africa came to power in 1994 with the historic triumph by Nelson Mandela's ANC. It did so in a "Tripartite Alliance"³⁷ with two other major political organizations, the South African Communist Party (SACP) and Congress of South African Trade Unions (COSATU). The new government faced the challenge of addressing significant infrastructure requirements (to redress imbalances created by Apartheid) with an alarming budget deficit inherited from the outgoing National Party.³⁸ In addition, discrimination against blacks under Apartheid meant that most government departments were struggling to resource managerial positions, causing "a general lack of capacity to manage facilities and provide required levels of service within the public sector" (Merrifield et al., 2002).

In confronting these problems, the South African government experienced strong normative pressures from international development agencies who, as part of their neo-liberal policies were strongly advocating use of PPPs. (Niksic, 2004). The Tripartite Alliance's socialist roots however prevented a central initiative to develop PPPs (as was the case in BC and Victoria). Rather, governmental departments started to investigate PPPs in a somewhat decentralized manner, the result of more focused lower level influence that came through technical assistance projects undertaken by the donor community and international consultants. Three main organizations began to implement PPPs quite independently at this stage: the South African National Roads Agency (SANRAL), the Department of Correctional services, and the Municipal Infrastructure Investment Unit (MIIU). We discuss each of these PPP-enabling field development streams in turn.

PPP stream 1: SANRAL

National roads in South Africa have historically been bond-financed. However, by the late 1980's the Department of Transportation was approaching the government's bonding limit and began to consider measures that would move infrastructure spending off its balance sheet. This culminated in 1997 in the first PPP-type project in South Africa, the N1/N2 project.³⁹ Because this was prior to the development of any PPP legislation or methodology by National Treasury, legislation

³⁷ Under this ongoing alliance the SACP and COSATU did not contest the election directly, but rather influenced policy decisions by holding senior positions within the ANC party and within government.

³⁸ The deficit in 1993/94 was 5.1% of GDP. In comparison it declined to 0.5% of GDP by 2005 (see <http://www.southafrica.info/business/economy/econoverview.htm> for more information).

³⁹ Similar to early projects in Victoria, this project (a Build-Operate-Maintain arrangement funded out of toll revenues) does not fall within our current understanding of PPPs, as it involved the government carrying out most of the design work, and transferring very little risk to the private party.

specific to national roads was passed in 1998 in the form of the SANRAL. This act provided for the establishment of a public corporation (similar to PBC) responsible for managing the construction, operation, and maintenance of national roads. The act further allowed this corporation to enter into PPP-type contracts with private providers, and levy tolls on National roadways.

Further projects followed in the form of the N3 toll road, N4 Maputo Development Corridor, and the N4 Platinum Highway. By the time that the PPP Unit was established and PPP guidelines published (see below), SANRAL had been so successful at building up PPP delivery capacity, that National Treasury effectively excluded them from the PPP Unit's oversight. To this day national road PPPs remain separate from the rest of the South African PPP field.

PPP stream 2: Department of Correctional Services

Up to the late 1990's, social infrastructure assets (such as hospitals, schools, prisons and offices) were delivered by the Department of Public Works (DPW) on behalf of various sponsoring departments.⁴⁰ Towards the late 1990's, DPW was acutely aware of the challenges that sponsoring departments were facing in terms of growing infrastructure requirements under declining budget allocations. This was specifically salient for the Department of Correctional Services (DCS), where the provision of accommodation for a growing prisoner population required urgent action. As a solution, DPW contracted with British consultants to develop a framework for implementing PPPs for social accommodation in the South African context. The result was Asset Procurement and Operations Partnership System (APOPS), a step-by-step guideline which closely resembled the process followed for PFI projects in the UK (Merrifield et al. 2002)

DPW's implementation of APOPS for DCS culminated in the identification of preferred bidders on six proposed PPP prison projects. An informant in treasury takes the story further:

It was at a very late stage in the whole process that they came to treasury and said, "It's going to cost us this much." This means, on an annual basis they had to pay what we call a unitary payment. And that unitary payment would have consumed on these 6 facilities a significant part of their existing budget. They would actually have to close down other facilities. So Maria Ramos who was the DG at the time was very clear that the system could not work this way. You can't have departments going out, procuring PPP's,

⁴⁰ DPW would run the development of the asset (based on input from the applicable department), and then hand over the completed asset at the end of the construction period. DPW did not execute the design and construction themselves, but followed the traditional procurement approach of contracting these out separately to private consultants and construction companies.

*pretending that they have no fiscal implications because there is no capital investment by the state, because you incur this long term obligations that impacts their budget. It became very clear that there was a very strong role for Treasury to play in regulating the financial aspects of these [projects].*⁴¹

This chain of events formed the foundation for the development of the main PPP field in South Africa. A PPP unit within Treasury was subsequently established in 2000, following significant assistance from two international development agencies (the German GTZ and the United States Agency for International Development or USAID). As noted, these carriers worked to diffuse the British model. But the controversy surrounding APOPS led to significant translation. Specifically the PPP unit was established in Treasury with a strong mandate to control the discretion of sponsoring departments in future. For this reason the South African PPP field has continued to be imprinted by what we have termed elsewhere a “logic of control” (see chapter 3 of this dissertation), to be contrasted with a “logic of empowerment” that prevailed in PBC. The “logic of control” was underlined by the subsequent development of PPP legislation and guideline documents which called for a very thorough gateway review process, where the PPP unit is required to grant formal approvals at four stages throughout project development. A recognition that this review process might be too “lengthy and laborious” (MIIU, 2004: 2), has recently lead to the PPP unit receding on granting formal approval for procurement documents. In the words of one treasury informant:

At this stage we're actually looking to not even make the procurement documents a formal approval. Rather say as long they comply with the practice notes, the accounting officer can sign off on them.

A second type of translation came about due to a parallel process within the National government to address a perceived lack of accountability by line departments (partially a remnant of centralized control under the Apartheid government). The resulting Public Financial Management Act (PFMA) moved the authority and accountability of service delivery out to these various line departments. By decentralizing service delivery, the PFMA essentially allowed for PPP project

⁴¹ One of our other informants suggested that the reason for the over commitment on the part of DPW was due to their historic focus on project development – i.e. they are only concerned with the project development cycle, and do not consider the actual operation and maintenance of assets. DPW therefore failed to appreciate the ongoing budgetary commitment these 6 projects represented.

delivery outside of the control of DPW.⁴² Unfortunately, however, this change has also limited the extent to which the PPP unit could take a leading role in PPP project delivery.

PPP stream 3: MIIU

The challenges posed by building infrastructure under severe fiscal and capacity constraints were greatest at the municipal level (Bahl and Smoke, 2003; MIIU, 2006). It was in the context the Department of Provincial and Local Government (DPLG⁴³) started searching for solutions. Following significant input from the donor community (specifically the World Bank and USAID) and from a local governmental infrastructure investment bank (the Development Bank of South Africa), PPPs came to be viewed as a possible solution (MIIU, 2006; Smith, 2008). This culminated in 1997 in the formation of the Municipal Infrastructure Investment Unit (MIIU), a government-owned, non-profit organization “tasked with providing technical assistance and grant funding to municipalities investigating innovative [PPPs]” (Hlahla, 1999: 565). Formed more than 3 years before the central PPP unit in Treasury, the MIIU acted as an early PPP unit at a municipal level.

The unit was partly funded by USAID, and staffed by a combination of World Bank-appointed international consultants and local specialists. What should be noted is that the MIIU had no formal tie to National Treasury (Ibid), which at that stage was only starting to consider its role in PPPs (as noted above). It was hoped that this independence would help the MIIU “make deals happen, even in the face of taking some risks” (Ibid: 5). Clearly the MIIU operated much more out of a “logic of empowerment” than a “logic of control” (see chapter 3 of this dissertation).

Over the next 8 years, the MIIU was highly successful in developing projects, initiating over 100 projects on behalf of local authorities (Magugumela, 2006)⁴⁴. The majority of these were quite small and do not fit our current definition of PPPs, but the list did include a number of large scale PPP-arrangements.⁴⁵ These projects were implemented under the Municipal Systems Act (MSA) of 2000, legislation authored by DPLG, which allowed for PPPs in the municipal

⁴² An interesting phenomenon has been the fact that many departments have actually undertaken PPPs in response to frustration from working “through” DPW in the traditional way.

⁴³ Then called the Department of Constitutional Development

⁴⁴ In comparison, during this time the PPP unit had only delivered 12 projects (National Treasury 2006), albeit projects of larger scope.

⁴⁵ Two of these project, water concessions at the Nelspruit and Dolphin Coast Municipalities, became the subject of much controversy.

sphere. From the start the unit was envisioned to operate only for a finite term, and by 2006 the organization was dissolved and its activities “taken over” by the PPP unit in Treasury.

One of our informants (a former employee of the MIIU) proposed that Treasury grew exceedingly uncomfortable with the discretion afforded to the MIIU, even though USAID was willing to continue funding support. Although it is difficult to confirm this assertion, we can find tentative support in the way that Treasury implemented additional legislation to guide procurement in local government in 2004. This act, known as the Municipal Financial Management Act (MFMA), added an additional layer of complexity to the contracting of PPPs in that it supplemented the existing MSA. In this way it superimposed the requirements of Treasury (as reflected in the MFMA) onto those of DPLG (reflected in the MSA). If our informant is correct, then this would further highlight the “logic of control” that has so imprinted the South African PPP field.

This third stream ended with the disbanding of the MIIU. The PPP unit has since undertaken significant work to streamline the process of implementing municipal PPPs (specifically clearing up the confusion surrounding the duplicate requirements of the MSA and MFMA). This has, to some extent, led to a resurgence of interest in municipal PPPs.

The three streams illustrate the fragmented nature of PPP field construction in the South African case. In closing we wish to highlight the way that the government’s Affirmative Action policy has been combined with the PPP field structure in a process of bricolage to further shape the field structure. Broadly referred to as “Black Economic Empowerment” or BEE, this affirmative action policy has been central to the ANC’s ideology and strategy since it came to power in 1994 (ANC, 1994; Tangri and Southall, 2008). BEE entails an attempt to redress the inequalities created by Apartheid by affording persons previously disadvantaged (effectively non-white individuals) under the Apartheid policy, new economic opportunities. In this way the ANC hoped to “de-racialise business ownership completely through focused policies” (ANC, 1994). The ANC’s parallel imperative of fostering rapid economic growth among the predominantly white owned business community has, however, limited the extent to which they have been able to enforce BEE requirements (see Tangri and Southall, 2008).

While the ANC government has been cautious to implement stringent BEE requirements on the general business sector, one area where they have seen considerable BEE opportunities has been PPPs. The government has recognized a number of reasons why PPPs present unique BEE opportunities (see National Treasury 2004). These include: (i) the long term nature of the arrangements presents unique opportunities for skills transfer to affirmative enterprises; (ii) the fixed income stream typical of social accommodation PPP projects helps affirmative enterprises

grow over time by decreasing business risks; and (iii) the high profile nature of these projects make them valuable vehicles for showcasing the government's BEE achievements (Ibid: 7).

As a result, the South African PPP field has been greatly shaped by the concept of BEE. Not only do BEE goals continue to form a central part of PPP bids requirements, but the achievement of BEE objectives is now one of the main selling points of undertaking PPPs in South Africa. This characteristic appears to be unique to the South African PPP field (certainly in our collection of cases, but possibly even internationally).

CONCLUSION

The aim of this paper has been to move the discussion on development of PPP-enabling fields further by providing a theoretical explanation of how their history affects the way they form, grounded in a set of empirical case studies. For this purpose we investigated the field formation histories in three leading PPP fields. Our discussion started with by recognizing the overarching diffusion processes that lead to the emergence of PPP-enabling fields in our three cases. Thereafter we reviewed the ways that these diffuse practices were adapted to suit local conditions, through processes of translation and bricolage.

Our three cases entailed quite different development trajectories. Both the Victoria and BC cases entailed the centrally coordinated and purposeful construction of a PPP-enabling field. In the Victorian case this involved a substantial revision, as the field was adapted in response to local criticism of the initial field incarnation. The South African PPP field construction followed a much more evolutionary path, with various streams progressing in parallel at times, before merging later. The cases confirm that fields do not progress towards an isomorphic "one size fits all" conclusion; rather, they are shaped by the institutional and political contexts in which they are constructed, and bear the markings of the political actors that take a hand in their crafting.

There are two main claimed contributions from this study. First, we draw attention to the need for a context-specific approach to explain and predict PPP field development. Second, we develop arguments relating to institutional systems and processes that can guide future studies of these and similar fields.

CHAPTER 5 – ASSESSING THE IMPACT: THE PROGRAM LEVEL OUTCOMES OF PPP FIELD CONFIGURATIONS

ABSTRACT

This chapter explores the comparative extent to which “success” has been achieved in three leading PPP fields: in British Columbia (Canada), Victoria (Australia) and South Africa (see other chapters in this volume). To this end I formulate five broad measures of program success and then conceptualize a number of empirical metrics to assess the extent to which each of these measures has been achieved. The assessment is based on data drawn from PPP project data, informant interviews, a review of statements relating to PPPs in local newspapers, and a survey among central field actors on the extent to which a number of PPP program development tasks had been achieved. The results show varying levels of success in the three cases in terms of each of the five measures. Rather than comment on an overall level of success, I use the findings to develop six tentative propositions on the connections between PPP enabling field characteristics and program-level outcomes.

INTRODUCTION

There is a growing understanding among scholars that the move towards Public Private Partnerships (PPPs) for infrastructure does not simply substitute private sector capacity for public sector capacity; rather it requires new forms of public sector capacity to be developed to

overcome various challenges that infrastructure PPPs face (see for instance Dutz et al. 2006). In an earlier paper in this volume (see Chapter 2) I showed that this PPP “enabling capacity” has not been answered by a reformation of public agents alone – rather a network of new “enabling organizations” (public, private and non-profit) has emerged in response. These organizations, in varying ways, attempt to enable the development and continued operation of PPPs, for the benefit of public, private, and civic actors. These “PPP enabling organizations” include: Sponsoring Departments, PPP Units, Transaction Advisors, Transaction Auditors, Public Regulators, Non-public regulators, Advocacy Associations, and Local, Regional and Multinational Development Agencies.

I proposed elsewhere (see other papers in this volume) that the concept of an *organizational field* (DiMaggio, 1991; Scott and Meyer, 1991; Scott et al., 2000), a concept from the institutional theory literature, can be usefully employed as a theoretical lens in this regard. DiMaggio and Powell (1983: 148) define an organizational field as “those organizations that, in the aggregate constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services and products.” I termed this network of PPP enabling organizations the “PPP enabling field” (see Chapter 2 and 3). My detailed review of three leading PPP enabling fields (in British Columbia, Victoria, and South Africa) is included in Chapter 3 of this volume. I observed a similar set of actors in each of the fields, but detected significant variation in the characteristics of these actors. In addition I found that, even within each field, the actors are arranged in varying combinations on different projects.

In the current chapter I attempt to build on the aforementioned work by considering the impacts of these field differences on the overall “success” of PPP enablement in a region. I start by reviewing previous literature on PPP program success to develop five broad dimensions of “successful” PPP enablement. Next, I lay out my methodology for evaluating the extent to which each dimension has been achieved in each region, identifying more specific proxy metrics for measuring this. I then compare the outcomes in each of my cases to develop theory on what the impacts of field differences are on enablement success.

MEASURING SUCCESS - CLUES FROM THE LITERATURE

The question of what constitutes and leads to a “successful” PPP project has been widely debated in the literature (Akintoye et al. 2003; Jefferies et al., 2002; Li et al., 2005b; Zhang, 2005). PPP projects are, however, invariably situated within larger “PPP programs”—i.e., more or less coordinated collections of PPP projects undertaken in a given politically sovereign area. The

concept of “success” at this higher program level has received much less attention. The difficulty in making normative judgments of what success looks like, is rooted in the fact that PPP programs can only be judged against the stated aims of the program. Unfortunately very few PPP programs have such explicit “mission statements.”

Still, the literature that deals with PPP programs provides a foundation for thinking about “success” in this regard. In most of this literature the focus is predominantly on the tasks that lead to success, with “what constitutes success” often only implied. In my review of this literature below I therefore first come up with a list of tasks that are needed to ensure program success. Thereafter I tease out the implied aims of these programs as a basis for measuring success.

Literature on PPP programs

A helpful starting point for my review of the PPP program literature is the work of Kumaraswamy and Zhang (2001), who propose that successful PPP programs need to create favorable investment environments for private providers of infrastructure. They identify seven salient actions to achieve this, including: creating an adequate legal and regulatory framework, and ensuring a stable political environment. A study by the Canadian Council for Public Private Partnerships (CCPPP, 2006) provides a similar perspective. The study brought together representatives from more than 25 public, private and civic organizations involved in the PPP process in Canada. They present three main functional areas that need to be addressed: tasks that develop the PPP environment, tasks aimed at improving project development, and tasks that focus on the procurement process. Work by Durchslag et al. (1994) takes a similar view, proposing that PPP success depends on creating favorable conditions for investment. They propose eight measures to achieve this, including providing political commitment, maximizing transparency, and ensuring consistency between projects.

Several authors have identified the need to develop the capacity of governmental departments to ensure PPP program success. For example, work by Aziz (2007) reviews the experience of the UK and British Columbia PPP programs, finding that a successful program needs a public sector that has sufficient appreciation of PPP financial objectives, risk transfer, and performance specifications. Other authors have stressed the need for oversight or regulating capacity as governments attempt to control the discretion of sponsoring departments (OECD 2008) and regulate the behavior of private providers (Pongsiri, 2002).

Yescombe (2007) provides support for the above discussion. He asserts that the actions required for developing a PPP program include those aimed at making the environment attractive for private investment (for example through developing and applying the legal framework

consistently, and by coordinating the PPP deal-flow), and those aimed at ensuring the capacity of governmental departments (for example through training, managerial support, and publishing guidance materials).

Probably the most complete review of PPP program governance is the recently published guidelines for the governance of PPPs by the United Nations Economic commission for Europe (UNECE, 2007). Here the focus is wider than simply ensuring an attractive investment environment, or a capable Public Sector, but the need to address the concerns of users and other constituents is also recognized. The guidelines propose seven broad principles of PPP governance, with close to 50 areas of concern that need to be addressed. The seven principles are:

- (i) a coherent PPP policy that achieves the support of the general population;
- (ii) sufficient governmental capacity to develop and manage PPP projects;
- (iii) a simple and consistently applied legal framework to attract investment;
- (iv) a sophisticated risk transfer and mitigation strategy on all PPP projects;
- (v) procurement processes that are fair and transparent;
- (vi) making the improvement of the “public interest” the main objective of the PPP program; and
- (vii) ensuring that all projects provide environmentally sustainable solutions.

Lastly, I should mention the significant body of literature on Critical Success Factors (CSFs) for PPPs (Akintoye, Hardcastle, Beck, Chinyio, & Asenova, 2003; Jefferies, Gameson, & Rowlinson, 2002; Zhang, 2005). The work by Li and colleagues (Li, Akintoye, Edwards, & Hardcastle, 2005) presents a helpful synthesis of the CSF literature, with the authors identifying 18 broad factors that determine PPP success. Although CSFs are not completely analogous to PPP program development tasks, they provide us with significant insight into the issues that PPP development tasks need to address.

Identifying tasks needed for PPP program success

Integrating the various resources mentioned above, we can identify 15 general actions that are needed to ensure the successful development of a PPP program, including the specific tasks that make up each of these measures. These measures and their related tasks are shown in table 5 below (with the applicable articles that reference each task indicated in the last column).

Table 5 - PPP Program Development Tasks

No	Broad action	Detailed task needed to develop a successful PPP program	References
1	Develop supportive legal framework and apply consistently	Establish a clear legal and regulatory framework	1, 2, 3, 4, 6, 7, 8, 9
		Apply framework and policies consistently	1, 3
		Standardize contracts and documents	4, 5, 8
		Ensure that policies are able to accommodate change	1
		Consult the public and the market in policy development	1, 5
		Develop legal capacity to handle PPPs (train lawyers and judges)	1
2	Provide political commitment	Provide high level political commitment to the PPP program	1, 7, 8
		Political risk management through advocacy within the government	2
3	Improve public sector knowledge of PPPs	Provide training to public sector staff	1, 3
		Communicate lessons learnt to governmental actors	3
		Publish guidance materials to help public sector organizations	3
		Ensure that governmental agents understand the objectives of private finance	4
		Develop pilot projects	2, 3
4	Increase public awareness and understanding of PPPs	Increase public awareness and understanding of PPPs	1, 2, 5, 8
		Communicate lessons learnt to civic actors	3
		Inform citizens of their right to participate on project developments	1
		Gain buy-in from key constituents (e.g. unions) for PPPs	8
5	Develop and support market of private providers	Take actions that attract private investment, e.g developing the domestic capital market	1, 2, 6, 8
		Take actions that sustain state credibility	2, 6, 8
		Ensure a stable political environment	6, 8
		Publish guidance materials for the benefit of private sector	3
		Involved private providers to influence project structure, size, scope	5
		Reduce cost and duration of procurement	5
		Provide support to private providers through loans, guarantees, etc.	1, 6, 7, 8
		Ensure “even-handed” regulation (i.e. avoid over regulation)	1, 9

Table 5 - PPP program development tasks (ctd.)

No	Broad action	Detailed task needed to develop a successful PPP program	References
6	Coordinate deal flow	Coordinating deal-flow to avoid a “bunching” of projects	1, 3
		Communicate upcoming projects to market	5
		Coordinating public-sector “buying power”	3
7	Improve program transparency	Have transparency in project development (e.g. options analysis)	1, 7, 8
		Increase procurement transparency (share information during/after the bidding phase)	1
		Make sure the public are well informed regarding project details	1
8	Increase program accountability	Keep the PPP program accountable of its performance	1
		Incorporate user feedback in performance measures	1
		Make use of performance specifications on PPP projects	2, 4
9	Independent oversight of project execution	Have independent oversight of procurement	1
		Provide for independent oversight of performance monitoring (and publish results)	1
10	Ensure quality of projects, with adequate level of risk transfer	Identify the most suitable projects and execute them in a way that takes local context into account	1, 2, 5, 8
		Select strong private consortia for projects	8
		Ensure good project and contract management on all projects	2, 8
		Provide clear contract clauses for “step-in” rights	1
		Assess VfM when selecting a delivery system	1, 2, 4, 8
		Identify all risks early in the project	1, 5
		Transfer optimum level of risk to the private partner	1, 4, 5, 8
		Be willing to mitigate or retain some risk	1, 8
11	Keep Line Agency discretion in check	Prevent line agencies from making unrealistic commitments on behalf of government	2, 7
		Ensure quality of project development by line agencies	2
12	Provide project specific support to line agencies	Establish a PPP unit to facilitate the process, provide leadership in the PPP program	1, 4, 7
		Provide technical advice and support on specific projects	3
		Provide line agencies with funding for hiring of private consultants	2
		Hire external advisors where necessary to fill the skill gap	1

Table 5 - PPP program development tasks (ctd.)

No	Broad action	Detailed task needed to develop a successful PPP program	References
13	Ensure that PPP projects improve the public interest	Define how PPPs can promote the “public interest”	1
		PPP Policy should have clear economic and social objectives	1, 8
		Ensure equity in access to all citizens (e.g. through subsidies)	1
		Allow for adequate stakeholder consultation	1
		Ensure that private provider complies with H&S requirements	1
14	Ensure fairness of PPP procurement	Follow recognized procurement practices to avoid corruption	1, 6, 7, 8
		Use neutral and fair selection and award criteria	1, 4
		Ensure that PPP unit retains neutrality and independence from private sector	1
		Monitor behavior of private providers to prevent unfair competition, bribes, political influence, etc.	9
		Provide an avenue for complaint to an independent tribunal	1
15	Improve environmental performance of projects	Ensure that projects are delivered in an environmentally sensitive way	1
		Include specific (but realistic) “green” objectives in bid criteria	1
		Carefully review green claims made by bidders	1
		Include green performance in payment mechanisms	1
<p>References: 1: UNECE (2007); 2: OECD (2008); 3: Yescombe (2007), 4: Aziz (2007), 5: CCPPP (2006), 6: Kumaraswamy and Zhang (2001), 7: Durchslag, et al. (1994), 8:Li, Akintoye, et al. (2005), 9: Pongsiri (2002)</p>			

Aims of PPP programs and characteristics of success

Beyond specific program development actions, each of my references on PPP program development also implies the existence of broad aims of the PPP programs considered. My review of the literature revealed three common aims: (i) create a favorable investment environment to attract private proponents and ensure competitive tendering conditions that drive value for money; (ii) develop high capacity governmental agencies and departments to ensure efficient and consistent project development, and (iii) address the concerns of users and other constituents to ensure the wide acceptance and legitimacy of the concept of PPPs.

Based on this I propose five characteristics of successful PPP programs:

- *A competitive PPP market* – this aspect is reflective of an attractive investment environment for private investors.

- *An efficient project development process* – rather than seeing a competent PPP enabling field as an end in itself, the capacity of the enabling field is viewed as a vehicle to ensure efficient project delivery (in terms of both time and cost).
- *A growing but well-controlled flow of PPP projects* – this aspect recognizes the tension between rapid growth and project quality
- *Acceptance and legitimacy of the PPP model* – this aspect reflects the extent to which PPP delivery is accepted by a variety of constituents, including government agencies, users, the general public, and private industry
- *Opinion of central field actors* – a final measure is the extent to which central field actors—the most informed and salient role players—believe that the program has been successfully developed.

Below, I propose more detailed metrics to measure the extent to which each of these characteristics is displayed in my three case fields.

METHOD

I propose nine outcome metrics as proxies for the existence of each of the five “ideal” PPP program characteristics identified above. Table 6 lists these metrics, indicating the data source I used in each case.

Table 6 – Measuring “Ideal” PPP Program Characteristics

No	Program characteristic	Direct measure	Data source
1	Competitive PPP market	Average number of bidders per PPP project	Project data
2	Program efficiency	Average length of PPP project development phase	Project data
		Average length of PPP procurement process	Project data
3	A growing but well-controlled flow of PPP projects	Annual value of PPP deals signed (normalized to overall infrastructure provision)	Project data
		Average number of projects per year since inception	Project data
		Pace of projects coming on stream	Project data
4	Acceptance and legitimacy of the PPP model	Number of Line Agencies that have registered projects	Project data
		Number of sectors impacted	Project data
		Affect (positive or negative) towards the PPP concept expressed by various stakeholder groups in local media	Newspaper article review
5	Opinion of central field actors	Response of informants to list of ideal PPP program activities	Survey

I use four data sources for the current assessment:

- *Project data* – I reviewed publicly available data on the PPP projects that had reached Financial close by June 2010 in each of my case regions. I obtained this data from on-line sources (project reports and PPP unit websites) and directly from key informants in the respective PPP units. The project data I used is included in Appendix A of this report. Readers will notice that a number of fields are not completed in these tables. This represents information that was not available either on-line or via key informants. My calculations are therefore based on the information that was available.
- *Newspaper article review* – I conducted a systematic review of more than 4000 newspaper articles from the leading local newspapers in each of my case regions. I selected all articles between January 1998 and July 2009 that contained the term “public-private” or “private public” in the text body. I then reviewed each article to determine the “affect level” that the reporter had to the concept of PPPs: Negative (-1), Neutral affect (0), or Positive (+1). In cases where the news source lists a third party individual as the source for the news, I identified this party as the reporter. For example, in the statement “Peter Brown, Head of the National Public Union, today condemned the continued use of PPPs in Yugoslavia,” the indirect reporter would be “Peter Brown, Head of the National Public Union,” with an affect level of -1. The number and sources of newspaper articles coded is summarized in table 7 below. My newspaper selection and coding protocol is included in Appendix B of this document.
- *Survey on success of program development tasks* – I asked my informants to complete a survey on the extent to which each of the PPP program development tasks, listed in Table 5, had been attained in their region. The survey was completed by 24 of my informants (6 in British Columbia, 10 in Victoria, and 8 in South Africa, representing an overall response rate of 57%). Informants graded, on a scale of 1 to 4⁴⁶, the extent to which each of these actions had been addressed in the local PPP field. In addition, I asked informants to indicate, also on a scale of 1 to 4⁴⁷, how important this action is to PPP program success in the region. In this way I hoped to control for actions that are not recognized as salient by practitioners.

⁴⁶ The scale was worded as follows: 1 = “has not been addressed,” 2 = “has only been partly addressed,” 3 = “has been largely addressed but more work is needed,” and 4 = “has been fully addressed.”

⁴⁷ The scale was worded as follows: 1 = “not important,” 2 = “somewhat important,” 3 = “important,” and 4 = “extremely important.”

- *Interviews with key informants* – Lastly, I supplemented the abovementioned quantitative data with qualitative data obtained from semi-structured interviews I conducted with leading actors (in both public and private organizations) in each of the regions. I selected informants from the range of organizations that represent the PPP-enabling field. I conducted a total of 42 interviews distributed evenly between the three regions and the enabling organization types. Interviews were recorded, transcribed, and then coded in a systematic iterative manner with the use of the qualitative coding software QSR Nvivo. See Chapter 3 of this document for a more details on the selection, interview, and coding process.

Table 7 - Summary of Newspaper article coding data

Aspect	British Columbia	Victoria	South Africa
Number of newspapers sourced	7	22	23
Number of articles downloaded	1237	1189	2152
Number of coded events	969	929	967

RESULTS

The results of my analysis are summarized in Table 8 below. I discuss the implications in terms of each of the success characteristics, in turn, hereafter.

Competitive PPP market

The results reveal little difference between the 3 fields in terms of the average number of bidders per project. Unfortunately the unavailability of information (specifically in South Africa) detracts from the rigor of this comparison. I therefore turn to my interview data for additional clarity. Of all my respondents, the Victorian informants were most convinced of the level of competition that currently exists in local PPP procurements. Both my Victorian and South African informants however pointed out the possible lack of competition due to a perceived oligopoly of local banks controlling most of the lending to local PPP projects. As one South African advisor mentioned:

I think the perception is that with the small number of banks operating, all the margins are on the same bracket. If you go to the UK market you put out a thing and you've got 300 banks knocking on your door. You know essentially here there's four or five who can actually come to the table. And if they say this is the bracket where things happen, then it happens in that bracket.

Table 8 - Summary of results

No	Direct measure	British Columbia	Victoria	South Africa
1	Number of bidders per PPP project			
	a. Observations	n = 10	n = 21	n = 4
	b. Median	3	3	3
	c. Mean (std. dev)	2.7 (0.7)	2.9 (0.7)	3 (1.2)
2	Typical length of PPP project development phase (months)			
	a. Observations	n = 11	n = 12	n = 9
	b. Median	8.1	6.8	12.2
	c. Mean (std. dev)	9.1 (4.9)	9.5 (9.1)	15.1 (11.2)
	Typical length of PPP procurement process			
	a. Observations	n = 17	n = 21	n = 11
b. Median	16.1	16.6	26.4	
	c. Mean (std. dev)	16.5 (5.3)	19.6 (10.7)	30.5 (13.0)
3	Details of annual dealflow			
	a. Number of years	n = 7	n = 11	n = 10
	b. Mean annual value	\$1,232 mil	\$854 mil	\$525 mil ⁵²
	c. Mean as % of total annual public infrastructure investment	13% ⁴⁸	9% ⁵⁰	4% ⁵³
	d. Mean as % of 2008 GDP	0.54% ⁴⁹	0.35% ⁵¹	0.03% ⁵⁴
	e. Median number of projects per year			
	f. Mean no of projects per year (std dev)	2.7 (1.3)	2.0 (1.0)	1.5 (1.5)
	Pace of projects coming on stream	See Figures 6 and 7 below		
4	Number of Sponsoring Departments that have registered projects			
	a. National level	N/A	N/A	5
	b. State / Provincial level	4	9	6
	c. Local level	4	2	0
	Number of sectors impacted	4	9	6
	Affect (positive or negative) towards the PPP concept expressed by various stakeholder groups in local media	See Table 10 below		

⁴⁸ Calculated using Capital Expenditure data published in the annual British Columbia Budget and Fiscal Plans between 2001 and 2010. This figure excludes projects that did not have any private financing (the following four projects were excluded: Charles Jago Northern Sport Centre, Residential Care & Assisted Living Capacity Initiative, Pitt River Bridge & Mary Hill Interchange and Port Mann/Highway 1).

⁴⁹ GDP data sourced from http://www.bcstats.gov.bc.ca/data/bus_stat/bcea/gdmp.asp

⁵⁰ Source: Chan et al. (2009: 22)

⁵¹ GDP data sourced from <http://www.invest.vic.gov.au>

⁵² Please note that the South African project data excludes the Fleet management projects that are reported in the PPP units list of completed projects, as these projects do not fit with my definition of infrastructure PPPs.

⁵³ Calculated using unpublished data from Statistics South African (www.statssa.gov.za). The South African average annual public infrastructure investment amounts to \$ 12,199 million for the period 2001 – 2009. This figure includes expenditure by government corporations, which is consistent with the BC and Victoria calculations.

⁵⁴ GDP data sourced from World Development Indicators report

5	Average response of informants to list of ideal PPP program activities (See Appendix C for details)			
	a. Number of respondents	n = 5	n = 10	n = 8
	b. Median	3	3	3
	c. Mean (Std dev)	2.76 (0.74)	3.02 (0.79)	2.67 (1.01)

Lastly, one Victorian informant mentioned that the small number of local construction firms who are large enough to bid on PPPs can be seen as anti-competitive:

Probably one of the biggest issues is the concentration of the construction market in Australia, where particularly for the large civil engineering projects there's really a choice of three subsidiaries of the Leighton group or two subsidiaries of Bilfinger Berger. They do compete ferociously against one another, and we've never had anything to suggest that there is collusion between them. Nevertheless there are still groupwide policies and so on that constrain how they bid. And also there are perception issues which drive out some of the potential foreign competition. That does mean we've sort of got a few too many eggs in two baskets.

Unfortunately these quotes do not help us to make a comparative judgment about the level of competition in our three regions.

Program efficiency

The results on program efficiency show surprising similarity between the project development and procurement timeframes in British Columbia and Victoria, while revealing markedly longer timeframes in the South Africa field. These results suggest that the South African PPP enabling field is much less efficient than my other two cases. This finding is supported by my interview data where the majority of my South African informants (mentioned by 8 of my 13 informants) noted the frustratingly slow project development and approval process. This quote by a departmental project manager serves to illustrate:

How is it possible that a project can be in feasibility procurement for four years? How is it possible that we can receive bids for prisons that obviously cost the bidders millions: They handed it in May [2009] and you still [by January 2010] haven't opened it? How is that possible? We are getting a bad reputation by doing that.

A manager at a local development agencies adds:

Well I mean we are all frustrated. When you look at that list [published by the PPP unit showing PPP projects in process] you'll get the impression there's lots to do. But we get frustrated from the fact that these deals are not moving. But secondly as well we all get affected personally. Because it's the infrastructure that we have to live with. So we feel it. All of us. We feel it.

Flow of PPP projects

The British Columbia field has the highest annual dealflow, while the South African field shows a strikingly lower volume of annual deals, both in terms of the average number and value of projects. Normalizing the annual value in terms of total public infrastructure investment and GDP further supports this finding. Clearly PPPs play by far the most significant role in infrastructure delivery in British Columbia, while being much less consequential in South Africa.

Figure 6 below shows the annual dealflow in capital value for each of the three cases since inception. I have attributed the full capital value of each project to the year of Financial Close. This is not in line with the actual flow of expenditure on PPP projects (most projects have a construction timeframe of between 2 and 5 years); rather, it attempts to capture the industry view of PPP deal flow.

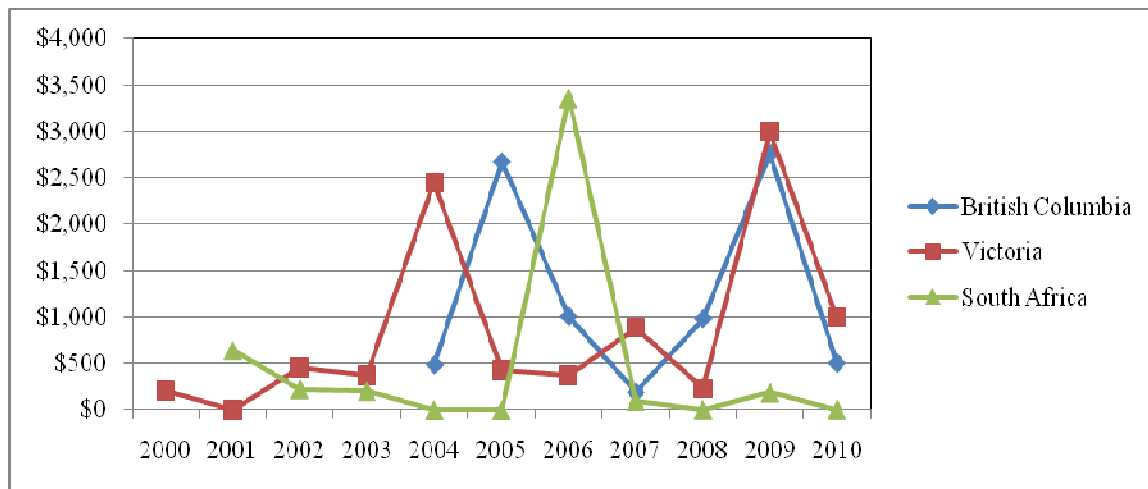


Figure 6 - Annual PPP deal flow (\$ mil)

The graph reveals “lumpy” dealflow in all three of our cases. This “lumpiness” is a consequence of both the small number of projects delivered in each region, and the dominance of a small number of large deals in each region. The South African dealflow however is much more inconsistent than those of the other two cases, with the flow spiking noticeably in 2006. This

spike is due to the signing of the Gautrain PPP, a project which is an order of magnitude larger than any other PPP signed in South Africa. Large projects dominate the programs in each of our cases (see table 9) but this is by far the biggest issue in South Africa - the Gautrain project represents 70% of the value of all deals completed to date.

Table 9 - Dominance of two largest projects in total PPP deal flow value

Case	Total number of project to date	Total value of all projects to date	Value largest project	Largest project share of total value
British Columbia	19	\$8,620 million	\$2,374 million	28%
Victoria	22	\$9,396 million	\$2,790 million	30%
South Africa	16	\$4,732 million	\$3,299 million	70%

Figure 7 shows the annual dealflow in terms of number of projects. This figure again highlights the sporadic nature of the South African field (surprisingly no projects were signed in either 2004 or 2005). I conclude that the South African deal flow is the least consistent of my three cases. I lastly note that none of the fields show growth of the program over time, in terms of either value or number of projects completed annually.

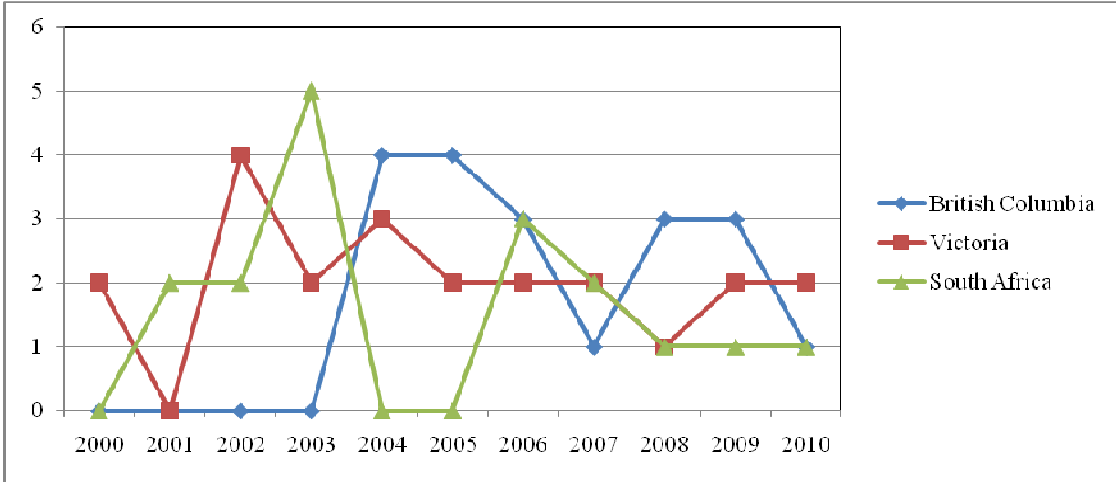


Figure 7 - Annual PPP deal flow (number of deals signed)

Acceptance and legitimacy of PPPs

My assessment of the acceptance and legitimacy of PPPs in each of the regions is based on two sets of data. Firstly, the data presented under heading 4 in table 8 show the number of line departments that have registered projects in each field, and the number of sectors impacted to date. In terms of both these measures PPPs appear to be most widely accepted in Victoria. This is

followed by the South African field, with the British Columbia field having the “narrowest” impact: only 4 state level departments have undertaken projects in only four sectors to date.

My second data source is the results of the newspaper article survey, presented in table 10 below.

Table 10 - Results of newspaper article review

Field	British Columbia			Victoria			South Africa		
	<i>-1</i>	<i>0</i>	<i>1</i>	<i>-1</i>	<i>0</i>	<i>1</i>	<i>-1</i>	<i>0</i>	<i>1</i>
<i>Affect level</i>									
All events (number)	212	459	298	236	396	297	74	428	465
All events (percentage)	22%	47%	31%	25%	43%	32%	8%	44%	48%
Average	0.089			0.066			0.404		
Governmental actors	28	74	150	25	58	156	21	111	194
Political Leader	0	5	26	0	22	61	1	6	10
PPP Unit	0	1	9	0	0	0	0	4	11
Ministers	3	31	35	4	5	40	7	13	57
Local government	23	12	38	1	3	12	1	15	16
Auditor General	0	0	0	0	2	1	0	0	0
Incumbent political party	1	0	4	6	3	9	5	1	3
Opposition political parties	29	0	0	21	8	12	1	0	21
Civic actors (incl reporters)	182	367	94	200	309	78	49	244	107
Reporters	50	344	46	121	273	18	21	223	58
Editorials	71	83	76	104	86	58	3	11	27
Labor unions	50	1	0	7	2	13	10	2	1
Private sector	2	17	54	8	29	63	3	72	144
Advocacy organizations	0	0	4	0	0	4	0	1	10

From this data I draw the following conclusions:

- *All events*: The results for Victoria and British Columbia are very similar, showing a balanced mix of positive, neutral and negative comments. The South African results are surprisingly more positive. I propose two possible explanations for this: (i) There is some inherent difference in the way that public debate is carried out in the South

African media; or (ii) the more limited implementation (as shown above) of PPPs has led to both a significant aspiration on the part of local proponents, and a lower level of vocal criticism from local PPP opponents. I suggest that the answer is a combination of these two factors.

- *Political Leader and Ministers:* The findings suggest very strong leadership in the Victoria and British Columbia fields, while indicating a distinct lack of political leadership at the highest level in South Africa. There does however seem to be comparable support at the ministerial level in the three cases.
- *PPP unit:* Partnerships BC and the South African PPP unit have both used the media to promote the use of PPPs. It is surprising that Partnerships Victoria have not done this at all.
- *Local government:* The findings suggest both a higher salience of PPPs at a local government level, and moderate opposition in this regard in British Columbia. The other two cases had a small number of generally positive statements by local government representatives.
- *Auditor General:* The results suggest that the Auditor General has only entered the public debate on PPPs in Victoria, as I did not observe references by the Auditor Generals in either of the other two cases.
- *Incumbent political party:* The results suggest some debate over the merit of PPPs within the ruling parties in both Victoria and SA. The Liberal party in British Columbia seems to be much more unified in their acceptance and support of the PPP model. This is not surprising given the more left-leaning, pro-large government, parties in power in both South Africa and Victoria.
- *Opposition political parties:* The political debate in British Columbia is clearly the most polarized of the three cases. This is understandable as the main opposition to the right-leaning incumbent Liberals being the leftist NDP. Part of this divide has resulted from the unapologetic stance that the incumbent government has taken to labor concerns in the implementation of the PPP program. There is some detraction by the political opposition in Victoria, but most of the opposition parties in South Africa seem to favor a stronger adoption of the PPP model.
- *Civic actors, reporters and editorials:* Civic actors account for the majority of the negative comments about PPPs in all three our cases. This includes actors such as academics, non-governmental organizations, citizen groups, newspaper columnists, and labor unions. Newspaper reporters and columnists made the most negative comments in

Victoria, dominated by one specific columnist, Kenneth Davidson, who wrote close to 50 percent of the negative editorials about PPPs in this region.

- *Labor unions*: The results suggest that labor union opposition to the use of PPPs is by far the strongest in British Columbia, with some opposition also noted in South Africa. Again the unapologetic stance taken by the Liberals goes a long way to explaining this in British Columbia. In contrast the Unions appear to be much more supportive in Victoria, probably due to the pro-union approach that the Bracks government has taken (see Chapter 4 of this volume), and the historic connection between labor pension funds and infrastructure investments.
- *Private sector*: The findings show unsurprising support from private sector actors in all three cases. A large number of private actors (mostly from the financial, consulting and construction industries) promoted the use of PPPs in the media in all three cases.
- *Advocacy orgs*: As expected, PPP advocacy organizations also made supportive comments about PPPs in all three of my cases.

Opinion of central field actors

My program development task survey recorded the extent to which, in the opinion of a number of central (and highly informed) field actors, tasks that are needed to successfully develop a PPP program have been fulfilled in each region. To this end it represents an important measure of the success of each of my case fields. The results of the survey are included in Appendix C.

The results show the highest satisfaction level by my informants in Victoria, followed by British Columbia, with South Africa coming in last. As mentioned I controlled for the fact that some tasks might not be relevant for some of the reasons, by asking informants to also rank the importance of each task. This control variable did not reveal tasks that should be excluded from the list⁵⁵. This suggests that, in the opinion of the most informed field actors, the Victorian field has been most successful in fulfilling the actions needed to make a program successful.

Summary of findings

The findings are summarized in table 11 below.

⁵⁵ Responses on the importance of each of the rated actions to overall program success did not reveal a task rated lower than 2 (“somewhat important”) in any one field, not task with an average (between the three fields) under 2.5, and only 5 of the 64 tasks obtaining an average rating under 3 (“important”). The average rating for all 64 tasks was a high 3.45.

Table 11 - Summary of findings

No	Direct measure	British Columbia	Victoria	South Africa
1	Competitive market	Insufficient data to reach a comparative conclusion. All three fields average close to the desired 3 bidders per project.		
2	Program efficiency	Similar timeframes to that recorded in Victoria.	Similar timeframes to that recorded in British Columbia. Some respondents have commented positively on fast decision making and development process.	Much slower development and procurement processes, and inefficiency confirmed by frustrated interviewee comments.
3	A growing but well-controlled flow of PPP projects	Highest annual dealflow of our three cases, with PPPs playing a very important role in total public infrastructure delivery. Slightly more inconsistent annual dealflow than that of Victoria, with possible indication of contraction over time.	Slightly lower annual dealflow than that of British Columbia, with PPPs forming a much smaller part of total public infrastructure delivery. Most consistent annual dealflow of the three cases, but no indication of growth over time.	Much lower annual dealflow, with PPPs playing only a small part of total public infrastructure delivery. By far the most inconsistent dealflow of the three cases, with some year without any projects, and dominance of one very big project.
4	Acceptance and legitimacy of the PPP model	<p>“Narrowest” impact of PPP delivery of the three cases, with only 4 sectors impacted to date.</p> <p>Media statements are on balance more positive than negative, but indicate ongoing public debate over efficacy of PPPs. Clear indication of strong political leadership, and promotion by PPP unit. Debate is very polarized around incumbent and opposition parties, with strong opposition from labor. Significant criticism at local government level.</p>	<p>Widest “acceptance” and implementation of the model of our three cases, with 9 sectors impacted.</p> <p>Distribution of affect levels similar to British Columbia, being positive on balance. Large number of negative statements do indicate ongoing public debate, but much less polarized along party lines. Very strong political leadership. Surprising that PPP unit made no statements. Unions not as opposed, with criticism from a number of key civic actors. Only case where Auditor General has entered debate.</p>	<p>Slightly wider acceptance and implementation of model than in British Columbia, but much less than Victoria.</p> <p>Overall comments are surprisingly positive. There appears to be a lack of political leadership (at the highest level) although some ministers make statements in favor. PPP unit has been strong proponent in the media (strongest of the 3 cases). Incumbent political party is much less supportive than political opposition parties. Strong opposition from labor unions, but very supportive (and vocal) private sector.</p>
5	Opinion of central field actors	Central field actors are slightly less satisfied than the Victoria respondents with the extent to which all the required PPP program development tasks have been completed.	Central field actors are very satisfied (highest of three cases) with the extent to which key program development tasks have been fulfilled. Suggests a very thorough and well thought out institutional model.	Central field actors are least satisfied of the three cases by the extent to which all the needed program development tasks have been completed.

IMPLICATIONS FOR PPP FIELD CONFIGURATIONS

The purpose of this chapter is to comment on the impact that different field characteristics exert on the success of PPP programs. Drawing this linkage is however a perilous exercise. A large number of factors, external to the PPP enabling field, have a bearing on the extent to which the field is able to deliver a successful program. I have endeavored to control for this to some extent by choosing cases that have comparable institutional contexts. Still, I note here that there are external factors that have not been controlled for, specifically differences in the historic notions of public versus private initiative, bureaucratic traditions, and local infrastructure needs. Any tentative implications that I draw from the data presented above are presented in the light of these obvious limitations.

Still, I propose six tentative propositions on the linkages between PPP enabling field characteristics and PPP program outcomes.

***Proposition 1:** A PPP unit that drives project delivery will lead to a more efficient project development and delivery process.*

Support for this proposition is drawn from the fact that project development and delivery timeframes are the shortest in British Columbia. This finding might be expected intuitively, since the key strength of a centralized delivery approach is that it is not encumbered by the demands of a diverse group of departmental stakeholders.

***Proposition 2:** A PPP unit that drives delivery (in the presence of strong political leadership) will lead to higher proportional dealflow.*

Again the British Columbia case, where Partnerships BC drives project delivery, is used as empirical support. This also makes intuitive sense, as a strong push for projects will more rapidly lead to a high dealflow of PPPs, than if dealflow is dependent on an emergent pull from sponsoring departments. Some commentators have proposed that this might lead to an excessive number of deals.

***Proposition 3:** A PPP unit that drives delivery will struggle to have a wide impact with broad acceptance among different governmental departments.*

As before the case of British Columbia is used as support. There are two possible reasons for this more “narrow” impact. First, the drawback of centralization is that it might lead to a lack of buy-in from sponsoring departments who are forced to submit to the leadership of the centralized governmental actor (in this case the PPP unit). Second, a centralized delivery agent taking on a large portion of project development will only be able to develop deep expertise in a limited number of sectors.

***Proposition 4:** There is a positive association between a lack of political leadership and inefficient project development and delivery.*

Here the cumbersome development process of the South African market is used as empirical support. A large number of my South African informants commented on the time it took to get project documents and funding commitments approved by decision makers. I hypothesize that high level political support for the PPP program would have (at least to some extent) overcome these bureaucratic barriers, leading to an increase in the dealflow and efficiency of the delivery process (not necessarily to the levels observed in British Columbia or Victoria).

***Proposition 5:** Implementation of PPPs by a right-leaning government will lead to greater political polarization of the PPP debate.*

This is illustrated by contrasting our three cases: British Columbia has a right-leaning government, while the Victorian and South African are arguably more left-leaning. At their core, PPPs are founded on a belief in the superiority of private incentive over governmental action. Implementation by right leaning governments will therefore naturally lead to polarizing of the debate on PPPs. Where left leaning governments have constructed or reconstructed the PPP enabling field (in South African and Victoria) the program benefits from a decline in political rhetoric. The discussion in Chapter 4 of this volume provides further historic details for how the debate became so polarized in British Columbia.

***Proposition 6:** A PPP field that has gone through a major restructuring by different political regimes can lead to a more robust institutional model.*

The Victorian case illustrates the extent to which a major restructuring of the PPP field can lead to a much more robust institutional model. That is not to say that this happens automatically. But

my Victorian informants were clearly more satisfied by the way that the model had been implemented than was the case in either British Columbia or South Africa.

CONCLUSION

This chapter has explored the comparative extent to which the PPP enabling fields in British Columbia, Victoria, and South Africa have been able to deliver successful PPP programs or portfolios. To this end I formulated five broad measures of program success and then conceptualized a number of empirical metrics to assess the extent to which each of these measures had been achieved. This was drawn from PPP project data, informant interviews, a review of statements relating to PPPs in local newspapers, and a survey on the extent to which a number of PPP program development tasks had been achieved.

The results showed varying levels of success in the three cases in terms of each of the five measures. Rather than comment on an overall level of success, I used the findings to develop six tentative propositions on the impact of PPP enabling field characteristics on program level outcomes.

This paper represents an initial step in linking field characteristics to program outcomes. More work is needed to develop a more robust conception of success, specifically including the stated aims of each of the programs, and assessing in more detail the impact on infrastructure delivery in general⁵⁶. In addition, it would be helpful to assess the impact on program outcomes over a longer time period than is currently available. Lastly, I note that my work does not consider the wider impact of the creation of a PPP program on the traditional public sector infrastructure delivery process. Some of my informants suggested impacts on the approach to facility planning and asset management, but my work did not explicitly consider this aspect.

⁵⁶ This would firstly include measures of the impact on total infrastructure delivery, but it would also be to investigate the extent to which the use of PPPs, by introducing competition for public works delivery and bringing in global best practices for, e.g., construction and operation, has changed public sector behavior beyond PPPs – specifically in terms of planning rigor and development coordination.

CHAPTER 6 – CONCLUSION

This concluding chapter summarizes the contributions of the four different perspectives employed. In addition, I recognize the limitations of the current work and suggest avenues of research to be explored in future.

CONTRIBUTIONS

This exploratory study investigates the previously under-explored concept of a PPP-enabling field. It does so by harnessing four distinct perspectives that, together, paint a portrait of this novel concept. In addition, these perspectives contribute to our understanding of PPP governance, infrastructure policy, and public sector capacity. I discuss the contributions that emanate from each perspective in turn.

Perspective 1: PPP enabling organizations

The first perspective investigates my concept of the “PPP-enabling field” from a high level. The focus here is on breadth rather than depth, in an attempt to lay the groundwork for more detailed investigations that follow in the three other perspectives. This perspective is presented in Chapter 2 of this dissertation, and it elaborates the observed problem by reviewing and building on previous work on infrastructure PPPs. I first collate work on various challenges facing private participation in infrastructure (Bovaird, 2004; Goldberg, 1976; Kumaraswamy & Zhang, 2001; Mody, 1996; Ramamurti and Doh, 2004; Savas, 2000; Woodhouse, 2005) to identify four broad PPP challenges: (1) market failures; (2) agency failures; (3) perceived legitimacy issues; and (4)

government opportunism. Second, I review work that recognizes the central role that governments need to fulfill in order to overcome these challenges (Estache & Serebrisky, 2004; Harris, 2003; Van Slyke, 2003), and the fact that this role is different to the role that governments take under traditional procurement (Dutz, et al., 2006).

My work departs from existing PPP literature in recognizing that these “enabling” responsibilities are not restricted to a single governmental body—nor even to public agents alone— but rather are shared between networks of public and non-public organizations. These “PPP enabling organizations” include: *Sponsoring Departments, PPP Units, Transaction Advisors, Transaction Auditors, Public Regulators, Non-public regulators, Advocacy Associations, and Local, Regional and Multinational Development Agencies*. This recognition mirrors developments in the public administration literature that call for “bringing the state back in” (Evans, Rueschemeyer, and Skocpol, 1985) and the move from New Public Management to “New Governance” (Rhodes, 1996; Salamon, 2002)⁵⁷. I introduce the concept of organizational fields (DiMaggio, 1991; Scott and Meyer, 1991; Scott et al., 2000) as a theoretical lens to help me investigate these combinations of organizations in a comparative way. Specifically I argue that these organizations need to be combined in varying constellations of field configurations to overcome the challenges that infrastructure PPPs face.

I further attempt to make preliminary sense of the global variety of present-day PPP-enabling field compositions and configurations, drawing on previous work by Scott and others (Scott & Meyer, 1991; Scott, Ruef, Mendel, & Caronna, 2000; Wooten and Hoffman, 2008) on organizational field characteristics. The investigation entailed a desktop review of a small number of diverse contemporary cases of enabling-fields. I drew predominantly from previous literature (academic articles, project reports, and on-line sources) and a small number of telephonic interviews with representatives in these regions. From this I built up high-level descriptions of the field structures of our diverse cases. This high-level comparison was extended as I compared across cases to identified five dimensions that can be used to distinguish field-level differences between cases. The five dimensions include: how centralized the field governance is, how consistent its application across different infrastructure sectors in the region is, the extent to which private enablers are used in the field, the role (or lack thereof) of Multinational Development Agencies, and lastly, the types of logics that dominate field action.

⁵⁷ A variety of terms have been used for this second stream of reform, including “governance” (Stoker, 1998), “Intergovernmental Management” (Rhodes, 1996), and more recently “New Public Governance” (Osborne, 2006). I stick with the term introduced by Salamon (2002) as it stresses the two parts of the follow up movement that I believe are significant: (i) “new” indicates the substantial departure from the foundations of NPM, and (ii) “governance” underlines the move of the focus from narrow “management” to wider “governance.”

The paper extends previous work on infrastructure PPPs in a number of ways. First, it clarifies the challenges that PPPs face by proposing four main obstacles to PPP success. In addition, it extends the recognition of the need for new types of capacity to set up and govern PPPs by showing that project enablement is the work of a network of actors. This capacity therefore needs to be created at the field level. In this way I move beyond the simple public/private dichotomy that still characterizes much of the PPP literature.

My work in this first perspective also contributes to other literatures, by supporting the “new governance” trend in new public management, and applying the concept of organization fields from institutional theory to the organizations that set up and govern PPPs of behalf of governments.

Perspective 2: Field details

From the high-level concept of the “PPP-enabling field” in the first perspective, I deepen the discussion in Perspective 2 by looking at three leading PPP-enabling fields in a comparative manner. This analysis is included in Chapter 3 of the dissertation. I selected three cases (British Columbia, Victoria, and South Africa) with largely analogous British Commonwealth institutional contexts, in an attempt to control for external variance in the cases in order to be able to theorize more clearly about the reasons for, and implications of, field differences.

Because my study represents a first investigation of the fields of PPP enabling organizations, this second perspective took on an exploratory nature. I conducted semi-structured interviews with 50 leading field actors in the three regions in an attempt to lay out the details of typical enabling fields. My investigation was structured according to the five salient *components* that have been proposed to undergird organizational fields: *actors*, including both types of roles for individuals and types of organizations, *logics*, *governance arrangements*, *intermediaries*, and *local sense-making activities* (Scott et al., 2000; Hoffmann and Ventresca, 2002).

The anticipated restricted variance in my observations (due to the case selection) materialized in terms of actor types. However, I detected surprising variation in the characteristics of these actors, especially in terms of the roles they play at both a project and program level. I show how this variation is closely related to the role that the PPP unit takes in each field. In addition I highlighted that, even within each field, the actors are arranged in varying combinations on different projects. My cross-case comparison was useful here to show that these combinations are at least somewhat consistent across different fields, and that their emergent configuration flows from four characteristics that relate to the experience of the sponsoring department, the role of the PPP unit, and the complexity of the project funding stream.

I also present an initial discussion on the typical field logics that guide actions in these PPP-enabling fields. Although PPP-enabling fields bring together actors around a shared logic of “market efficiency,” the divergent nature of the organizations involved lead me also to observe logics that conflict with one other. Finally, this study identified three main actor groups that play a helpful intermediary role, both between field actors and with actors outside the field: PPP units, financial advisors, and advocacy organizations.

My second perspective extends the existing literature in a number of ways. First, the findings serve to highlight the complexity of initiating PPPs in a region. As with Perspective 1, I reiterate that the simple construction of one governmental body to oversee and execute PPP projects is clearly insufficient to ensure the success of a wide range of PPP projects in a region. Rather, PPPs require a combination of public, private and non-profit organizations that bring diverse capacities to overcome the new and different demands of these projects on governments. In this second perspective I also highlight that these organizations require institutional flexibility to accommodate the varying demands of different projects, and to absorb the forces applied by existing institutional contexts. My typology of PPP project governance arrangements also contributes to a more complete understanding of PPP governance. Moreover, the results contribute to the literature on organization fields, by stressing the varying roles and responsibilities that field actors take in different contexts (projects in our case). In this way it suggests the possible merit of separating out the *roles* that organizations take in the field from *actors*, thereby constituting a sixth field component. Showing the need for this additional component represents a theoretical contribution to the concept of organizational fields.

Perspective 3: Field formation and change

The third perspective in this dissertation (Chapter 4) emerged in response to the diversity in field actor characteristics that I observed in the three cases. I was specifically interested in the reasons for the differences I observed among the PPP units in my cases, as my second perspective found this to be so foundational to the appearance (and function) of surrounding field actors. I believed that examining the historical trajectories of how these fields were constructed might shed light in this regard.

The paper proceeded from a number of theoretical points of departure. I drew from work on institutional change and structuration (Campbell 2004; Giddens, 1979, 1984; Scott 1995, 2008)—specifically, theory on the mechanisms that induce change, such as imprinting (Stinchcombe, 1965), diffusion (Scott 2003), translation (Czarniawska and Joerges 1996; Strang and Meyer 1993), and bricolage (Douglas 1986; Campbell 2004). In addition, I reviewed selected

theories on policy change that included the useful concept of a policy window (Kingdon, 1984; Keeler, 1993), and the distinction between rationalizing and breakthrough policies (Brown, 1983). My analysis was based on semi-structured interviews with leading actors in each of the regions and on archival materials, including histories.

The discussion on perspective 3 starts by recognizing the overarching diffusion processes that lead to the emergence of PPP-enabling fields in my three cases. Here the influence of the pre-eminent PPP program, the UK's PFI is acknowledged. Thereafter I review the ways that these diffused practices were adapted to suit local conditions, through processes of translation and bricolage. My three cases entailed quite different development trajectories. Both the Victoria and BC cases entailed the centrally coordinated and purposeful construction of a PPP-enabling field. In the Victoria, Australia, case this involved a substantial revision, as the field was adapted in response to local criticism of the initial field incarnation. The South African PPP field construction followed a much more evolutionary path, with various streams progressing in parallel at times, before merging later.

There are a number of claimed contributions from this study. First, I underline the need for greater attention to developments at the PPP field level as a driver for PPP project outcomes. This responds to a general need in the existing PPP literature to move the focus to this higher aggregated level (see Rachwalski and Ross, 2010). In addition, it contributes to the existing work at this aggregate level (Aziz, 2007; Clark and Root, 1999; Flinders, 2005; Garvin and Bosso, 2008; Greenaway et al., 2004; Kumaraswamy and Zhang, 2001; UNECE, 2007), by introducing the concept of an institutional field as a more descriptive and insightful characterization than viewing such important changes in public vs. private roles in such a contentious area as a "program."

As a second contribution, I draw attention to the need for a context-specific approach to explain and predict PPP field development. This responds to the normative approach that characterizes much of the PPP literature, which creates, in effect, a "one size fits all" view of PPP fields. In this third perspective I show that fields do not progress towards this isomorphic conclusion; rather, they are shaped by the institutional and political contexts in which they are constructed, and bear the markings of the political actors that take a hand in their crafting.

Thirdly, I develop arguments relating to institutional systems and processes that can guide future studies of these and similar fields. My study also represents a novel application of selected concepts of policy change to the area on PPP field formation.

As a final contribution, this third perspective provides early evidence of the ways that PPP-enabling fields evolve over time. The cases highlight both the path-dependent, evolutionary

nature of change in existing programs, while recognizing the possibility of significant, deliberate reform in response to perceived limitations of existing structures.

Perspective 4: Outcomes

I present my fourth and final perspective in Chapter 5. Here I consider what the implications of field structure might be on outcomes at a collective level. Specifically I explore the comparative extent to which “success” has been achieved in my three case PPP fields.

To do so, I started by reviewing previous work on PPP “success.” I found ample work at the project level, but a relative dearth at the collective program or field level. Nevertheless, the literature that deals with PPP programs provided a foundation for thinking about “success” in this regard. In most of this literature the focus is predominantly on the tasks that lead to success. From the review I, therefore, first develop a collated list of tasks that are needed to ensure program success, and thereafter infer five broad measures of success. These are: A competitive PPP market, an efficient project development process; a growing, but well-controlled, flow of PPP projects; broad political acceptance and legitimacy of the PPP model; and a positive assessment of field success by central field actors.

I conceptualized a number of empirical metrics to assess the extent to which each of these measures had been achieved in my three cases. Data for these metrics were drawn from a number of complimentary data sources. This included PPP project data (sourced from informants and project publications), informant interviews, a review of statements relating to PPPs in local newspapers, and a survey of the extent to which a number of PPP program development tasks had been achieved in each region.

The results showed varying levels of success in the three cases in terms of each of the five “success” measures. Rather than comment on an overall level of success, I used the findings to develop six tentative propositions on the impact of PPP enabling field characteristics on program level outcomes.

This analysis of outcomes makes a number of contributions. First, it rounds off my investigation of the concept of a PPP-enabling field concept by appraising the implications of field differences on some key outcome metrics. In this way it shows that field structure matters beyond purely functional implications. At a more basic level, this fourth perspective also contributes to the literature by presenting ideas on what PPP program success entails, and how it can be measured.

DIRECTIONS FOR FUTURE RESEARCH

This dissertation reports on an exploratory study into the concept of the PPP-enabling field. As such it presents an initial step in exploring the organizational fields surrounding PPP enablement and has several limitations.

The foremost limitation of the study stems from the small number (and limited institutional variance) of the cases on which the majority of the study is based. The case selection for Perspectives 2, 3 and 4 was purposely restricted to the UK and Commonwealth countries with relatively similar legal and political frameworks, to enable clearer theorization about the extent and implications of field differences. Future research can address this limitation by including a more diverse and encompassing set of cases. This would help to validate and expand the descriptive review of field elements presented in perspective 2 (including dominant logics, archetypical actors, and typical governance arrangements). The historical accounts of field development presented in perspective 3 could also usefully be supplemented with examples of field structuration in more diverse institutional contexts. The propositions on field outcomes developed in perspective 4 could be further tested and refined with a larger number of cases.

I should also note that the study has focused only on sectors that remain under public responsibility. I allude to the fact that some infrastructure sectors (or parts thereof), for example electricity and telecommunications, have in some regions effectively been removed from public control through full privatization and deregulation (partial or full). The current study does not purport to explain the dynamics of these fully privatized sectors. This can be explored in future studies.

Perspective 1 presented an initial investigation of a more diverse set of field configurations in order to develop a field-level typology. Nonetheless, the paper does not purport to present the full spectrum of contemporary cases—only seven cases were investigated. The propositions presented are therefore again only an initial attempt at theorizing at a field level. Work that utilizes a larger sample would further validate (and supplement) these findings.

The work on field outcomes in Perspective 4 would also benefit from additional research. Considerable effort will be required to develop a more robust conception of success, specifically including the stated aims of each of the programs, and assessing in more detail their impact on the region's overall infrastructure service levels, cost, quality, durability and sustainability, including projects delivered through conventional and PPP modes. In addition, it would be helpful to assess the impact on program outcomes over a longer time period than is currently available. It would be especially useful to re-assess field trajectories after another two or three election cycles. This

would help to validate the propositions developed from the Victoria case – the only case in my sample that has seen a change of government since the introduction of PPPs.

More work is also needed to investigate the extent to which the use of PPPs has changed public sector behavior beyond PPPs. It would be interesting to investigate how planning rigor, development coordination, and asset management under traditional infrastructure delivery has been impacted both by knowledge transfer, and by the requirement for traditional governance approaches and agents to compete with those involved in PPP delivery both for their effectiveness and for their political legitimacy. Although some of my informants suggested impacts in this regard, my work did not explicitly consider this aspect.

Another suggestion for future work is a closer investigation into the way that capacity is built in the early days of a PPP-enabling field. From my exploratory work I have developed some initial ideas: Governments need to “push through” a number of pilot projects to overcome early opposition (specifically within line departments) to a new approach, and to develop initial capacity within the field. Thereafter the success of early projects serves as a sort of “proof of concept.” This increased legitimacy and existing capacity helps to greatly reduce the transaction cost of follow up projects, thereby serving as a pull force to drive the PPP program along. I hope to pursue these initial ideas in a future publication.

As a final thought, my investigation revealed the mobility of capacity within the field. Specifically, there seems to be a trend of capacity moving from the public to the private sector as the field ages: I found a number of consultants who had previously been employed on the public side of the enabling field. It would be interesting to examine this trend, to see whether it stabilizes over time, or if it indeed leads to a “hollowing out” of the state, as has been proposed by scholars of public sector reform (Peters 1993; Milward and Provan, 2000; Rhodes and Rhodes, 2006).

REFERENCES

- Akintoye, A., Hardcastle, C., Beck, M., Chinyio, E., and Asenova, D., (2003) "Achieving best value in private finance initiative project procurement," *Construction Management and Economics*, 21(5), 461-470.
- Aldrich, H. E., (2005) "Entrepreneurship," In: N. J. Smelser & R. Swedberg (Eds.), *Handbook of Economic Sociology*, Princeton, NJ: Princeton University Press., 2nd ed., 451-477.
- Aldrich, H. E., (1999) *Organizations Evolving*, Thousand Oaks, California: Sage.
- Allen, G., (2001) "The Private Finance Initiative (PFI)," *House of Commons Library Research Paper*. London, UK: House of Commons Library - Economic Policy and Statistics Section, paper 01/117.
- ANC, (1994) *The Reconstruction and Development Programme: A Policy Framework*, Johannesburg, Umanyano.
- Andres, L., Gausch, J. L., Diop, M., & Azumendi, S. L. (2007). "Assessing the governance of electricity regulatory agencies in the Latin American and the Caribbean region: A benchmarking analysis," Washington, D.C.: World Bank.
- Aziz, A. M. A., (2007) "Successful delivery of public-private partnerships for infrastructure development," *Journal of Construction Engineering and Management*, 133, 918.
- Bahl, R., & Smoke, P., (2003) "Overview of fiscal decentralization in South Africa," in R. Bahl, and P. Smoke (eds.), *Restructuring Local Government Finance in Developing Countries: Lessons from South Africa*, Edward Elgar, 1-22.
- BAI. (2009). "The board of audit and inspection of the Republic of Korea," Retrieved 07-09-2009, from <http://park.org/Korea/BAI/home-e.html>
- Batley, R., & Larbi, G. A., (2004) *The Changing Role of Government: The Reform of Public Services in Developing Countries*: Palgrave Macmillan.
- Bazeley, P., & Richards, L., (2000) *The NVivo qualitative project book*: Sage.
- Bing, L., Akintoye, A., Edwards, P. J., & Hardcastle, C. (2005). The allocation of risk in PPP/PFI construction projects in the UK. *International Journal of Project Management*, 23(1), 25-35.
- Bovaird, T., (2004) "Public-private partnerships: from contested concepts to prevalent practice," *International Review of Administrative Sciences*, 70(2), 199.
- Broadbent, J., & Laughlin, R., (2003) "Public private partnerships: an introduction," *Accounting, Auditing & Accountability Journal*, 16(3), 332-341.

- Brown, L. D., (1983) *New Policies, New Politics: Government's Response To Government's Growth: A Staff Paper*: Brookings Institute Press.
- Building-Canada. (2009). "Public-private partnership fund," Retrieved 2 March 2008, from <http://www.buildingcanada-chantierscanada.gc.ca/funprog-progfin/target-viser/pppf-fppp/pppf-fppp-eng.html>
- Bult-Spiering, M., and Dewulf, G., (2006) *Strategic issues in public-private partnerships: An international perspective*, Blackwell Pub.
- Burger, P. (2006). *The Dedicated PPP Unit of the South African National Treasury*. South Africa: Department of Economics, University of the Free State.
- Campbell, J. L., (2004) *Institutional Change and Globalization*, Princeton University Press.
- Campbell, J. L., Hollingsworth J. R., & Lindberg L. N., ed. 1991. *Governance of the American Economy*. New York: Cambridge University Press.
- CCPPP. (2006). Responsible PPP Procurement for British Columbia. Available online at: <http://www.pppcouncil.ca/publications.asp>: The Canadian Council for Public-Private Partnerships.
- Chan, C., Forwood, D., Roper, H., & Sayers, C. (2009). "Public Infrastructure Financing: An International Perspective," *Productivity Commission Staff Working Papers*, Victoria, Australia: Commonwealth of Australia.
- Clark, G. L., & Root, A., (1999) "Infrastructure shortfall in the United Kingdom: the private finance initiative and government policy," *Political geography*, 18(3), 341-365.
- Cohn, D., (2008) "British Columbia's Capital Asset Management Framework: Moving from transactional to transformative leadership on public-private partnerships, or a "railroad job"?" *Canadian Public Administration*, 51(1), 71-97.
- Cuttaree, V., (2007) *International Experience in Establishing and Operating PPP Units*, Retrieved 17 May 2010, from <http://siteresources.worldbank.org/PPPILP/Resources/1-Vikram.pdf>
- Czarniawska, B., & Joerges, B., (1996) "Travels of Ideas," In B. Czarniawska & G. Sevón (Eds.), *Translating Organizational Change*, New York: Walter de Gruyter.
- David, P. A., (2001) "Path dependence, its critics and the quest for 'historical economics'," In P. Garrouste & S. Ioannides (Eds.), *Evolution and Path Dependence in Economic Ideas: Past and Present*, Cheltenham, England: Edward Elgar Publishing.
- Davies, P., & Eustice, K., (2005) *Delivering the PPP promise - A review of PPP issues and activity*, London, UK: PriceWaterhouseCoopers.

- Davis, J. (2005). "Private-sector participation in the water and sanitation sector," *Annual Review of Environment and Resources*, 30, 145-183.
- DiMaggio, P. J., (1988) "Interest and agency in institutional theory," In: *Institutional Patterns and Organizations*, L. G. Zucker (ed.), Cambridge, MA: Ballinger, 3-21.
- DiMaggio, P. J., (1991) "Constructing an organizational field as a professional project: US art museums, 1920-1940," in: *The New Institutionalism in Organizational Analysis*, W. W. Powell and P. J. DiMaggio, eds., University of Chicago Press, Chicago, 267-292.
- DiMaggio, P. J., & Powell, W. W., (1983) "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality," *American Sociological Review*, 48(2), 147-160.
- Djelic, M. L., & Sahlin-Andersson, K. (2006). *Transnational Governance: Institutional Dynamics of Regulation*. Cambridge University Press.
- Douglas, M., (1986) *How Institutions Think*, Syracuse: Syracuse University Press.
- Drori, G. S. (2006). "Governed by governance: The institutionalization of governance as a prism for organizational change," In G. S. Drori, J. W. Meyer, & H. Hwang (eds.), *Globalization and Organization: World Society and Organizational Change*. Oxford: Oxford University Press.
- Durchslag, S., Puri, T., and Rao, A. (1994). "The Promise of Infrastructure of Privatization." *The McKinsey Quarterly*(1).
- Dutz, M., Harris, C., Dhingra, I., & Shugart, C., (2006) "Public Private Partnership Units: What Are They and What Do They Do," *Public Policy for the Private Sector*, 311.
- Eberhard, A. (2007). "Infrastructure regulation in developing countries: an exploration of hybrid and transitional models," *African Forum of Utility Regulators 3rd Annual Conference*. Windhoek, Namibia.
- Eisenhardt, K. M., (1989) "Building theories from case study research," *Academy of management review*, (14(4)), 532-550.
- English, L., (2005) "Using Public-Private Partnerships to Deliver Social Infrastructure: The Australian Experience," In: G. Hodge, and Greve C., eds., *The Challenge of Public-Private Partnerships*, Cheltenham, UK: Edward Elgar, 290-304.
- English, L., (2006) "Public Private Partnerships in Australia: An overview of their nature, purpose, incidence and oversight," *UNSW Law Journal*, 29(3), 250-262.
- Estache, A. (2004). "Emerging infrastructure policy issues in developing countries: A survey of the recent economic literature," *World Bank Policy Research Working Paper No. 3442*.

- Estache, A., and Serebrisky, T. (2004). "Where do we stand on transport infrastructure Deregulation and public-private partnerships?," *Policy Research Working Paper Series no. 3356*. Washington, D.C.: World Bank.
- Evans, P., Rueschemeyer, D., and Skocpol, T., (1985). *Bringing the State Back In*. Cambridge: Cambridge University Press.
- Farrugia, C., Reynolds, T., & Orr, R. J., (2008) "Public-Private Partnership Coordination Agencies: A Global Perspective," *CRGP Working Paper*, Stanford: Collaboratory for Research on Global Projects.
- Flinders, M., (2005) "The politics of public-private partnerships," *British Journal of Politics & International Relations*, 7(2), 215-239.
- Friedland, R., and Alford, R. R., (1991) "Bringing Society Back In: Symbols, Practices, and Institutional Contradictions," In: *The New Institutionalism in Organizational Analysis*, W. W. Powell and P. J. DiMaggio, eds., University of Chicago Press, Chicago, 232-267.
- Garvin, M. J., (2007) "America's Infrastructure Strategy: Drawing on History to Guide the Future," *PPP White paper*, KPMG.
- Garvin, M. J., and Bosso, D., (2008) "Assessing the Effectiveness of Infrastructure Public-Private Partnership Programs and Projects," *Public Works Management & Policy*, 13(2), 162.
- Giddens, A., (1979) *Central Problems in Social Theory*. London: Macmillan.
- Giddens, A., (1984) *The Constitution of Society: Outline of the Theory of Structuration*: University of California Press.
- Gil, N., and Beckman, S., (2008) "Infrastructure meets business: Building New Bridges, Mending Old Ones," *California Management Review*, Winter.
- Glaser, B. G., & Strauss, A. L., (1967) *The discovery of grounded theory: Strategies for qualitative research*: Aldine Transaction.
- Ghobadian, A. , D. Gallear, N. O'Regan, and H. Viney. 2004. "PPP: The Instrument for Transforming the Public Services." In *Public Private Partnerships: Policy and Experience*, ed. A. Ghobadian, D. Gallear, N. O'Regan and H. Viney. New York: Palgrave Macmillan.
- GoC. (2009). Canada Gazette, Vol. 142, No. 26. (p. 1954). Government of Canada, Ottawa.
- Goldberg, C. V. P. (1976). "Regulation and Administered Contract," *Bell Journal of Economics*, 7 ((2) Autumn), 431.

- GoPRC. (1995). "Ministry of Foreign Trade and Economic Corporation's announcement on absorbing foreign investment in the form of BOT (in Chinese)," Beijing: Former Ministry of Foreign Trade and Economic Corporation of the People's Republic of China.
- GoPRC. (2004). "The State Council's decision on the investment system reform (in Chinese)," Beijing: The State Council of the People's Republic of China.
- GoPRC. (2005). "The State Council's views on encouraging, supporting and guiding individual, private and the other non-public sectors of the economy (in Chinese)." Beijing: The State Council of the People's Republic of China.
- Greenaway, J., Salter, B., & Hart, S., (2004) "The Evolution of a 'Meta-Policy': The Case of the Private Finance Initiative and the Health Sector," *British Journal of Politics & International Relations*, 6(4), 507-526.
- Grimsey, D., & Lewis, M. K. (2005). Are Public Private Partnerships value for money?: Evaluating alternative approaches and comparing academic and practitioner views. *Accounting Forum*, 29(4), 345-378.
- Guasch, J., Laffont, J., & Straub, S. (2002). "Renegotiation of concession contracts in Latin America," *USC Law School, Olin Research Paper No. 02-7 and World Bank Policy Research Working Paper No. 3011*.
- Hardy, C., & Maguire, S., (2008) "Institutional entrepreneurship," In: *The Sage Handbook of Organizational Institutionalism*, R. Greenwood, C. Oliver, R. Suddaby, and K. Sahlin-Andersson, eds., 198–217.
- Harris, C. (2003). *Private participation in infrastructure in developing countries: Trends, impacts, and policy lessons*, Washington, D.C.: World Bank.
- Heald, D., (2003) "Value for money tests and accounting treatment in PFI schemes," *Auditing & Accountability Journal*, 16(3), 342-371.
- Hellowell, M., & Pollock, A. M., (2010) "Do PPPs in Social Infrastructure Enhance the Public Interest? Evidence from England's National Health Service," *Australian Journal of Public Administration*, 69, 23-34.
- Henisz, W. J., Zelner, B. A., & Guillén, M. F., (2005) "The worldwide diffusion of market-oriented infrastructure reform, 1977-1999," *American Sociological Review*, 70(6), 871.
- Hlahla, M., (1999) "The municipal infrastructure investment unit: The government's PPP-enabling strategy," *Development Southern Africa*, 16(4), 565-583.
- HM Treasury, (1997) *Government publishes new ABC of PFI*, 21st January, mimeo.
- Hodge, G., and Greve, C., (2005) *The challenge of public-private partnerships: learning from international experience*, Edward Elgar.

- Hodge, G., & Greve, C., (2010) "Public-Private Partnerships: Governance Scheme of Language Game?," *Australian Journal of Public Administration*, 69(s1), 8-22.
- Hoffman, A. J., and Ventresca, M. J. (2002). "Introduction." In A. J. Hoffman & M. J. Ventresca (eds.), *Organizations, Policy, and the Natural Environment: Institutional and Strategic Perspectives*. Stanford, California: Stanford University Press.
- Hood, C., (1991) "A Public Management For All Seasons," *Public Administration*, 69(1), 3-19.
- Izaguirre, A. K. (2004). "Private Infrastructure: Activity Down by 13 Percent in 2003," *Public Policy for the Private Sector*, Washington, D.C.: World Bank, Note 274.
- Jefferies, M., Gameson, R., & Rowlinson, S. (2002). Critical success factors of the BOOT procurement system: reflections from the Stadium Australia case study. *Engineering Construction and Architectural Management*, 9(4), 352-361.
- Johnston, J., (2010) "Examining 'Tunnel Vision' in Australian PPPs: Rationales, Rhetoric, Risks and 'Rogues'," *Australian Journal of Public Administration*, 69(s1), 61-73.
- Kaul, M. (1997). "The new public administration: Management innovations in government," *Public Administration and Development*, 17(1): 13-26.
- Keeler, J. T. S., (1993) "Opening the Window for Reform: Mandates, Crises, and Extraordinary Policy-Making," *Comparative Political Studies*, 25(4), 433.
- Kim, J.-H. (2009). "Managing PPP in Korea through a think tank institution," *OECD Second Annual Meeting on Public Private Partnerships*, OECD Conference Center, Paris: OECD.
- Kingdon, J., (1984) *Agendas, alternatives and public choices*, Boston: Little, Brown.
- Klijn, E. H., and Teisman, G. R., (2000) "Governing public-private partnerships: Analysing and managing the processes and institutional characteristics of public-private partnerships," In: *Public-private partnerships: Theory and practice in international perspective*, S. P. Osborne, ed., Routledge, London, 84.
- Kumaraswamy, M. M., and Zhang, X. Q., (2001) "Governmental role in BOT-led infrastructure development," *International Journal of Project Management*, 19(4), 195-205.
- Kwak, Y. H., Chih, Y., and Ibbs, C. W., (2009) "Towards a Comprehensive Understanding of Public Private Partnerships for Infrastructure Development," *California Management Review*, Vol. 51(No. 2).
- Laffont, J.-J. (2005). *Regulation and Development*: Cambridge University Press.
- Levinsohn, D., & Reardon, D. (2007). "Municipal PPP project in South Africa: Obstacles and opportunities," *IP3's Public-Private Partnership Information Series*. Washington, D.C.: Institute for Public-Private Partnerships, Inc.

- Li, B., Akintoye, A., Edwards, P. J., and Hardcastle, C., (2005a) "The allocation of risk in PPP/PFI construction projects in the UK," *International Journal of Project Management*, 23(1), 25-35.
- Li, B., Akintoye, A., Edwards, P. J., and Hardcastle, C., (2005b) "Critical success factors for PPP/PFI projects in the UK construction industry," *Construction Management and Economics*, 23(5), 459-471.
- Lounsbury, M., Geraci, H., & Waismel-Manor, R. (2002). Policy discourse, logics and practice standards: Centralizing the solid waste management field. In A. J. Hoffman & M. J. Ventresca (Eds.), *Organizations, Policy and the Natural Environment*. Stanford, CA: Stanford University Press.
- Magugumela, D., (2005) "The local government perspective on PPPs," *IPFA Conference 2005*, Pretoria, South Africa.
- Maguire, G., & Malinovitch, A., (2004) "Development of PPPs in Victoria," *Australian Accounting Review*, 14(33), 27-33.
- Merrifield, A., Manchidi, T. E., & Allen, S., (2002) "The asset procurement and operating partnership system (APOPS) for prisons in South Africa," *International Journal of Project Management*, 20(8), 575-582.
- Meyer, J. W., & Rowan, B. (1977). "Institutionalized organizations: Formal structure as myth and ceremony," *American Journal of Sociology*, 83(2): 340.
- MIIU (2004) *MIIU strategy 2004/2006 – Proposal to the board of directors*, Municipal Infrastructure Investment Unit, Johannesburg, South Africa, Final Draft (6 February 2004).
- MIIU (2006) *A Journey of Partnership – Eight Years of Public-Private Partnerships in Local Government*, Municipal Infrastructure Investment Unit, Johannesburg, South Africa.
- Milke, M., (2001) *Barbarians in the garden city: the BC NDP in power*: Thomas & Black.
- Milmo, D., Inman, P., and Durrani, A. (2009). *A bridge too far for PFI schemes*. In: The Guardian, London, UK.
- Milward, H., & Provan, K. (2000). "Governing the Hollow State," *Journal of Public Administration Research & Theory*, 10(2), 359.
- Mody, A. (1996). *Infrastructure delivery: Private initiative and the public good*, World Bank Publications.
- MPV. (2009). *MPV Corporate Profile*. Retrieved 3 June 2010, from <http://www.majorprojects.vic.gov.au/>

- Nam, K. (2009). *The PFI Governance of Public Sectors in Korea*. Seoul, Korea: Ministry of Strategy & Finance.
- National Treasury, (2004) *PPP Manual Module 2: Code Of Good Practice for BEE In PPPs*, available online at <http://www.ppp.gov.za/>
- National Treasury, (2006) *PPP Quarterly*, Issue Number 22, March 2006, available online at <http://www.ppp.gov.za/>
- Ng, C., & Ryan, C. (2001). The practice of probity audits in one Australian jurisdiction. *Managerial Auditing Journal*, 16(2), 69-75.
- Niksic, G., (2004) "Difficult but not impossible; The ANC's Decentralization Strategy in South Africa," *Development and Change*, 35(2): 353–374.
- Nisar, T. M., (2007) "Value for money drivers in public private partnership schemes," *International Journal of Public Sector Management*, 20(2), 147-156.
- OECD. (2008). *Public-Private Partnerships: In Pursuit of Risk Sharing and Value for Money*: OECD Publishing.
- Osborne, S. P. (2006). "The New Public Governance?" *Public Management Review*, 8(3), 377-387.
- Osborne, D., & Gaebler, T., (1992) *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*: Addison-Wesley.
- Parker, D., (2009) "Editorial: PPP/PFI – Solution or Problem?" *Economic Affairs*, 29(1), 2-6.
- Parkinson, T., (2000) *Jeff: The Rise and Fall of a Political Phenomenon*: Ringwood: Viking.
- Peters, B. G. (1993), "Managing the Hollow State," in Eliassen, K. and J. Kooiman (Eds.), *Managing Public Organisations: Lessons for Contemporary European Experience*, London: Sage, 2nd edition.
- Peters, B. G., & Pierre, J. (2002). "Governance without government? Rethinking public administration," *Journal of Public Administration Research and Theory*, 8(2): 223-243.
- Petersen, O. H. (2010, forthcoming). Emerging meta-governance as a regulation framework for public-private partnerships: An examination of the European Union's approach. *International Public Management Review*, 11(3).
- Pongsiri, N. (2002). "Regulation and public-private partnerships." *International Journal of Public Sector Management*, 15(6), 487-495.
- PPIAF, (2007) *Public-Private Partnership Units: Lessons for their Design and Use in Infrastructure*, Washington, D.C., U.S.A.: Public-Private Infrastructure Advisory Facility.

- Pretorius, F., McInnes, A., Chung-Hsu, B. F., Lejot, P., and Arner, D., (2008) *Project finance for construction & infrastructure: principles & case studies*, Wiley-Blackwell.
- PUK. (2010). Partnerships UK Project Database. Retrieved 14 May 2010, from <http://www.partnershipsuk.org.uk/PUK-Projects-Database.aspx>
- Rachwalski, M. D., & Ross, T. W., (2010) "Running a Government's P3 Program: Special Purpose Agency or Line Departments?" *Journal of Comparative Policy Analysis: Research and Practice*, 12(3), 275-298.
- Ramamurti, R., & Doh, J. P. (2004). "Rethinking foreign infrastructure investment in developing countries," *Journal of World Business*, 39(2): 151-167.
- Rhodes, R. A. W., (1996) "The New Governance: Governing without Government," *Political Studies*, 44(4), 652-667.
- Rhodes, R.A.W., and Rhodes, R. A. W. (1994). "The hollowing out of the state: The changing nature of the public service in Britain." *Political Quarterly*, 65, no. 2: 138.
- Salamon, L. M. (2002). *The Tools of Government: A Guide to the New Governance*: Oxford University Press.
- Savas, E., (2000) *Privatization and Public-Private Partnerships*, Chatham House, Chatham, NJ.
- Schumpeter, J. A., (1961) *The Theory of Economic Development*. New York: Oxford University Press.
- Scott, W. R., (1995) *Institutions and Organizations: Theory and Research*, Sage Publications.
- Scott, W. R., (2003) "Institutional carriers: reviewing modes of transporting ideas over time and space and considering their consequences," *Industrial and Corporate Change*, 12(4), 879.
- Scott, W. R., (2008) *Institutions and Organizations: Ideas and Interests*, Sage Publications.
- Scott, W. R., Levitt, R. E., & Orr, R. J. (2008). "Infrastructure construction projects in transnational contexts." *SCANCOR 20th Anniversary Conference*. Stanford University.
- Scott, W. R., & Meyer, J. W. (1983). "The organization of societal sectors." In J. W. Meyer and W. R. Scott (eds.), *Organizational Environments: Ritual and Rationality* (pp. 129-154). Beverly Hills, CA: Sage.
- Scott, W. R., and Meyer, J. W., (1991) "The Organization of Societal Sectors: Propositions and Early Evidence," In: *The New Institutionalism in Organizational Analysis*, W. W. Powell and P. J. DiMaggio, eds., University of Chicago Press, Chicago, 108-140.
- Scott, W. R., Ruef, M., Mendel, P. J., and Caronna, C. A., (2000) *Institutional change and healthcare organizations: From professional dominance to managed care*, University of Chicago Press, Chicago.

- Smith, L., (2008) "Power and the hierarchy of knowledge: A review of a decade of the World Bank's relationship with South Africa," *Geoforum*, 39(1), 236-251.
- Stewart, G. L., (2008) *Repositioning BC ferries: from Crown corporation to administrative hybrid*, University of British Columbia, Vancouver, BC.
- Stinchcombe, A. L., (1965) "Social structure and organizations," In J. G. March (Ed.), *Handbook of Organizations* (pp. 142-193). Chicago: Rand McNally.
- Stoker, G. (1998). "Governance as theory: five propositions," *International Social Science Journal*, 50(155), 17-28.
- Strang, D., & Meyer, J. W., (1993) "Institutional Conditions for Diffusion," *Theory and Society*, 22(4), 487-511.
- Tangri, R., and Southall, R., (2008) "The Politics of Black Economic Empowerment in South Africa," *Journal of Southern Africa Studies*, 34(3): 699-716
- Taylor, J. E., Dossick, C. S., & Garvin, M. J., (2009) "Constructing Research with Case Studies," *The 2009 Construction Research Congress: Building a Sustainable Future*, Seattle, WA.
- Treasury, S. (2004). *Public Private Partnership Manual*. Pretoria, South Africa: South African National Treasury.
- Trémolet, S. (2007). "Outsourcing regulation: When does It make sense and how do we best manage it?," *PPIAF Working Paper No. 5*. Washington, D.C.: World Bank.
- UNECE, (2007) "Guidebook on promoting good governance for Public-Private Partnerships," United Nations Economic Commission for Europe, New York.
- Van Slyke, D. M. (2003). "The mythology of privatization in contracting for social services," *Public Administration Review*, 63(3): 296-315.
- Viljoen, P. (2006). "Development Bank of Southern Africa: Regional integration through infrastructure development," *Third Regional Consultation on "Rethinking the Role of National Development Banks in Africa"*. Johannesburg, South Africa.
- Vogel, B., Kerans, R., & Casson, B. (2008). *Fairness Monitoring*. Available online at <http://www.kerans.ca/fairness/monitoring.pdf>; Accessed on 16 March 2010.
- Weick, K. E. (1995). *Sensemaking in Organizations*. Thousand Oaks, CA: Sage.
- Weick, K.E., Sutcliffe K., & Obstfeld D. (2005). "Organizing and the process of sense-making," *Organization Science* 16(4): 409-421.
- Weihe, G., (2008) "Ordering Disorder: On the Perplexities of the Partnership Literature," *Australian Journal of Public Administration*, 67(4), 430-442.

- Wettenhall, R., (2005) "The public-private interface: surveying the history," In G. Hodge & C. Greve (Eds.), *The Challenge of Public-Private Partnerships: Learning from International Experience* (pp. 22 - 43). Northampton, MA, USA: Edward Elgar
- Whitley, R. (1999). *Divergent Capitalisms: The Social Structuring and change of Business Systems*. New York: Oxford University Press.
- Woodhouse, E. J. (2005). "Obsolescing bargain redux: Foreign investment in the electric power sector in developing countries," *New York University Journal of International Law and Politics*, 38: 121.
- Wooten, M., & Hoffman A. J. (2008). "Organizational fields: Past, present and future." In R. Greenwood, C. Oliver, K. Sahlin, and R. Suddaby (ed). *Sage Handbook of Organizational Institutionalism*, 130-147. Los Angeles: Sage.
- Yescombe, E. R., (2007) *Public-private partnerships: principles of policy and finance*, Butterworth-Heinemann.
- Yin, R. K., (2003) *Case study research: design and methods*, New York: Sage.
- Zandamela, H. (2001). *Lessons from Mozambique: The Maputo Water Concession*: Available online at www.citizen.org.
- Zhang, X., (2005) "Critical success factors for public-private partnerships in infrastructure development," *Journal of Construction Engineering and Management*, 131, 3.

APPENDIX A
PROJECT DATA

British Columbia Project Data

Project	Government Institution	PPP type ⁵⁸	Asset type	Business case start date	RFQ release date	RFP release date	Number of bidders	Date of Financial Close	Date of constr comp	Contract duration / Operating term	Project Value (USD)
Sierra Yoyo Desan Road	Ministry of Energy and Mines	DBFOT	Road	Jun-02	Jul-03	Sep-03		Jun-04	Dec-05	16 years	\$38,600,000
Gordon and Leslie Diamond Health Care Centre	Ministry of Health	DBFM	Hospital	N/A	Oct-02	Jan-03		Jun-04	Oct-06	32 years	\$91,675,000
Abbotsford Regional Hospital and Cancer Centre	Ministry of Health	DBFM	Hospital	N/A	Jan-03	Sep-03		Jul-04	Aug-08	30 year	\$342,575,000
Britannia Mine Water Treatment Plant	Ministry of Agriculture and Lands	DBFOT	Water Treatment Plant	Oct-03	Jan-04	May-04		Nov-04	Jun-06	20 years	\$14,475,000
William R. Bennett Bridge (okanagan)	Ministry of Transportation,	DBFM	Road	Aug-03	Dec-03	Jun-04		Jun-05	May-08	30-year	\$138,960,000
Charles Jago Northern Sport Centre	City of Prince George, University of Northern British Columbia	Design-Build partnership	Sports Center	Oct-04	Jun-05	N/A		Apr-06	Sep-07	N/A	\$27,985,000
Kicking Horse Canyon (Phase 2)	Ministry of Transportation	DBFOT	Road	Feb-04	Jul-04	Oct-04	2	Oct-05	Jan-08	25-year contract	\$125,450,000
Residential Care & Assisted Living Capacity Initiative	Ministry of Health	DBFM	Hospital	N/A	N/A	Jun-06		Jun-06	Sep-08	20 year	\$202,650,000
Sea-to-Sky Highway Improvement Project	Ministry of Transportation and Infrastructure	DBFOT	Road	Jul-03	Jun-04	Sep-04		Mar-05	Apr-09	25-year	\$579,000,000
Canada Line	GoC, BC MoT, Vancouver Transp Auth, City of Vancouver, Vancouver Airport	DBFOT	Rapid rail	Apr-03	N/A	Aug-03	4	Jul-05	Aug 09	35-year	\$1,833,500,000

⁵⁸ These acronyms represent different types of PPP models. Generally the letters used reflect the aspects of project and service delivery that are outsourced to the private provider. This includes aspects such as Design (D), Build or construction (B), Finance (F), Operate (O), Maintain only (M), and Transfer (T, signifying the asset is transferred to public ownership at the end of the contract).

Golden Ears Bridge	TransLink (Greater Vancouver Transportation Authority)	DBFOT	Road	N/A	Oct-03	Jan-05	3	Mar-06	Jun-09	35.5-year	\$779,720,000
Pitt River Bridge & Mary Hill Interchange Project	Ministry of Transportation and Infrastructure	Design-Build	Road	N/A	Feb-06	Aug-06	2	Jan-07	Nov-09	N/A	\$191,070,000
Surrey Outpatient Hospital	Ministry of Health Services	DBFM	Hospital	Jan-06	Mar-07	Sep-07	2	Aug-08	Mar-10	30 year	\$230,731,500
Royal Jubilee Hospital Patient Care Centre Project	Ministry of Health Services	DBFM	Hospital	N/A	May-07	Sep-07	3	Jul-08	Under construction	30-year	\$336,399,000
Kelowna and Vernon Hospitals Project	Ministry of Health Services	DBFM	Hospital	Oct-06	May-07	Sep-07	3	Aug-08	Under construction	30 years	\$417,748,500
Port Mann/Highway 1 Project (PMH1)	Ministry of Transportation and Infrastructure	Design-Build	Road	N/A	May-07	Aug-07		Feb-09	Under construction	N/A	\$2,373,900,000
Fort St. John Hospital Project	Ministry of Health Services	DBFM	Hospital	Oct-06	May-08	Oct-08	2	Jul-09	Mar-11	30 years	\$287,473,500
South Fraser Perimeter Road Project	Ministry of Transportation and Infrastructure	DBFOT	Road	Jan-08	Jul-08	Apr-09	3	May-10	May-13	20 year	\$506,625,000
BC Cancer Agency's Centre for the North Project	Ministry of Health Services	DBFM	Hospital	Oct-07	Jul-08	Apr-09	3	Dec-09	Dec-12	30 years	\$102,097,000

Victoria Project Data

Project	Government Institution	PPP type	Asset type	Date of initial public announcement	EOI release date	RFP release date	Number of bidders	Date of Financial Close	Date of constr comp	Contract duration / Operating term	Project Value (USD)
County Court	Department of Justice	DBFM	Courthouse	Sep-97	Sep-97	Jun-98	3	Oct-00	May-02	20 years	\$175,500,000
Wodonga Wastewater Treatment Plant	North East Region Water Authority	DBOT	WWTW	Oct-00	Apr-00	Sep-00	4	Dec-00	Jul-03	10-year term (plus 10 year ext)	\$28,800,000
Southern Cross Station (formerly Spencer Street Station)	Department of Infrastructure	DBFOT (partially)	Train station	Feb-00	Jun-01	Oct-01	3	Jul-02	Jul-06	30 years	\$278,100,000
Docklands Film and Television Studios	Department of Industry, Innovation and Regional Development	DBFOT	Television production studio	n/a	n/a	n/a	n/a	Sep-02	Feb-04	20 years	\$36,000,000
Casey Community Hospital	Department of Human Services	DBFM	Hospital	May-01	Nov-01	Apr-02	3	Nov-02	Sep-04	25 years	\$108,000,000
Campaspe Water Reclamation Scheme (formerly Echuca/Rochester Wastewater Project)	Coliban Water Authority	DBFOT	WWTW	Oct-00	May-99	Nov-00	4	Nov-02	May-05	25 years	\$36,000,000
Mobile Data Network	Department of Justice	DBFM	Telecom/IT system		Aug-99	Feb-02	1	Jun-03	Dec-05	5 years	\$126,000,000
Victorian Correctional Facilities	Department of Justice	DBFM	Prison	Nov-01	Jun-02	Oct-02	3	Dec-03	Apr-06	25 years	\$247,500,000
Metropolitan Mobile Radio (MMR)	Department of Justice	DBFM	Telecom/IT system	May-02	Nov-02	Aug-03	3	Mar-04	N/A	7 years	\$108,000,000
Emergency Alerting System	Department of Justice		Telecom/IT system	Jan-02	Jul-02	Sep-02	4	Jun-04	N/A	7 years	\$90,000,000
EastLink	Department of Transport	DBFOT	Road	Sep-02	May-03	Oct-03	2	Oct-04	Jun-08	39 year	\$2,250,000,000
The new Royal Women's Hospital Project	Department of Human Services	DBFM (only soft FM)	Hospital	Oct-03	Nov-03	Apr-04	3	Jun-05	Jun-08	25 years	\$327,960,000

Royal Melbourne Showgrounds Redevelopment	Department of Primary Industry	DBFM	Tourism complex	Dec-04	Oct-03	Apr-04	3	Jun-05	Dec-06	25 years	\$97,200,000
Ballarat North Water Reclamation Project	Department of Sustainability & Environment	DBOT (not sure who finances)	WWTW	May-02	May-05	Aug-05	3	May-06	Jan-08	15-year	\$45,000,000
Melbourne Convention Centre Development	Department of Industry Innovation and Regional Development	DBFM	Urban complex/ Exhibition center	Oct-04	Oct-04	Mar-05	3	Feb-06	Jul-09	25 years	\$330,300,000
Barwon Water Biosolids Management Project	Department of Sustainability & Environment	DFBOT	WWTW	Sep-07	May-05	Oct-05	2	Aug-07	Dec-09	20 years	\$36,000,000
The new Royal Children's Hospital project	Department of Human Services	DBFM	Hospital	Nov-05	May-06	Oct-06	3	Nov-07	Mar-11	25 years	\$851,400,000
Partnerships Victoria in Schools Project	Department of Education and Early Childhood Development	DBFM	Schools	Dec-07	Feb-08	May-08	3	Dec-08	Jul-10	25 years	\$229,500,000
Peninsula Link (previously the Frankston Bypass Project)	Department of Transport	DBFOT (availability payments)	Road	Mar-09	Mar-09	Jun-09	3	Feb-10	Feb-13	25 years	\$683,100,000
Ararat Prison Project	Department of Justice	DBFM	Prison	Jul-08	Mar-09	Jul-09	3	Jun-10	Nov-12	25 years	\$315,000,000
Biosciences Research Centre project	Department of Primary Industries in joint venture with La Trobe University	DBFM	Research center	Dec-07	May-08	Aug-08	3	May-09	Dec-11	25 years	\$207,000,000
Victorian Desalination Plant	Department of Sustainability and Environment	DFBOT	Desalination plant	Sep-07	Jun-08	Sep-08	2	Sep-09	Feb-11	30 years	\$2,790,000,000

South Africa Project Data

Project	Government Institution	PPP type	Asset type	First appear on PPP list	EOI release date (TA IIA)	RFP release date	Number of bidders	Date of Financial Close (TA III)	Date of constr comp	Contract duration / Operating term	Project value (USD)
Inkosi Albert Luthuli Hospital	KwaZulu-Natal Dept Health	DFBOT	Hospital	Jun-01				Dec-01		15 years	\$642,857,143
Eco-tourism Manyeleti 3 sites.	Limpopo Dept Finance, Economic Affairs, Tourism	DFBOT	Tourism complex	Jun-01				Dec-01		30 years	\$3,571,429
Universitas and Pelonomi Hospitals co-location	Free State Dept Health	DFBOT	Hospital	Jun-01				Nov-02		16,5years	\$11,571,429
Information Systems	Department of Labour	DFBOT	Telecom/IT system	Jun-01				Dec-02		10 years	\$214,285,714
State Vaccine Institute	Dept Health	Equity partnership	Laboratory	Jun-01	Jun-01	Jun-01	2	Apr-03		4 years	\$8,571,429
Chapman's Peak Drive toll road	Western Cape Dept Transport	DF(part)BOT	Road	Jun-01	Mar-01	Jul-01	4	May-03		30 years	\$64,285,714
Humansdorp District Hospital	E/Cape Dept Health	DFBOT	Hospital	Jun-01	Jun-02			Jun-03		20 years	\$2,700,000
DTI Head Office Accommodation	Dept of Trade & Industry	DFBOT	Offices	Jun-01	Aug-01	Dec-01		Aug-03		25 Years	\$124,285,714
Cradle of Humankind Interpretation Centre Complex	Gauteng Dept Agriculture, Conservation, Environment and Land Affairs	DBOT	Tourism complex	Dec-01		Mar-02	4	Oct-03		10 years	\$5,571,429
Gautrain Rapid Rail Link	Gauteng Dept Public Transport, Roads & Works	DBFOT	High speed rail	Jun-01	Mar-02	Nov-02	2	Sep-06	Jun-11	20 years	\$3,298,571,429
Western Cape Rehabilitation Centre & Lentegeur Hospital	Western Cape Dept Health	Facilities Managemt	Hospital	Dec-02	Apr-04	Sep-05		Nov-06			\$47,714,286
Polokwane Hospital Renal Dialysis Unit	Dept Health	DBOT	Hospital	Mar-04	Dec-04	Sep-05		Dec-06	Oct-07	10 years	\$12,621,429

Dept. of Education Serviced Head Office Accommodation	Dept. of Education	DBFOT	Offices	Jun-01				Apr-07	Ongoing	27 years	\$73,180,571
Port Alfred & Settlers Hospital	Eastern Cape Dept of Health	DBFOT	Hospital	Mar-04	Nov-04	Mar-05		May-07	Feb-07	17 years	\$24,085,714
De Hoop Eco Tourism PPP	Western Cape Nature Conservation Board	DBFOT	Tourism Complex	Jun-01	Dec-02	Oct-02		Dec-08	Ongoing	30 years	\$5,714,286
Foreign Affairs Head Office Accommodation	Department of Foreign Affairs	DFBOT	Offices	Jun-01	Nov-04	Sep-05		Jan-09		30 years	\$188,571,429
Western Cape Nature Conservation Board (Whale Trail)	Western Cape Nature Conservation Board	DBFOT	Tourism Complex	Aug-05		Jan-07		Apr-10	Ongoing	20 years	\$4,142,857

APPENDIX B
NEWSPAPER ARTICLE SELECTION AND CODING PROTOCOL

PROTOCOL FOR FACTIVA EVENT SEARCH AND CODING

This section discusses the protocol and methodology that I followed to obtain event information, and to determine the public opinion of PPPs in the three Case Study regions.

Purpose and event definition

The purpose of this analysis was to obtain a quantitative assessment of the public opinion of PPPs in each of our case study regions (South Africa, British Columbia and Victoria). It was decided that articles published in local news sources would provide a good proxy for the general local understanding and opinion of the PPP concept. Each such article is considered a codable event, providing an indication of the understanding and opinion of PPPs at a point in time. These articles are related to the public opinion in two ways: they both reflect the current understanding and opinion, and inform the future understanding and opinion of the concept. Events might therefore have a slight lag in time, suggesting that a monthly timescale might be preferred over a daily one.

Database

For the event search, the Dow Jones Factiva database was used. Factiva provides access to more than 20,000 news sources. This was supplemented with articles drawn from the LexisNexis database to provide a more complete set of event data. Articles from both data sources were compared to ensure no duplication.

Search terms

A number of searchable terms were considered to obtain the event data. The combination term “*public private*” and its reverse “*private public*” (both enclosed in double quotes) was found to be the most reliable event indicator. Acronyms such as *PPP* and *P3* (a term often used in Canada) produced a large number of erroneous results because these terms are often used in other contexts⁵⁹. The most complicated decision was on the inclusion of the term *partnership* (or *partnerships*). A number of search tests indicated that inclusion of these terms would discard a significant number of events (where “*public private*” was used in conjunction with terms such as *initiative*, *development*, *business-model*, and *arrangement*).

⁵⁹ A search for P3 and infrastructure produced only five additional results (excluding the terms “public private” and “private public”) from Canadian sources and was therefore not included.

Source Publications

As mentioned above, the source of events is local news sources in each of the three regions. The publications used in each region were as follows:

- **British Columbia:** BC Business, Equity, Vancouver Province, Vancouver Sun, and Victoria Times Colonist; plus from LexisNexis: Times Colonist and Vancouver Province (additional dates), Nelson Daily News, Northshore News, Abbotsford times
- **South Africa:** Business Day, Cape Argus, Cape Times, Daily Dispatch, Daily News, East Cape News, Financial Mail, The Herald, Mail & Guardian Online, The Mercury, Post, Pretoria News, Pretoria News Weekend, SAPA (South African Press Association), Saturday Star, Rand Merchant Bank Economic Report, Southscan, Sowetan, The Star, Sunday Independent, The Sunday Times, Sunday Tribune, Sunday World, The Independent on Saturday, Weekend Argus, Weekend Post
- **Victoria:** The Age, Bayside Leader, Bendigo Advertiser [Bendigo], Berwick/Pakenham Cardinia Leader, Border Mail [Albury Wodonga], The Courier [Ballarat], Cranbourne Leader, Diamond Valley Leader, Frankston Standard/Hastings Leader, Free Press Leader, Geelong Advertiser, Geelong News, Herald-Sun, Knox Leader, Maroondah Leader, Melbourne/Yarra Leader, Melton/Moorabool Leader, Progress Leader, Shepparton News, Sunday Age (Melbourne), Sunday Herald Sun Magazine, Sunday Herald Sun, The Weekly Times, Wyndham Leader

Coding Protocol for Event Data

The coding process was followed the following protocol steps:

- I. Determine whether the article contains a codable event (CODABLE)
 - a. Before beginning to code events, coders should know how to identify what is classified as an event. The article will be considered a codable event if any of the reference sentences refers to the concept of public private partnerships.
 - b. In addition, the event is only codable if the event refers to the region under investigation: South Africa, Canada, or Australia. Where an article refers to a PPP development in a different country, the event is considered codable if the reference is tied to so local context, for example if a reference to PPPs in Britain is used to substantiate their use in Canada.

- c. Events that are found in Company Financial Statements are not considered codable.
- d. We will work at the article level, as most articles contain only one references sentence. However, if we identify more than one divergent view expressed in an article (both positive and negative affect), we code each of the views expressed separately.
- e. Some of the articles from LexisNexis are letter published in the specific paper. As we have not searched for letters in all publications (not available in the Factiva database) we exclude any articles that are letters.
- f. For the sake of completeness we will not exclude events that refer to PPPs outside the field of infrastructure development.

II. Record each of following data fields for the article

- a. RDAY. Locate the day of the report in the byline or other header text.
- b. RMONTH. Locate the month of the report in the byline or other header text.
- c. RYEAR. Locate the year of the report.
- d. NEWSSOURCE NAME. Note the specific name of the news source (e.g., New York Times, Market Wire, ...).
- e. SENTENCE. Provide the full text of the sentence that includes the event. Separate sentences with // in the case of more than one event sentence per article.
- f. OP-ED/NEWS. Indicate whether the article is an Editorial or a News piece
- g. INDIRECTREPORTER. In cases where the news source lists a third party individual as the source for the news, identify this entity. “Jim Jones, CEO of Greenpeace today announced that XYZ Corporation spilled toxic materials into the river.” The INDIRECT REPORTERTITLE field should equal Jim Jones, CEO of Greenpeace.
- h. REPGROUP. Indicate to which type of organization the reporter or indirect reporter belongs. Examples include local government, Union, NGO, and Private business.
- i. INDIRECTSECTOR. In cases where the news source lists a third party organization as the source for the news, identify this entity. For example, in the sentence “Jim Jones of Greenpeace today announced that XYZ Corporation spilled toxic materials into the river.” The INDIRECTSECTOR field should equal Civic. Other types are: Government, Private. These can be classified using the following reference system:
 - i. Government: All governmental agents including
 - 1. Ministers
 - 2. Governor
 - 3. Cabinet members

4. Advisors/Staff members
 5. Regulatory agencies and staff
 6. Legislative actors
 7. Judicial actors
 8. Military
- ii. Private
1. All economic organizations
 2. Firms
 3. Buyers,
 4. Suppliers, competitors, complementors
 5. Private Financial Institutions (Banks, Pension funds, etc.)
 6. Associations of firms and Industry-based interests
 7. Media
- iii. Civic
1. Local community organizations
 2. NGOs organized around a specific issue (e.g., environment, governance, rights, ...)
 3. Associations of individuals with common identity (e.g., religion, ethnicity, heritage, values, customers/users)
 4. Unions
 5. Other actors or organizations, such as Workers, Professors/teachers, and Students
 6. Political Parties, Politicians, and Candidates
- j. PPPPROJECT. Identify the specific PPP project to which the event refers. Examples would include Royal Jubilee Hospital, or SR-91 Highway. If the event does not apply to a specific project, then the PPPPROJECT should equal Industry.
- k. PPPSECTOR. Identify the infrastructure sector that the event applies to. The list of sectors includes: Transportation, Water and Wastewater, Energy, Telecoms, Health, Prisons, Schools, Courthouses, Offices, Other (other infrastructure projects), and Non-infrastructure (if the event refers to something other than infrastructure)
- l. AFFECTVALUE. Identify the level of affect that the event has towards the concept of Public Private Partnerships. AFFECTVALUE can be one of three values: Negative (-1), No affect (0), Positive (+1). The AFFECTVALUE should only reflect an affect towards the concept of PPPs, and not towards specific projects only – if the event

does not clearly tie the positive or negative affect to the concept of PPPs, then the AFFECTVALUE is 0. For example, an event that describes the death of a worker on a specific PPP project will only be coded -1 if the author (or INDIRECTREPORTER) making the connection (clearly or just alluding thereto) between this bad event and the project being a PPP.

Replication analysis

To ensure the replication of the coding process, a section of the events (approximately one quarter of all the sourced articles) were independently coded by another coder, and the results compared. The results of the comparison of these two coding sets are summarised in the table below:

Statistic	Value
Total number of events compared	1014
Number of coded events coded differently	256
Percentage similarity	75%
Number of articles that differ on CODABLE	50
Number of articles that differ on AFFECTVALUE	206

APPENDIX C
SURVEY DETAILS

Survey details

The survey was aimed at measuring the extent to which each of the PPP program development tasks, listed in Table 5, had been attained in each region. To do so, I asked my informants to graded, on a scale of 1 to 4, the extent to which each of these actions had been addressed in the local PPP field. In addition, I asked informants to indicate, also on a scale of 1 to 4, how important this action is to PPP program success in the region, In this way I hoped to control for actions that are not recognized as salient by practitioners. Lastly, I asked respondents to indicate (again on a 4 point scale) what their role had been in accomplishing this task. The survey instrument is shown below. I report on the results on the extent to which each task had been accomplished thereafter.

<p>STANFORD UNIVERSITY</p> <h2 style="text-align: center;">PPP PROGRAM DEVELOPMENT SURVEY</h2> <p><u>Overview and purpose</u> This survey is aimed at understanding the tasks and actions that have been important for establishing PPPs in [region]. Completing the survey takes less than 10 minutes. Please make sure you complete both sides of the survey page.</p> <p><u>Instructions</u> The attached table is a summary of the literature on PPP program development, i.e. the tasks and actions that have been proposed by scholars as important to make PPPs successful in a region. Please complete the table by indicating:</p> <ul style="list-style-type: none">(i) The importance, in your opinion, of each of the detailed tasks to ensure overall success of PPPs in [region name], graded on the following scale:<ul style="list-style-type: none">1 Not important2 Somewhat important3 Important4 Extremely important(ii) The extent to which this task has been accomplished in [region], graded on the following scale:<ul style="list-style-type: none">1 This tasks has <u>not been addressed</u> at all2 This task has only been <u>partly addressed</u>3 This task has <u>largely addressed</u>, but more work is needed4 This task has been <u>fully addressed</u>(iii) The extent to which your organization has been involved in the fulfilment of each of these tasks, graded on the following scale:<ul style="list-style-type: none">1 Your organization has <u>not been involved</u> in fulfilling this2 Your organization has played a <u>small role</u> in fulfilling this3 Your organization has played a <u>significant role</u> in fulfilling this4 Your organization has <u>taken the lead</u> in fulfilling this <p>Also, please add any tasks / actions at the bottom that you think need to be included.</p>
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Results of survey on the extent to which program development tasks have been fulfilled

No	Broad action	Detailed task needed to develop a successful PPP program	Average score			Average z-score		
			British Columbia	Victoria	South Africa	British Columbia	Victoria	South Africa
1	Develop supportive legal framework and apply consistently	Establish a clear legal and regulatory framework	3.20	3.60	3.38	0.60	0.75	0.95
		Apply framework and policies consistently	2.60	3.30	3.13	-0.18	0.36	0.53
		Standardize contracts and documents	2.80	2.50	3.00	0.08	-0.67	0.41
		Ensure that policies are able to accommodate change	2.60	3.00	2.63	-0.14	-0.01	0.00
		Consult the public and the market in policy development	2.20	3.10	2.88	-0.73	0.19	0.24
		Develop legal capacity to handle PPPs (train lawyers and judges)	3.00	3.20	2.50	0.29	0.26	-0.18
2	Provide political commitment	Provide high level political commitment to the PPP program	3.60	3.10	2.50	1.27	0.17	-0.24
		Political risk management through advocacy within the government	3.00	3.00	2.13	0.53	-0.01	-0.65
3	Improve public sector knowledge of PPPs	Provide training to public sector staff	2.60	2.70	2.38	-0.29	-0.34	-0.39
		Communicate lessons learnt to governmental actors	2.40	2.60	1.75	-0.55	-0.55	-1.12
		Publish guidance materials to help public sector organizations	2.40	3.40	2.88	-0.51	0.54	0.20
		Ensure that governmental agents understand the objectives of private finance	2.40	2.70	2.13	-0.55	-0.42	-0.69
		Develop pilot projects	3.00	2.50	2.25	0.26	-0.73	-0.58
4	Increase public awareness and understanding of PPPs	Increase public awareness and understanding of PPPs	2.00	2.20	1.75	-1.19	-1.13	-1.12
		Communicate lessons learnt to civic actors	2.00	2.10	1.75	-1.23	-1.21	-1.12
		Inform citizens of their right to participate on project developments	2.00	1.90	1.75	-1.67	-1.50	-1.10
		Gain buy-in from key constituents (e.g. unions) for PPPs	1.80	2.50	1.75	-1.45	-0.63	-1.18
5	Develop and support market of private providers	Take actions that attract private investment, e.g developing the domestic capital market	2.60	2.80	2.75	-0.23	-0.27	0.15
		Take actions that sustain state credibility	2.60	3.30	2.75	-0.08	0.38	0.16
		Ensure a stable political environment	2.80	3.80	2.63	0.14	1.03	-0.02
		Publish guidance materials for the benefit of private sector	2.40	3.20	3.00	-0.45	0.31	0.31

		Involved private providers to influence project structure, size, scope	2.80	3.00	2.88	0.07	0.06	0.12
		Reduce cost and duration of procurement	2.20	2.70	1.88	-0.73	-0.42	-0.93
		Provide support to private providers through loans, guarantees, etc.	2.20	2.40	2.25	-0.74	-0.80	-0.51
		Ensure “even-handed” regulation (i.e. avoid over regulation)	2.60	2.90	2.50	-0.23	-0.10	-0.12
6	Coordinate deal flow	Coordinating deal-flow to avoid a “bunching” of projects	2.40	2.10	2.00	-0.40	-1.16	-0.66
		Communicate upcoming projects to market	2.20	3.00	3.13	-0.66	0.09	0.51
		Coordinating public-sector “buying power”	2.20	2.10	1.88	-0.66	-1.29	-0.91
7	Improve program transparency	Have transparency in project development (e.g. options analysis)	2.80	2.60	2.63	0.03	-0.42	0.01
		Increase procurement transparency (share information during/after the bidding phase)	3.20	2.60	2.63	0.51	-0.56	0.03
		Make sure the public are well informed regarding project details	3.20	3.00	2.38	0.51	0.01	-0.26
8	Increase program accountability	Keep the PPP program accountable of its performance	3.00	3.00	2.63	0.26	0.01	-0.23
		Incorporate user feedback in performance measures	2.20	2.40	2.13	-0.71	-0.90	-0.75
		Make use of performance specifications on PPP projects	3.40	2.90	3.38	0.77	-0.25	0.76
9	Independent oversight of project execution	Have independent oversight of procurement	2.80	3.50	2.75	-0.12	0.62	0.12
		Provide for independent oversight of performance monitoring (and publish results)	1.80	2.60	2.25	-1.45	-0.52	-0.42
10	Ensure quality of projects, with adequate level of risk transfer	Identify the most suitable projects and execute them in a way that takes local context into account	3.00	3.20	2.75	0.29	0.23	0.10
		Select strong private consortia for projects	3.20	3.60	3.38	0.55	0.75	0.77
		Ensure good project and contract management on all projects	3.00	2.80	2.75	0.29	-0.24	0.09
		Provide clear contract clauses for “step-in” rights	3.20	3.60	3.38	0.55	0.75	0.79
		Assess VfM when selecting a delivery system	3.40	3.60	3.25	0.88	0.75	0.78
		Identify all risks early in the project	3.20	3.40	3.25	0.55	0.46	0.63
		Transfer optimum level of risk to the private partner	3.00	3.30	3.25	0.29	0.32	0.63
		Be willing to mitigate or retain some risk	3.00	3.30	3.00	0.29	0.32	0.37
11	Keep Line Agency discretion	Prevent line agencies from making unrealistic commitments on behalf of government	3.00	3.50	3.13	0.29	0.62	0.49

