

The Delocalization of Expenditures:

The Role of Foreign Actors in Infrastructural Public Private Partnerships

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Abstract:

This paper investigates the role played by foreign actors in infrastructural public private partnerships. It uses a case study of PortMiami where two public private partnerships, developed under the auspices of the Florida Department of Transportation, have been recently completed or are under construction. The PortMiami Tunnel, a road tunnel providing highway access to the port, was built by a special purpose vehicle under the control of a series of foreign actors. The Intermodal/ rail restoration, providing freight rail services to the port, is being built by a Florida based development firm. This paper will use its findings to gain an understanding of the role played by foreign actors in Public Private Partnerships and their potential to change the way regions plan infrastructure.

Table of Contents

Introduction and Background	3
Literature Review	6
Methodology	13
Florida and Infrastructure	17
Analysis	34
Going Forward	55
Tables	59
Endnotes	62
Bibliography	63

Chapter 1: Introduction and background

The importance of infrastructure in economic and community development is hard to overstate. Yet, in spite of its essentialness, governments around the world are finding it harder and harder to build infrastructure through the use of tax dollars. Public investment in infrastructure as a share of GDP has fallen consistently among most member nations of the Organization for Economic Co-operation and Development (OECD) for the past 40 years (Vailia, Et al. 2005)

To build and maintain infrastructure in an era of conservative use of taxpayer dollars, governments around the world are turning to models of public private partnership. Utilizing the private sector for building and maintaining large, traditionally publically funded infrastructure is seen as having several advantages: It is a way to raise funds for needed infrastructure in a time of governmental budget cuts; it is a way to take advantage of private sector efficiencies in building and maintaining public works. (Monk and Levitt, Et al., 2011) For example, a new road tunnel connecting the port of Miami to existing highway infrastructure was realized through such a model. Its public owner, the Florida Department of Transportation (FDOT) states that the port provides around 176,000 jobs, \$6.4 billion in wages and is responsible for over \$17 billion in economic activity. Nonetheless, in building the tunnel, FDOT worked in a public private partnership wherein the design, build, finances, operation and maintenance have been handled by a private actor.¹

¹ <u>http://www.portofmiamitunnel.com/project-overview/project-overview-1//14</u> Accessed 11.10.2014

The risks of using public private partnerships (P3s) have been widely written about: A lack of transparency (allowing for increased risk of corruption, little oversight to ensure a reduced burden on taxpayers) is seen as common among private - public works (Bloomfield 2006). Higher contracting and other transaction costs often reduce or nullify any micro-economic gains made by utilizing private sector parties (Valilia 2005); control of public facilities that are built and maintained by private entities and the applicability of public access laws in the public private context become unclear(Kohn 2004).

What is missing from this discussion is the role of the private global actor in public private relationships. What role are multinational corporations, State-Owned Enterprises, global notfor-profits and the like looking to play? What impact could their participation have on something as localized as infrastructure? While the role of international organizations like the World Bank and the global implications of privatization have received significant discussion, infrastructural P3s fall outside that dialogue. Despite widespread privatization of nationalized industries throughout the 1980s and 1990s, the monopolistic, non-competitive nature of central infrastructure was seen as making its privatization unappealing (IMF 2004). Furthermore, Infrastructure in developed nations (where many P3s are occurring) has typically not been under the purview of an actor like the World Bank. Even the United States, where little privatization occurred and the World Bank has seldom played a local role, has increasingly looked to P3 models for infrastructure.

Infrastructure development in the context of local regimes has also been widely written about (Stone 1989, Lauria 1996). While modern P3 infrastructure projects done in conjunction with local partners do occur, they appear to be the exception. Rather, international

actors like Skanska, Cintra, Bouygues and Meridiam among other multinationals have played a dominating role in building, financing and maintaining infrastructure done under P3 contracts. The PortMiami tunnel (POMT) is handled by the MAT Concessionaire, LLC, a consortium consisting of the French firms Meridiam Infrastructure and Bouygues as equity partners, with Bouygues also serving as the contractor and the Australian firm Transfield Services serving as operator.²

As the prevalence of international firms continues to expand at the local level, the needs and wants of international firms (as opposed to locally based development partners) should be examined. The significant role played by these foreign actors in delivering local infrastructure could become a political issue.ⁱ Furthermore, earlier experiences with localities concessioning out infrastructure to a private party have shown that local control can indeed be threatened.ⁱⁱ

Where the functions, uses and traffic of the segment of existing infrastructure are established, the impacts of contracting out infrastructure are easily observed. In new or greatly refurbished infrastructure, whose impacts are not yet understood, the influences of international parties may require particular consideration. Development habits and customs can change radically from locality to locality and foreign firms may not be used to working under local laws and conditions. (Ankner and Mayer 2009) For example, a five to ten year development timetable may be common in certain markets (to allow for public reviews, land purchases, etc.) but completely alien, and ultimately undesirable to firms based outside that market. To further the project with the foreign partner, a locality may therefore look to issue

² http://www.portofmiamitunnel.com/organization/public-private-partnership/ accessed 11.10.2014

variances or allow a development partner to otherwise sidestep established local procedures. Furthermore, the type of project that an international player may feel comfortable creating may diverge from the project envisioned by local planners. Therefore, the purpose of this paper is to understand both the firms looking to work in P3s and governments turning to P3 models for new infrastructure. Ironically, in decentralizing financing and operation of infrastructure away from taxpayers, governments have opened this key factor of regional economic and community development to a wide range of global influences. The way localities access, use and plan critical infrastructure may change as a result of the increased role publicprivate partnerships enable international actors to take.

Chapter 2: Literature Review

While infrastructure is universally regarded as critical to keeping a region economically competitive, financing it has often proven to be a challenge. In recent years, governments around the world have been turning to Public Private Partnerships (P3s) to have the private sector help maintain and fund infrastructure. The modern application of P3s is seen as emerging in the early 1990s, during the height of the privatization movement. Because of the monopolistic nature of infrastructure, outright privatization of infrastructure was often not seen as suitable. P3s became seen as a way of utilizing private sector flexibility and efficiency in delivery of infrastructure while still maintaining public ownership. Literature on Public Private Partnerships has explored best practices and potential benefits; it has also examined the potential risks and threats to public interest in the public-private sphere.

Definition and relations:

In a 1997 collection of essays titled *Public and Private in Thought and Practice: Perspectives on a Grand Dichotomy*, its editor, Jeffrey Weintraub, sought to find and understand the distinctions between the public and private spheres. While admitting that the distinction between private and public is problematic, and can vary depending on cultural and political context, he finds that for mainstream economics, with its capitalistic point of reference, the term private has come to mean "market based" or goods provided by the market economy. Public, meanwhile, has come to mean governmental or centrally administered goods. Under this model, centrally planned groups like the United States government or the World Bank could be seen as public actors, whereas market oriented groups, including corporations and investment funds, could be seen as private.

In 2004, the International Monetary Fund (IMF) released a report titled simply *Public Private Partnerships* in which they detailed how describe the basic components of P3s in building what has traditionally government provided infrastructure asset and services. In the paper, the IMF examines typical P3 arrangements that had emerged up to that point. They state goals of P3s as including transferring project risk to the private sector and attempts to take advantage of assumed private sector efficiencies. The IMF states that, up to that point, a clear definition of P3s had yet to emerge and existing P3 programs had yet to mature to a point of providing meaningful lessons. They further state that no comprehensive fiscal accounting or reporting standards had yet emerge for P3s and that a main purpose of their report was to provide an overview of some P3 issues as they related to fiscal consequences.

In a 2005 paper for the World Bank, Bent Flyvbjerg wrote how often planners of major infrastructure projects (public, private or both) often misrepresent the costs and benefits of the projects they are trying to push forward. This potentially could lead lawmakers, investors and the general public to legitimately mistrust information about the projects shared by planners and projects promoters. Flyvbjerg argues that to combat this issue, accountability in large infrastructure is a must. Flyvbjerg identifies two poles of accountability as defining liberal democracies: In the public sector transparency and public controls are a must; in the private sector, accountability is best achieved through competition and market controls. Whether infrastructure projects fall at either end of that spectrum or, relevantly to this paper, fall in between, they must be set up with a strong governance framework that creates accountability.

A 2010 Paper for the World Bank by Jeffery Delmon tries again to define the modern P3 in infrastructure. He says though the projects across nations may have many overlapping characteristics, the way these characteristics are expressed varies. Delmon argues this the lack of clear and common terminology has constrained development of the P3 field. He thus aims to create a classification model that standardizes the language of the modern P3. To do this he examines five main characteristics he finds have come to define P3s: whether the project is for a new or existing facility; the nature of the private sectors obligations; the degree to which the private sector will be expected to fund the project; the private sectors delivery operations and the final projects revenue stream. Delmon's paper is meant as part of a larger project by the World Bank to develop best practices in the P3 field.

Privatization, Public Finance and the Emergence of P3s:

Privatization of formally public goods is a trend that is seen as emerging in the mid-1970s. Partly informed by the ideas of Milton Friedman (Savas, 2000), it is underwritten by a sense that private sector actors are able to operate more efficiently and react more quickly to changing conditions than a public actor. (Roland 2008). As an outgrowth of this, nations like the UK and Australia began looking into using Private Financing Initiatives and P3s as methods to finance public works. The modern emergence of P3s is often seen as dating to creation of Private Finance Models instituted by the John Major UK government in the early 1990s. PFI was promoted as a way to provide infrastructure without increasing Public Sector Borrowing Requirements (PSBR), which are limits placed on the amount of debt the UK government is permitted to take on. (Hodge and Greve, 2013) By the mid-2000s, P3s had become widely used throughout most OECD nations for delivering infrastructure. Simultaneously, Public capital for infrastructure has been significantly reduced among OECD nations. Public investment in OECD nations has fallen significantly since 1970 (Kamp 2005)

However in the United States, demand for these types of funding methods was less immediate. Privatization did not occur in the United States to the extent it had in the other OECD nations. (Stieglitz 2002) As opposed to other OECD nations, the US has long had a highly developed system of private utilities. Large infrastructural groups like airlines, telecoms and energy have often been primarily private firms in the United States. This was partially maintained by a bond system known as Private Activity Bonds (PAB). PABs are a type of municipal bond where the municipality issues a bond; the proceeds are then used for a qualified use by a private entity (IRS 2014). In the United States, holders of municipal bonds are exempted from paying both federal and local income taxes. This has enable private firms of infrastructural projects such as power plants and airport terminals to borrow money at a lower cost than would be available in the private capital markets, and has helped keep government involvement in these sectors to a minimum.

However, even in the United States, there are many areas where the private sector has either not taken an active role or a natural monopoly situation has made public development and maintenance more desirable. Typically in the United States, these situations have been handled by public authorities. Public authorities, also often referred to as public benefit corporations, are special debt-issuing entities specifically charged with maintaining particular infrastructural components. Public authorities manage infrastructural areas such as mass transit systems, airport

surfaces and port facilities, public housing and utilities. Like other forms of bonded debt, debt issued by a public authority is at the lower, tax free rates enjoyed by municipalities. Public authorities are also in line to receive grant money either from the state or federal governments in connections with their infrastructural missions. (Radford 2013) For these reasons, P3s have been comparatively slow to emerge in the United States and public investment in infrastructure has remained at a fairly constant level. However, over the past two decades in the United States, federal support for infrastructure has waned, leaving localities to find other methods to finance and operate infrastructure (Brown, 2005)

This reliance on private financing has created a transitional moment for public finance throughout the developed world. Infrastructure that was once financed largely through tax support is now increasingly reliant upon private actors and increasingly complex financial engineering for its delivery. Inge Kaul and Pedro Conceicao (2006) examine this convergence of what had been localized public finance and globalized market forces. They find that the policy approaches and tools of contemporary public finance tend to concentrate at the nexuses of the public and private and domestic and foreign policy. They term this interplay between these overlapping nexuses as the *New Public Finance*.

Benefits and Possibilities of P3s:

An OECD report from 2008 listed the following principles as being good practices in the public-private partnership process: Affordability; Value for Money; Fiscal rules and expenditure limits; risk sharing; competition and contestability; documentation and transparency; regulatory and legal framework; institutional capacity and political support. Of these it lists Value for Money (VfM) as being the primary objective of PPP design. The article defines VfM the point where quality, (project) features and price combine. They say this is obtained through efficient

allocation of risks between public and private parties, increased competition and the use of private sector management skills.

From the Stanford University Global Project Center, Monk, et al. (2012) argue that together the public and private sectors can best provide the needs for modern infrastructure in the United States. In this way, risk can be transferred to the private sector and the public can be provided with enhanced infrastructure at a better value for money (VfM). They say policymakers need to develop methods to determine when to use P3s and to develop P3 procurement systems. Alongside these reasons, Ankner and Meyer (2009) propose that as regional planning over individual city planning becomes more important, private actors can more efficiently coordinate different jurisdictions to foster joint investment.

In an article for the Brookings Institute, Istrate and Puentes (2011) state that in the postgreat recession climate of fiscal austerity in the American public sector, P3s have offered a method of delivering public works. While the authors admit that P3 contracts are complicated and are not without challenges to the public, they state that P3s have the potential to improve infrastructure delivery. The paper recommends governments establish dedicated P3 units to both develop the P3 market and ensure that the public interest is taken into account.

Risks and Threats to Public Interest:

Timo Valilia (2005) reviews British P3 case studies and finds that while there may be potential micro economic savings, the contracting, regulatory and other soft costs in P3s are much higher than in traditional public works and therefore P3s are, at best, macro-economically neutral. Pamela Bloomfield (2006) writes about how in practice P3s often encounter challenges toward transferring risk and achieving efficiency. Bloomfield states that often these efficiencies do not materialize and many of the costs and risks get externalized by the private actor onto the

public sector. Furthermore, oversight of these projects becomes harder as public-private contracts create circumstances where having transparency becomes more challenging. She states that local governments looking to engage in P3s should have relevant, public expertise and strong governance to monitor P3s.

With very different concerns, Margaret Kohn (2004) wrote about the risks of privatization of what had traditionally been public space. Her concerns lay in that traditionally taxpayer supported public spheres may start to have restricted access under the control of private owners. Due to this restricted access, people may be unable to gather, protest and express themselves in a free manner. Her ultimate fear is that this loss of public control may lead to an undermining of democracy. Ellen Dannin (2011) sums up many of these concerns by stating that contract provisions within privatization contracts have the ability to affect and undermine governmental abilities to legislate and adjudicate.

Globalization and Competitive Regions:

The notion of the locality as a competitive measure has been widely written about in economics (Tiebout 1956, Stieglitz 1977, Zoderow 1983). Recent examinations of this phenomenon include seeing the competitive region as turning the state a quasi-enterprise (Cerny, 1997) and seeing the regional agglomerations as being the sustaining instrument of economic globalization (Scott 2001).

The role of the forces of globalization and regional competitiveness in the development of infrastructure has also been examined. Saskia Sassen in *The Global City: New York, London Tokyo* (1990) posited that that the ability of cities to compete in the global economy is tied to their degree of connectivity to global networks. In contemporary Western Europe, global market influences have reoriented state policies toward large cities and urbanized regions. This has led

to new forms of urban governance and uneven overall development in regions (Brenner, 2002). Competition between regions has been seen as a motivating factor behind towns and regions creating infrastructure projects (Jonas 2012). Furthermore, failure of localities to attract investment for infrastructure and other service will compromise the long term competitiveness of the region (Jonas, 2013) The private involvement in developing regional infrastructure has let to questions about the role of the state in development and has led to the creation of what has been termed "non-state spatial strategies."(Harrison, 2014)

Chapter 3: Methodology

Part of the challenge with measuring public private partnerships is the lack of agreement as to what constitutes a public private partnership. As referenced above, Delmon argues the lack of clear and common terminology has constrained development of the P3 field. He thus aims to create a classification models that standardizes the language of the modern P3: He breaks his classifications into five categories: whether the project is for a new or existing facility; the nature of the private sectors obligations; the degree to which the private sector will be expected to fund the project; the private sectors delivery operations and the final projects revenue stream. Building on his work, This paper uses his classification models and builds questions from them that specifically address specific issues:

1. Project is for a new or existing facility

a. Categorize Facility as New, Rebuilt or existing/concessioned

Note: For my purposes, the difference between a rebuilt and existing privatized facility is that a concessioned facility may not have been changed in anyway. Its costs and revenue streams as they were generated under government control should be more generally understood. Whereas a rebuilt facility may have a changed roll from that which it had previously played to its core users and thus the impacts of private public construction would be less immediately understood.

2. Nature of Private Sector obligations

- a. Categorize private sector actors who are they? Where are they from? What kind of owner are they (Individual; company; SPV; SOE, etc.)
- b. What are they expected to deliver for the final project?

3. Degree of Private Sector Funding

a. Codify the Nature of project funding - How are these projects being funded? Where is the capital coming from (Bank Ioan, FDI, Bonds, etc.)?

4. Private Sector Delivery Operations

- a. Categorize ownership structures Who controls what on the project?
- b. Understand the nature of services that are being provided
- c. Categorize management models How much is controlled from onsite? How much is controlled offsite? Where are relevant offsite facilities?

5. Final Revenue Streams

- a. How are funds collected? Where are they going (private actor, government, both)?
- b. What revenues are anticipated?

Table 1 shows Delmon's general question framework applied to select P3 projects listed by the United States Department of Transit:

Та	Table 1: Select Completed Public Private Partnerships in the United States Projects listed as P3s by the US Dept. of Transportation as completed by March 2015					
Quest. #	Port of Miami Tunnel	I-495 Capital Beltway (Virginia)	North Tarrant Express Segments (Texas)	South Bay Expressway (California)	Pocahontas Parkway (Virginia)	
1	New	New	Refurbished	Refurbished/extended	Newly Built/Existing	
2	Design, Build, Finance, Operate and Manage	Design, Build, Finance, Operate and Manage	Design, Build, Finance, Operate and Manage	Design, Build, Finance, Operate and Manage	Original construction: Design- Build Long-term lease (2006): Lease- Develop-Operate	
3	Project Costs: \$1,072.9 million Senior bank debt - \$341.5 million TIFIA loan - \$341 million* Equity contribution - \$80.3 million	Project cost: \$2,068 Million Private Equity - \$348 million Private Activity Bonds - \$589 million TIFIA Loan - \$589 million	Project Costs: \$2,047 million Private Activity Bond Proceeds - \$398 million TIFIA Loan - \$650 million Equity Contribution - \$426 million	Project cost: \$658 Million Bank debt - \$340 million (backed by toll revenues) TIFIA loan - \$140 million (backed by toll revenues) Investor equity - \$130 million	Original construction: Project cost: \$658 Million 63-20 corporation tax-exempt toll revenue bonds - \$354 million Long-term lease (2006): Senior bank debt - \$420 million Subordinated debt - \$55 million Equity contribution - \$141 million TIFIA loan - \$150 million	

4	35 Years – 5 years for construction, 30 years for maintenance. Due to be returned to Florida in 2044	85 years - five years of construction and 80 years of operation	52 Years	35 Years – Reverts to state of California in 2042	99 Years
5	Availability and Milestone Payments	High Occupancy Toll	Toll	Toll	Toll

Source: http://www.fhwa.dot.gov/ipd/p3/

For this examination, This paper uses the public private partnerships occurring at PortMiami as its central case study, with particular focus on its two P3 projects: the Port of Miami Tunnel and the Intermodal/Freight Restoration.

The Port of Miami Tunnel (POMT) was one of the first Design-Build-Finance-Operate projects completed in the United States. While the project is similar to other, earlier projects often considered P3s it differs in many other key ways. First, while many projects that have been labeled as P3s in the United States have used revenue models (or toll models) for their final revenue stream, the POMT was one of the first American P3 projects to be paid through government availability payments. Large public works have long struggled with over-projections for demand (Flyvbjerg, 2005), and accurate projections for toll revenues have been a persistent challenge for P3s. Thus, Availability payments, where the government pays for services based on performance of the concessionaire, have become increasingly popular globally. Secondly, the POMT concession term is for 35 years, whereas many American concessions have had terms lasting over half a century. Lastly, the POMT project has been praised for maintaining a website for the project were many of the detail and documents relating to the project could be found. This has been seen as allowing this project to operate more transparently than many of its infrastructural predecessors (Doulis and Brecher, 2012). For these reasons, the terms of the POMT concession agreement are closer to what are currently seen as best practices in P3 procurement.

The other public private partnership recently completed at the Port of Miami was the restoration of the freight rail connection from the island port to the mainland. While the rail restoration project at the PortMiami is considered a P3 by its participants, it is in fact quite different in nature from the POMT. In this paper, the actors and stakeholders of this P3 are contrasted and compared with those at POMT, thus allowing for a more in-depth analysis of the entire infrastructural P3 field. As part of its analysis, this paper will seek to understand the project stakeholders for these two P3 projects. It will look to explore what types of projects they pursue and what they understand a P3 project to be. Stakeholders considered will include private actors, such as the companies working in P3s, as well as public actors, like state and federal transit authorities.

Using Delmon's framework to identify, breakdown and develop a basic understanding of these projects, relevant stakeholders were then singled out and categorized. (Table 2- see below) As taken from Robert Yin's work on case study research, the most appropriate form of questioning for these subjects would be focused interviews, whereby subject are interviewed for a short period. Parties interviewed for this paper included a wide range of both public (governmental) and private (market based) actors working in the P3 field.

Chapter 4: Florida and Infrastructure

Florida, Federal Government and the Federalist System

The precarious state of American infrastructure is well known. In 2005, on an A to F scale, the American Society of Civil Engineers rated American infrastructure at a grade D. Roads were rated at a D with rail rated slightly higher at a C-. The report states bluntly that "Congested highways, overflowing sewers and corroding bridges are constant reminders of the looming crisis that jeopardizes our nation's prosperity and our quality of life." In 2010, the Federal Highway Administration produced a report to Congress that laid several concerns bare: in 2009, it found 26% of bridges to be in deficient condition; implementing all potentially costbeneficial improvements by 2028 under the Improve Conditions and Performance scenario would cost approximately \$170.1 billion per year over 20 years. The cost of replacing all transit assets (Rail, Bus, etc.) that are past their useful life would be \$78 Billion. Meanwhile, construction of new, modern infrastructure has been slow. High speed rail is seen as lagging behind nations in Europe and Asia (Nixon 2014). Funding for infrastructure has been hard to come up with. The major source of revenue for the Highway Trust Fund, the federal gas tax, hasn't been raised since 1993. By 2014, Former Secretary of Transportation Ray LaHood categorized America's infrastructure as being on life support. (CBS News 2014)

To address this, the Obama administration passed the \$787 billion dollar American Recovery and Reinvestment Act (ARRA) in 2009. Passed as an economic stimulus after the financial crisis of 2008, the recovery act put a particular emphasis on rebuilding, developing and enhancing American infrastructure. In particular, the bill gave priority too projects that were deemed to be shovel ready - projects that could be mobilized within a matter of months.

In Florida, a High Speed Rail link from Orlando to Tampa was deemed to be such a project. Florida had long been criticized for its' over dependence on car-based mobility and had repeatedly been advised to construct more mass transit options. In 2000, FDOT had created a plan for the creation of a high speed rail system throughout the state. In 2006, FDOT released the Florida Intercity Passenger Rail "Vision Plan", whereby they detailed an "affordable statewide intercity passenger rail system (that) can be developed incrementally that will eventually link all of the major urban areas in the State." (FDOT 2006, 1). The plans "market, operating and infrastructure requirements for implementing the Florida Intercity Passenger Rail System have been assessed at a detailed feasibility level and in terms of the financial and economic objectives of the USDOT Federal Railroad Administration (FRA) for intercity passenger rail." Phase 1 of the plan was to be an inland route running over (and in partnership wish) freight lines currently run by the rail firm CSX between Tampa and Orlando. Governor Charlie Christ had lobbied at the federal level to bring federal funding for the project. The rail was envisioned as a way to reduce sprawl and concentrate future development in the state. By 2009, The state had most of its rail easements in place and many of the drawings completed. A preliminary budget estimated the cost of the project at about \$3 Billion. For this reason, out of \$8 Billion allotted for high speed rail under the ARRA, \$2 billion had been set to go to Florida for construction of the Orlando-Tampa line. The rail project looked likely to become a flagship of the entire ARRA. In his 2010 State of the Union address, President Obama announced that in Tampa, Florida "workers will soon break ground on a new high-speed railroad funded by the Recovery Act.... There are projects like that all across this country that will create jobs and help move our nation's goods, services, and information." (Obama 2010)

Despite the allocated money, then-newly elected governor Rick Scott terminated the project in 2011. In doing so he cited the following concerns: capital cost overruns from the project that could leave Florida taxpayers responsible for an additional \$3 billion; historic overprojections for ridership and revenue of public works and if the state found the project too costly and shut it down, the \$2.4 billion in federal funds would have to be returned to Washington. In spite of concerns from Florida State legislators, Scott was able to cancel the project because under the American federalist governing system, asset allocation and land use are responsibilities of the individual states. Despite the federal money being delegated to the project, it was ultimately up to the state to implement its usage. In the state of Florida, The state Supreme Court ruled that the governor has the power to either accept or reject federal money as has he or she feels is suitable.

Rick Scott is an honorary member of the American Federalist Society. The Federalist society is a think tank founded in 1982 that describes itself as "group of conservatives and libertarians dedicated to reforming the current legal order." They describe themselves as being committed to several principles including the separation of government powers and "making sure that the principles of limited government embodied in (the American) Constitution receive a fair hearing." In a 2012 speech to the Federalist Society, Scott stated "the stimulus that would have begun projects, like high speed rail, in states without the financial support to continue them."³ In the same speech, he went on to say that "from the very outset of our constitutional experiment, there has always been a temptation for the federal government to expand the reach of government... citizens must dwell on the balance between national and state

³ http://www.flgov.com/governor-scott-addresses-federalist-society-2/

governments 'with particular attention' because 'it forms a double security [for] the people. If one encroaches on their rights they will find a powerful protection in the other.'" Despite many years of planning, passenger rail service development in Florida came to a major halt.

Florida, P3s and Port Miami

Scott, in his expressed interest of "reduc(ing) government spending, cut(ing) government's leash on our state's job creators and then hold(ing) that government accountable for the investments it makes," has expressed considerable support for Public Private Partnerships. In the speech rejecting the \$2 billion of federal funds for high speed rail, Governor Scott defend his decision by arguing that

"Rather than investing in a high-risk rail project, we should be focusing on improving our ports, rail and highway infrastructure to be in a position to attract the increased shipping that will result when the Panama Canal is expanded... By capturing a larger share of containerized imports entering our seaports, expanding export markets for Florida businesses and emerging as a global hub for trade and investment we can create up to an additional 143,000 jobs according to a recent chamber of commerce study."⁴

PortMiami, with its range new containerized ports, new highway infrastructure, refurbished rail infrastructure done through public private partnerships provides and unusual conjunction of all these concerns.

Located just off the city's downtown core, the modern Port of Miami was built atop three manmade refuse islands in Biscayne Bay in the 1960s. Since that time, it has emerged as a major facility for both cruise ships and cargo operations. According to the Port, it is the largest cruise ship facility in the world, with 831 docked ships and 4 million total passengers in 2013. Furthermore, their cargo facility docked 1,348 ships and was ranked as one of the 100 busiest seaports in the United States by the American Association of Port Authorities. It is

⁴ http://www.flgov.com/2011/02/16/florida-governor-rick-scott-rejects-federal-high-speed-rail/

touted by officials in Miami-Dade County as being it's the second largest generator of economic activity. In 2013, The County cited that the port contributed over \$27 billion in economic activity and provided direct and indirect employment for 207,000 persons throughout south Florida.

In order to keep the port competitive, the ports managing authority has forged ahead with more than \$1 Billion dollars' worth of major capital improvements spread primarily over 5 main projects. Three of them (Dredging the harbor to a depth of 50-52'; building new super Post-Panamax Cranes, strengthening the ports bulkheads) are being done to accommodate larger cargo vessels anticipated upon the widening of the Panama Canal in 2015. The dredging was handled by the Army Corps of Engineers and was funded largely by the State of Florida.⁵ The other two major capital improvement projects are Public Private Partnerships: the Miami Access Tunnel, which allows direct highway access to the port and the intermodal/ freight rail restoration which will restore freight access to PortMiami.

Port Planning Context

⁵ http://www.miamidade.gov/portmiami/press_releases/2013-11-21-deep-dredge-construction-moving-forward.asp



Figure 1 Port Miami- Downtown Connections 2015

Many lists rank cities by their competitiveness – their ability to attract jobs and investment into their city limits. Under this context, The Miami region has emerged as a highly prosperous and competitive region over the past several decades. By the early 1990s, Miami, with its' significant port and international commerce facilities had already emerged as a "global city" (Sassen 1993). A 2012 ranking of Global City Competitiveness conducted by the *Economist* ranked Miami as the 43rd most competitive city in the world. A similar poll done by *Foreign Policy* and consulting firm AT Kerney ranked Miami as the 36th most global city. The areas ability to attract people is demonstrated by the fact that the 2010 census showed the metropolitan region to be home to over 5 million people, making it the 8th largest metropolitan statistical region in the United States and the largest in the South.

In particular, the city's downtown has emerged as a particularly strong location for foreign investment. Despite having been impacted heavily by the financial crisis, residential construction in Miami has rebounded strongly. In 2014, the Miami Downtown Development Authority released a report stating that 6,019 units were under construction in the downtown market. Much of this resurgence has been seen as being fueled by foreign investment. (IRR, 2015) Thanks to an estimated delivery of 23,656 residential units in the core, the current population of downtown Miami is estimated to be around 80,000, with much of that being young professionals being between the ages of 25 and 40 (USA Today, 2015) Downtown Miami's office market is both one of the largest and most expensive downtown office markets in the Sunbelt. The MDDA has said that over the course of the past 10 years, the downtown area has emerged as a 24 hour district.

However, this prosperity and competitiveness is reliant on having good infrastructure. About their list of global cities, the *Economist* states "physical capital is a prerequisite for competitiveness—good infrastructure that undergirds a city probably boosts all its other scores." While the seaports off-downtown location had helped fill downtown hotel rooms with cruise ship travelers, it had been constricting for both the port and the downtown in other ways. For much of the ports existence, the main way freight traveled to the mainland was over the Port Boulevard Bridge, a road-bridge leading to local downtown roads. Rail connections that had existed on the site were little used and, after a Hurricane in 2005, were lost completely. In 2009, an average weekday saw nearly 16,000 vehicles traveled to and from PortMiami and through downtown. Of this 16,000, about 28% was truck traffic.⁶ These poor infrastructural connections were seen as making the port less attractive to logistics firms looking to send and receive freight into the south east, while the truck traffic was blamed for discouraging private investment downtown.

⁶ http://www.portofmiamitunnel.com/project-overview/project-overview-1/

Table 2: PortMiami P3 Project Stakeholders

	Port of Miami Tunnel			Rail Restoration		
		Stakeholder	Interest	Stakeholder	Interest	
olic		US DOT	Project Loan Under TIFIA program - \$341 Million		Project Grant under TIGER Program - \$22 Million	
Put	FDOT		Ownership. Investment		Contribution - \$11 Million	
	Miami Dade County/Port Miami				Contribution - \$5 Million	
	City of Miami					
rivate	onaire	Meridiam	90% Equity -	Florido Fost	Ownorship Investment	
	MAT LLC LLC	Bougyues	10% Equity	FIORUA EASL Coast Railway	- \$ 11 Million	
Ч	Ŭ	Transfield	Operations	coust namedy	V II WIIIION	

Tunnel Development

As early as 1982, Miami-Dade metropolitan planning had recommended building a tunnel to allow for direct highway access from the port. By 1991, after having evaluated other cost effective alternatives to linking the port with the highway, FDOT, the Federal Highway Administration (FHWA) and the City of Miami had endorsed the tunnel as the preferred method of connecting the port. Despite the widely understood need to create a direct highway connection to the port, the challenges were significant. The geology under Biscayne Bay is porous and unpredictable. The risks for sinkholes, flooding from hurricanes and other natural disasters is high.

However, it wasn't until 2006, when after a decade and a half of back and forth between different governmental bodies that FDOT issued a Request for Qualifications (RFQ) for a concessionaire to create and administer the tunnel using a design, build, finance, operate, maintain (DBFOM) model of P3. There are a few reasons that the P3 route was chose for building this project. FDOT claims that they a limited ability to issue bonds and are often required to pay for capital improvements out of their general operations budget. Sources say that that would have made building this tunnel unfeasible for them to finance under traditional

design-build methodologies without significant support from other government agencies. In 2015, FDOT had a highway budget of \$3.8 billion for all of its highway projects, a record high and nearly 4 times the construction costs of the new tunnel. However, FDOT officials insist that diverting nearly a quarter of all highway funds to construction of a single project would not have been politically doable. Instead, FDOT decided to use an availability payment compensation system. In this case, the availability payment structures was set up wherein the private concessionaire arranges all or most project financing, and would then repaid by FDOT as services requirements are fulfilled and project milestones are met. While this structure has been often used in other countries, this marked among the first times it was used in the United States.

However, FDOT had never gone through a P3 procurement process before and P3 enabling legislation had not yet been enacted by the state legislature. To make the project possible, FDOT needed special permission for several aspects of the process. In particular, under Florida law, all traditional contractors needed to provide surety bonds covering 100% of the contract price. The use of surety bonds for P3s has been seen as undermining P3 projects as the market does not provide bonds large enough to cover most P3 contracts. As a result, the law was amended to allow FDOT to reduce bonding requirements for larger projects so long as an alternate security source covered the contract amount. (Harder, 2009) Sources in Florida indicate that this adjustment actually helps reduce the cost of some P3 projects, as the alternate methods of securing the contract are done at a lower rate that a typical surety bond.

In February 2008, Miami Access Tunnel, LLC (MAT) was chosen from a shortlist of three other consortiums to be the concessionaire for the tunnel project. Miami Access Tunnel

special purpose vehicle (SPV) consisted of the French firm Bouygues Travaux Publics S.A as equity member, lead tunneling contractor, tunnel design and engineering; the Australian firm Transfield services for lead operations and maintenance and the Australian firm Babcock & Brown Infrastructure Group as equity member. Babcock and Brown had been one of the leading infrastructure investment firms in the years prior to the financial crisis of 2008. However, by the end of October in 2008, its stock price had fallen to \$1.40 AUD from a high of \$33.90 AUD just a year earlier. In December of 2008, FDOT announced that an agreement would not be made with MAT because of their financial difficulties. However, by May 2009, the Consortium behind MAT had replaced Brown and Babcock with the French investment firm Meridiam Infrastructure. Babcock and Brown went into bankruptcy in March 2009 and went into liquidation in August of 2009.

Therefore, the final agreement on the Miami Access Tunnel concession worked out as follows: Meridiam infrastructure held 90% equity in the MAT special purpose vehicle with the remaining 10% being held by Bouygues Travaux Publics. The project employed the services of Bouygues Civil Works as the Design and Build contractor and Transfield Services and the tunnel operator after completion. The tunnel was publicly sponsored by the Miami-Dade County, FDOT and the City of Miami. The federal government also provided significant support through the Transportation Infrastructure Finance and Innovation Act (TIFIA).

At time of the contract, the funding obligations to be borne by the City, County and FDOT were estimated to be \$915 Million dollars: \$609,888,888 for construction costs; \$54,836,582 for soft costs; \$50,000,000 in direct costs; \$150,000,000 for Geotechnical Contingency Reserve and \$50,274,530 in general contingencies. Final costs were estimated by

the FWHA as being around \$1,113 million dollars, with \$1,072 being listed as eligible payments for federal support. MAT was paid \$156 million in milestone payments from FDOT during construction with an additional \$350 Million to be paid to MAT upon completion of the tunnel. After construction was completed, Maximum Availability Payments (MAP) of \$32.5 million would be made available annually to the concessionaire based on meeting service, quality and availability standards that have been specified in the concession contract for the next 30 years. If the tunnel is inaccessible or if the concessionaire underperforms, it will be denied full payment. This break up of payments is seen as making the expenses easier to meet for FDOT. Final payment amounts will be determined based on the condition of the tunnel at the time of turnover to the state. Total cost of the concession arrangement could reach \$2.6 billion

Funding sources, as arranged by MAT under the guidance of Merdiam Infrastructure include a consortium of 10 banks holding senior debt on the project totaling \$341.5 Million and a TIFIA loan from the federal government of \$341.5 million.⁷ This A/ B financing structure whereby, institutional creditors (banks, funds) usually form the B group that is repaid before the A group is typical among P3 arrangements. MAT's equity partners made an equity contribution of \$80.3 million. \$100 Million in milestone payments and \$209.8 Million in development funds from the directly from FDOT were also used to help finance the project.

A second reason for utilizing a DBFOM model for realizing this project was the lack of local knowledge in geotechnical fields. Knowledgeable staff for doing the drilling and tunnel boring had to be brought in from outside the Miami region. FDOT felt ill equipped to take on

⁷ http://www.fhwa.dot.gov/ipd/project_profiles/fl_port_miami_tunnel.aspx

the Geotechnical risk that the project entailed. One of the goals of P3s is to delegate risk to the party best able to accept it. In this case, the contract was designed to transfer geotechnical risk onto the private actors. The deal was structured so that the first \$10 Million in extra costs due to changed geotechnical conditions would be borne by the concessionaire, the next \$150 Million in geotechnical risk would be borne by FDOT. Bouygues Civil Works, which had a long background in tunnel drilling, designed and built two underwater tubes that were 3,900 feet long, 41 feet in diameter and reached a depth of 120 feet below the water.⁸

In October of 2009, FDOT reaches a financial close with MAT and issues a notice to proceed for design and construction of the tunnels. Construction for the tunnel commenced on May 24th 2010. Mining of the Tunnels began in November 2011 and was completed in May of 2013. The project was completed and opened for traffic on august 3rd, 2014. The tunnel is scheduled to be turned over to FDOT in 2044. See table 3 at the end of the paper for an itemized timeline.

MAT Concessionaire, LLC

MAT Concessionaire,LLC is a Special Purpose Vehicle (SPV) owned by Meridiam Infrastructure (90% equity interest)and Bouygues Travaux Publics (10% equity Interests). Bouygues Group's construction division, Bouygues Civil Works, was charged with construction and design. Operation and Maintenance is being handled by the Australian firm Transfield Services (Figure 1). Their corporate backgrounds are as follows:

⁸ <u>http://www.fhwa.dot.gov/ipd/project_profiles/fl_port_miami_tunnel.aspx</u>



Figure 2: Diagram of Miami Access Tunnel concession structure (Image Source: MAT, LLC)

Bouygues Travaux Publics/ Bouygues Civil Works – Paris based Bouygues Group is a conglomerate focused on a broad range of infrastructural civil works. Its devisions include telecoms, media and construction services. It does business in over 100 nations and was listed at #660 on the Forbes Magazine list of the largest 2000 global companies in 2014. Among its past major infrastructural projects is the rail tunnel connecting France and the UK. Bouygues has been working in the P3 field since it first emerged in the early 1990s.

Meridiam Infrastructure – Meridiam is an asset management firm specializing in public and community infrastructure. Founded in 2005, Meridiam is based in Luxembourg and has its head offices in Paris. Meridiam develops projects in OECD countries by working closely with public authorities at every stage of their projects, from design through long-term management (25 years).

Transfield Services – Australian Transfield Services is a provider of operations, maintenance and construction services in a wide range of infrastructural sectors. It employs over 19000 people in over 10 countries.

P3 Project 2: Intermodal/ Freight Rail Restoration

The final major capital expenditure currently being undertaken at the Port of Miami is the restoration of rail service to the port. In 2005, Hurricane Wilma made landfall in south Florida as a category 3 hurricane and ultimately caused an estimated \$16.8 billion dollars in damage in the region.⁹ Among the damage was the loss of a rail bridge that connected the Port of Miami to the mainland. In the immediate years after the loss of rail connection, there was little concern about having it restored. The rail connection was seen as lightly used. However, the private Florida East Coast Railway (FECR) retained ownership of their rail easements within the port and their rail spurs had to be relocated within the port during construction of the tunnel.

In 2010, as part of a larger project called the Port of Miami Intermodal and Rail Reconnection Project, a \$49 million restoration of the rail bridge was undertaken. The Project received a \$22 Million grant from the federal Department of Transportation (US DOT) under the Transportation Investment Generating Economic Recovery program (TIGER). TIGER grants are competitive grants that are offered to projects that may not be eligible for other types of federal funding. TIGER grants usually require the locality to commit a certain amount of matching funds from either State, municipal, private or philanthropic sources. In the case of the Rail Bridge, separate sums of \$11 Million were invested by FDOT and FECR. The remaining \$5 million came from Miami-Dade County.

Florida East Coast Railway - Florida East Coast Railway is a Jacksonville, Florida based private firm that owns the major freight rail system along the east coast of Florida. Its easements run

⁹ http://www.nhc.noaa.gov/outreach/history/#wilma

through all major east Florida cities including Miami, Fort Lauderdale, Palm Beach and Jacksonville. The firm was established in 1895 by Industrialist Henry Flagler, who created it from existing railroad companies located throughout northern Florida. Using those easements, the FECR became instrumental in the founding and development of many of eastern Florida's largest cities, including Miami. One of the main commercial thoroughfares in downtown Miami is named Flagler Street in honor of Henry Flagler. Today, FECR is primarily a logistics firm focused on freight in South Florida. When completed, restored rail service from the port will enable fright to be brought to FECR's intermodal rail yard in Hialeah, Florida (next to Miami International airport). It is from there that cargo will be distributed into the national rail system. Service is anticipated to begin in 2015.

PortMiami P3s and their Public Stakeholders

The PortMiami P3 projects are unusual in that, despite their differences, they share almost entirely the same list of Public Stakeholders: the United States Department of Transportation; State of Florida/FDOT and Miami-Dade County/PortMiami. As the power of FDOT is derived from the state and the power of the PortMiami Port Authority is derived from the county, the below stakeholder discussion discusses the state and county rather than the specific agency or public benefit corporation administering the project.

United States Department of Transportation - The United State Department of Transportation (USDOT) is the division of the United States Federal Government that handles domestic transport issues, including providing federal funding and support for infrastructure delivery. In 2008, the department established the *Innovative Delivery Program* with the purpose of providing " a comprehensive set of tools and resources to assist the transportation community

in exploring and implementing innovative strategies to deliver programs and projects."¹⁰ Among the innovations it looks to foster are project procurement methods that utilize P3 Methods. It feels that "Early involvement of the private sector can bring creativity, efficiency, and capital to address complex transportation problems facing State and local governments." To help foster P3s, US DOT offers significant financial resources through a range of programs including TIFIA, TIGER, Federal PABs.

TIFIA, as referenced above, is a program begun in 1998 with the intent of fostering innovated financing for infrastructure. TIFIA loans or bonds are meant to provide "improved access to capital markets, flexible repayment terms, and potentially more favorable interest rates than can be found in private capital markets for similar instruments."¹¹ Projects including highway, transit, railroad, intermodal freight, and port access projects are all eligible for TIFIA funding. The US DOT boasts that "Each dollar of Federal funds can provide up to \$10 in TIFIA credit assistance - and leverage \$30 in transportation infrastructure investment." Without a TIFIA loan of \$340 Million, the Port of Miami project would not have been buildable as a P3

TIGER, as referenced above, was begun in 2009 with the intent of promoting economic recovery in the United States after the 2008 financial crisis. It looks to provide grants in road, rail, transit and port projects. TIGER also looks to find matching local funds in the projects it invests in boasting that while the program "can fund projects that have a local match as low as twenty percent of the total project costs, TIGER projects have historically achieved, on average, co-investment of two non-Federal dollars (including State, local, private and philanthropic

¹⁰ http://www.fhwa.dot.gov/ipd/how_business/

¹¹ http://www.fhwa.dot.gov/ipd/tifia/

funds) for every TIGER dollar invested."¹² TIGER grants provided close to half the funding for the Rail restoration project at the PortMiami.

State of Florida - Both advocates and doubters to the use of P3s state that creating a strong regulatory framework is a must if P3s are going to work out well for all parties that are involved. As such, in June of 2013, the Florida state government passed legislation whereby a "responsible public entity" and a private entity could enter into contract to provide qualified public goods. Under the bill's legislative findings and intent, The legislature states that it finds "a public need for timely and cost-effective acquisition, design, construction, improvement, renovation, expansion, equipping, maintenance, operation, implementation, or installation of projects serving a public purpose... and that such public need may not be wholly satisfied by existing procurement methods." (CS/CS/HB 85, Pg. 7) Furthermore, the legislature states "that a public-private partnership has demonstrated that it can meet the needs by improving the schedule for delivery, lowering the cost, and providing other benefits to the public." (Ibid) Lastly, there may be state and federal tax incentives that promote partnerships between public and private entities to develop and operate qualifying projects." (Ibid) It is the intent of the Legislature to encourage investment in the state by private entities; to facilitate various bond financing mechanisms, private capital, and other funding sources for the development and operation of qualifying projects."

A related statute, dealing specifically with public private transportation facilities, details what may be classified as a qualified project. FDOT may advance projects programmed in their adopted 5-year work program or projects increasing transportation capacity and costing greater

¹² http://www.dot.gov/tiger/about

than \$500 million in the 10 year strategic intermodal plan. Both the 5-year work program and the 10 year strategic intermodal plan contain a range of Air, rail, Seaport, Spaceport and transit projects. Furthermore, a private actor may forward an unsolicited proposal to build infrastructure. FDOT must determine if the project would have safeguards to ensure that no additional costs or disruptions would be borne by the public; that the department or private entity has the opportunity to add capacity if desired; and that the facility would be owned by the department upon completion or termination of the concession agreement. Agreements under FDOT statute are not to run for periods exceeding 50 years without special authorization from either the secretary of the department or legislature. To help forward public private partnerships within FDOT, a special office was created under the auspices of the office of the comptroller. In August 2014, FDOT completed its first major arrangement through its P3 office, adding additional capacity to the I4 highway in Orlando.

Miami-Dade County -On top of the state legislation, Miami-Dade County passed its own Public Private Partnership ordinance in July of 2013. Similar to the state law, it cites that "infrastructure funds from traditional sources, including State and Federal are often unavailing, inconsistent and unpredictable, with demand for funding clearly exceeding the resources available." (Sec. 2-8.1.7) It cites a growing interest among private investors to invest in infrastructure and that "it is in the best interest of the County to work collaboratively with such investors, to provide a structure and simplify its procurement policies and practices to allow for such alternative financing." (IBID) The law then calls upon the mayor to develop a list of projects considered suitable for P3s and develop recommendations to simplify the County process for soliciting, evaluating and contracting P3s. Importantly, the law asks for proposed

amendments to the codes of the state law involving unsolicited P3 proposals, with the hope of simplifying them and making them more effective. ¹³

Chapter 5: Analysis

Stakeholder Understandings of P3s

Delmon's concerns about what constitutes a P3 and the lack of consensus thereof should not be taken lightly. Legal rules and funding methodologies that make P3s feasible are potentially rife with holes and potential contradictions. The US DOT defines a P3 as "contractual agreements formed between a public agency and a private sector entity that allow for greater private sector participation in the delivery and financing of transportation projects."¹⁴ On their website, the US DOT profiles 64 projects that they feel are examples of P3s. The chart below displays the types of project delivery methods considered P3s by the US DOT

Public Responsibility Private Responsibilit					ivate Responsibility
		P3 Optic	ons		
New Build Facilities	Private Contract Fee Services	<u>Design</u> <u>Build</u>	<u>Design Build</u> <u>Operate</u> <u>Maintain</u>	Design Build Finance	Design Build Finance Operate Maintain Concession
Existing Facilities	<u>O & M</u> Concession				Long Term Lease Concession

Figure 3: US DOT classified P3 options (Image Source: USDOT)

As such, they have classified arrangements that range from Design-Build, where a private sector entity is contracted to handle both the design and construction of a facility, and Design-

¹⁴ http://www.fhwa.dot.gov/ipd/p3/defined/

Build-Operate-Maintain, where the private sector entity handles all stages of development and eventual operation of the facility as public private partnerships. These options still maintain public financing of the project, with most of the risk for project over runs still being born by the public sector outright. Furthermore, under the definitions set forth by the US DOT, P3s are occurring in the 17 states that have yet to pass any designated P3 legislation.

Even in states where P3 legislation has been enacted, the differences between the profiles of a design build project and a DBFOM are tremendous. Among the projects listed by the US DOT as being P3s are the Route 28 Corridor improvement and the Capital Beltway High Occupancy Toll (HOT) lanes project. The Route 28 Corridor was financed through a range of government grants and all design-build services were performed by a single firm. The Capital Beltway was full born DBFO project that was contracted out to an SPV titled the Capital Beltway Express, LLC, a joint venture between two firms. Out of an estimated \$2 Billion in project costs, close to \$1 billion came from either private equity or through PABs. These projects both occurred in Virginia, which became the first state to pass P3 legislation in 1995. The state of Virginia defines P3s as "A public-private transportation project is one in which a public agency partners with a private firm in planning, financing, constructing and/or operating a road, bridge or other facility." (VDOT 2007) The Virginia P3 website has their own list of instate P3 projects. The Route 28 corridor project is not among them.

Firms engaging in infrastructural P3s tended to have narrower definitions. Consistently, firm representatives stated that a P3 should be analyzed from a life-cycle point of view, where a private firm has been engaged to handle the infrastructure from conception through its approximate life expectancy. While some sources felt that a private sector financing component was essential to considering something a P3, others did not.

Firms engaging in P3 activity, while admitting that definitions are challenging, have themselves stated the cacophony has constrained the field and lead to widespread misunderstanding between the citizenry and the administering bodies. Design-build, where a single private sector consortium is contracted to handle both the design and build phases of infrastructure was generally thought to be a misuse of the term P3, as the infrastructure would be handed to the public sector upon completion of construction. One source expressed frustration that Long term lease concessions have been grouped alongside DBFO models in the discussion of P3s. According to the source, long term leases of existing facilities cannot achieve the hoped for life cycle benefits or cost efficiencies of a DBFO project. The ability of DBFO parties to use prudence in making construction decisions is lost when a government outsources an existing facility. Furthermore, the long term lease concessions tended to be arranged with upfront payments for exceedingly long periods of time. Concerns such as these about long term concession arrangements have long been expressed, even by industry advocates. As early as 2012, critics pointed out that long term leases, like the 99 years for the Chicago Skyway and the 75 years for the Indiana Toll Road, were out of sync with then emerging best practices in Europe for private administration of infrastructure. (Doulis and Brecher, 2012).

Although US DOT includes many Design-Build projects as P3 examples, despite widespread consensus within the P3 industry that those projects do not qualify, they do not make mention of the POMT Intermodal/ Freight Rail Restoration project. This is in spite of the fact that all parties involved in the project refer to it as a P3. After all, out of the \$50 million needed to complete the project, only \$11 million was provided by the private partner. One could attribute this to the comparatively small size of the project. Most of the P3 projects highlighted by the US DOT run into the hundreds of millions or even billions of dollars. However, even the \$700 million National Gateway project undertaken by another Florida-based rail operator, CSX,

is also not profiled by the US DOT. This is in spite of the fact that out of the \$188 million budgeted for its first phase, the rail operator only put up \$25 million.

Despite the public/private nature of their operations, within Florida, CSX and FECR are not administered by FDOT P3 office. Instead they are administered by FDOT Rail and Motor Carrier Operations Office. While the two may have some overlap (the P3 office is part of the Project Finance office within FDOT), sources indicate the proactive role the P3 office has taken in other state P3 projects, it did not take with the intermodal rail restoration at the Port of Miami. Nor are they taking the same proactive role with FECRs affiliated firms, Florida East Coast Industries (FECI) upcoming passenger rail project All Aboard Florida. That project, which FECI is trying to promote as fully private, is nonetheless looking for federal financing of some kind. Initially, the project applied for a loan from the Federal Railroad Administration. The firm then decided to withdraw the loan application and instead try to raise \$1.75 Billion through TIFIA PABs. Regardless of how the project is funded, ownership for the rail lines and their easements remains with the rail companies. The Florida P3 office is mandated to make sure that facilities are to return to the public upon the completion or termination of the contract. This falls in line with the P3 projects profiled on US DOT. They are public/private arrangements wherein ownership is held by the public and reverts to the public upon the end of the contract.



Figure 4: All Aboard Florida Station Location



Figure 5 All Aboard Florida Miami Station Rendering (Image Source: All Aboard Florida)

Unlike FECI, or other former infrastructure firms like Penn Central, P3 firms are not interested in profiting from value capture or even the increased property values achieved as a result of the creation of their infrastructure. In connection with the All Aboard Florida project, FECI is building a terminal called MiamiCentral that will include approximately 3 million square feet of transit oriented development. However, most of the P3 firms surveyed here tend to avoid taking real estate risks. Before major players in the P3 field such as Bouygues, Kiewit, Isolux Corsan, Ferrovial and Vinci became equity players in infrastructure, they were construction firms. Despite their equity interests in the SPV and the long term interest that they have in the project, they in essence are trying to serve primarily as builders. Following this, even the financing firms, such as Meridiam, look to focus only on the construction delivery aspects of the financing and are less concerned with larger development. Indeed, Meridiam looks to avoid real estate risk as much as possible. Skanska, which does have a unit specifically dedicated to commercial real estate development, still primarily self identifies as "a provider of comprehensive construction services and a developer of public-private partnerships."¹⁵ While they state that they plan to invest approximately \$1billion into US commercial development over the next five years, this is a minor amount when compared to the \$2 billion expected to be spent on just Tower 3 at another value capture project, the World Trade Center in New York. The World Trade Center, a mixed use facility that combined commuter rail facilities with large office buildings, is an example of a project by a quasi-public agency (PANYNJ), that is not supposed to be supported by tax-payer dollars, trying to use value capture techniques to generate revenue. In its 2011 master plan, debt-burdened PortMiami was advised to "move forward with the commercial master plan of the southwest corner of the Port of Miami that will allow for key commercial revenue opportunities for the Port with minimal capital outlay." (Miami-Dade, 2011)

The modern P3, as is figured under the rubric here, are pure infrastructure development projects: They are have been conceptualized as a form of construction delivery tool. The firms engaged to do this work do not seek the cross-subsidizing and value capture aspects that have

¹⁵ http://www.usa.skanska.com/about-skanska/ Accessed 5.15.2015

marked previous developments infrastructural developments handled by both private (FECR, Penn Central) and public-authority based (PANYNJ, Port of Miami) actors. P3 legislation in Florida allows room for private actors to propose P3 projects that have not been sent out for bid, but the real estate development aspects that make many of what gets called a public-private partnership in other fields unappealing for most infrastructural P3 actors.

P3 Private Actors

While P3s most heavily pushed by the government may be intended for construction and delivery of infrastructure, there are more actors in creating infrastructure than just the builders. Engineers, operators and in the case of a DBFO project, an equity partner also figure into delivering infrastructure. DBFO SPV usually consists of a consortium of these firms. The Florida P3 process requests that a consortium submit qualifications to the government with equity partners, lead contractors, lead engineers and lead operation and maintenance (O&M) firms individually highlighted. From there, the firms deemed most qualified are short listed and invited to submit a proposal for the P3 project. In the case of POMT, the winning SPV (MAT, LLC) listed Babcock & Brown Infrastructure Group US, LLC and Bouygues Travaux Publics, S.A. as equity partners; Bouygues Travaux Publics, S.A. as lead contractor; Bouygues Travaux Publics, S.A. and Jacobs Civil Engineering as lead engineers and Transfield Services, Ltd as lead O&M. In total 3 SPV were invited to submit proposals. (Table 4)

This format is still the one followed since the establishment of the P3 law in 2013. The recently awarded I-4 Highway development had 4 teams that were invited to submit proposals. A scoring committee from FDOT reviewed each proposal based on its Administrative, Technical and Financial merits. The team that scored the overall highest number of points was then

awarded the concession agreement. In this case, it was a consortium called I-4 partners. (Table 5).

Despite the experience gained by government officials in administering P3s and the passage of the state P3 law, the teams put together to bid on the projects retain remarkably similar make up. In both projects, Equity, Contracting and O&M are primarily handled by a firm based outside the US, while lead engineering is usually handled by a US based party. Of the 14 firms listed as being part of a proposal team for POMT, 6 maintained a headquarters in the US at the time bid. If the role of lead engineer is removed, 10 firms submitted proposals with only 2 maintaining a headquarters in the US. None of the bidders was based in Florida. When the original MAT equity partner, Babcock & Brown needed to be changed, they were replaced by the French firm Meridiam, LLC. In the more recent I-4 project, 22 firms were listed as being part of a proposal team, 12 of which list having a headquarters in the United States. When the lead engineer category is again removed, 17 firms are listed as being part of a proposal team, 8 have an American headquarters. Analyzing the role of the foreign concessionaire by numbers alone actually underplays the role they are playing. Often one party will serve multiple roles within the SPV. On POMT, Bouygues served as equity partner, lead contractor and lead engineer. On the I4 project, the equity firms are the Swedish firm Skanska and the British firm John Laing Investments. Lead contractor is a consortium led by Skanska with two additional American firms holding smaller percentages of the venture. While two of the proposal teams did include Florida based partners, they were limited to construction roles that paired them with much larger multinational construction groups.

The US DOT project profiles reveal a somewhat similar result. Of 46 firms listed as private partners in the 25 projects listed potentially non-P3 category of Design-Build, 4 firms

have overseas headquarters. Of 57 firms listed as private partners in DBFO type projects, 24 list overseas headquarters. This statistic again comes with a major caveat. The actual number does not express the true role played by the domestic partner, which, as can be seen in the Florida examples, can be minimal.

This contrasts starkly with the contracting arrangements undertaken by FECR and FECI. For the Intermodal Rail Restoration, FECR engaged the local rail company Gonzales & Sons as well as the Connecticut based (with operational headquarters in Jacksonville, FL) Atlas Construction. So far for All About Florida, contracts have been announced for its rail stations. Boston based Suffolk Construction will be building the Miami Terminal. Fort Lauderdale, FL based Moss and Associates has been contracted to build stations in the cities of Fort Lauderdale and West Palm Beach. The process was described by sources as open with the contract awarded to the lowest bidder.

Delocalization of expenditures.

In 1956, Charles Tiebout published an article titled *A Pure Theory of Local Expenditures* in which he asserted that where consumer-voters are mobile, they will move to areas whose revenue-expenditure patterns match their interest. Therefore, the ratio of public expenditures and tax rates will reflect the preferences of the local population. Since then, this spatial description of how public assets are both generated and allocated has been widely seen as explaining budgets and amenities available in different American localities. For example, Americans often chose suburban communities based on the quality of their schools and their related tax burden (Saiger, 2009). Furthermore, bond issues for large infrastructure projects often first need voter support.

How P3s connect to this model is problematic. While localities want infrastructure that will make them attractive to movers, the movers are often not desirous to pay the taxes needed to build it. P3s are an attempt to resolve this contradiction. As opposed to needing immediate voter support the

way a bond issue or a raise in property taxes might, P3s enable municipalities to finance large infrastructure without public approval. Instead, financing for P3s is often seen as existing between two models: Revenue payments and availability payments. Revenue based P3 models are expected to exist solely on the projects generated usage fees. Availability payment P3s are often paid out of a government's general obligation funds over long periods. In Florida, the POMT has been paid for through a series of milestone payments for construction and annual availability payments for annual maintenance. The availability payments come out of FDOTs general funds.

However, the loss of immediate voter oversight of is only one of the ways in which local control of infrastructure is reduced under P3 arrangements. Transportation P3s are designed with reimbursement and profit to be achieved gradually. Return on investment can take decades. The long term nature makes providing for all possible eventualities that may happen over the term of a contract difficult. A P3 contract is thus often regarded as an "incomplete Contract." (Yescombe 2007) Furthermore, the greater the degree specificity of needed in the contract, the greater the transaction costs become for the whole project. Therefore, negotiating a contract too finely would add significant costs to the project as a whole. Thus parties looking to work in P3s have financial incentives to not to work out too much minutiae.

Discussions of relational contracting must not only be considered between the public and private parties, but must also be considered among the private parties themselves. The majority of P3 projects are done through SPVs. These enterprises, formed purely for the purpose of administering the project, are usually comprised of several companies. For the Port of Miami Tunnel, the project was built by a consortium of consisting of the construction firm Bouygues, finance firm, Meridiam and operator Transfield. Companies looking to work in P3s would therefore be repeatedly need to negotiate contracts with each other. Therefore developing embedded relationships where the need for greater contractual details would become less of a factor in working together is important for firms looking to do P3 projects. Based on interviews, these firms for POMT were able to coalesce because of prior working relationships and existing mutual trust and confidence. Indeed, Meridiam's website makes mention of how the firm has "developed global and strong partnerships with construction and service leaders including Aecom and Kiewit from the US, Bouygues and Vinci from France, Strabag from Austria, Hochtief from Germany, Cintra and Acciona from Spain."¹⁶ Note that Meridiam was pulled into the POMT consortium alongside the other consortia firms after the original financing firm, Babcock and Brown, had to withdraw. Further consider that Meridiam considers its relationship with Bouygues, one of the original MAT, LLC consortia members, to be of particular importance. Though no source explicitly stated that this network alliance is what specifically brought Meridiam onto the project, the working relationship between the two was obviously a major factor in Meridiam's taking an equity position in the SPV. Based on the best available knowledge to the involved private parties, these firms will be able to coexist in a working relationship for the 35 year period of the contract with FDOT.

Interviews with other firms engaged in PPPs revealed similar patterns. Firms looking to work as partners evaluate each other based on suitability: the firms themselves must be suitably large enough and stable enough to handle the scope of a P3 project. They must also share compatible corporate values. These P3 arrangements were compared by one source to marriage.

This system of partnerships ties in very closely with Sociologist Manuel Castells observations that we are seeing the rise of a network society. Castells observes that the "new economy is organized around global networks of capital, management, and information, whose access to technological knowhow is at the roots of productivity and competitiveness." (Castells 2000, Pg. 502) His categories of capital, management and information pair up exactly with the categories of Administrative, Technical and Financial used by FDOT in evaluating P3 proposals. For urban environments, Castells cites Sassen and

¹⁶ http://www.meridiam.com/en/news/meridiam-infrastructure-raises-2-billion-dollars-and-reinforces-its-independence

notes that the role of cities in the global economy depends on their connectivity to infrastructural networks and that the urban nodes (like the PortMiami) will be the economic drivers of their entire metropolitan regions. Castells ultimately sees the how the city forms and performs globally as being highly dependent on how its local society is or isn't connected to these global flows of wealth, power and information. (Castells 2005)

While one may view availability payments as a variation of the Tiebout model of taxpayers paying for desired goods, there are several funding mechanisms that cause P3s to vary in key ways. First, in the United States, P3s are very reliant on low-interest money made available through the government. That, in in of itself isn't new. Much private development has been done through PABs for decades. PABs have allowed developers seen as creating a project with a public benefit to access lower-cost financing than would be generally available to a private actor. Usually this is done through the municipal bond market with a Public Benefit Corporation (Housing Authority, Port Authority, etc.) acting as the issuer. Indeed, this method has allowed localities to deliver large, infrastructural developments in the absence of any federal support. (Sagalyn 1990) Modern infrastructural P3s, on the other hand, are heavily reliant on federal money. While P3s may also rely on municipal PABs, they rely at least as much on money from the federal government. The TIFIA program was created to address state and local government struggles at obtaining affordable financing for transport projects. To do this, it looks to use federal money as a leverage to attract other non-federal co-investment. The POMT received a \$341 million TIFIA loan, exactly mirroring the amount of private bank debt attracted by the P3 consortium from a range of banks. While approvals are needed from local authorities before the project can receive TIFIA money, the amount of money made available to the project corresponds to the amount the private interests were able to arrange. The TIFIA program also includes federal PABs; Federal lines of credit and federal loan guarantees, all of which are meant to leverage non-federal capital. Other federal programs that look to leverage non-federal money include TIGER Discretionary Grants. While state and local governments are also able to apply for money under the TIFIA and TIGER programs, the amount of funding is contingent on how much they are able to provide on their own. Sources from the Florida

government indicate that they highly question whether the POMT would have been doable under non-P3 financing structures available to them in state. To this point, although the high speed rail plans once pushed under the ARRA are now being built, it is by the private All Aboard Florida and is relying on \$1.7 billion in TIFIA PABs.¹⁷ The state of Florida, which had once been in line to receive \$2 Billion in federal grant money to build high speed rail, is now seeing a high speed rail project realized through a combination of federal and private actors. In spite of the use of government funds, the role of the state of Florida in this arrangement is marginalized.

This inherent lack of control becomes a particular challenge in dealing with issues of asset specificity. Asset specificity, where assets are specialized among users, is widely written about within the context of government contracting. In contracting out services, the government runs the risk of losing the understanding of operating and running a system to a private sector party. Williamson (1987) writes about two types of asset specificity: physical asset specificity and human asset specificity. In infrastructural public private partnerships, the physical asset typically reverts back to the public owner upon conclusion of the contract. The human assets, whereby the knowledge and skill needed to keep the infrastructure functional and in good condition, may be kept by the private sector. In fact, in the case of an international partner, the knowledge and understanding may not even be kept within the country at the dissolution of the contract. In Florida, knowledgeable personnel had to be brought in from outside south Florida for construction. While maintenance is handled by the local union, many of the managerial positions are filled by people outside of Florida. Castells notes that " who are the owners, who are the producers, who are the managers, and who the servants becomes increasingly blurred in a production system of variable geometry, of teamwork, of networking." (Castells 2000, Pg. 506)

Political Risk

Managing political risks is one of the great challenges facing the P3 field. P3s are often viewed with concern by many parties. In spite of general bipartisan support in the US for P3

 $¹⁷_{http://www.fhwa.dot.gov/ipd/finance/tools_programs/federal_debt_financing/private_activity_bonds/federal_debt_financing/private_activity_bonds/federal_debt_financing/private_activity_bonds/federal_debt_financing/private_activity_bonds/federal_debt_financing/private_activity_bonds/federal_debt_financing/private_activity_bonds/federal_debt_financing/private_activity_bonds/federal_debt_financing/private_activity_bonds/federal_debt_financing/private_activity_bonds/federal_debt_financing/private_activity_bonds/federal_debt_financing/private_activity_bonds/federal_debt_financing/private_activity_bonds/federal_debt_financing/private_activity_bonds/federal_debt_financing/private_activity_bonds/federal_debt_financing/federal_deb$

projects, the challenging politics of doing P3 projects has continued to constrain the field. (Smith 2011)

The political risks of the international aspect of P3s, could be especially significant. While multinational corporations have at times been described as placeless (Ferguson and Gupta, 1990), P3 infrastructure bears multiple senses of place. Alongside the region served by the infrastructure, a P3 often forwards the interest of the private, quasi-private or wholly public organizations financing its construction and delivery. Germany's state owned bank, KfW, has often served as a financier to global infrastructural P3 projects that involve German partners. Indeed, KfW states that part of their corporate mission is to support "the German and the European export industries by financing infrastructure, climate and environmental protection projects as well as raw materials supplies, thus securing the life-blood of Germany's manufacturing industry and its competitiveness."¹⁸ Japans sovereign fund, JBIC, announced plans to work on a joint venture with Central Japan Railway Co., to build a bullet train line from Houston to Dallas (WSJ, Feb, 10 2015). France's Stated Owned rail enterprise, SNCF, also stated that it was exploring possibilities of building high speed rail in Texas (Star Telegram, Jan 26 2015).

However, even wholly private partners from overseas have close dealings with public institutional actors. In 2007, Meridiam launched the Meridiam Infrastructure Fund, a EUR 600 Million fund seeded with EUR 50 Million from the European Investment Bank (EIB), that had the stated purpose of funding infrastructure in European OECD nations. In 2012, the bank launched the MEII fund, with over EUR 1 Billion in capitalization. As opposed to the Meridiam Infrastructure Fund, MEII is looking to fund projects both in the EU and in North America. Of the funds over EUR 1 Billion, EUR 50 Million again came from the EIB. The EIB describes itself as "the European Union's bank" and that it is "the only bank owned by and representing the interests of the European Union Member

¹⁸ https://www.kfw.de/KfW-Group/About-KfW/Auftrag/Export-und-Projektfinanzierung/

States, Work(ing) closely with other EU institutions to implement EU policy."¹⁹ There is an important distinction to note between banks like KfW and JBIC and the EIB. While KfW and the JBIC are meant to forward the interests of the nations that they are owned by, the EU is a network alliance and not a nation, and its interests may differ accordingly

Citied political risks for P3s include suspicion that local jobs may be lost or transferred out of the region; public service being leached out at the expense of the user; private partners trying to get a foot in the door into local councils; Politian concerns for a loss of control over services. (Jefferies, et al. 2013) The potential political risks that could be extracted from foreign involvement in P3s as discussed here runs alongside those notions and expands upon them. Taken with Castells theories, the situation described above creates a politically dangerous paradox for regions turning to public private partnerships. According to Castells, regions must facilitate proper spatial connections to remain competitive. To do this, they must connect into global flows of wealth, power and information. To wit, In the interest of keeping their infrastructural connections competitive, localities are forced to turn to international actors with no inherent local connections or with interests that are not aligned with the locality looking to commission infrastructure. To whom these international actors are accountable to can be tricky. Unlike bond issues, P3s do not typically need voter support to be contracted into existence. The ability of P3s to attract federal investment into the region has much to do with the ability of the P3 consortium to attract private investment. Provisions where a contract is bought out by the local, public party can be complicated and hard to enact. The issues of asset specificity may mean the region may lack the personnel and skillset needed to take control. Therefore, if an asset were to lose strategic importance to the private partner and therefore the private partner does not invest in maintenance as needed, the locality may struggle to maintain infrastructural connections. Simultaneously, the private actor may be more sensitive to

¹⁹ http://www.eib.org/about/index.htm

the interest of those for whom its network connections are strongest, be they a large corporation, a State Owned Enterprise or a global institutional actor than to the locality that has hired it to administer a public good. Indeed, the strong external network connections among the MAT, LLC consortia members were key to bringing POMT to fruition. P3s, as they are currently evolving, may not only be politically questioned for threatening local control. If not properly arranged, they may ultimately be framed as undermining the competitively of the regions that the P3 infrastructural projects are meant to enhance.

Initial Pushback

P3 Projects have not always gone smoothly. Just to the north of Florida, the state of Georgia has had limited P3 financing legislation in place since 2006. In the late 2000s, the state had looked to put into place a P3 concession agreement for adding two toll lanes alongside GA/I-75 and I-575 Northwest of Atlanta. Often referred to as the West by Northwest Corridor Project (NWCP), the project was for 30 miles of managed lanes running from I-295 (the beltway around the Atlanta core) for about thirty miles to the northwest.

In February of 2010, the Georgia Department of Transportation (GDOT) had issued an RFQ. In June 2010, three teams had been shortlisted for bidding:

- Georgia Mobility Partners: Cintra (equity), Meridiam Infrastructure (equity), Soares da Costa, Ferrovial, Prince Contracting and AECOM

- Northwest Atlanta Development Group: ACS Infrastructure Development (equity), Dragados USA, CW Matthews Contracting and Atkins

- Northwest Development Partners: Vinci (equity), OHL (equity), Archer Western Contractors, Hubbard Construction Company, OHL USA and Parsons Transportation Group

A formal RFP was issued in September 2011. By January of 2012, all teams were to submit proposals. review.

Nathan Deal, like Rick Scott, took office as a republican governor of his state in January 2011. Deal had spent almost Thirty years in politics up to that point, including 18 years in the US House of representatives. Despite having a reputation as being fairly centrist on the political spectrum, he, like Rick Scott has often followed party lines on topics like health care.

Initially, Deal had been seen as an advocate for both the project and the P3 Process. In July of 2011, he held a press conference announcing that TIFIA has awarded a loan of up to \$270 million to build the project, about a third of its estimated costs. He stated that the state would contribute an additional \$300 million with the remaining amounts to be coordinated by the private sector.



Figure 6: West By Northwest HOT Lanes (Image source: Toll Road News)

However, by fall of 2011, the governor began expressing concerns about the project. Stabilization clauses which prevent municipalities from adding capacity or otherwise adversely effecting road traffic on toll roads are often a criticized aspect of P3s. They are seen as contractually constraining municipalities from responding to changing conditions and addressing immediate problems. Before the project RFP was issued, Governor Deal reportedly questioned whether the toll lane P3 would prevent adding free capacity to the roads at a later date. His specific concerns were seen as satisfied, and the RFP was issued. On November 18 2011, Deal told a radio interviewer that he was not convinced the project was worth the \$300 million from the state of Georgia. Furthermore, he was unconvinced that the toll lanes would offer a significant time savings from the existing general purpose lanes for commuters. He finished the interview by saying that while the state was a long way from finalizing the project, it was too late to halt the procurement process. However, much to the surprise of the bidding P3 teams, on December 14, 2011 Georgia State Transportation Board and GDOT released a terse statement cancelling the procurement process in for the NWCP. Despite his onetime support for the project, the cancellation was largely seen as being largely at the Governors behest.

The project was later revived under a Design-Build-Finance contract, with the contracted SPV (NWER) providing approximately \$59.8 million of the projects \$834 million estimate. The financing element from the private actor may lead some to refer to the project as a P3 and indeed it is widely referred to as such in the general media. However, the term of the contract, and private interest in it, concludes with construction and the repayment of the private sectors \$60 million. This differs greatly from the original DBFO model originally envisioned for the project, where the concession term would likely have been several decades. The state itself, in Record of Decision on the DBF team, summed up the difference as follows:

"Previously, the project was to be delivered under a long-term P3 toll concession strategy. In return, the investors would collect tolls on the new managed lanes and retain some level of control over future improvements in the corridor. Under the new proposed approach, the project will still benefit from the investment and innovation of a P3, while allowing the State to retain more control of this important regional transportation corridor. Under this strategy, known as Design, Build, and Finance (DBF), the private sector will contribute a reduced amount of initial funding and be responsible for design and construction of the project, under the State's oversight. Responsibility for operations, maintenance, tolling, and long-term financing will be retained by the State." (GDOT 2013, 7)

While concerns about local control under P3s are a widespread, critics of the projects cancellation voiced other concerns. Robert Poole, who writes for the P3 advocating Reason Foundation, stated "They had three world-class well qualified teams that were willing to do a lot of work to come up with financeable proposals. It's hard to see that happening easily again after this. This stamps Georgia as a place with high political risk." Sources from within the consortia say that the high cost of bidding for a DBFO project, makes project cancellations a high risk for bidders. Furthermore, some state that they do indeed consider the political risks of a particular

area before deciding to bid on a project. While the contract winners, NERB, consists of a similar consortium to the Northwest Development Partners consortium that bid on the initial project, the other shortlisted groups, Georgia Transportation Partners and CW Mathews Contractingⁱⁱⁱ had not been invited to bid on the original DBFO project. The other shortlisted parties did not participate. One source from one of the firms bidding for the DBFO contract expressed a reluctance to work in Georgia. The Sources cited long delayed overhaul of Georgia's P3 legislation as part of the concern. Broad enabling P3 legislation initially passed the Georgia Senate in 2014, but then was never voted on by the Georgia House of Representatives. A new version of the bill was reintroduced in 2015, and was approved by the state senate. The new version is still pending a vote by the State House of Representatives.

Furthermore, despite Georgia's ability to mobilize traditional resources to begin the NWRC project, the state is also suffering its share of infrastructure woes. In 2009, The American Society of Civil Engineers gave the state of Georgia's infrastructure a C grade. In December of 2014, the Georgia State House Budget and Research Office and Senate Research Office jointly released the "Final Report of The Joint Study Committee on Critical Transportation Infrastructure Funding." It states that "like many other states, Georgia is faced with a growing crisis with regard to funding the construction, repair, and maintenance of its transportation infrastructure. " (HNTB 2014, 6) Georgia is particularly reliant on federal money from the Highway Trust Fund, which the report found to be problematic in the long term. As stated above, the Gas Tax, which supports the Highway Trust Fund, has not been raised since 1993. Citing the Reason Foundation, the report questions how much raising the gas tax will generate for infrastructure as American are seen as driving fewer miles each year and choosing increasingly fuel efficient vehicles. They further state that relying on traditional federal funds is problematic because:

"Congress has demonstrated an increased reluctance to deal with significant infrastructure funding issues in a responsible, forward looking manner. Recently, federal action on infrastructure authorization and funding issues has taken place in short spurts of three, six, or 12-18 month authorizations. This leaves state and local transportation agencies in dire need of stability and predictability." (Georgia 2014, 7)

Other forms of infrastructure revenue currently utilized by the state of Georgia, including a state gas tax (motor fuel tax) of 7.5 cents per gallon, toll revenues general obligation bonds and federal Grant Anticipation Revenue Vehicle Bonds were also seen as inadequate sources of funding. They ultimately find that "to merely preserve the current transportation system, namely the maintenance of roads and bridges at acceptable levels, the state has a funding gap of \$1.0 billion to \$1.5 billion annually." The report suggests that the state follow Florida's lead in indexing its state gas tax (which had not been increased since 1971) to inflation, but the report does refrain from discussing P3s.

Despite this, the report does make considerable use of statistics and data compiled by the Reason Foundation. The Reason Foundation describes itself as a think tank for "advancing the values of choice, individual freedom and limited government."²⁰ As such it shares similar values with the Federalist Society. In January 2011, the Reason Foundation released a report under guidance of Poole titled "The Tampa to Orlando High-Speed Rail Project: Florida Taxpayer Risk Assessment" which has been seen as major source of the arguments put forward by Rick Scott in his cancellation of the Tampa-Orlando high speed rail project.

While Georgia is able to maintain a greater degree of control over their infrastructure, they have simultaneously strained their relations with the large, global consortium that provide P3 services. The role this may play going forward should require further consideration. Federal funding for P3s has increased through its TIFIA programs, while traditional funding methods for

²⁰ http://reason.org/about/

infrastructure in the United States find themselves increasingly constrained. Without proper engagement and further discussion of how to engage with different actors, a difficult scenario could emerge whereby moving either for P3s or against P3s could ultimately hurt the competitively of the region.

Chapter 6: Going forward

In his 2015 State of the Union Address, President Obama urged both sides of the political spectrum to work together and find ways to produce something both sides understand to be needed in the US: New and improved American infrastructure. Receiving a lot of press was his proposal to use corporate repatriation taxes specifically to fund infrastructure.²¹ The \$478 billion Grow America Act would allocate much of its resources (an estimated \$317 Billion) to fixing distressed infrastructure. Even that high amount is seen as inadequate as the US DOT estimates that there is an existing backlog of \$808.2 Billion in roadway investment needs.²² Meanwhile, the Act will look to "provide more bang-for-the-buck through innovative project finance and delivery improvements," including allocating billions of dollars more to the TIGER, TIFIA and other competitive funding programs that promote public private partnerships. Interestingly, in his efforts to promote the Grow America Act, US Secretary of Transportation Anthony Foxx began a multi-state tour in Tallahassee, Florida. His predecessor, Ray LaHood, joined Meridiam Infrastructure as a senior advisor after leaving his post as Secretary of Transportation. In his State of the Union speech, the president also announced an expansion of the Qualified Public Infrastructure Bond program, allowing for more private involvement public infrastructure delivery.²³ In short, even though there would be billions of dollars made available for infrastructure if the repatriation tax measure were to pass, the federal

 $^{^{21}\} http://www.forbes.com/sites/taxanalysts/2015/02/05/obamas-foreign-earnings-tax-19-minimum-doa-but-deemed-repatriations-key/$

²² http://www.dot.gov/grow-america/fact-sheets/roadways

²³ http://www.governing.com/topics/transportation-infrastructure/gov-obama-sotu-financial-tool.html

government remains highly interested in using and expanding P3s for infrastructure delivery. Interestingly, support for P3s is not uniform throughout the Democratic Party. In Colorado, Democratic governor John Hickenlooper broke ranks with other state Democrats and vetoed a law seen by P3 advocates as "anti-P3"²⁴

Nonetheless, even as other funding methods for infrastructure have lagged, annual funding for TIFIA has increased from only \$1 Billion in 2004 to over \$10 Billion today. As TIFIA remains one of the most prominent financing methods for P3s, despite the challenges the field has faced in the US, the P3 movement is still seen as gaining momentum. As such, planners trying to work under P3 frameworks should consider the following challenges as they try to focus development:

- Stakeholder analysis Different stakeholders will have different long-term interests. Some P3 projects, like the Rail Restoration, already have an embedded private interest, whereas others may be greenfield projects without any set interest. As such, developing an understanding of different types of private actors and different layers of governmental actors and where their interests either align or diverge is critical. Understanding the nature of the consortia and the characteristics of their network connections may become critical. Designing infrastructure RFPs that account for longer term plans in the hope of draw bids appropriate consortia arrangements may become essential. Planners will need to be able to access these different stakeholders and the pluses and minuses of bringing each into the development equation.
- **Balancing local interests** Urban spaces are increasingly seen as being reliant on their connectivity to the rest of the world to remain competitive. P3s represent a double edged sword in this equation. On the one hand, working with the networks of P3 actors for infrastructure investment facilitate a regions global connectivity a couple of ways. Firstly, the development of new and modern infrastructural connections in highways, roads, rail lines and ports are critical in making a region a nodal center. Secondly, connectivity into the networks of P3 concessionaires can further enhance business connections and enable access to up-to-date knowledge of infrastructure engineering and delivery methods.

On the other hand, P3s pose a loss of local control of the development and maintenance of facilities. Knowledge and capability to realize and maintain projects may increasingly be unavailable at the local level. This increasing reliance on global (often foreign) consortia may inhibit a localities ability to plan infrastructure and hinder its ability to administer and allocate services. Furthermore, procurement of federal support for regional infrastructure seems to be increasingly reliant on the P3 consortia's experience and ability in

²⁴ http://reason.org/blog/show/colorado-governor-correct-to-veto-a

getting federal funds. This may further inhibit localities and regions from realizing projects without engaging the consortia.

As such, planners must carefully consider methods of engagement when dealing with P3 arrangements. Though both the POMT and the rail restoration are considered P3s, the risks being taken by both parties are markedly different. The POMT is contracted out to a consortium of international investors. While ownership of the tunnel remains with the State, the consortium maintains operations of the tunnel. Though the consortium can be bought out and replaced, they have no real estate risk and the failure and success of their consortium do not lie with the success of a specific region. While the rail connection is owned by a private entity, the private entities business interests are tied directly to the success of the South Florida region as a whole. As P3s are considered a method of allocating risk, planners should consider the long term implications of allocating different types of risk. This should be understood, worked out and made clear at the initial project stages. The earlier P3 consortia and may be a critical piece of working effectively under new methods of public finance.

Planners may need to reconsider how to realize and monetize benefits anticipated from the privately built and operated infrastructure. P3 projects often involve players that might be looking to take either very direct revenue risks or are looking for scheduled payments. They may not have an interest in making sure intended developments or changes in a specific area come to fruition. Facilitating connections between different parties and creating frameworks that encourage mutual engagement in making plans both work and financially solvent will become a key part of achieving this stakeholder balance.

 Political risk – Despite the great similarities between Florida governor Rick Scott and Georgia Governor Nathan Deal, the stance they have taken on undertaking P3 projects reveal the political issues and political risks of P3s to be non-partisan. Managing political stances and concerns on P3s in the United States cannot be refined to a simple conservative-liberal polar framework. Planners will need to develop mechanisms that can negotiate and access the risks in differing, multi-layered political climates.

Sources at the international firms indicated the inability or unwillingness of domestic firms to compete in P3 procurement processes has enabled them to break into the American market. They anticipate that American firms will develop larger roles in P3s internationally as the American P3 market develops. However, developing connections with larger global networks is a must for cities and regions looking to maintain competitiveness. P3s are a personification of this phenomena and thus working in P3s requires special consideration and thought. The reasons for turning to P3 and who the P3 actors are should be considered when trying to approach how to deliver infrastructure. As opposed to just simply turning to P3 networks in the hopes of transferring risk, perhaps policy

makers and planners may need to consider what risks they *should* take so as to build up local capabilities that are less susceptible to global flows. Learning how to work with these phenomena and plan in ways that harness these forces will be a challenge for planners and policymakers alike. Realizing integrated planning objectives including transit-oriented-development and carbon neutrality may require new approaches. The current Grow America Act proposal specifically "includes policy reforms to incentivize improved regional coordination by Metropolitan Planning Organizations (MPOs)" and that "High-performing large MPOs will be granted control of a larger portion of funds."."²⁵ Going forward, a high performing MPO will be one that can effectively engage with broad international networks to deliver regional plans.

²⁵ http://www.dot.gov/grow-america/fact-sheets/overview

Tables

Year	Month	Milestone
1981	Oct	Miami Dade (M-D) Transportation Planning Committee establishes POM Access Task Force
1982	March	MD Met. Planning Org. adopts plan recommended by POM Task force
1984	August	M-D approves POM Transport improvement plan. Plan includes construction of 4 lane highway tunnel
1990	July	FDOT and FHWA determine preferred tunnel route
1991	March	FDOT, FHWA, POM and the City of Miami endorse the tunnel as the preferred alternative
1996	June	Public Hearing
2000	Dec.	Project receives Location and Design acceptance from FHWA
2005	Dec.	FDOT hosts industry forum to examine P3 opportunities
2006	Feb	FDOT issues a Request for Qualification form proposers for a DBFOM concession
2006	Nov	FDOT issues a Request for Proposals for short listed proposers
2007	March	FDOT receives proposals from three short listed teams
2008	Feb	MAT is named "Best Value Proposer"
2008	Dec.	FDOT announces that an agreement with MAT will not be reached because of financial difficulties
2009	May	FDOT authorizes replacement of Babcock & Brown with Merdiam Infrastructure as MAT partner
2009	June	FDOT reaches Commercial Close with MAT
2010	May	FDOT issues Notice to Proceed, allowing the contractor to being construction
2013	May	Tunnel boring was completed on project
2014	August	Tunnel is opened to traffic

Table 3: Port of Miami Tunnel development overview

Source: portofmiamitunnel.com

Table 4: Port of Miami Tunnel Short Listed Proposals				
	Role C	Comp. Headquarters		
Winning		MAT, LLC		
Bid (Awarded	Equity	Babcock & Brown Infrastructure Group US, LLC	Sydney, Australia	
May 2 nd ,		Bouygues Travaux Publics, S.A.	Paris, France	
2007)	Lead Contractor	Bouygues Travaux Publics, S.A.	Paris, France	
	Lead Engineering	Bouygues Travaux Publics, S.A./Jacobs Civil	Paris, France/ Pasadena, CA	
	Lead O&M	Transfield Services Ltd.	Sydney, Australia	
Submitted		Miami Mobility Group		
Proposals	Equity	ACS Infrastructure Development, Inc.	Madrid, Spain	
		Odebrecht Infrastructure Investments, LLC	Salvador, Brazil	
		Parsons Transportation Concessionaires, LLC	Los Angeles, CA	
	Lead Contractor	Dragados USA, Inc.	Madrid, Spain	
		Odebrecht Construction, Inc.	Salvador, Brazil	
	Lead Engineer	Parsons Transportation Group, Inc.	Los Angeles, CA	
		DMJM & Harris, Inc.	Piscataway Township, NJ	
	Lead O&M	IRIDIUM Concesiones de Infraestructuras, S.A	Madrid, Spain	
	FCC (
	Equity	FCC Construccion S.A.	Barcelona, Spain	
		Morgan Stanley & Company, Inc.	New York, NY	
	Lead Contractor	FCC Construccion, S.A.	Barcelona, Spain	
	Lead Engineer	Hatch Mott MacDonald Florida, LLC	Iselin, New Jersey	
		Edwards and Kelcey, Inc	Piscataway, New Jersey	
	Lead O & M	FCC Construccion, S.A.	Barcelona, Spain	

Source: portofmiamitunnel.com

Table 5: I-4 Shortlisted Proposal firms							
	Role	Company	Comp. Headquarters				
Winning							
Bid	Equity	Skanska Infrastructure Development Inc.	Stockholm, Sweden				
(Awarded Apr. 23,		John Laing Investments Limited	London, UK				
2014)	Lead Contractor	Skanska-Granite-Lane Joint Venture (Skanska USA Civil Southeast Inc.; Granite Construction Company; and The Lane Construction Corporation)	Stockholm, Sweden/Watsonville, CA/Cheshire, CT				
	Lead Engineering	Engineering, Inc. and Jacobs Engineering Group, Inc.)	York, NY				
	Lead O&M	Infrastructure Corporation of America(Division of HDR)	Omaha, NE				
Submitted		4wardPartners					
Proposals	Equity	VINCI Concessions S.A.S.	Rueil-Malmaison, France				
		Meridiam Infrastructure I-4 Ultimate, LLC	Paris, France				
		Walsh Investors, LLC	Chicago, IL				
	Lead Contractor	Archer Western-Hubbard-de Moya Joint Venture (Archer Western Contractors(Div. of Walsh Group), LLC; Hubbard Construction Company (subsidiary of VINCI); and The deMoya Group, Inc.)	Chicago, IL/Miami, FL				
	Lead Engineer	AECOM Technical Services, Inc	Los Angeles, CA				
	Lead O&M	4wardPartners (a team comprised of VINCI Concessions S.A.S.;Meridiam Infrastructure I-4 Ultimate, LLC; & Walsh Investors, LLC)	Same as equity holders				
	I-4 Development Partners						
	Equity	Macquarie Capital Group Limited	Sydney, Australia				
		OHL Concesiones S.A.	Madrid, Spain				
		FCC Construccion, S.A.	Barcelona, Spain				
	Lead Contractor	A team comprised of Obrascon Huarte Lain, S.A.; Community Asphalt Corp.; and FCC Construccion S.A	Madrid, Spain/ Miami, FL/Barcelona, Spain				
	Lead Engineer	Parsons Brinckerhoff	New York, NY				
	Lead O & M	A team comprised of Macquarie Capital Group Limited; OHL Concesiones S.A.; and FCC Construccion S.A.	Same as equity holders				

	Ultimate Mobility Partners			
	Equity	InfraRed Capital Partners Limited	London, UK	
		Fluor Enterprises, Inc.	Irving, TX	
		Kiewit Infrastructure South Co.	Omaha, NE	
	Lead Contractor	Ultimate Mobility Constructors (a team comprised of Fluor Enterprises Inc. and Kiewit Infrastructure South Co.)	Irving, TX/Omaha	
	Lead Engineer	Parsons/Atkins (a joint venture of Parsons Transportation Group Inc. and Atkins North America, Inc.)	New York, NY/ Epsom, UK	
	Lead O & M	Ultimate Mobility Operators (a team comprised of Fluor Enterprises, Inc.; and DBi Services, LLC)	Irving, TX/Melville, NY	

Source: ultimatel4.com

ENDNOTES

ⁱⁱ CW Matthews Contracting was technically a member of the Northwest Atlanta Development Group.

¹ A campaign ad against the incumbent Texas governor Rick Perry took aims at the concessioning out of what had been a taxpayer supported local highway to the Spanish firm Cintras. The script for the ad read: "This is not a European road. Yet. Rick Perry tried to seize private land and toll existing roads. So a foreign company could collect tolls, too."ⁱ

^a In the creating the act that contracted out maintenance of taxpayer built Highway 407 in Toronto, persons who did not pay their tolls (collected by Cintras) risked having their vehicle permits taken away. The provision was designed to remain in effect regardless of whether the delinquent party had filed for bankruptcy.^a Cintras also has the ability to raise tolls on the road without obtaining consent from the province of Ontario.^a

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