

Position paper: Public policy implications in publicly funded infrastructure projects

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Abstract

Purpose: This essay contributes to the ongoing exposition of a project management-focused understanding of 'public policy' implementation. Distinct from previous studies which take a predominantly administrative sciences perspective, the delivery and implementation of publicly funded infrastructure projects as an instrument of public policy is explored through the lens of legal frameworks.

Design/Methodology/Approach: We adopt the explanation building review approach to provide descriptions and explanations of the relevant enablers and context necessary for the successful delivery and implementation of publicly funded infrastructure projects.

Findings: The ambiguity associated with public policy is more likely to hinder than facilitate the use of publicly funded infrastructure projects as preferred instruments of choice for implementing public policy.

Originality/Value: Despite substantial interest among academics and practitioners in utilising projects as tools for public policy implementation, thorough discussions on the legal complexities inherent in these projects remain scarce.

Paper type: Conceptual paper

Keywords: Infrastructure projects; Public policy, Legal perspectives; Rule of law; Justice

1.0 Introduction

Infrastructure consists of the physical assets, facilities, and structures such as airports, bridges, buildings, canals, dams, and power supplies that are essential for the functioning of society. Governments recognise the economic role of infrastructure assets. The role of infrastructure is indispensable to sustainable, strong, and enduring national economic growth. Appropriately developed infrastructure can improve income levels and alleviate poverty. Governments also recognise that, apart from providing a platform to enable productivity, infrastructure assets also contribute to several social objectives such as job creation and improving community welfare (Willar *et al.*, 2021). Governments have also sought to deliver and implement infrastructure for other reasons, including for national security and other non-economic reasons (see Migone *et al.*, 2023). Governments have also sought to deliver and implement infrastructure for reasons related

to prestige and national pride (Sotoudehnia and Rose-Redwood, 2019). Most of the activities that are undertaken to deliver and implement infrastructure are framed in the form of projects. In this context, we draw on Harvey and Aubry (2018) to define a project as “...*temporary action undertaken with the aim of producing outcomes within a specified set of constraints*” (p. 1291).

Infrastructure projects are notoriously challenging to undertake. They take several years to implement and will involve a heterogeneous selection of stakeholders drawn from the private and public sectors. They also tend to be highly difficult to undo as the high up-front funding which they require is rarely recouped, if at all. They can either be privately or publicly funded and there are very significant differences between the two. Specifically, while the success of those that are privately funded tend to be assessed on a limited system of measurement (predominantly profitability), publicly funded infrastructure projects tend to be assessed against much broader societal metrics such as ‘best value’ (Ojiako *et al.*, 2014; Park *et al.*, 2015).

Infrastructure projects are of critical interest to the public sector (Sanderson and Winch, 2017; Volden and Welde, 2022). Thus, they have been extensively and thoroughly embedded in how governments think about shaping the lives of their citizens. While primarily implemented to deliver a range of citizen-oriented and taxpayer-related benefits (e.g., our above-highlighted job creation and community welfare improvement), infrastructure projects—especially those which are publicly funded—also serve another less well discussed purpose which is that they are used to implement public policies (Shiferaw and Klakegg, 2012; Esposito and Terlizzi, 2023; Hudon and Floricel, 2023; Lucciarini and Galdini, 2023; Tinti, 2023). In the process, these projects serve as instruments for organising not only how the government, acting as an organ of the state, relates to the public (Chan and Rosenbloom, 1994), but also how the government may achieve its objectives as relate to desired social benefits and environmental sustainability.

Infrastructure projects have consistently been viewed as a prominent policy tool for enhancing economic activity. Publicly funded infrastructure projects with a predominant public policy interest will be very different from more traditional projects being delivered and implemented for well-defined, non-policy reasons. We will expect those projects which are primarily driven by public policy considerations to be associated with significant levels of ambiguity. Thus, such projects need to be essentially dynamic to the extent that they can be adapted to changing realities (e.g., change in government policy).

The use of infrastructure projects to implement public policy makes sense when one considers that their internal features (e.g., high cost, large size, and visibility) formulates them in much the same way as public policies are formulated. For example, in a manner akin to public policy (Needham, 2011), infrastructure projects represent distinctive and unique solutions that arise from attempts by stakeholders to shape their direction and objectives (Hudon and Floricel, 2023). Moreover, reflected in numerous instances, infrastructure projects (as public policy also does) often arise from requirements based on a combination of logical discourse, manipulative communication and rhetoric, political leverage, and the capacity to forge and establish alliances (Coticchia and Di Giulio, 2023; Sergeeva and Ninan, 2023). These similarities (i.e., between infrastructure projects and public policy) allow us to frame public infrastructure projects as symbolising public policies. For this reason, we can draw on the same tools to analyse both (Hudon and Floricel, 2023).

Despite well-documented use of infrastructure projects to implement public policy, governments appear to have an abysmal record of delivering and implementing infrastructure projects (see NAO, 2006, 2011, 2016, 2020, 2023), and a less than desirable record in implementing public policy. In some instances, the desired social benefits from these projects have

remained unrealised well after project completion. These realities were recognised in recent announcements relating to the abandoning of the second phase of the High-Speed Rail 2 (HS2) trainline project (see United Kingdom Department of Transport, 2023). The UK government had noted that continuing with the project raised the prospect that it would “...*trap enormous sums of money that could be far better spent elsewhere*” (United Kingdom Department of Transport, 2023, p. 5). The HS2 trainline project was a typical example of an infrastructure project (new train stations, new rail lines of approximately 300 km running across 350 active sites) with considerable public policy implications (focused on ‘levelling up’; effectively, a focus on the reduction of regional, economic, and social imbalances).

The problem with this, which should be a concern to any observer, is that the failure of infrastructure projects is extremely susceptible to potential cascading failure. The propagation of failure has the potential to affect infrastructure assets across multiple sectors. Due to the integrated nature of infrastructure systems, failures within a specific asset/system are very likely to cascade down to other assets/systems (Buldyrev *et al.*, 2010; Vespignani, 2010).

Central to our present 'public policy' discourse is the dual inquiry regarding (i) the capacity of the public sector to successfully deliver and implement infrastructure projects and (ii) their subsequent ability achieve successful projects using such infrastructure to drive through and implement public policy. In the same manner as in Hosseini *et al.* (2021), we adopt an ‘explanation building’ review approach (see Yin, 2014). This approach serves as a useful means of setting out descriptive parameters for scholars and practitioners based on explanations about phenomena.

We argue in this essay that one of the reasons why governments are unable to primarily deliver on the first of these objectives (and most likely, be unsuccessful in the second) is because the bureaucratic model or administrative sciences perspectives of project management are

generally overstated at the expense of the legal frameworks underlying the implementation of these project types. Our present study explores this gap in the literature by illuminating the importance of the legal perspective of public policy. We further embellish our theoretical understanding of ‘public policy’ by drawing on instrument choice theory to explain two key attributes of the legal perspective—i.e., the ‘*Rule of law*’ and ‘*Justice*’. Through our connection of insights from infrastructure project delivery/implementation and public policy literatures, our study makes a key contribution through its emphasis on the significance of theorising about infrastructure project delivery/implementation as an undertaking requiring a focus on the legal constraints that actively hinder infrastructure projects.

The essay is set out as follows. The first section introduces public policy and discusses its relevance for not only promoting sustainable development, but also for implementing public policy. In the second section, we explore the key roles that public policy potentially plays in enhancing the environment for sustainable infrastructure. In the third section, we explore the factors that may be important to the success of publicly funded infrastructure projects. In the fourth section, we delaminate our paper’s central argument which is that the administrative sciences perspective of project management is generally overstated at the expense of the legal frameworks underlying the implementation of these project types. We discuss questions relating to instrumentality (i.e., the use of a *specific* infrastructure as a tool for implementing a *specific* public policy), dimensions, and the legal perspective in the fifth section. The sixth section concludes by highlighting some opportunities for future studies.

2.0 Public policy

Policy primarily serves to define and direct the actions that governments are to take. Bacchi (2000) states that policy essentially represents “...*what governments do*” (p. 48). The aim of policy is to express ideals about expected societal behaviour, encapsulating societal values, priorities, and goals (Wedel *et al.*, 2005). Policy is central to communicating a society’s norms and expectations regarding significant issues, and policies can be formulated and implemented in both private and public spheres. Private policies deal with issues relevant solely to individuals, often having little to no broader societal effects (Rosenau, 2000). Conversely, the focus of public policy is on “...*ensuring equity, preventing discrimination or exploitation, ensuring continuity and stability of services, and ensuring social cohesion*” (Osborne and Gaebler, 1992, pp. 24–25).

Essentially, the focus of public policy is on the choice of action(s) that governments decide upon in response to problems. A key difficulty associated with the public policy concept is that the terms 'policy' and 'public policy' are themselves fraught with uncertainty (see Fimyar, 2014; Plunkett, 2016). Particularly, the notion of public policy has been criticised for being ‘vague, nebulous, and intractable’, lacking clear and consistent guidelines for its definition and implementation (Yelpaala, 1989).

Alongside ‘goals’ (i.e., preferred results that governments aim to accomplish), elements of any public policy will include ‘instruments’ (i.e., tools and techniques) (Henstra, 2016). Numerous studies have examined the use of infrastructure as instruments to implement public policy (e.g., Esposito and Terlizzi, 2023; Hudon and Floricel, 2023). Some studies have examined the economic and political justification for a specific choice of instrument (Woodside, 1986; Lascoumes and Le Galès, 2007) while others have examined the behavioural expectations motivating choice of policy instruments (Schneider and Ingram, 1990). Some studies have also

focused on exploring the intersection between infrastructure, public policy implementation, and the legal imperatives (e.g., Choudhury, 2014; Lucciarini and Galdini, 2023).

Public policy plays a significant role in the efforts to foster sustainable development through the delivery and implementation of infrastructure (Tichenor *et al.*, 2022). Public policy also plays different roles facilitating sustainable development through infrastructure delivery and implementation. These include, for example, formulating national strategies for sustainable infrastructure development. Specifically, there is a need for countries to be able to broadly set out well-defined schemes for the development (i.e., delivery and implementation), of sustainable infrastructure. It is solely through such cohesive strategic frameworks that coherence and alignment among distinct public policy goals can be achieved, thereby providing the necessary clarity and confidence in the private sector to contribute effectively. There is also a need to ensure a pipeline of sound infrastructure projects by bolstering project planning and management competences. Of relevance here (which we elaborate upon below) is the need to ensure that relevant legal frameworks to support infrastructure delivery and implementation are put in place. These legal frameworks will go a long way to ensure that there is transparency in terms of how infrastructure projects are prioritised (i.e., which projects are to be implemented/delivered to drive through which public policies?).

3.0 Infrastructure projects delivery

The implementation of public policy through commissioned publicly funded infrastructure projects will generally occur in very complex circumstances since accurate prediction, assessment, and control of all potential consequences of the policy is near-impossible. The uncertainty associated with public policy implementation means that, on implementing the driving

infrastructure projects, some public policies may end up with the conflicting impact of their original intention. The problem, however, is that, sometimes, the actual policy and its intended consequences are not actually well-defined. This is because most public policies constitute numerous dimensions, and the ambiguity/uncertainty associated with public policy also means that its framing and consequences can be perceived differently.

Numerous studies have explored what factors may be important to the success of publicly funded infrastructure projects. They include (i) political support, (ii) funding/public interest considerations, and (iii) project management.

3.1 Political support

There is widescale support for the idea of the importance of political commitment from government. Arguably, while the failure of the HS2 trainline project suggests that governments may not be particularly well-placed to identify and then drive through infrastructure project delivery and implementation (Institute for Government, 2017), governments have evinced the importance of infrastructure projects by making significant investments in them (e.g., HM Treasury, 2020; Esposito and Terlizzi, 2023; Hudon and Floricel, 2023). Governments are also heavily involved in the oversight of infrastructure projects (Esposito *et al.*, 2023; van der Heijden, 2024). For example, in the UK, entities such as the Infrastructure and Projects Authority (IPA) and the National Infrastructure Commission have been established to support the government's efforts in projects and project management. Similar initiatives exist in other countries such as the United Arab Emirates with the Abu Dhabi Centre for Projects and Infrastructure (in the *emirate* of Abu Dhabi) and the Government of Dubai Capital Projects Division/Dubai Excellence Programme (in

the *emirate* of Dubai). In the United States, the Federal Acquisition Certification for Program and Project Managers (FAC-P/PM) program exists to perform a similar role.

The government has also evinced the importance of infrastructure projects by investing in best-practice initiatives directed at improving the efficiency and effectiveness of infrastructure project delivery and implementation. For example, the widely popular PRINCE2 (*PRojects IN Controlled Environments*) project management methodology is a development of the UK government.

Governments are also instrumental in infrastructure initiatives by setting out long-term priorities and for regulating the industry with the aim of ensuring the cohesiveness of infrastructure systems. These systems operate within long-term frameworks where individual projects contribute, necessitating strategic leadership and decision making at the national level.

3.2 Funding/public interest considerations

A critical funding consideration is the question of who will deliver these projects (within the public sector) and how their delivery and implementation will be met. Most publicly funded infrastructure projects will undergo various funding assessments and evaluations to determine their viability (Samset and Volden, 2016; Williams *et al.*, 2019; Volden and Welde, 2022). These assessments, which are critical to the determination of the success of project outcomes (Williams *et al.*, 2019), may include cost-benefits (Volden, 2019), feasibility assessments (Jo *et al.*, 2015), social impact analysis (Wang *et al.*, 2016), and best value (Ojiako *et al.*, 2014; Park *et al.*, 2015).

The government may engage in different creative initiatives to fund infrastructure projects. These may include (i) private participating using schemes such as the Private Finance

Initiative/Public–private partnerships, (ii) direct funding from taxpayers (e.g., tax on fuel), and/or (iii) funding by directly charging users (e.g., tolling).

A key basis for assessing publicly funded infrastructure projects is to apply the ‘public interest’ test (Campbell and Marshall, 2002; Fisher, 2014). The public interest test is a central legitimating concept (Campbell and Marshall, 2002) and cornerstone (MacNair, 2006) of public policy. While the literature does not advance a generally accepted definition of ‘public interest’, reviewing the relevant literature points to something of serious importance or benefit to the public (Schubert, 1962; Cochran, 1974; Brown and Rossi, 2010).

Within the broader notion of public policy, the public interest tests lay emphasis on simultaneously meeting or achieving societal values, priorities, and aspirations (Brekoulakis, 2019). Essentially, it requires an organ of state to weigh the potential harm to the public good (i.e., what will *not* be in the best interests of the wider society) caused by either delivering or not delivering a project. The public interest tests include considerations focused on (i) consumer rights, (ii) renewable energy and environmental protection, (iii) community well-being, social cohesion, and economic development, and (iv) value for money. What makes these tests challenging is that they are largely subjective (Barth, 1992; Burstein, 2018), evolving (Thacher and Rein, 2004), and associated with ambiguous and vaguely defined decision points (Greenberg *et al.*, 1977). For these reasons, they are undertaken in the absence of economic reasoning or explicit funding reciprocation (Munnell, 1992; Smith, 2003; Torjman, 2005; Picciotto, 2020).

3.3 Project management

Defined as “...*the process by which projects are successfully delivered, and their objectives successfully achieved*” (Turner and Müller, 2003, p. 2) or more expansively as “...*the application*

of a collection of tools and techniques (such as the CPM and matrix organisation) to direct the use of diverse resources toward the accomplishment of a unique, complex, one-time task” (Oisen, 1971, p. 14), at its foundations, project management has had planning and scheduling tools such as the Critical Path Method (CPM) and the Program Evaluation and Review Technique (PERT) (Bashir *et al.*, 2022). However, reliance on these tools has been limited due to their modelling capability and technical superiority being compromised by information poverty. Another reason why reliance on these tools has *not* proved advantageous is that they are essentially instrumental. That is, the resultant decisions from their use are unrealistic as they are primarily guided by the expected consequences of available options in accordance with a particular set of preferences (Gray and Jenkins, 1995; Adler, 2012).

Although traditional perspectives of project management appear to have departed from the impracticable expectations associated with rational models such as the CPM and PERT, they remained framed in very narrow sets of management action which essentially remained focused on delivering projects within the very narrow parameters of time, cost, and quality (Atkinson, 1999).

The reality, however, is that projects have increasingly encompassed strategic and organisation-wide activities (Geraldi *et al.*, 2020, 2021). This has meant that it is extremely difficult to make accurate determinations of the precise nature of optimal project decisions which has necessitated an expansion of the foundational concepts of project management (Meredith, 2022; Pinto, 2022; Clegg, 2023). In conjunction with these changes, there are extensive endeavours by professional project management entities and institutions aimed at revising and updating their multiple bodies of knowledge (e.g., Project Management Institute 2021; Association for Project Management 2022). Thus, there is greater emphasis on project management capabilities built on

unlocking value using boundaryless, multi-located, highly distributed, networked, and self-organised work processes and teams (Hodgson, 2004; Bashir *et al.*, 2022; Vento and Kuokkanen, 2022).

The use of project management remains a very popular approach for both privately and publicly funded infrastructure implementation. Its popularity stems from not only providing novel forms of organising, but also their focus on innovation. However, its use and, therefore, administrative/bureaucratic weight is more pronounced in publicly funded projects (Vento and Kuokkanen, 2022). Thus, the use of projects and project management is very widespread within the sphere of administrative sciences and public policy implementation.

4.0 DELAMINATION

To recap, a central argument has been put forward in this essay on government competency. This argument is that the capacity of government to (i) successfully deliver and implement publicly funded infrastructure projects and any (ii) subsequent efforts to implement public policy through these infrastructure projects is being impeded by an overstatement of the bureaucratic model/administrative sciences perspective of project management at the expense of the legal frameworks underlying the implementation of these project types.

To briefly recap, the '*Administrative*' perspective articulates the necessary organisational structures, processes, and routines that will influence the implementation of public policy (Majone, 1996; Nelson, 1998). Being project focused, it serves as the foundation for published guidelines on assessing policy options for publicly funded projects and the requisite managerial competencies associated with the assessments. This perspective is critical in projects as it highlights the importance of processes, routines, and organisational frameworks in project organising.

Some research has emphasised the supportive administration of infrastructure via project management. These studies have specifically pointed to the efficiency and legitimacy that arises from project management processes (Besner and Hobbs, 2006; Mir and Pinnington, 2014; Joslin and Müller, 2015). At the same time, some attention has been given to those studies who are highly critical or question its benefit (Hodgson, 2002, 2004; Vento and Kuokkanen, 2022). Among the highlighted concerns is that an emphasis on process (e.g., work breakdown structures), methodologies (e.g., PRINCE2), and lifecycles, which are the hallmark of traditional project management, highlights regulations and rules which may only end up impeding rather than enabling innovation required in infrastructure projects.

4.1 The 'Legal' perspective

The '*Legal*' perspective on the other hand is concerned with understanding how socially constructed policies can be validated through legal instruments (Knight, 1922; Winfield, 1928; Stigler, 1972; Kreis and Christensen, 2013; Howlett, 2018). Drawing from Krishnamurthy and Mahesh (2024), the legal perspective has the potential to optimise the delivery of publicly funded infrastructure projects. It emphasises that the successful delivery and implementation of such projects as a conduit for public policy implementation will be reliant on the existence of relevant legal frameworks.

The '*Legal*' perspective provides an element of complementarity to the '*Administrative*' perspective that potentially dampens the various criticisms ascribed to it. Specifically, it does so by empowering and reinvigorating the administrative approach (Cooper, 2017) and, in the process, enhancing successful public policy implementation. Thus, a compounded engagement with both perspectives is desirable, necessitating an exploration of the legal perspective.

4.2 Legal frameworks

One of the key factors likely to have an impact on the implementation of publicly funded infrastructure projects with a predominant public policy interest is the prevailing legal framework (Mouraviev and Kakabadse, 2015; Sainati *et al.*, 2019; AlRaeesi and Ojiako, 2021; Lucciarini and Galdini, 2023). Strong legal frameworks are important means of ensuring that certain practices likely to negatively impact on the delivery of infrastructure are adequately addressed (e.g., compulsory land and/or property acquisition, changes to planned development areas or routes, plan and/or schedule manipulation, etc.).

The commissioning of new publicly funded infrastructure projects will often need new laws/legislation to be promulgated, or existing ones amended to be able to adequately account for not only the specific features and components of the project (e.g., planning approval) but also the expected policy change or transformation that will result from the delivery of the infrastructure asset. It also requires compliance with these laws. These new laws/legislations serve several purposes, including the reduction of transaction costs. They also provide the legal framework which allows for the overriding of ‘standard’ considerations of funding rationality.

This perspective espouses the view that reliance on legal frameworks and provisions is critical for realising public policy aspirations of any project (Pethe and Nallathiga, 2017; Krishnamurthy and Mahesh, 2023, 2024). In effect, without legal support, policy implementation is unachievable (Cooper, 2017).

Through for example, the availability of clearly stated judicial rules (e.g., legislation), stable frameworks able to mitigate or limit uncertainties inherent in public policy (and associated publicly funded projects) become available. An example of such a legislative framework is the Impact

Assessment Act, a new project assessment scheme that became law in Canada on 21 June 2019. This new law emphasises a move towards assessing whether publicly funded infrastructure projects contribute to the social well-being, values, priorities, and aspirations of the wider society. Interestingly, the role of project management is also well recognised in legal circles. For example, courts regularly employ various project (e.g., damage quantification methods—see Ibbs and Gentele, 2021) and network and analysis planning techniques such as the Critical Path Method (CPM) to assess liability in project claims (Bayraktar *et al.*, 2012).

4.3 Functions

The *legal* perspective serves three functions. First, it serves to re-enforce the idea that projects are not only separate legal entities (Bredillet, 2008), but they also function under specific legal frameworks emphasising their independence. These frameworks are particularly important in regulating the nature of interactions among project participants (Bredillet, 2010). The legal perspective is also important as it ensures that the delivery and implementation of publicly funded infrastructure projects are appropriately embedded within national regulatory frameworks and laws.

Second, the legal perspective provides essential legitimisation support for the implementation of public policies through publicly funded projects, thereby establishing a lawful validation for the channelling of national resources (e.g., funding), to its delivery and implementation. For example, the UK Hinkley Point C Nuclear Power Station project has faced numerous legal challenges including those mounted in 2013 by *An Taisce* (the National Trust of Ireland) and later Greenpeace on the grounds of perceived detrimental environmental impact of the project. In 2018, the project faced further legal challenges in the European Court of Justice from the Austrian government. In

all three instances, these challenges were defeated based on the necessary legal and regulatory frameworks for their implementation being in place. Drawing from Metcalfe (2001), the legal perspective primarily serves as a means of defining and legitimising legal authority, which effectively grants the project the right to be implemented.

Perhaps the most important role of the legal perspective is that it can be employed as a means of checking unencumbered discretion on the part of the government to commission and implement ‘pet projects’ that are not in the public interest. The Institute for Government (2017) has reported instances where publicly funded projects proceeded without the meaningful incorporation of citizens’ voices. The legal perspective will serve as a means of mitigating or limiting the potential for such occurrence. Other advantages that may be associated with the legal perspective include ensuring that clear roles and responsibilities are delineated within the public service delivery (Chan and Rosenbloom, 1994; Hood, 1995). It will also ensure the furnishing of the requisite frameworks for accountability—all which are necessary to ensure successful policy implementation.

4.4 Capability

How capable these legal frameworks will be as relates to successful infrastructure asset delivery and policy implementation will be dependent on factors such as the legal framework model being used and the tractability of relevant legal institutions. Legal impediments surface at the point where prevailing or proposed legal frameworks are not adequate to address either the specific features of the project or the resultant policy implementation. Additional barriers may arise where attempts to bring in or amend laws cascades into significant risk on other infrastructure ‘networked’ infrastructure assets/systems. One such area relates to the challenge in ascertaining important areas where legal frameworks should be developed. This arises because it is very difficult to predict with

confidence the precise nature of public policy impact. A typical example where this challenge has arisen relates to the fallout from the failed Post Office Horizon project. The failed project created a further scandal with nearly 1000 innocent sub-postmasters being wrongly convicted by the courts for fraud, theft, and false accounting based on faulty Horizon data (despite Fujitsu—the project consultant—being fully aware as early as 1999 that the Horizon software contained software bugs). The specific challenge faced in these circumstances is whether the government (which has acknowledged that the Horizon scandal is one of the most significant miscarriages of justice in UK history) should promulgate legislation to provide a blanket quashing/*en masse* exoneration of the convictions (see Hill, 2024).

4.5 Key dimensions

The legal perspective is encumbered by two key principles—the '*Rule of Law*' and '*Justice*'. The '*Rule of Law*' is a set of legal principles which espouses an ideal that every individual and institution within a specific jurisdiction (e.g., country) is accountable, bound by, and subject to the same laws (Harvey, 1961; The Lord Bingham, 2007; Lucy, 2009). At its core is the idea that “...*all persons and authorities within the state, whether public or private, should be bound by and entitled to the benefit of laws publicly and prospectively promulgated and publicly administered in the courts*” (The Lord Bingham, 2007, p. 2). There are two key elements of this principle; one is founded on its formality while the other is founded on its procedures. In terms of formality, the '*Rule of Law*' focuses on the norm of its general applicability. In effect, in the absence of very limited and narrow exceptions (e.g., sovereign immunity), it highlights the non-discretionary application of the law. Conversely, in terms of procedures, the focus of the '*Rule of Law*' is on the

process of its administration which can be through the courts or other institutions such as arbitration panels.

While there are various defining elements of the '*Rule of Law*' (see The Lord Bingham, 2007; Raz, 2017), these are outside the scope of this paper. However, a key point of relevance to our present discussion is that the '*Rule of Law*' emphasises that governments cannot wield power in either an arbitrary or a discretionary manner. In effect, because of the '*Rule of Law*', governments are still obliged to conduct their affairs within a clearly defined legal framework. Importantly, therefore, the '*Rule of Law*' espouses the idea that the obligation of governments to operate within clearly defined legal framework is inseparable from public policy. On this account, public policy implementation would require publicly funded infrastructure projects to exhibit characteristics and processes associated with fundamental elements of the '*Rule of Law*'. For example, a '*Rule of Law*' test may be employed to assess the potential 'harm' that may result in a new publicly funded infrastructure project encroaching on indigenous and/or land deemed 'sacred'.

The second principle which we believe impedes the legal perspective is '*Justice*'. As an independent principle of morality, '*Justice*' emphasises fairness (Sen, 2006). Justice is, therefore, focused on the need to treat individuals in a similar manner (Katzner, 1973). Primarily, justice counsels on the equitable treatment of all (Rawls, 1957). Justice comes in different forms: (i) *distributive*, which expresses that the outcome of decisions must be fair (Cook and Hegtvedt, 1983; Cohen, 1987; Jasso *et al.*, 2016); (ii) *informational* (Katok and Pavlov, 2013), which points to the need for satisfactory descriptions of social interactions between different entities; (iii) *interpersonal* or *interactional* (Bies and Shapiro, 1987), which focuses on the nature of exchanges and interactions between entities; and (iv) *procedural* (Thibaut *et al.*, 1974; Vermunt and Steensma, 2016), which discusses fairness relating to the mechanisms and methods of decisions.

5.0 Instrumentality, dimensions, and the legal perspective

So far, we have built our arguments on the premise that a legal perspective of public policy is likely to shed substantial insight that will shape how we understand the use of infrastructure projects for public policy implementation. Potential difficulties ensuring the successful delivery and implementation of infrastructure projects and subsequent challenges to their use as instruments for public policy implementation generate several questions of interest. For example, these include questions such as (i) whether a government should mobilise and channel its resources towards utilising a *specific* infrastructure as a tool for implementing a *specific* public policy and (ii) how specific infrastructure may be used to implement specific public policy. We believe that, by drawing on insights from *instrument choice theory*, we may be able to provide and justify some relevant answers to these questions.

Defined as either “...a set of techniques by which governmental authorities wield their power in attempting to ensure support and effect (or prevent) social change” (Vedung, 1998, p. 21) or as “...a device that is both technical and social, that organizes specific social relations between the state and those it is addressed to, according to the representations and meanings it carries (Lascoumes and Le Galès, 2007, p. 4), policy instruments (i.e., instruments of choice) represent the constellation of tools and techniques available to governments to use to implement their public policy objectives (Howlett, 1991).

Instrument choice, hence, focuses on articulating the rationale or justification for the choice of a particular instrument to implement policy to advance the interest of the state. The choice of policy instrument is technically based on the one deemed to be the most efficient (defined as the

degree of resource utilised to deliver the required functionality) and effective (defined as the extent to which the results have met functionality expectations).

Governments have available a diverse range of public policy instruments that they can utilise to influence the behaviour of the public/wider society. These instruments cover several sectors, including the infrastructure development, delivery, and implementation (Lascoumes and Le Galès, 2007).

The general contention is that different policy instruments (i.e., instruments of choice) can be used to accomplish similar public policy objectives (Landry and Varone, 2005). Thus, in effect, policy instruments can be technically substitutable. As the choice of instrument is a fundamental decision that will need to be made taking into consideration a wide range of administrative, economic, legal, political, and social concerns, it largely exists in a socio-political space of which there are three main considerations. The first is the decision on which instrument to choose/select from a wide range of other potential alternatives. Second, what efforts and resources will need to be expended to allow for the use of the instrument within the desired context? Third, what complementary/support instruments are available to support the effective use of the instrument?

Overall, the academic opinion seems to be that, because the success rate of major public sector infrastructure projects is near zero (Goldfinch, 2007) or, at best, sub-optimal (Sovacool and Valentine, 2011), they sometimes offer little evidence on any ability to realise stated benefits (Shiferaw and Klakegg, 2012). Various reasons have been discussed on why this may be the case. These include that they are sometimes justified based on misinformation (Fearnside, 2016) and that they are often predicated by conflicting and competing policy narratives (Flyvbjerg, 2007).

We suggest four potential ways in which publicly funded infrastructure projects can be used to implement public policy.

The first, which entails the *distributive* use of publicly funded infrastructure projects, revolves around ideas of distributive justice. It involves funding infrastructure projects as a means of managing potential disputes that may arise among the public—for example, in areas such as resource availability and use. By funding infrastructure projects, governments will ensure that resources (or, at the very least, access to national resources) are equally distributed in an equitable and fair manner. The recently abandoned second phase of the High-Speed Rail 2 (HS2) trainline project could have fulfilled this criterion. In this instance, although not conceptualised to directly deliver benefits to people living in the North of England, the expectation was that the project would serve as a benefits enabler, reliant on complementary factors to facilitate such development.

The second suggestion revolves around publicly funded infrastructure projects serving as platforms able to fulfil aspirations aligned with *informational* justice. Project types that may come under this category include those focused on the communication of societal experiences. The third way by which publicly funded infrastructure projects can be utilised as a preferred instrument for implementing public policy may align with their *interactional or interpersonal* justice. Publicly funded infrastructure project types that may come under this category include those focused on enhancing social interactions. Examples of such projects were the Millennium Dome project and the associated New Millennium Experience (see McGuigan and Gilmore, 2002). Finally, publicly funded infrastructure projects may also fulfil a *procedural justice*. These will be projects focused on enhancing citizen's rights—such as access to justice.

Put together, a '*Justice*' assessment may be employed to assess or frame the equitable objectives of any publicly funded infrastructure project. These evaluations are crucial, particularly amid increasing societal awareness and consciousness among various populations on a range of environmental and social issues (Zárate-Toledo *et al.*, 2019).

It then transpires, like the *'Rule of law'*, that public policy implementation would require relevant projects to exhibit characteristics and processes associated with fundamental elements of fairness—in effect, *'Justice'*. In both instances, we recognise a perhaps ambitious assumption (which is rarely the case) that the majority people hold broad ideas of the *'Rule of Law'* and *'Justice'* sufficient to influence policy decisions.

6.0 Concluding remarks

The public policy concept is becoming everyday discourse in several field and disciplines, including project management. The premise of our brief position paper is that publicly funded infrastructure projects have been employed to serve two purposes: (i) as a conduit for the implementation of public policy (primary purpose) and (ii) as a means of organising the government's relationship with the public (secondary purpose). The emerging idea of 'open government partnerships' is focusing greater attention on the need for government to enhance its level of engagement and openness with its citizens. The public interest imperative now extends to its right to be included in defining national infrastructure goals. Consequently, it has also extended to assessing the viability of such infrastructure by requiring projects to meet public policy and, more specifically, *'Rule of law'* and *'Justice'* aspirations.

What seems to appear as a general incapability to decide on an established framing public policy is causing great disquiet among project management practitioners, especially as 'public policy' represents one of the principal driving factors for publicly funded infrastructure projects. The reality that these projects continue to fail in delivering their stated public policy objectives despite significant resources being channelled towards them suggests the need for guidance which is much clearer and more concise, possibly couched in language that project practitioners can relate to,

detailing the scope of the public policy criteria. This may be important as mitigating against the effects of ambiguity “...requires collective framing of meaning” (Ojiako *et al.*, 2023, p. 1394). Essentially, we think it is unlikely that additional legislation will be able to resolve the complexity of public policy. At the same time, we also believe that strict adherence to the ‘*Rule of law*’ principle may not necessarily change individual attitudes and behaviours, especially where significant interests are at stake. Moreover, since legislation is typically crafted in narrow and precise terms, it may not be an appropriate means of accommodating the diversity of public policy objectives being pursued via publicly funded infrastructure projects.

As we conclude, we highlight that one of the concerns with the seemingly persistent failure of publicly funded infrastructure projects is the accrual of dysfunctional decisions to the extent that learned lessons on how to deliver successful projects will dissipate. The authors have counted not less than 50 different reports by the National Audit Office (NAO) on various failed/failing infrastructure projects over the last 10 years. The sheer combined volume of these reports and the reality that infrastructure projects continue to fail on different criteria suggests that limited lessons are being learned (Williams, 2008), and that dysfunctional public policy implementation decisions will continue to accumulate. Left unaddressed, these resultant cycles of poor implementation are likely to create the appearance of a project environment that is simply unfit for purpose, supporting the view that, perhaps, the government should not be in the business of directly funding infrastructure projects. While this position is in direct contrast to views expressed by the Institute for Government (2017), the mere fact that they do acknowledge this point (p. 20) suggests that perhaps it is time, at the very least, to debate it.

Our paper sets the scene for future studies. These may advance in either of two possible directions. First, future studies can explore how the ambiguity associated with public policy

impacts upon governance frameworks of publicly funded sector projects (for example, do governance frameworks of public sector projects need to evolve alongside public policy?). Second, studies could explore how the existence of specific legal perspectives of public policy affects project legitimacy. Here, research could focus on the extent to which public policy is utilised as a tool to establish, maintain, and consolidate power and credibility during infrastructure project implementation.

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