



# Thinking of Infrastructure Beyond the PPP Model

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# **Issues to Consider When Addressing Canadian Infrastructure Development**

- Business Models Related to Infrastructure Needs
- Tackling Revenue Sources
- Developing New Value-Capture Models
- Infrastructure Productivity
- The Role of People and Institutional Memory



# **Business Models Related to Infrastructure Needs**



# Business Models Related to Infrastructure Needs

- What do we mean by a business model in the context of infrastructure?
- Why is a business model a requisite to any infrastructure procurement program/process intended to address (public) objectives?
- How do legal, regulatory, capital, governance and accountability systems affect the realization of (public) objectives?
- Where and how do end users enter the picture in this discussion?
- If there are multiple business models to consider, how best to evaluating their appropriateness?
- What will be the role of Canada's proposed Infrastructure Bank?



# **Tackling Revenue Sources**



# Tackling Revenue Sources

- What are the objectives of revenue models?
- Do we need to access new sources of revenue to fund infrastructure? Why not continue to rely on general revenues or and the tax base?
- What are the possible policy implications, real and perceived risks, and some of the potential unintended consequences (socio-economic disparity) associated with different revenue sources to fund infrastructure?
- Can governments agree upon and adopt clear, policy guideline on user pricing, such as those pronounced by the Federal government, or the refusal of the Ontario government to support a recent pricing initiative proposed by the City of Toronto?



# Tackling Revenue Sources (cont.)

- How do you reconcile the potential benefits of dynamic pricing models with political accountability?
- What can we learn about effective user pricing models from other jurisdictions?
- How do we tie revenue sources to value propositions for stakeholders and end-users?



# **Developing New Value-Capture Models**



# Developing New Value-Capture Models

- Based on the considerable costs to the public and the risks involved to both public and private partners in the delivery of new infrastructure or rehabilitation of existing infrastructure, should the public not be compensated for the value created for adjacent land owners who might otherwise enjoy 'windfall' profits?
- Are there models for value recapture that work and that recognize different sources of value (financial, social and economic)?
- Are governments forfeiting the imbedded value of data collection in this new world of 'Big Data' and the Internet of Things?
- What can be learned from the experiences of existing value-capture models, and what remains to be developed?



# Infrastructure Productivity



# Infrastructure Productivity

- Have we made the case for new infrastructure project from a public benefit perspective, or are political mandates a key driver (shovel ready projects)?
- Are the benefits highly exaggerated and the overall infrastructure deficit highly distorted from a productivity perspective? If so, what are the factors underscoring this behaviour?
- Can technology advancements such as data collection devices, cloud-based computing, autonomous vehicles, and hand-held devices be used to enhance the utility of infrastructure, particularly existing infrastructure?
- Do we understand the distinction between depreciation (accounted for in the PPP model) and functional obsolescence (not a function or time nor money)?



# Infrastructure Productivity (cont.)

- Can infrastructure be scaled to match productivity profiles (airports, cargo handling, and trade corridors)? Can intangible service providers replicate the services delivered by existing infrastructure? If so, what governance models will be designed to address the accessibility and equity considerations of those service providers?
- Why have we failed to use existing infrastructure more productively (design for peak capacity, significant underutilization, and mispricing)?
- Does the mismatch between the life of an asset and the business model suggest that the public sector is the implicit equity holder in PPP? If so, should additional objectives be pursued?



# **The Role of People and Institutional Memory**



# The Role of People and Institutional Memory

- Are organizations entering into partnership agreements fully aware of the risk and the costs involved into the operation stages of infrastructure partnerships?
- Are current practices and processes failing to recognize the role and importance of intuitional memory and the transfer of imbedded knowledge?
- Will governments have the leadership and/or political will to cancel contracts if they fail to deliver what is "promised"? Might they do so without an appreciation of the institutional memory associated with an infrastructure asset to understand what was originally "promised"?



# The Role of People and Institutional Memory (cont.)

- What role will people play in the interpretation and enforcement of long-term legal agreements such as PPP agreements?
- How can there be a transfer of tacit knowledge to enhance the learning curve of organizations to go beyond the procurement stage and to fully understand the business models underlying the infrastructure partnership agreement?
- Are people the fourth "P" in PPP? If so, should we begin to think of PPP as more than a contractual or procurement model



# Thank You

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