

Paper examines risks associated with infrastructure projects in Canada

Angela Gismondi January 25, 2019



The Lawrence National Centre (LNC) for Policy and Management has identified six categories of risk to economic infrastructure investment and development in Canada which, if not addressed, could have consequences for the country's economic competitiveness.

The LNC, part of the Ivey Business School at the University of Western Ontario in London, Ont., recently released a discussion paper entitled Moving Canada's Economic Infrastructure Forward: Addressing Six Risks to Timely, Economical and Prudent Project Selection and Delivery.

The purpose of the paper is to examine the risks associated with the development of public and private infrastructure projects in Canada.

"We identified six broader types of risk that we think, if they were recognized for what they are and addressed directly, that a lot of the challenges we have in the infrastructure space would be easier to surmount," said Michael Fenn, who co-authored the paper with Mahmood Nanji, Jessica Rolfe and Andrew Sussman.

"It's really important that we use a risk-based approach to infrastructure construction...as you would in other major business decisions."

The six categories of risk include: political and regulatory, governance, funding and financing, industry capacity, innovation and technology, environmental sustainability and climate change.

The paper identifies issues and poses questions rather than solutions and recommendations, Fenn noted.

Business leaders, investors and government need to work together to find solutions to address the risks, he added.

"We're not making the decisions in this paper, we're saying the people that are sponsoring and building projects are the best people to decide how to go about doing it," said Fenn. "What we're saying is in making those decisions...there are certain lenses that you can use to look at the problem so you can see it clearly. Regardless of what you do, be judicious in how you select projects and once you've selected the projects run them through this set of filters so that when you are ready to build the projects and operate them you won't make the same mistakes that others have made in the past."

According to the paper, political and regulatory risk refers to the processes that can potentially increase the project cost and unpredictability for various partners including investors, construction firms and others in the supply chain.

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— Michael Fenn

Lawrence National Centre for Policy and Management

"Stability in government decision-making and leadership combined with a predictable regulatory framework is of paramount importance in mitigating this risk," states the paper.

Governance risk is a result of competing priorities among levels of government, a lack of transparency regarding project selection criteria and the private sector's failure to deliver on commitments.

"There is a recurrent theme that they need to get their act together to ensure that the governance of projects is transparent, consistent and mutually supportive," Fenn stated.

The paper states funding and financing risk relates to the source of funds during procurement and the optimal use of financial instruments. It suggests governments "need a more balanced approach to funding infrastructure from the tax base and through user-pay mechanisms."

"Particularly for things like public-private partnerships, we need to design those appropriately so we can have the kinds of infrastructure we need, spread across the appropriate period of time and

make sure those that are enjoying the benefits of the infrastructure make a contribution towards them both in construction and in their operation," said Fenn.

Industry capacity risk is the availability and supply of construction, engineering and design firms, equipment and materials, project management and general labour.

"As projects get bigger, the capacity to project manage major infrastructure projects that are complex...takes a particular kind of talent and expertise. When we devote the project management capacity that we have in Canada to those projects there is less to go around in general," said Fenn. "We think there is a consideration there of developing our own internal capacity of construction, design, financing operations so that if we get the opportunity to build infrastructure that we are not held up by the lack of talent and skill necessary."

In terms of innovation and technology, Fenn said new infrastructure should incorporate new technology.

"The procurement process really doesn't reward technology or experimentation or moving beyond obsolescent technological infrastructure to look at new ways," said Fenn.

Another major challenge is the need for broader consideration of the impact of climate change on infrastructure assets and incorporating sustainability and resiliency through a design and building process.

Andy Manahan, executive director of the Residential and Civil Construction Alliance of Ontario, said political and funding risks are important to consider.

"How are we going to build what we need to if we don't have leaders that are willing to say we've got to dig a little deeper right now to make sure that we are building the right kind of infrastructure to meet our future needs," Manahan stated.

The LNC is planning to host a forum in the spring to engage government and businesses in order to get input on how to overcome the six major risks.

"We're going to prepare a final report so that people aren't just dealing with broad principles but they actually see how it would be applied in practical terms," said Fenn.