



UNIVERSITY OF
TORONTO



CANADA'S URBAN INFRASTRUCTURE DEFICIT: TOWARD DEMOCRACY AND EQUITABLE PROSPERITY

FOREWORD, CANADA'S URBAN INFRASTRUCTURE DEFICIT

Hardly a day goes by without news of transit system failure, congested highways, flooded schools, and overcrowded long-term care facilities. Canada's rapidly growing population, fuelled by immigration, is taxing both physical and social infrastructure in our communities. Not only is this infrastructure inadequate to address today's challenges, but it also lacks the resilience to adapt to the uncertain crises of the future, from climate change to economic and political turmoil. It's clear: we are not keeping up.

Canada desperately needs rigorous research on our growing infrastructure deficit to spur more effective policy-making and action. To that end, the Canadian Urban Institute and University of Toronto's School of Cities partnered to commission a series of articles on the infrastructure deficit from Canadian universities, to spell out the challenges communities of all sizes are facing. With 46 authors from 18 different institutions, this volume provides the evidence base needed by multiple orders of government to design and implement new approaches to infrastructure investment – and soon.

Canada's Urban Infrastructure Deficit begins with an overview of the challenges by Exon Smith, Chapple, Fagan, and Siemiatycki. The chapter shows how Canadian infrastructure policy, programs, and investments have evolved over time – both positively and negatively – and identifies international best practices that Canada needs to consider to build more sustainable and equitable infrastructure to anchor its democracy.

Next, the volume assesses challenges and potential solutions in three broad areas: housing and governance, social and civic infrastructure, and transportation and sustainability. The recent addition of the responsibility for housing to the name and mandate of a major federal department – Housing, Infrastructure and Communities Canada – underscores the public realization that housing is infrastructure. In other words, the housing affordability crisis will not be solved in isolation, simply by building more: housing has to be coordinated with investments in all forms of infrastructure that build complete communities where people thrive.

To reach the scale of investment required, the public sector must resume a significant role in housing delivery, a theme explored by four articles in this volume. Frate and Robitaille probe the long-term shift toward greater municipal autonomy and explore the opportunities and risks of using preemption, or greater provincial control, to address the infrastructure deficit. Connolly, Grisdale, Power, Flynn, Jones, Rigsby, and Walks describe how the absence of a robust data infrastructure across multiple orders of government is creating a significant barrier to leveraging public lands for housing development. Two papers show how the housing crisis has amplified existing infrastructure challenges in the North. Pottie-Sherman and Christensen highlight the disconnect between northern housing

policy and immigration policy, and Tsenkova, Derkowski, and Taylor argue for the diversification of housing models, following models put forward by Indigenous-led organizations.

The second area this volume highlights is the risk Canada faces with respect to the state of our social and civic infrastructure, from libraries to schools to playgrounds. These institutions and spaces support Canadian cities by facilitating connections across diverse groups, providing access to opportunity, building trust in the public sector, and fostering space for democracy. As Biggar, Veloso, and Pottie-Sherman show for Halifax, cities often have inadequate community spaces to welcome newcomers. Mehta argues that community media infrastructure ensures access to trustworthy information and empowers local communities to dispute misinformation and participate in civic discussions. Both social and physical infrastructure are essential to addressing the social determinants of health, and well-connected, protected bike lanes are key to healthy cities, as explored by Fuller, Winters, Kestens, Mamiya, Sones, Thierry, and Poirier Stephens.

Finally, four articles examine the sustainability challenges related to transport and water infrastructure. Fischer, Anderson-Gregson, Farber, Tiznado-Aitken, Páez, Winters, Woodward, and Smith examine sustainable transport modes like walking, cycling, and public transit. Their research reveals low levels of access – particularly for walkability – and acute transportation disadvantages for Indigenous groups and extreme commuters. Similarly, Parga, Soukhov, Arku, Higgins, and Páez point out how shifts in transit service since the pandemic have disproportionately affected low-income groups in cities across Canada. Analyzing the issue of cost overruns in transit system construction, Mok, Crane, Chitti, and Shalaby show how Canada could do better by adopting practices of project planning and cost estimation used in Europe and Asia. Ahuja, Saxe, and Meyer analyze greenhouse gas emissions from water infrastructure, identifying the benefits of denser urban form.

The challenges outlined here only begin to cover all of Canada's infrastructure gaps. And if we do not act, these gaps will only grow bigger: our infrastructure is aging, with many of our collective assets built decades or even a century ago. Infrastructure is expensive, but it is a remarkable job creator, and a gift that keeps on giving by delivering benefits to future generations. It is also essential to making our economy productive, our communities safe, our neighbourhoods vibrant, and our lives rewarding.

In the future we are eager to explore topics such as education, labour, and culture, among others. Cross-cutting themes such as how to finance both operations and new infrastructure investment, the potential for data and technologies to introduce efficiencies, how to adapt infrastructure for an aging population, and addressing climate-related challenges, deserve volumes of their own.

At a time of global political, economic, and climate upheaval, Canada must strengthen the quality of its places, and their capacity to support the people living and working in them. This body of research is an important contribution to the serious conversation Canadians are beginning to have about assessing our infrastructure needs and the actions needed to secure our future.

- Karen Chapple and Mary W. Rowe