

THE HILL TIMES

Who said infrastructure's not sexy?

A new report outlines major trends to be considered when deciding where to dole out infrastructure funds between now and 2030.



Highway 401 and Don Mills in Toronto in 2011. The Liberals have pledged to spend \$120 billion over 10 years on infrastructure.
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By ANDY MANAHAN, MICHAEL FENN

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Contrary to comedian John Oliver's famous depiction of infrastructure as not being sexy, except for when it is being blown up in Hollywood movies, author Ryan Gravel claims that infrastructure can be sexy when "done right."

In his book *Where We Want to Live: Reclaiming Infrastructure for a New Generation of Cities*, Gravel says that infrastructure “is seductive—it dares us to go places we might not otherwise go. It is muscular—it shoulders the underlying weight of our social life and economy...More potently, however, it is sensual—infrastructure forms the physical and sensory space in which we live our lives.”

After a long federal election campaign, Prime Minister Justin Trudeau won in part due to his commitment to infrastructure. His government’s commitment was solidified in the federal budget in March when Finance Minister Bill Morneau announced the Liberals’ pledge of \$120 billion over 10 years, giving Infrastructure Minister Amarjeet Sohi a key role in cabinet.

This large investment commitment is back-ended, with only \$11.9 billion in the first phase. What this means for the federal government, working with its partners across Canada, is that there is still time to get it right for the bulk of the \$120-billion program. And that’s where megatrends come in.

A [report](#) released in July called *Megatrends: The Impact of Infrastructure on Ontario’s and Canada’s Future* says there are major trends that should be taken into account when deciding where to allocate infrastructure funds between now and 2030. As pressure keeps building on the federal government to meet demands for roads, bridges, transit, water systems, ports, broadband, and other critical infrastructure, the report’s impact summary provides useful guidance.

Commissioned by the **Residential and Civil Construction Alliance of Ontario**, representing those who build infrastructure, this labour-management coalition released the 68-page report to highlight that infrastructure will need to adapt to changes in the economy, the environment, and public expectations.

Some infrastructure could be built with a shorter lifespan. For example, with the convergence of miniaturization, pre-constructed components and new-age design processes, the infrastructure of tomorrow could be built in light, flexible, and adaptable ways, with a view to being repurposed, expanded or relocated as demand changes.

In a similar vein, the requirements for bricks-and-mortar facilities in the health-care and educational sectors could change dramatically as technology provides different forms of access and community delivery models, thus reducing the need for traditional hospitals and learning facilities.

What should we be doing to anticipate that very different world, one in which the pace of change is rapid?

The “Big Six” megatrends can provide guidelines. They are technological; urbanization, globalization, and connectivity; social and demographic; economic and workforce; environmental and energy; and political and fiscal. These will change our society and its infrastructure.

Today's infrastructure seems expensive, but yesterday's infrastructure seems like a prudent investment. And foresight, not just current demands, should guide our infrastructure decision-making, including new kinds of infrastructure.

Other specific impacts that the report identifies include:

- Increased automation and sharing of personal vehicles, and the advent of high-speed trains and more lake-based shipping will regenerate the economies of our cities. In turn, this will alter radically our land-use and transportation plans, and disrupt traditional assumptions about commuting patterns, public transit, and toll-free expressways.
- Greater connectivity, including nano-sensors and embedded RFID chips linked to the Internet of Things.

In a constrained fiscal environment, it is paramount that we build the right infrastructure. Good infrastructure decisions pay dividends for generations; bad decisions burden us for decades.

Our governments cannot let short-term thinking hinder their decision-making. Evidence-based approaches will be critical to adapting to megatrends and allocating scarce funds wisely. Hollywood will continue to depict the collapse of infrastructure with special effects, but our key decision-makers need to make prudent, sustainable infrastructure investment choices for Canada's future.

Michael Fenn was an Ontario deputy minister under three premiers and is the author of Megatrends: The Impact of Infrastructure on Ontario's and Canada's Future. Andy Manahan is the executive director of the Residential and Civil Construction Alliance of Ontario.