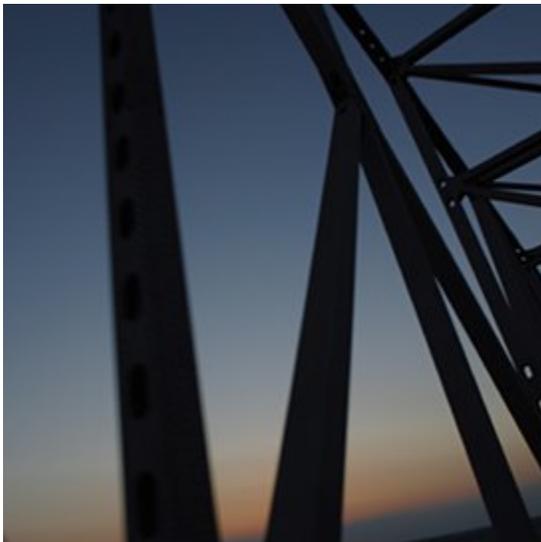


## ‘Get out in front’ of 6 megatrends says Fenn

by Don Wall Aug 8, 2016

As governments prepare to spend \$175 billion on Ontario infrastructure in the next 10 years, the winds of change are blowing furiously, says one of Ontario’s most respected policy analysts and futurists.



Michael Fenn, former Ontario deputy minister and founding CEO of Metrolinx, is urging policy makers to make an effort to understand the myriad of new trends emerging and converging from all directions — megatrends, he calls them — and prepare to make long-term decisions that anticipate and respond to them, to ensure the billions are spent wisely.

Fenn is the author of *Megatrends: The Impact of Infrastructure on Ontario's and Canada's Future*, the 37th infrastructure policy report commissioned by the **Residential and Civil Construction Alliance of Ontario (RCCAO)**.

"Big infrastructure choices are expensive and long-lived," said Fenn upon the release of the document on July 27. "Local responses to global forces — climate change and migration — must overcome short-term political and business goals to enable success in Ontario and Canada."

Fenn says six major trends are shaping the future of infrastructure: technological; urbanization, globalization and connectivity; social and demographic; economic and workforce; environmental and energy; and political and fiscal.

And emerging from those trends, Fenn's paper identifies 11 impacts that will affect the decisions politicians and other stakeholders make on infrastructure. Among them:

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 Ontario's land-use and transportation plans, and disrupt traditional assumptions about commuting patterns and public transit.

Global solutions can have local applications. Montreal now uses heated sidewalks. Madrid has reconfigured traffic signals to promote better and safer intersection clearance. Stockholm, Naples, Fla. and Milton, Ont. offer examples of "zero-injury design modifications and programs" for traffic flow.

"A great deal of activity in the infrastructure field means more work for all in the construction trades and in the professions that support it," Fenn writes. "However, the enhanced technological component will require more training and skill specialization...In much the same way that the job of the automobile mechanic has morphed from engine repair to computer diagnostician, the new infrastructure's impact on skilled workers will not so much displace old skills as require them to be supplemented and reframed."

Fenn says he has seen evidence that RCCAO papers introduce ideas that gain a new currency as policy makers tackle new problems.

"The terminology, the concepts they use, start showing up places," said Fenn. "In this current study are ideas that people need to reflect on, discussions about transit. Maybe trunk transit lines aren't the only consideration because of a lot of what's going on with ride sharing and automated vehicles, maybe we need to change the feeder systems for a rapid transit system." Besides introducing an updated vocabulary to describe needs and priorities — examples from the study include convergence, resilience and miniaturization and how greater connectivity, including Nano-sensors and embedded RFID chips will affect policy decisions — Fenn encourages an attitude adjustment among stakeholders to ensure they are in a position to benefit from change.

"Don't resist the winds of change and work against them, but get out in front of them," said Fenn. "Find ways to use the power of the economy and the focus and the momentum from these trends to do the kinds of things that we want. I guess part of the message in this paper is, if we get out in front of these trends, we can make them work for us, we can give ourselves a competitive advantage."

The Megatrends paper, he hopes, will spur discussions rather than provide all the answers.

"We don't have to answer all the questions but we do have to provoke the evaluations and the considerations, so I think that its main purpose is to have something that is accessible and readable, and digestible, to busy people so that they will recognize the importance of looking at themes over longer terms."

Fenn said a previously self-contained sector like construction has to realize that it will be unable to rely on traditional approaches, that it may not have the option of controlling its own destiny as in the past, and so "that means considerations like productivity, flexibility, retraining, new business models."

"Organizational patterns that we are going to see, the way we normally organized our affairs and the rules that we made for ourselves and in some cases the hurdles we imposed on ourselves, they are going to be swept away. And we should be ready for that, and how we are going to respond to it."