



Navigating Uncertainty – exploration of alternative futures for the GTHA

Project Overview

To address the challenges of planning for an increasingly uncertain world, Metrolinx commissioned WSP to conduct a scenario planning exercise to assess the resiliency of their draft Regional Transportation Plan (RTP). Using an alternative futures approach, a series of six scenarios were generated, bringing together a cross-section of trends across policy, economy, society, technology, legal, environment, and mobility.

The scenarios helped the team highlight opportunities and challenges addressed in the RTP, and also served as lenses through which different elements of the plan could be assessed. A resiliency analysis framework was developed to evaluate the ability of different plan elements and foci to withstand the conditions and stressors presented in each of the scenarios. The outcomes of the analysis provided the evidence necessary to support strategies and actions that otherwise may be less apparent under ordinary or expected circumstances.

What innovations and future trend(s) did we consider?

- Increased adoption of emerging technologies such as automated vehicles and advanced communication technologies
- Rapid growth of core areas and ethnoburbs, rather than even growth across the region, driven largely by immigration

- Increased impacts of climate change on local weather conditions, with possible population growth from climate change refugees
- Increased popularity of the on-demand economy, driven by consumer expectation that everything can be ordered on-demand, dominated by short term “gig” employment
- Growth and impact of a “user pay” economy, where all services are paid for by the user and priced according to the level of consumption

How were they considered?

All trends were considered on the basis of their impact across society, such as changes to population size and distribution, employment type and distribution, traveler behavior, environment, and quality of life.

How was our approach better?

The conventional planning approach typically involves linear forecasts and sensitivity testing of trends in isolation. The alternative futures approach to scenario planning more comprehensively considers trends as part of a system and accounts for how interactions and dynamics across trends could have unintended effects in a range of other areas of impact. This method recognizes the inherent level of complexity common to cities.

The outcome

Recognizing the need to continually adapt to uncertainty, the draft RTP elevated “Change Ready” as one of the five overarching strategies of the plan. The draft RTP has also highlighted a number of strategies and actions that were validated through the resiliency analysis process, such as the need to consider pricing in the context of managing behavioral change.

For more information:

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