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# NEW MOBILITY BACKGROUND PAPER

## CONCLUSIONS

Technical Paper 4 to support the ***Discussion Paper for the Next Regional Transportation Plan***



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## Summary

The report frames current thinking on the issues, opportunities and forces at play in the emergence of new mobility. By looking forward at how different trends and scenarios could evolve, it identifies broad strategic directions that are of interest to a wide range of new mobility stakeholders.

To support the update of the GTHA's Regional Transportation Plan, this concluding chapter highlights several high priority areas where future work could bridge gaps in current research or otherwise inform government transportation policy.

## Protecting the Public Interest

The changing mobility landscape will have implications for public policy and supporting research including the following key areas.

### Regional policy and regulation

An ownership model of new mobility—continuing and expanding the current model based on private vehicle ownership—would have major implications for the GTHA's transportation system and policy framework. In this model, vehicle owners and service providers would play a key role in shaping travel patterns and their impacts, especially changes in the amount of motor vehicle travel and government's ability to shape outcomes for the benefit of society. Research is needed to understand how the effectiveness of different policy levers would change depending on the model and mix of ownership.

For example, mobility pricing is a key policy tool but government's influence could diminish with a greater range of private-sector mobility offerings that compete with transit and are market priced. Data ownership, access, sharing and security are

key areas of research that must span the public and private realms. Research is also needed on where and how government can best invest its limited resources to influence industry practices—for example, in the area of travel planning the role of government could range from creating its own tools to creating frameworks and standards that guide the work of others. Research could also explore policy models for Mobility as a Service (MaaS), addressing issues such as organizational roles and priority strategies to ensure effectiveness.

### Rapid transit network planning

New mobility trends highlight the need for new tools and approaches for rapid transit network planning. Dynamic and uncertain circumstances call for scenario planning tools that can quickly assess policy and infrastructure options, both for strategic purposes and to monitor the plan's progress and shifting context. At a project level, evaluation tools and business cases will need to consider how new rapid transit lines, transit stations and parking structures can respond to a changing environment, and what role is played by factors such as the level of public acceptance of on-demand mobility services and autonomous vehicles, and how it impacts the degree and timing of possible uptake. Financial models will need to be sensitive to a range of revenue and service approaches, including disruptive ones. Similarly, traditional transportation models will need upgrading to more accurately assess the impacts of new mobility choices and services on individual behaviours and the broader transportation system.

### Operations and business models

Underpinning the Regional Transportation Plan will be the need for a better understanding of new mobility practices and business models. While international experience is highly varied, work can be done to bring together good examples of new

mobility offerings and lessons learned, such as the Milton GO Connect service, Kutsuplus in Helsinki or Bridj in Kansas City, Boston and Washington, D.C. Government will also need to monitor trends in the automotive, financial and information technology sectors to ensure the ongoing relevance of plans.

## Mobility pricing

The integration of transit fares across the region, to create a unified and logical fare structure for transit trips regardless of the operating agency, has become an increasingly urgent priority. The discussion has become more complex with the arrival of new mobility. Government policies around transit fares must continue to balance social, economic and environmental objectives, while also considering new market forces. Research is needed to build a better understanding of mobility pricing across modes and operators (e.g. bikeshare, parking), advanced transportation modelling, and private-sector business models for public mobility. Work is also required to decouple social and transportation policy objectives so that both can be pursued in an integrated and effective manner. For example, technology now allows for a consistent approach to fares, while concessions to different user groups can be applied to qualifying individuals. These subsidies can then be explicitly accounted for in the appropriate operating budget.

## Next-generation transportation demand management

TDM tools such as road or cordon charges have the potential to be a key lever of mobility policy in limiting the growth in vehicle-kilometres travelled that could result from new technology and service models. Work is needed to explore new ways of managing demand and their potential effectiveness.

## Parking management

Parking is an area that faces significant potential disruption from new mobility, both in terms of pricing and in the nature and extent of required infrastructure at GO stations and across the region. Within the broader topic of mobility pricing, parking pricing could be a key policy lever in managing demand. Areas of research could include how on-demand mobility services and autonomous vehicles could impact parking demands and operations; of particular interest might be the impacts of a mixed vehicle fleet on the timing, layout and possible repurposing of transit stations, parking structures and access streets.

## Urban freight

The automation of urban freight and the possible convergence of goods movement with personal mobility could raise a host of policy issues. Monitoring developments in the freight industry will be increasingly important to regional modelling and policy frameworks.

## Active transportation and safer, more complete streets

New mobility has the potential to reshape how public rights-of-way are used, and could lead to the reallocation of road space. Policy consideration should be given to how to best use road space, and how to repurpose roads over time in a way that balances public and private mobility with wider civic needs. Understanding the changing context of safety will also be important to street design and operations.

## Working Together in New Ways

A key finding of this report is the emergence of a wide range of new players in the mobility field, and the changing balance of public- and private-sector roles. There is an urgent need for cultural change in

how government views its role in mobility and how it engages with external stakeholders. There is a need for greater collaboration among different levels of government, between government and the private sector, and even within the private sector.

### Government collaboration

New mobility is disruptive, and the response of government so far has been fragmented and unfocused leading to a range of strategies. Canada's federal and provincial governments have been more active in the realm of autonomous vehicles, while the impacts of transportation network companies have largely been met by wildly different approaches of municipal governments. There is an opportunity to share initiatives and collaborate in research and policy development; in particular, Montréal's Agence métropolitaine de transport (AMT) and Vancouver's TransLink have mandates and experiences that support their continued engagement with Metrolinx. Other municipalities, regions and provinces can also engage on the topic, with scope for a greater provincial role and more coordinated action across municipalities. This could include identifying areas of research and policy development, and clarifying the appropriate roles of different jurisdictions in areas such as road safety, data analytics and security, and new transit business models. Of particular concern are inconsistent approaches across boundaries or between jurisdictions that could create inefficiencies or complicate GTHA-wide services.

### Partnering with the private sector

Government's role in mobility is changing rapidly and a new approach to engaging with the private sector will be needed in areas ranging from procurement processes to the coordination and delivery of different services. Research is needed on different partnership models, their successes

and failures, and lessons learned. Government will need to better understand industry dynamics in the mobility space and to monitor the evolution of business models and strategies, particularly in the automotive, financial, information and logistics sectors.

### A culture shift

In the context of the Regional Transportation Plan, re-imagining the role of government when it comes to innovative approaches such as Mobility as a Service (MaaS) means regulating service providers in a way that protects the public interest without stifling innovation. For transit operators, it means moving from their traditional role as train and bus operators into a new role as mobility managers and enablers. It will be important for government to be strategic in where it engages, and to maintain a clear policy direction on what factors it wishes to influence or control. Critically, this will in turn require corporate support and accountability within different areas of each organization.

A fundamental shift in government culture is needed, and the public sector will need to rethink its role in transit as private sector services grow along with their market share. While many governments have acknowledged the arrival of new mobility, few recognize the extent to which it will change the industry, and fewer still have worked to understand the pragmatic implications for today. Immediately after World War II, few planners foresaw the massive transformation of mobility and cities that took place over the next two decades; today, planners are in a similar situation and inertia must not restrain their ability to leap (sometimes uncomfortably) into a new future for mobility in the GTHA.