# Mississauga Moves: A City in Transformation 2018 iCity Symposium Hamish Campbell





#### Outline

- Mississauga: A City in Transformation
- Planning for a Transformative Future
  - Transportation Master Plan
  - Parking Master Plan ("Parking Matters")
  - Zero Emission Vehicles & Infrastructure (ZEV&I)
- Taking Transformative Steps Today
  - Transportation Network Company (TNC) Pilot Project
  - Transit Fleet Transition
  - Advanced Transportation Management System (ATMS)
- Open to Transformative Partnerships
  - We are participating on a host of working groups
  - What we hope to achieve with iCity CATTS



# Mississauga: City in Transformation



# A city with a driving habit...





# ...but less than we might think...





# ...changing every year...





# ...embedded in regional system.







# Word on the street

- First and last mile barriers to transit are becoming factors in business (re)location
- TNCs in common use, irrespective of controversy and regulatory status
- Growing older adult population dependent on caregiver chauffeurs for mobility
- Cycling and walking impeded by concerns for road safety



## Planning for a Transformative Future



#### **Transportation Master Plan**





# **Resilience:** leadership in adapting to changes that reshape the transportation system and how it is used

- How will public appetite for personal car ownership and modal choice be affected by:
  - evolution of on-demand transport (taxis, TNCs)?
  - app-supported shared mobility?
  - innovation in auto tech (fuel type, connected vehicles, autonomy)?
- How will (Provincial) policy on licensing drivers and licensing vehicles evolve as drivers and vehicles become one?
- What is the municipal role in developing design standards, best practices, infrastructure requirements, ROW allocations to enable:
  - New fueling systems (electricity, hydrogen)?
  - Connected and/or autonomous vehicles?
  - Curbside service provision (pick-up/drop-off, vendors-on-wheels, etc.)?



#### **Parking Master Plan ("Parking Matters")**

A coordinated and strategic approach to citywide parking provision and management.

Transformations:

- Digital payments, permits and signage
- Open Data, standardization
- Parking enforcement upgrades
- Emerging parking technologies, such as stackers and pop-up facilities
- Curbside management
- Impacts of autonomous vehicles



PARKING MATTERS





#### Zero Emissions Vehicles & Infrastructure (ZEV&I)

- Why ZEV's are important:
  - Reduce GHG emissions
  - Improve local air quality



- Catalyze the transition away from fossil-fuel powered vehicles
- Challenge: lack of access to fueling or charging infrastructure
- Municipal role:
  - Support the adoption of ZEVs by helping to establish a reliable and readily available charging and refueling infrastructure
  - Use land-use and building policies and planning to direct the deployment of low carbon charging and refueling infrastructure in public, residential, and workplace locations



#### **ZEV&I – Mississauga Approach**

- Establishing a ZEV Ecosystem which will include:
  - Developing a ZEV&I Ecosystem Strategy in 2019
  - Electrification of the City's Corporate Fleet
  - Exploring possible applications of hydrogen fuel cells (e.g. buses)
  - Charging and Refueling Infrastructure



# **Transformative Steps We're Taking Today**



#### Transportation Network Company (TNC) Pilot Project

- 18 month TNC Pilot Project Licensing By-law enacted on June 21, 2017 to permit "ride share" services.
- By-law deregulation amendments made to Public Vehicle Licensing By-law to permit taxis to be more competitive.
- Effective July 1, 2017, TNCs must meet licensing requirements to operate in Mississauga.





#### **TNC Pilot Project Purpose**

To assess the effectiveness of the ride share (TNC) regulatory framework from a consumer protection and public safety perspective:

- 1. Assess TNC By-law compliance rates.
- 2. Assess the impact of the Public Vehicle By-law deregulations.
- 3. Identify regulatory framework limitations and recommend a permanent regulatory framework.

Report back to Council in 2019







Servicing express routes

Servicing local and school routes

#### **Transit Fleet Technology**

MiWay is transitioning its fleet away from carbon fuels:

- Purchased battery electric change-off vehicles with operations expected September 2018.
- Purchasing second generation Hybrid buses which have the potential to be converted to full electric at mid-life (replace the diesel engine with batteries).
- Ongoing monitoring of electric bus demonstrations projects within Canada.
- Reviewing Hydrogen Fuel Cell Electric bus applications.
- Conducting a facility review in 2019 to identify the requirements for electric bus charging within our bus garages.



#### Advanced Transportation Management System (ATMS) Project

State-of-the-art project that provides means to:

- Meet traffic system and operational needs
- Manage traffic congestion and its effect on the road network





#### **Moving Forward**

- Proactive Traffic Management
- Traffic Signal Performance
- Private Traffic Data Apps:
  - Real-time traffic information
- Connected Automated Vehicles:
  - Future interconnections between vehicles and traffic infrastructure
- Big Data:
  - Data sharing is the way of the future







# **Open To Transformative Partnerships**



## **Our Partners in New Mobility**

- Peel Region Goods Movement Task Force
- Metrolinx Urban Freight Forum
- National AV Working Group
- Ontario Good Roads | MACAVO



# **Our New Partner: iCity-CATTS**

We look forward to:

- Learning from global academic community about emerging policy approaches and technological advancements
- Helping to identify local applications and implementation practicalities of emerging tools and technologies



# Thank you

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