

RE: PW26.4



# Preparing the City of Toronto for Automated Vehicles

January 19, 2018, Public Works and Infrastructure Committee

# Agenda

- Why Prepare for Automated Vehicles?
- What is an Automated Vehicle?
- Current Legislation and Legal Framework
- Transportation Services Divisional Workplan
- Partnerships and Relationships
- Public Opinion Highlights
- Global Context

# Why Prepare for Automated Vehicles

- Automated vehicles – commonly called autonomous vehicles or driverless cars – have the potential to dramatically change transportation in Toronto.
- In the short term, new advanced driver assistance systems could improve road safety, increase transportation efficiency, reduce environmental impacts and provide new economic development opportunities

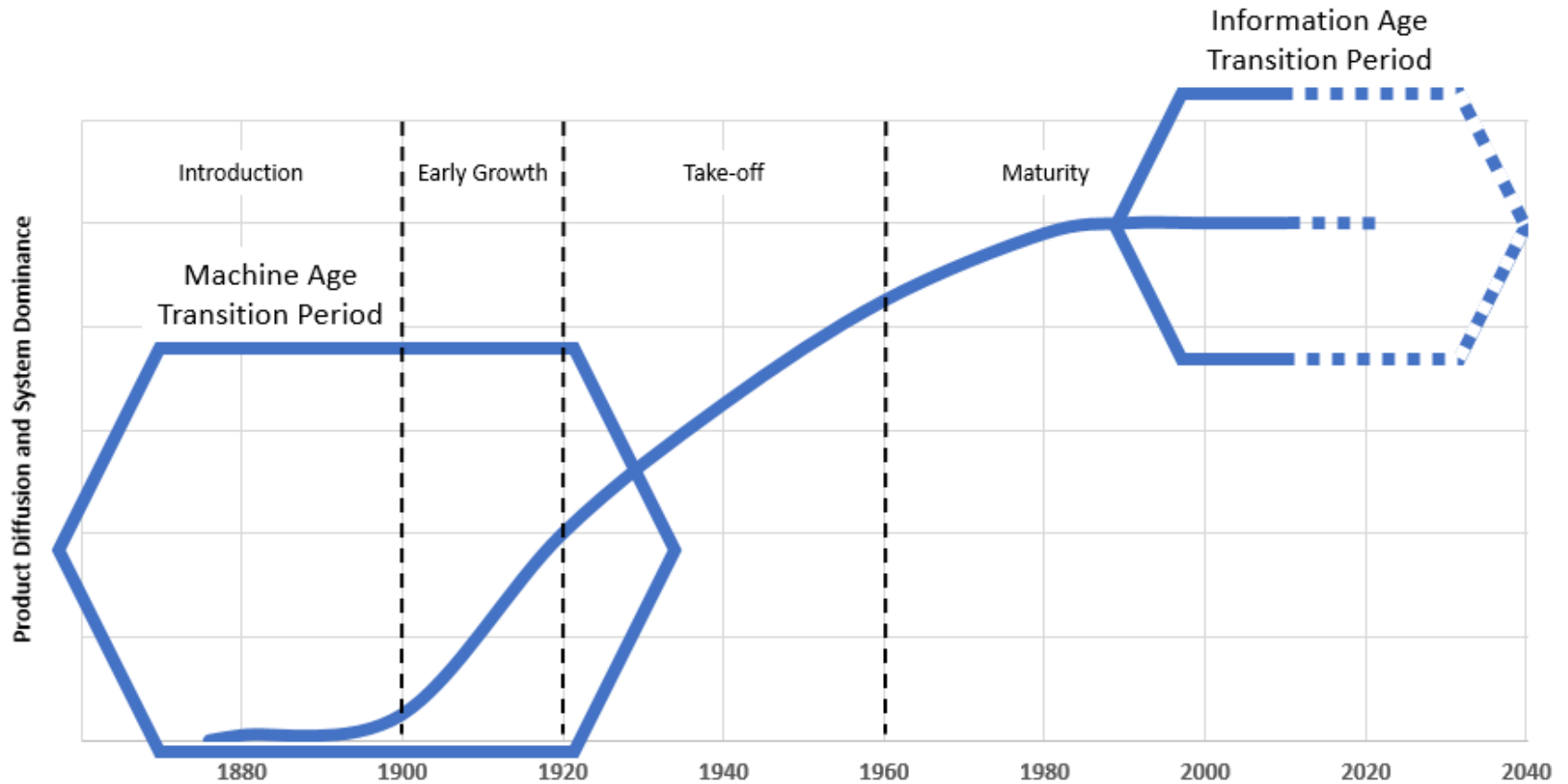


# Why Prepare for Automated Vehicles

- In the longer term, cars that can be operated without a human driver could further improve safety, significantly reduce the cost of transportation, provide increased mobility for non-driving populations, and completely change how we manage the transportation system.
- At the same time, these vehicles could spur more automobile use, facilitate greater travel distances, and create employment challenges for tens of thousands of Torontonians.
- No matter the case, we collectively have the opportunity to anticipate changes, and work to shape them, rather than have automated vehicles shape us.

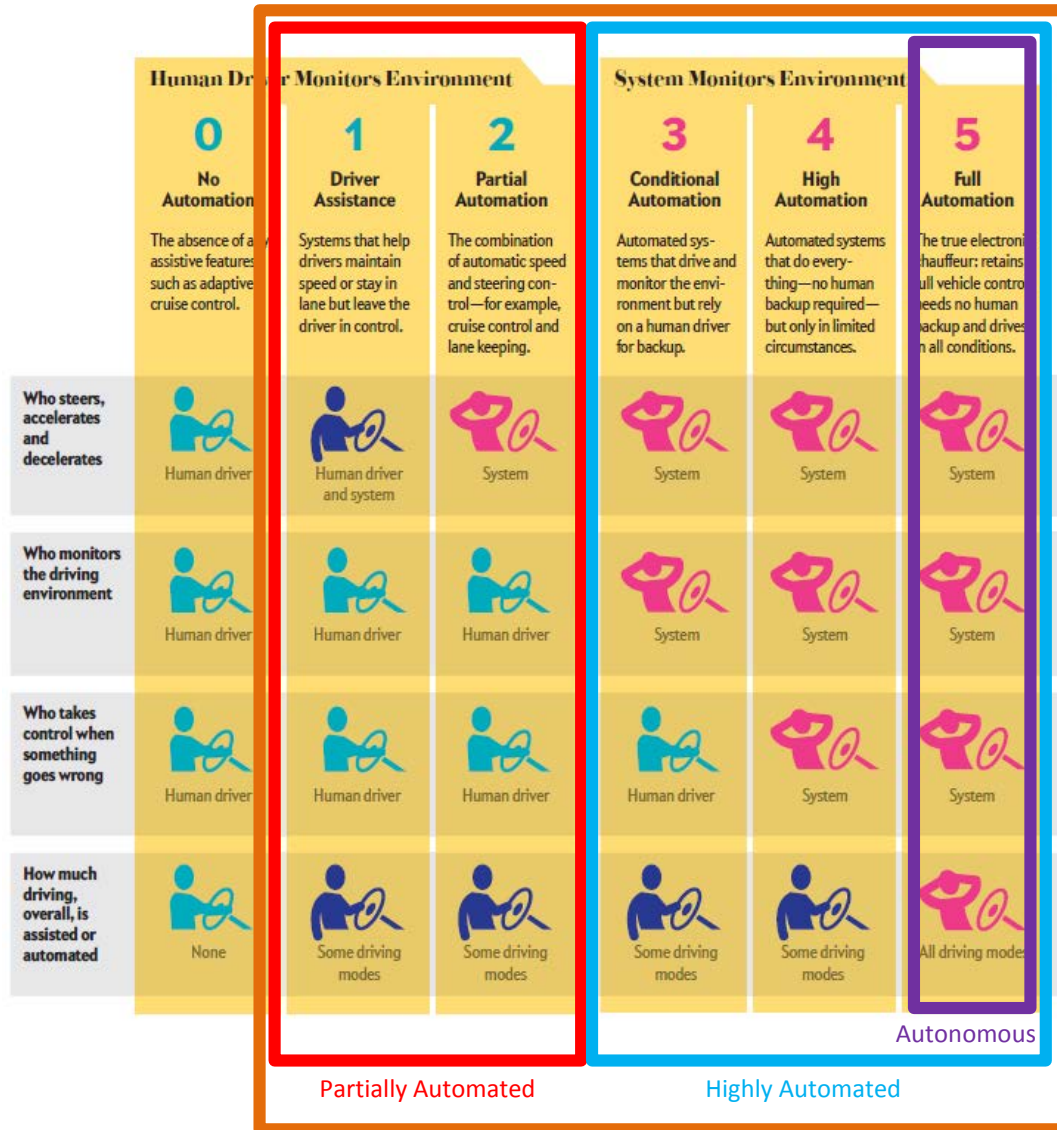


# Automated Vehicles and Disruption



Conceptual Model of the Realignment to and Dealignment from the Internal Combustion-powered Automobile

# What is an Automated Vehicle?



# Automated Vehicles in Ontario and Canada

## Ontario

- *Highway Traffic Act*
- 2016: Testing Framework
- 2018: Proposed changes
- Connected Vehicle/Automated Vehicle (CVAV) Program
- Automated Vehicles Innovation Network (AVIN)

## Canada

- *Motor Vehicle Safety Act*
- "Transportation 2030: A Strategic Plan for the Future of Transportation in Canada"
- Program to Advance Connectivity and Automation in the Transportation System (ACATS)



# Divisional Work Plan – 2016-2018

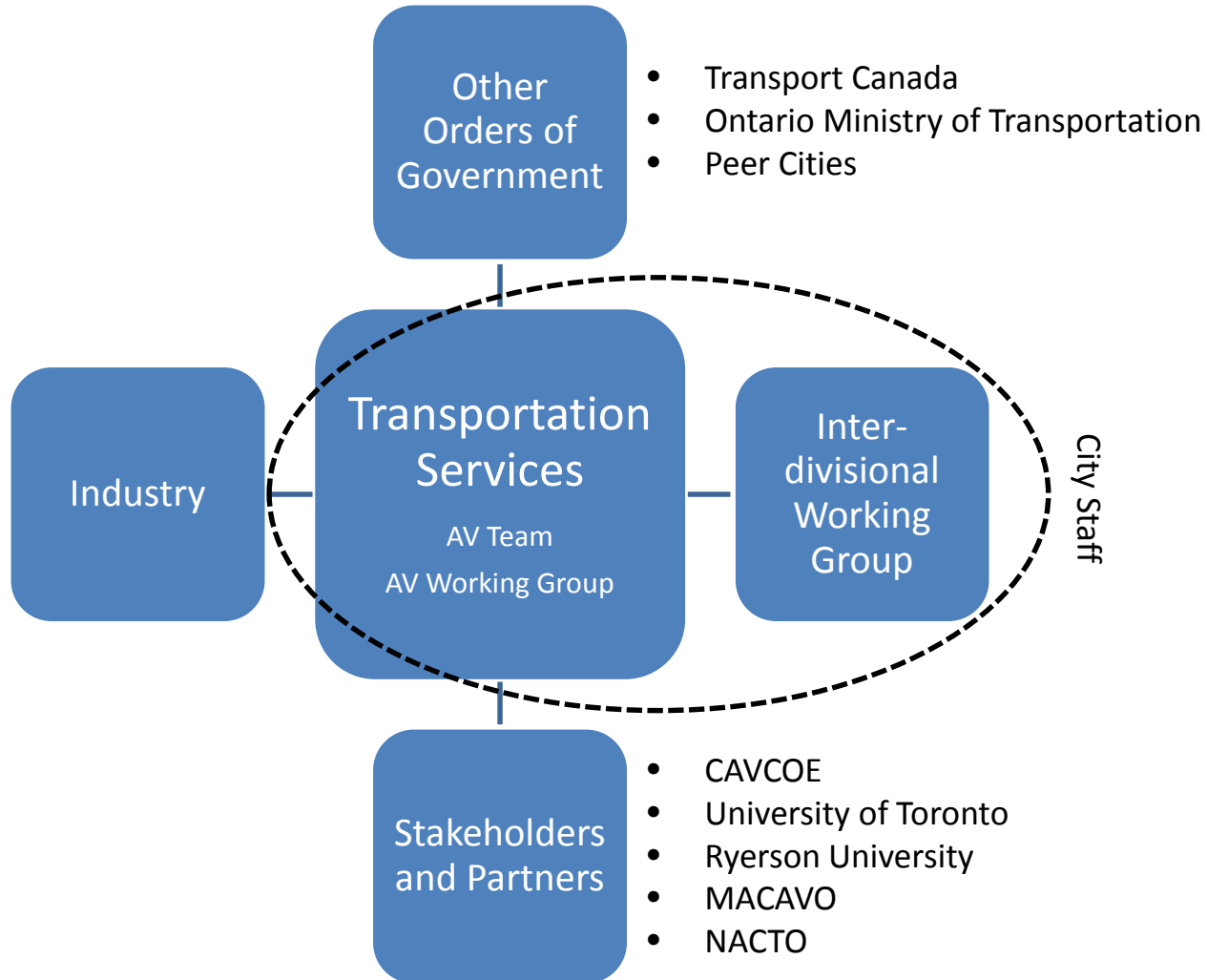


## Draft AV Tactical Plan

- Equity
- Environmental Impacts
- Road Safety
- Modal Shift
- Transit-centric
- Traffic Management
- Public Service Vehicles
- Economic Development
- Privacy and Security
- Business Intelligence



# Partnerships and Relationships



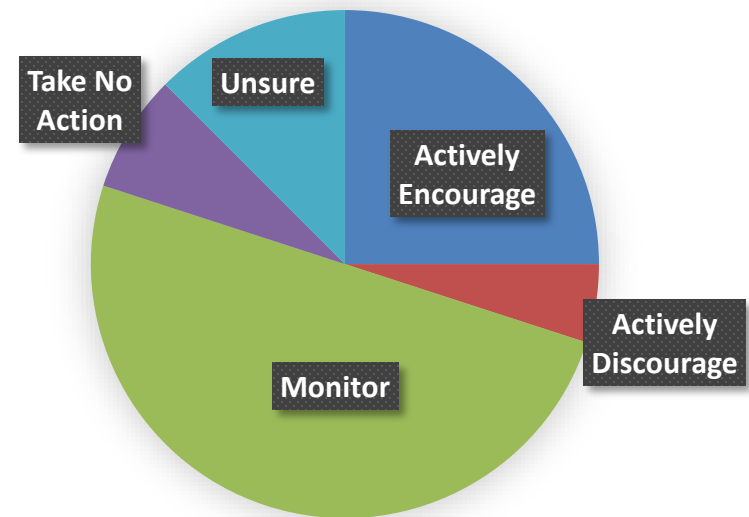
# Interdivisional Working Group

- Transportation Services
- City Clerk's Office
- City Manager's Office
- City Planning
- Corporate Finance
- Economic Development
- Environment & Energy
- Fire Services
- Fleet Services
- Information & Technology
- Legal Services
- Municipal Licensing & Standards
- Revenue Services
- Solid Waste Management
- Toronto Building
- Toronto Employment & Social Services
- Toronto Office of Partnerships
- Toronto Parking Authority
- Toronto Police Services
- Toronto Public Health
- Toronto Transit Commission

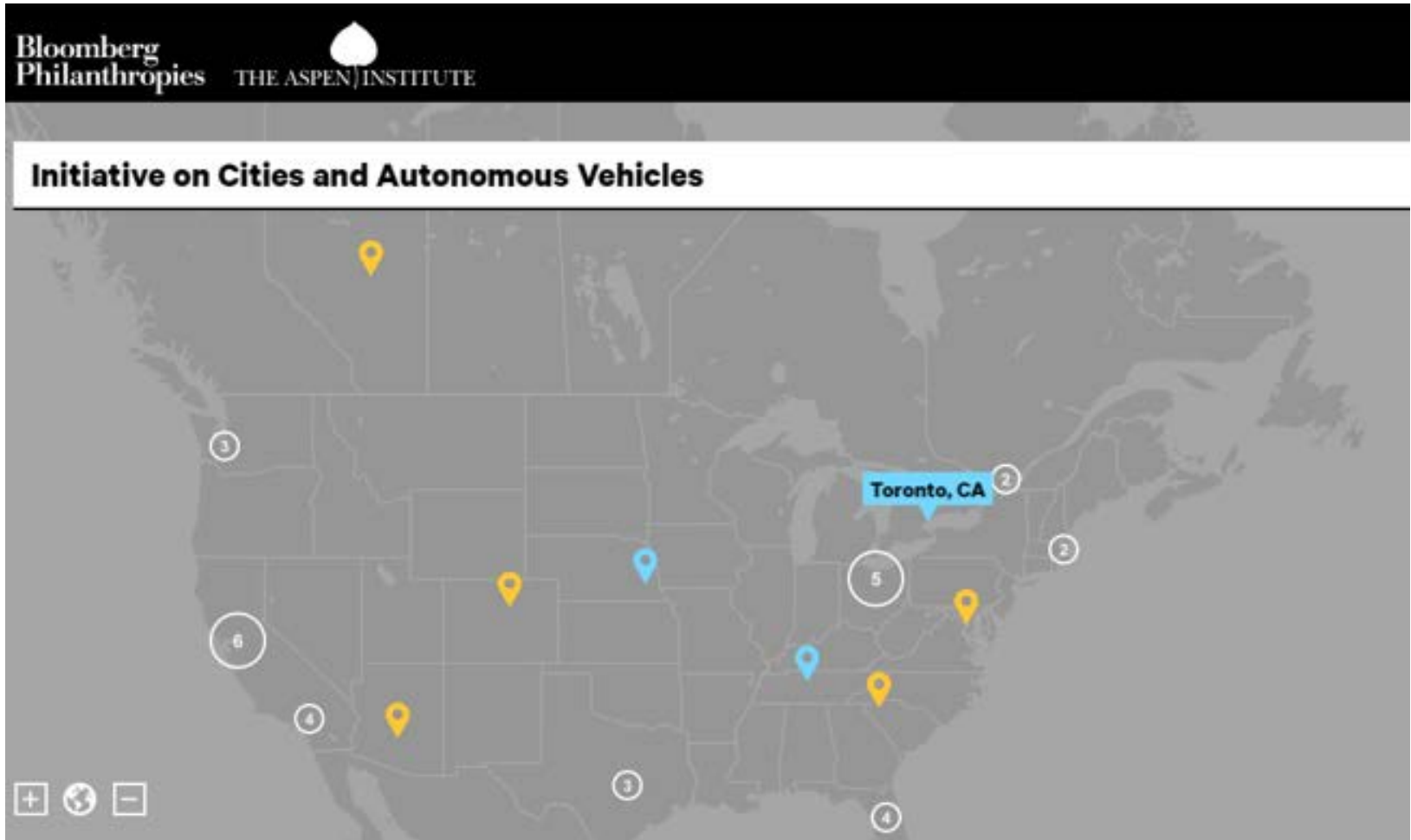
# Public Opinion Highlights

- 85% had heard of a “driverless car”
- Most interested in:
  - safety improvements
  - traffic flow
  - eliminating parking
  - support for people with disabilities
- Almost half would commute further

How should governments respond?

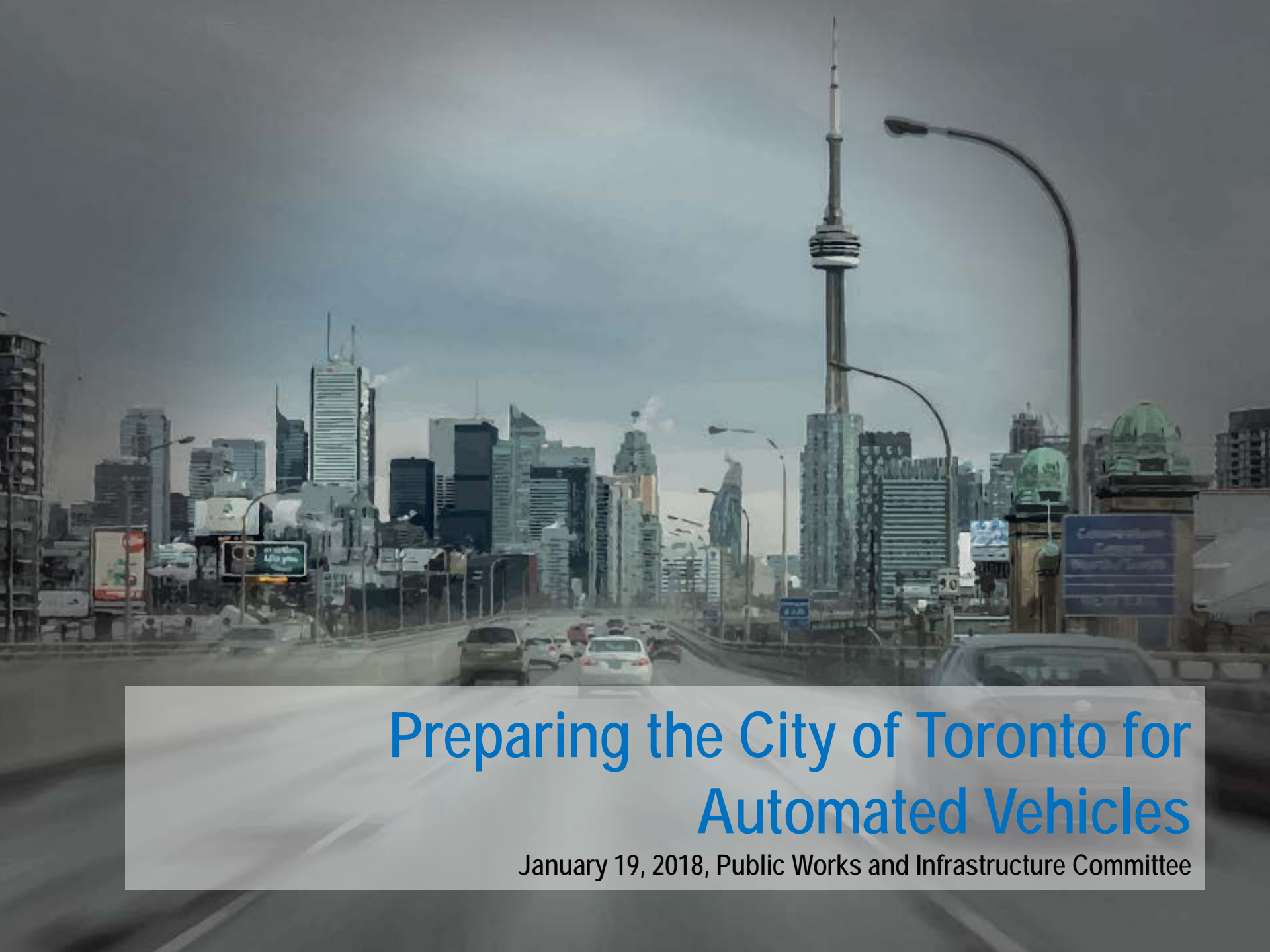


# Global Overview



# Next Steps

- Continue research and monitoring
- Engage more divisions in the Working Group
- Support divisions in developing their own work plans
- Stakeholder consultation on the “Tactical Plan”
- Develop deeper relationships with post-secondary institutions
  - iCity Centre for Automated and Transformative Technologies (U of Toronto)
  - Ryerson University
  - University of Waterloo
  - Harvard University
- Explore and support local pilot projects



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