



Preparing for Automated Vehicles: Working Across Silos at the City of Toronto

November 1, 2017, NACTO Designing Cities

City of Toronto and AVs

The City of Toronto does not have an official policy or position on automated and/or autonomous vehicles.

The views and opinions contained in this presentation do not represent those of the City of Toronto.



City of Toronto

- Single-tier municipality
- Responsible for a wide range of services
 - Roads and streets
 - Public transit (local bus, streetcar, subway)
 - Urban planning
 - Business licensing (including taxis)
 - Economic development
 - Employment services
 - Fire prevention
 - Police services
 - Ambulances and paramedics
 - Public parking



Approach to Date: Ask Better Questions

What is an AV?



What forms of transportation and trip types will likely be impacted first?



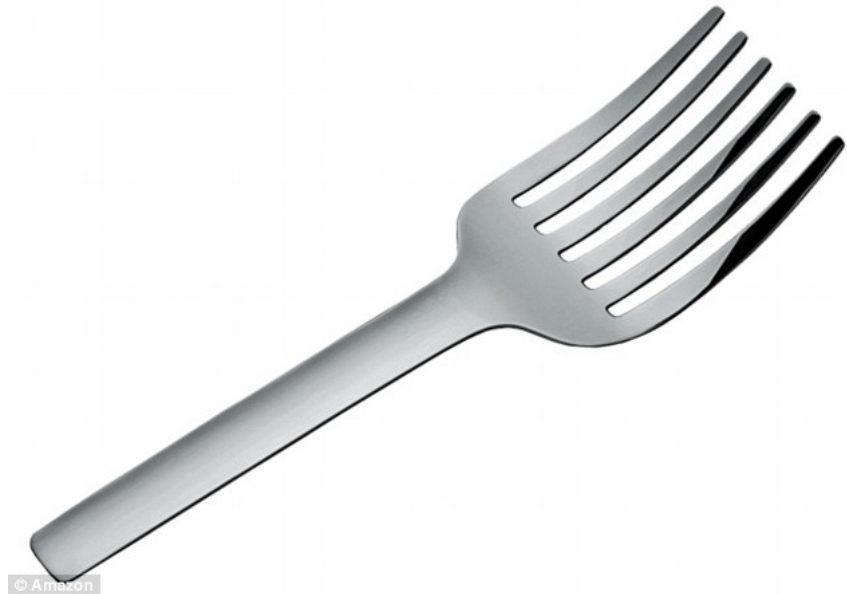
How could AVs change transportation demand and patterns in this area?



What options does the City have to guide or respond to these changes?

Approach to Date: Technologically Agnostic

- Mowat Centre
 - “Policymakers should resist the temptation to embrace a particular vision of how automated vehicles might come to market.”
 - Avoid picking winners and losers
 - Be cautious to avoid unintentional consequences
 - Can conflict with obvious desires to improve other aspects of transportation e.g. emissions reductions
 - Need to remain open to a range of options and scenarios
- Focus on automation only
 - Connected vs unconnected
 - Electric vs internal combustion
 - Shared vs SOV vs personal



“Policymakers can’t be expected to accurately predict how this will play out, and they should avoid that altogether by designing policy in a way that focuses on the public interest while remaining as technology agnostic as possible.”

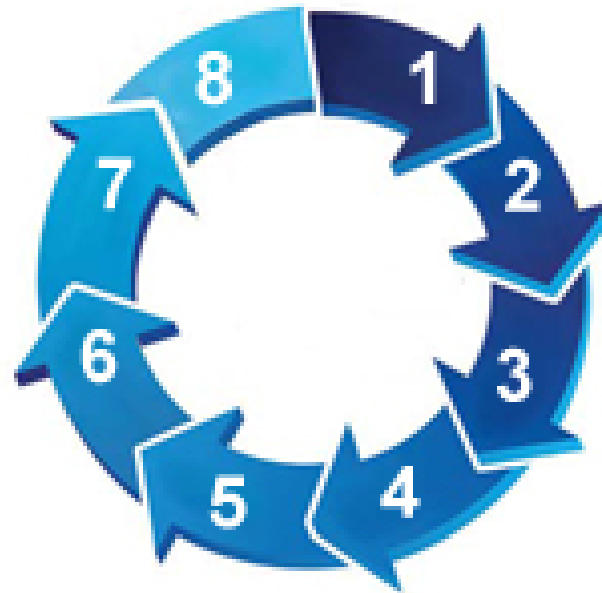
PREPARING FOR AUTONOMOUS VEHICLES

Divisional Workplan 2016-2018

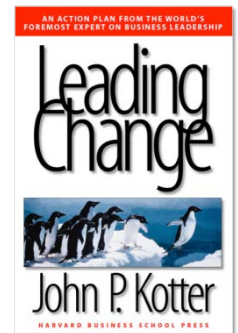
1. Leadership and Engagement
2. Preparation
3. Integration

Leading Organizational Change for AVs

- Urgency
- Coalition
- Vision
- Dialogue
- Empowerment
- Piloting
- Tipping Point
- Culture

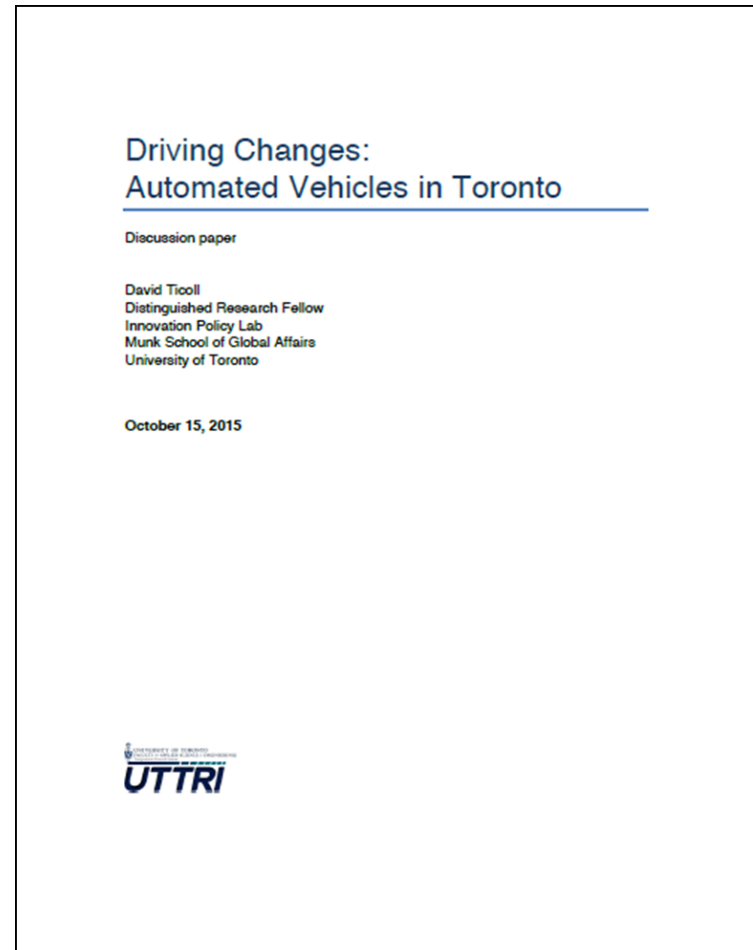


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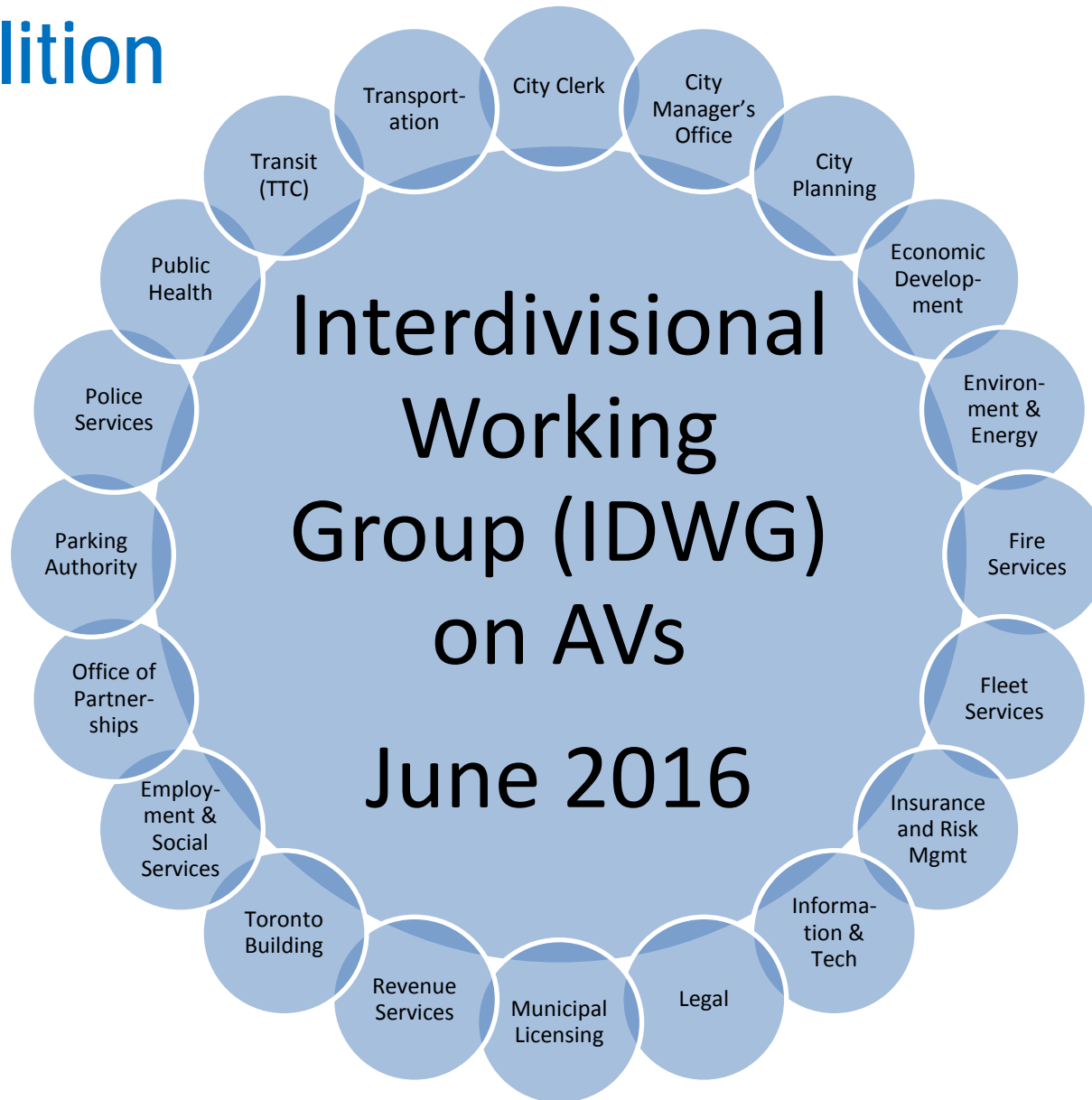


1. Urgency

- 2015-2016
- Current Trends
- Uncertainties
- Experienced Disruption
- Education
- Predictions



2. Coalition

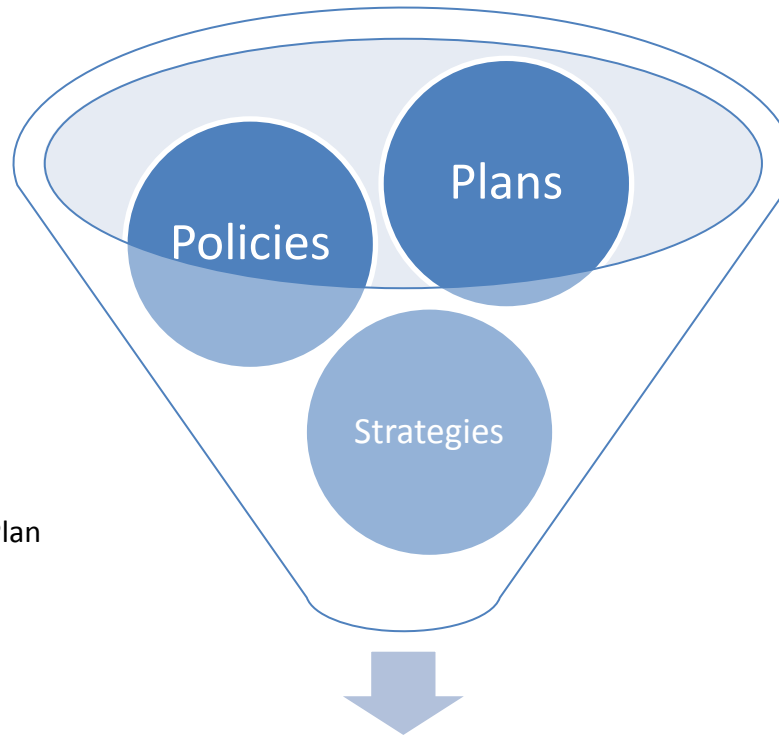


IDWG Selected Discussion Items

- **Literature Review: What Governments Can Do on AVs (Mtg #1)**
- Transportation Services Workplan (Mtg #2)
- Alternate Futures – Ryerson University Students (Mtg #3)
- **AVs in Transit (Mtg #3)**
- Consumer Research – Ryerson University (Mtg #4)
- **Lexicon of AV Terminology (Mtg #4)**
- Smart Cities Strategy (Mtg #5)
- Historical Review – University of Toronto Intern (Mtg #5)
- **Economic Development re: AVs – Provincial Ministry (Mtg #6)**
- **Standing Items**
 - AV Technical Updates
 - Member Updates (Go-Around)

3. Vision

- City's Strategic Plan
- Official Plan
- Complete Streets
- Curbside Management Strategy
- Congestion Management Plan
- eCity Strategy / Smart City
- Collaborating for Competitiveness
- Green Fleet Plan
- TransformTO
- Public Health Plan
- Vision Zero
- Equity, Diversity & Human Rights Plan
- Working as One
- Seniors Strategy
- Strong Neighbourhoods Strategy
- Economic Growth & Job Creation
- Poverty Reduction Strategy



Automated Vehicles “Position”

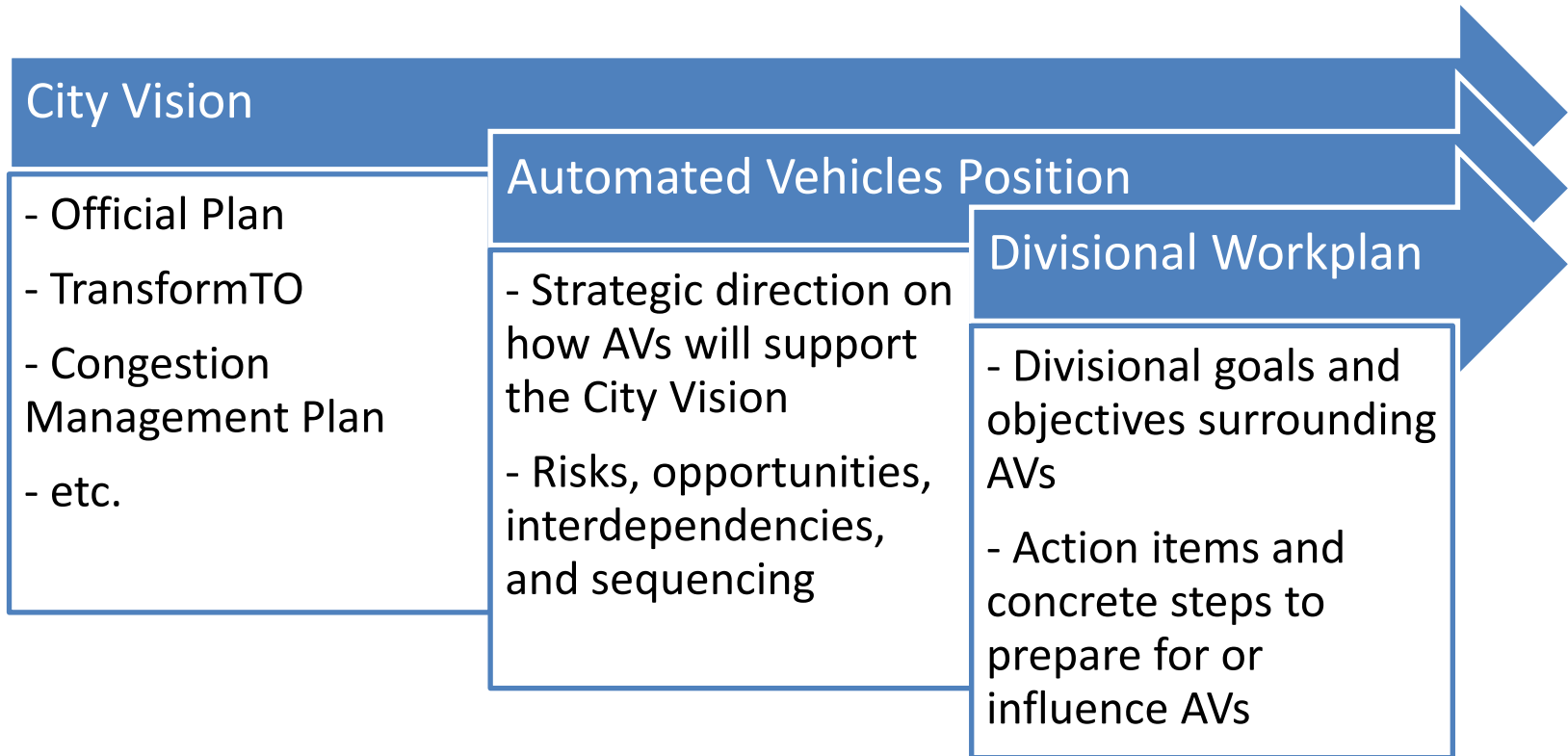
- DRAFT TOPICS:
- General Approach
 - Road Safety
 - Modal Shift
 - Transit
 - Traffic Management
 - Public Service Vehicles
 - Changing Driving
 - Vehicle Turnover
 - Economic Development
 - Broader Impacts

4. Dialogue

- City staff
- Working Group
- Senior Management
- Public and Stakeholder Consultation
- City Council



5. Empowerment



Active and Completed Projects

- Consumer Attitudes Research (Ryerson University, Metrolinx)
- Alternate Futures / Discussion Scenarios (Ryerson University)
- Historical Review of the Automobile (University of Toronto)
- Technical Updates / Lexicon of AV Terminology
- Communications Plan and Public Information
- **Municipal Code Review**
- Open Data Review and Strategy
- Relationship-building and Stakeholder Mapping
- **Exploration of Non-passenger or Unattended AVs**
- **Additional Research Partnerships and Capacity-building**



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