Automated Vehicles (AVs) and Shared Mobility

1. Incorporate policies to address AVs and Shared Mobility

There is no explicit policy regarding AVs or Shared Mobility. Existing Policy 2.4(17) addresses new technologies:

New introductory text explaining the City's general approach to AVs, Shared Mobility and other potential new technologies in the mobility space would clarify the City's position on them. Although there are significant potential benefits of these technologies, there are also significant potential drawbacks. It is unclear whether these benefits and drawbacks represent fundamental shifts which need to be explicitly addressed in the planning framework. The interaction of separate new technologies may also need to be addressed. The text will recognize the high level of uncertainty associated with the benefits and drawbacks of these technologies and restate that the City remains committed to its existing vision and goals. This text would fit best at the end of the introductory test to Section 2.4 and could read as follows:

Automated Vehicles (AVs) and new technologies which enable shared mobility, among other emerging technologies, are likely to significantly change the way people and goods travel around the city. New technologies bring challenges, such as increased demand for curbside space, as well as benefits. We must find ways to incorporate new technologies in our transportation system which capture their benefits, avoid their drawbacks and support the vision and goals of the City.

Revisions requiring further discussions:

Policy 2.4(17):

New technologies, and practices and designs that improve urban travel conditions for the movement of people, goods and services and help mitigate the environmental impacts of transportation will be pursued and implemented where appropriate. Such technologies, and practices and designs include, but are not limited to:
a) enhanced transportation network data management, collection, analysis and monitoring;
b) incident and event response;
c) construction coordination;
d) curbside management;
e) traveler information systems; and
f) centralized adaptive signals.

This policy was heavily modified as a result of OPA 274 in the first part of the transportation component of the Official Plan Review and modifications should be avoided if possible, or limited to minor additions. It may not be desirable to add AVs or Shared Mobility to the list of possible technologies because the policy could be seen as a universal endorsement of them. Consider adding a new policy before Policy 2.4(17) as follows:

The potential impacts of new mobility-related technologies and practices will be assessed to determine their impacts on urban travel conditions, the environment, public health, the economy and the policies of this Official Plan. Regulations will be put in place, as necessary, to achieve the objectives of this Plan.

Since the impacts of AVs are still uncertain, there are many areas which should be monitored. The way the impacts are monitored should be guided by a clear and common understanding of the City’s objectives for the transportation system. Areas of potential concern include:

- Equity
- Environmental impacts
- Health Impacts
- Road safety
- Modal shift
- Transit-centric
- Traffic management
- Public service vehicles
- Economic Development
- Privacy and security
- Business intelligence
- Development patterns
- Quality of public space

The City’s Interdivisional Working Group on Automated Vehicles is currently reviewing a number of tactics which could be used to ensure AVs contribute positively to the City. Some which could be implemented through the Official Plan include calling for such things as:

- the introduction of high-speed data connections throughout city
- more traffic monitoring sensors
- wayfinding beacons to be installed on infrastructure
- more HOV/transit lanes
- parking structures to be designed with reuse in mind

Many of these tactics can be implemented already given the existing policies of the Official Plan. Some may be highlighted in the next reports to Council on the OP Review.

The idea of designing infrastructure to be adaptable or able to be repurposed will be captured in a proposed sub-policy in section 2.2, as follows:

4. The City’s transportation system will be maintained and developed to support the growth management objectives of this Plan by:

   e) incorporating design features in transportation infrastructure, where feasible, that facilitate their modification or conversion to other uses in response to changes in environmental conditions, technology, development and travel behaviour.

The increasing popularity of ride-sharing has already changed the demand for pick-up/drop-off spaces. Policies to address this, similar to Policies 8.28 and 8.29 of the Downtown Plan should be considered for introduction following existing Policy 2.4(18):

Development will be encouraged to make off-street provisions for pick-ups and drop-offs, loading and parking activity.

Development will be encouraged to provide shared community parking spaces. Spaces will be dedicated for short-term use for residents and visitors, and located separately from commercial parking spaces on the site.