

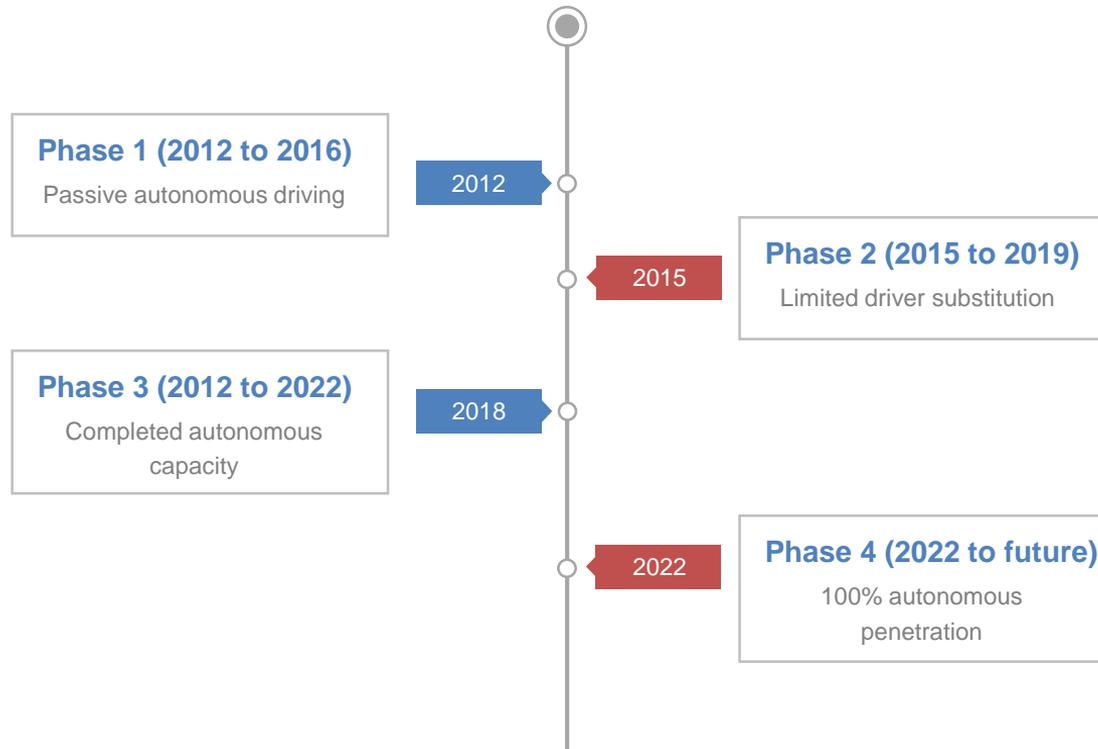
Autonomous Vehicles:

The Road Ahead for Municipalities

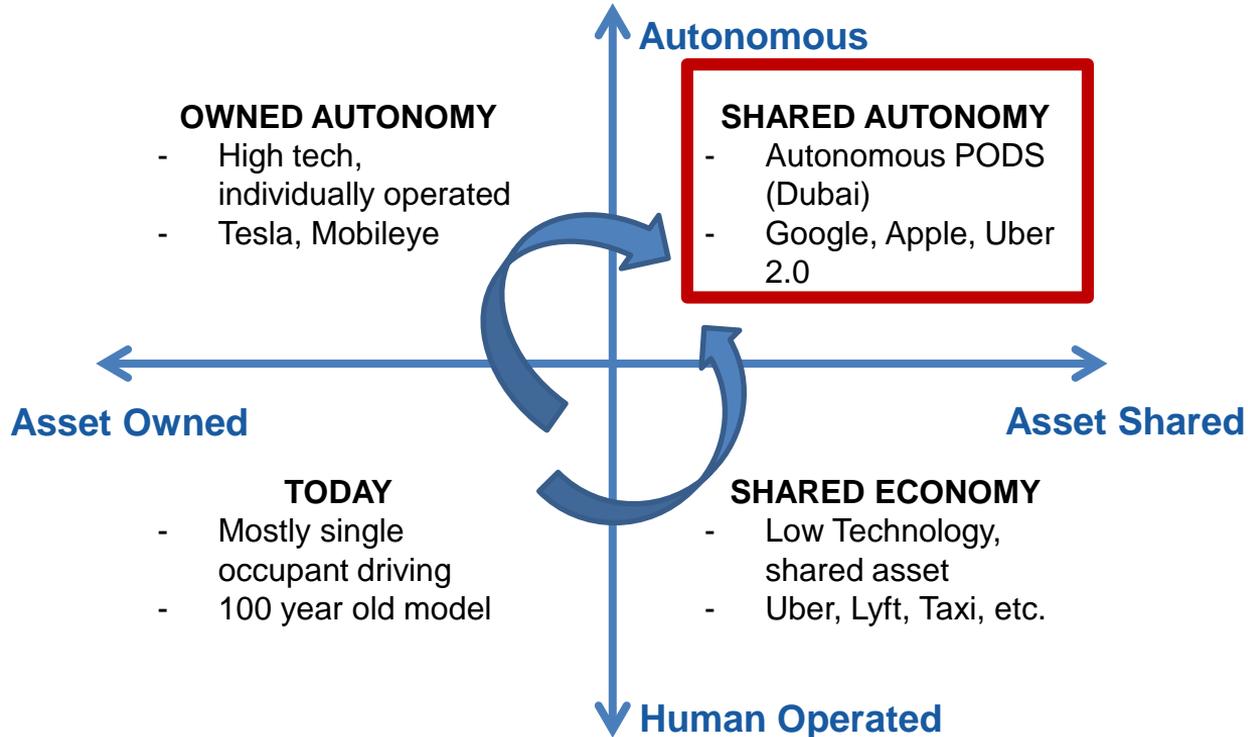
Sabbir Saiyed, Ph.D., P.Eng.
Manager | Transportation System Planning
Public Works – Region of Peel

Prepared for: **iCity-CATTS Symposium**
June 28, 2018

The Direction Forward

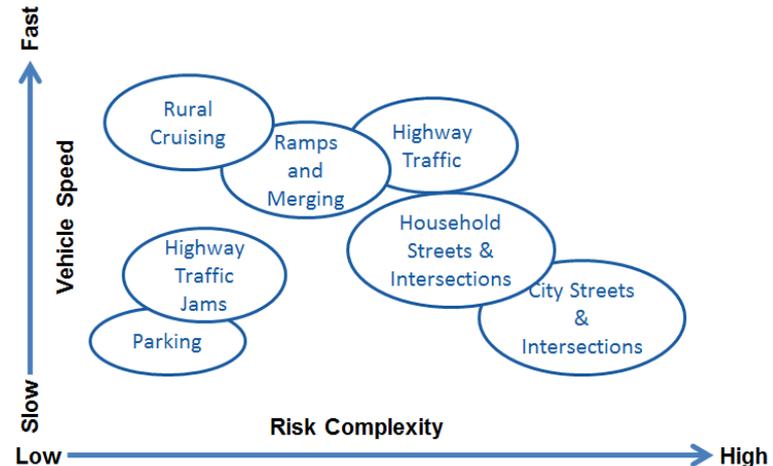


The new direction ahead



The Complexity of Autonomous Vehicles

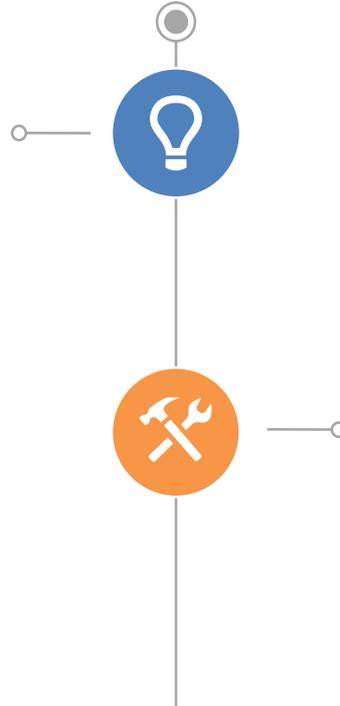
- The Region of Peel has a very diverse set of **roads** which results in a diverse set of **risks**
- Considerations for traffic, rights of way, pedestrians, and cyclists in **urban**, **suburban** and **rural** contexts



A Simultaneous Opportunity and Challenge

Opportunities

- Automobiles are the “most **under-utilized** asset on the planet”
- Cars are parked **95%** of the time
- Automated Freight Delivery
- Reduced fatalities and increased safety

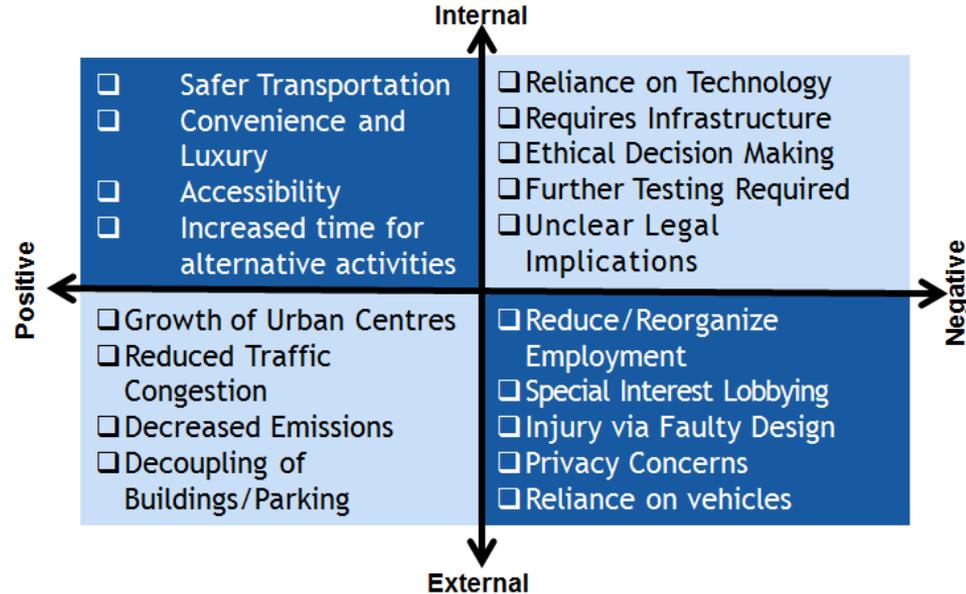


Challenges

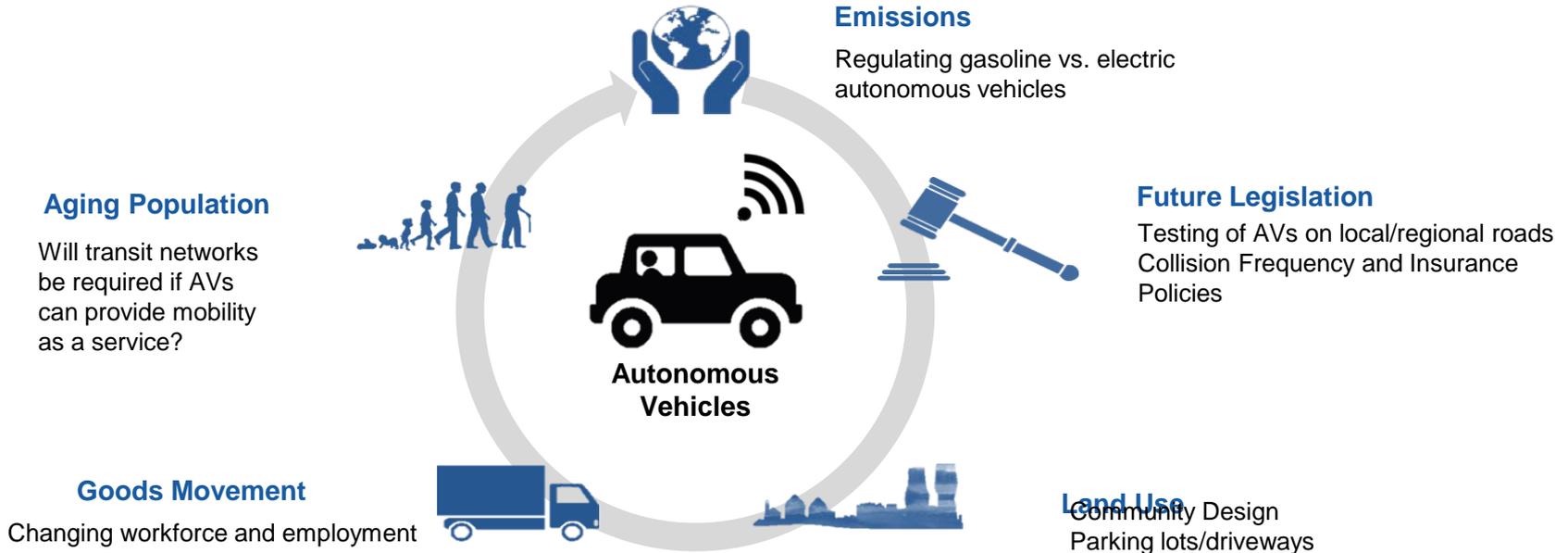
- Unpredicted travel behaviour and patterns
 - iCity-CATTS can help
- Costly investments into infrastructure and technology

A Simultaneous Opportunity and Challenge

- The degree to which municipalities prepare for AVs will determine which opportunities can be leveraged and which challenges can be mitigated
- Planning will require collaboration and extensive partnerships

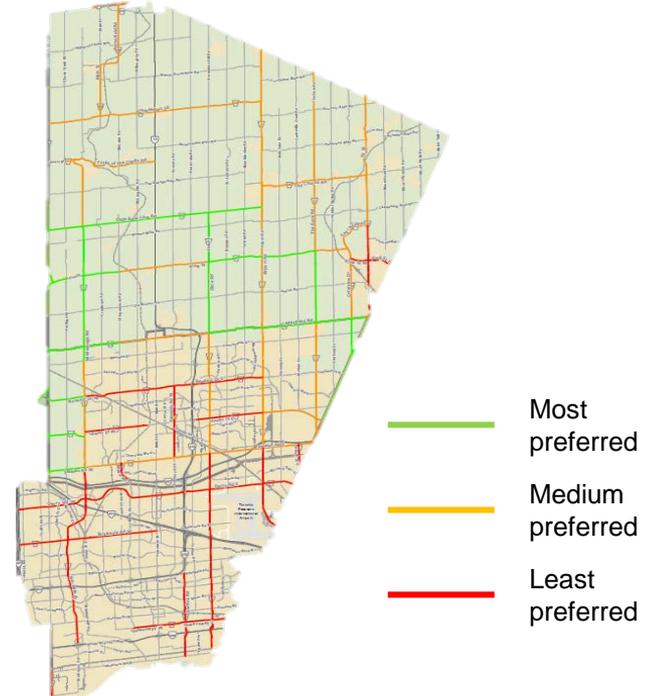


Impacts to Future Transportation Planning



Testing Autonomous Vehicles – Region of Peel

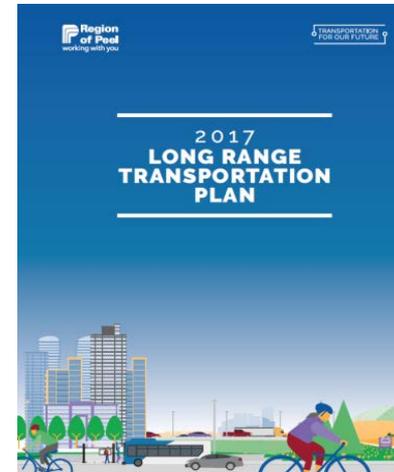
- The Region of Peel has a very diverse set of roads which results in many different risks
- Safety of residents in the number one priority
 - High density urban roads are not preferred testing routes (*yet*)
- Collaborate with MTO and MACAVO to develop testing regulations on regional and local roads
 - Move towards driverless testing



Note: This is non-official and in the draft stage

Looking Ahead: Municipal Initiatives

- Municipalities are entering uncharted territory in preparation for Autonomous Vehicles
- The Region of Peel dedicated a chapter to Autonomous Vehicles in its Long Range Transportation Plan
- Roles for Governments:
 - AV Data Collection and Maintenance
 - Envision municipal financing and revenue streams of autonomous vehicle mobility
 - Ensuring social equity and employment access for residents through AVs
 - Estimate impacts of AVs on zoning, bylaws, parking, etc.
 - Identifying opportunities in delivering municipal services through autonomous vehicles



Thank You!

Autonomous Vehicles: The Road Ahead for Municipalities

June 28th, 2018

Sabbir Saiyed, Ph.D., P.Eng.

Manager | Transportation System Planning

Public Works – Region of Peel

Sabbir.saiyed@peelregion.ca