

# Future Mobility Newsletter

Issue 14.03



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## Autonomous vehicles: How interested is the Government of Ontario?

At the end of 2013, several contacts based in Ontario sent us a document entitled “A pilot project to safely test autonomous vehicles - summary of proposal”.

Having been involved in the area of transportation evolution and autonomous vehicle technology for a while, we were clearly intrigued. We admit that we read the document several times because we wanted to understand precisely what the Government of Ontario was stating or alluding to through this document.

### Document summary

For the benefit of those who haven't read the document we're referring to, here's a synopsis:

- Some manufacturers predict fully autonomous vehicles will

be available to consumers between 2020 and 2025

- Autonomous vehicles (AVs) are currently being tested in several jurisdictions around the world
- “Proponents of autonomous vehicles state that, once widely available and adopted, AVs could provide a number of benefits” (the document goes on to describe some of those benefits including collision and congestion reduction)
- “After researching and reviewing what laws other jurisdictions have put in place, the MTO is proposing a pilot framework in order to safely test and evaluate autonomous vehicles under prescribed conditions before

they become widely available to the public.”

- Prescribed conditions to undertake pilot testing (paraphrased & summarized):
  - 5 years to effectively evaluate the pilot
  - Restricted use for testing purposes only
  - Safety and rules of the road
  - Registration and insurance
- The Government of Ontario is “considering this proposal” and inviting those interested to submit their comments on the proposed pilot framework.

## Autonomous vehicles: How interested is the Government of Ontario?

### Canadian first?

When this document was released, several Canadians promoting autonomous vehicle technology applauded Ontario as the first jurisdiction in the country to indicate interest in autonomous vehicles. The Ontario Government website, in fact, states that “this proposal is a first for Canada”.

We should note that in October 2013, the Government of Québec, in its economic strategy document, mentioned autonomous vehicle technology as an area of interest. Other provincial governments in Canada have demonstrated interest in autonomous vehicle technology, to varying degrees. Most of this interest has, however, been located well under the radar.

### Commitment

Thanks to increased automation, the automobile will experience significant changes over the next few years. These changes will necessarily impact auto manufacturing business models, among many others. Given the importance of the auto manufacturing industry to Ontario (including hundreds of thousands of direct and indirect jobs), it is not surprising that this province’s government demonstrate an interest in the technology that will redefine the automobile as we know it. The Government of Ontario appears to be creating the appropriate conditions to attract research and development activity. In fact, this pilot project proposal document states that it is “an excellent opportunity to showcase Ontario as a leader in

technology development with the potential to attract new business opportunities”.

Does Ontario need to get involved in autonomous vehicle technology development? You bet! But how committed is this Government? Read the document: “Proponents of autonomous vehicles state that, once widely available and adopted, AVs could provide a number of benefits”. Is the Government of Ontario a “proponent”?

South of the border, Michigan (US auto manufacturing capitol) Governor Snyder has been a major proponent of AV technology, urging the state’s government to welcome these vehicles.



Snyder and his administration were successful in getting AV testing legislation approved. In addition, the state announced a new \$6.5 million, 32-acre site for AV testing which will act as a “fake downtown”. This is, of course over and above the multi-million-dollar connected vehicle testing being undertaken in Ann Arbor.

California Governor Brown demonstrated the same clear commitment to AV technology. In September 2012, the Governor signed SB1298, the bill creating the legal framework and operational safety standards for the testing and operation of AVs on the state’s roads and highways.



### Michigan governor urges 'automotive capital of the world' to welcome self-driving cars

By Jacob Kastrenakes on April 26, 2012 10:37 pm Email @jake\_k

Snyder pushed for this state to join California, Nevada and Florida in allowing driverless vehicle testing. He eloquently discussed and presented the technology’s numerous benefits. Most importantly, he felt that Michigan needed to act quickly as the industry was developing elsewhere: “They’re ahead of us and aren’t we the automotive capitol of the world?”

How has Premier Kathleen Wynne or her Ministers “promoted” AV technology? With the exception of this brief document inviting comments on a proposed pilot project framework, how has the Government of Ontario demonstrated a commitment to AVs?

## Autonomous vehicles: How interested is the Government of Ontario?

### Process

The Government of Ontario is considering a five-year pilot project. By the time the comments on this document are received and processed, it will be spring 2014. The Government will then need to structure the framework for the pilot and follow the various activities for a period of five years. This will bring us to 2019-2020. We note that the MTO representatives we spoke with claimed to be unaware of next steps or timelines regarding an eventual/potential pilot.

Google has announced that it will have autonomous vehicles on the road in 2017 (in recent months, we have understood that the technology to be released in 2017 will still require some level of driver engagement). Based on information shared in the media, we expect that “fully” autonomous vehicles will be available by 2020 or shortly thereafter.



If we're reading this correctly, the Government of Ontario is aiming to complete its pilot project just in

time to have these vehicles potentially “roaming” on streets. And then what? Will the Government rush to write the legislation permitting autonomous vehicles to move freely on Ontario's roads and highways?

And even if the sale and use of AVs is delayed in Ontario, how will the province be prepared for the AVs that will quite possibly cross into Ontario from the United States? According to Government of Ontario statistics, on average, approximately a million US border crossings per month contribute to Ontario's tourism industry. What if some of these US-based vehicles crossing into Ontario in 2020 will be autonomous? How will the Government of Ontario deal with those? Will the laws and regulations be ready if pilot testing is only scheduled to be completed in 2019-2020 (assuming pilot testing begins in the next few months)?

It should be noted that California is expected to finalize operational regulations for autonomous vehicles by the end of this year. The testing regulations are written and are in the final stages of completion.

### Reinventing the wheel?

Autonomous vehicles have been tested on roads around the world for several years. The team from the University of Parma undertook

a driverless journey from Parma to Shanghai in 2010. Google alone has accumulated approximately a million kilometres of testing. Millions of kilometres of “driverless” travel have been accumulated by a variety of players around the world.

But the Government of Ontario is interested in undertaking a five-year pilot. Granted, each geographic location has its particularities but what exactly is expected to be learned from this experience and why will it take five years to learn?

### Clarity required

Does the Government of Ontario truly intend to become a proponent of autonomous vehicle technology and AVs? If so, what is the timeline moving forward? What is expected from this “public consultation” and request for comments? Is it free advice? Is it something else?

If the Government of Ontario is indeed serious about the promotion of autonomous vehicles and wishes to attract OEMs to undertake research and development in the Province, opening a window of five years allowing their testing on Ontario's roads is unlikely to be interpreted as strong a commitment as those made by several other jurisdictions.

### MARCON at the following events / MARCON aux événements suivants :

Catherine Kargas fera une présentation sur la nouvelle mobilité, l'électrification des transports et les véhicules autonomes à l'événement organisé par VARITRON le 27 février 2014.

C. Kargas will be discussing mobility, AVs and the insurance industry at the Insurance Canada Technology Conference, March 17-18, 2014 in Toronto: <http://www.insurance-canada.ca/seminars/Conference-2014-Agenda-Feb3.pdf>

C.Kargas will be presenting to the Canadian Council of Motor Transport Administrators (Conseil canadien des administrateurs en transport motorisé), May 15-28, 2014 in Toronto: <http://ccmta.ca/en/component/ohahah/2014-ccmta-annual-meeting>

# In the news

## › US DOT announces decision to move forward with V2V communication technology

In a step potentially adding even more safety to autonomous vehicles, US DOT announced that it will require that all light passenger vehicles sold in the US be equipped with vehicle to vehicle communications. US Transportation Secretary Anthony Foxx stated the announcement was a watershed moment in the nation's transportation history - akin to the launch of the interstate highway system. He also said that connecting the nation's vehicles could reduce non-alcohol-related traffic accidents by up to 80%. This decision has huge implications on a number of industries including telecommunications. Bandwidth adjustments will need to be made. Security, privacy issues remain to be addressed. (<http://www.nhtsa.gov/About+NHTSA/Press+Releases/2014/USDOT+to+Move+Forward+with+Vehicle-to-Vehicle+Communication+Technology+for+Light+Vehicles>)

## › Insurers told to prepare for "seismic" impact of driverless vehicle technology

The UK Government will be hosting an event on February 14th and the Association of British Insurers is being urged to "use its ticket wisely". UK insurers join their counterparts from around the world in preparing for the changes that will accompany the arrival and penetration of autonomous vehicles. (<http://www.postonline.co.uk/post/news/2326898/insurers-told-to-prepare-for-seismic-impact-of-driverless-vehicle-technology>)

## › Car sharing threat to auto sales

A study undertaken in the US concludes that a half million vehicle purchases in the US have been "avoided" due to growing popularity of car sharing. New mobility trends are certainly impacting the auto manufacturing and insurance industries as urban dwellers turn to multi-modal shared mobility. (<http://www.cnbc.com/id/101386723>) And car sharing impacts are not limited to private vehicle ownership. As discussed in previous issues of this newsletter, increasingly businesses and governments are turning to car sharing in an effort to reduce costs. Cogas' Dutch vehicle fleet is one of those organisations that have benefited from significant cost savings (25%) from car sharing. (<http://www.fleetnews.co.uk/news/2014/2/3/fleetster-corporate-car-sharing-reduces-costs-at-dutch-utility/49477/>)

## › Insurance and the rise of ride / car sharing

Car sharing is expected to increase six-fold between now and the end of the decade. Despite the rise of these forms of mobility, users and drivers are relatively unaware of the limitations of insurance coverage and the risks associated with not having the right type of coverage. Numerous examples of such issues are appearing in the United States. The recent death of a six-year-old San Francisco girl who was struck by a car driven by someone who uses his own vehicle for the on-demand car service Uber, underlines the issues of lack of clarity in liability and insurance. More on this subject in future issues of this newsletter.