



# Autonomous vehicles and mobility services: How to get ahead of the curve

This article was originally published on LinkedIn, March 20, 2018

Disruptive technologies have the potential to radically transform the economics and quality of service delivery. Autonomous Vehicles (AVs), as one such technology, is shaping up to be the ultimate game-changer for people with disabilities.

In a previous article, “Will autonomous vehicles be a game-changer for people with disabilities in Canada?” I explored the advent of AVs and the impact they might have on persons with a disability. Ensuring the widespread availability of shared AVs designed to give greater access to people with disabilities, however, is far from being a foregone conclusion. How can governments get ahead of the AV curve and effectively understand the impact AVs could have?

## The true cost of AV

Let’s think about what could go wrong, or the barriers, before an event occurs, such as the development of AV technology and infrastructure.

The National Highway Traffic Safety Administration estimates that the cost of a new vehicle with adaptive equipment for people with disabilities can cost anywhere between USD \$20,000 and \$80,000 (CAD \$26,000 and \$108,000).



While the cost of an autonomous vehicle with adaptive equipment may be lower given they only require modifications for passengers, the cost is still not insignificant. Consider a scenario where the norm is shared with for-profit autonomous vehicles providing a ride-share service and the economics become even more acute: additional investment in adaptive equipment is unlikely to yield a positive return on investment.

This is where the government has a role to play.

If the benefits of autonomous vehicles to persons with disabilities are likely to be substantial, finding a way to ensure this technology is made available should be an important consideration as AVs become more prevalent. Asking the right questions, making the right policy decisions and making adequate investments will be key.

## Questions for the public sector to grapple with

Autonomous vehicles are developing at an astonishing pace. In the span of just a few years, AVs have gone from being a concept on the fringes of human imagination to being tested on public roads in a number of jurisdictions (e.g. South Western Ontario, which will collectively receive \$80M funding from the Ontario government).

Whether they become a part of our everyday lives in the next five years or the next 20, policy-makers need to be ready. That means considering a number of core questions when it comes to providing greater mobility for people with disabilities, including:

1. In what way, and how much, should governments be investing in autonomous vehicles with a view to enhancing mobility for people with disabilities?
2. What are the different roles and responsibilities for stakeholders in the system, including both public and private sectors?

3. What kind of regulatory and licensing framework do we need to adopt to support an ideal future state?
4. What are the benefits and the risks of AV use, and what are the trade-offs that we might need to make?

#### It's all about timing

By tackling these questions now, policymakers can ensure that any unnecessary costs and risks are avoided, benefits can be maximized, and a more accessible world for those with disabilities can be realized sooner, rather than later.

Autonomous vehicles have huge potential to change cities

and transform people's lives, but let's not forget the people with disability and mobility issues.

The current system can be vastly improved if governments and communities begin to think about how this new and exciting technology can be integrated and modified to provide even greater accessibility and flexibility to those with disabilities.

Many questions still exist, but let's start thinking about these now, rather than when it becomes too late and we're left to rush around and try to retrofit solutions.

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