



City of Ottawa

Taxi and Limousine Regulations and Service Review

Emerging Issues in the Taxi and Limousine Industry

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Table of Contents

INTRODUCTION 2

THE BUSINESS MODEL 3

UBER’S MARKET PERFORMANCE 6

POLICY AND REGULATORY APPROACHES 10

ECONOMIC IMPLICATIONS 12

SERVICE IMPACTS 16

THE FUTURE 18

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INTRODUCTION

This paper, as part of the comprehensive review of the City of Ottawa’s taxi and limousine industry, provides an overview of new business models that are reshaping the face of the industry across the globe. Taxi companies have, for decades, operated in a little-changed regulated environment. Taxi plate (or medallion) holders picked up passengers curb-side or were centrally dispatched and charged passengers rates determined by government (requiring pre-arranged bookings in the case of limousines).

Companies such as Uber, Lyft and Sidecar are harnessing technology to connect riders and drivers in new ways that bypass traditional dispatch/booking services and upend regulated environments which limit the number of licenses and sets specific fare rates.

This paper explores the following issues:

- The market performance and business models of emerging technologies and service models, both in Ottawa and elsewhere
- Current and emerging policy approaches and regulatory environments for new business models
- Economic implications of these emerging technologies
- Service impacts (e.g., geographic, accessibility and socio-economic) of these new models

THE RIDE-SHARING BUSINESS MODEL

The sharing economy is quickly reshaping industries ranging from accommodation to transportation by harnessing the value of under-utilized assets and facilitating peer-to-peer or shared use transactions to maximize the value of those assets. The sharing economy is projected to be worth \$335 billion USD globally by 2025.¹ Technological advances, such as smartphones with GPS-capability and advanced data collection and analytics that reduce the time and effort to negotiate transactions, have laid the groundwork for an explosion in app-based sharing economy firms.

Uber, Lyft, Sidecar and Hailo are just some of the companies that have entered the transportation sector in recent years to offer consumers new options for getting around. The basic premise of this business model commonly known as ride-sharing,¹ —is simple – they offer drivers and passengers an app-based interface on smartphones that connects people seeking rides with those offering rides.

It is important to note that Uber offers a range of different services, including UberX, UberTaxi, UberXL and UberSUV. These services vary in the kind of vehicle that transports the passenger (e.g. an SUV or a luxury sedan), with the most significant distinction being that UberTaxi connects licensed cabs with passengers, while the other options typically are non-licensed, ‘ordinary’ drivers (UberX and UberXL are the only options currently available in Ottawa).

This paper will primarily focus on Uber, as it is the only company to have reached significant scale in the Ottawa and Canadian markets, though many of the key features of Uber’s business model are generally consistent across other ride-sharing apps. These key features include:

- **Technology** – Customers, using their GPS-enabled smartphones, order a car for pick-up and then track its progress, reducing and improving the predictability of wait times and also making it easier to order a ride when

¹ Critics observe that many of the new technology firms in the transportation sector are not actually facilitating ride-sharing (which suggests a driver taking a passenger somewhere they were already going). However, this paper will use the term ‘ride-sharing’ to refer to companies like Uber, as the expression has entered common usage and understanding.

the pick-up address isn't known. The firms' underlying technology also facilitates provision of fare estimates before a ride is accepted and ensures immediate matches between drivers and passengers. The interface of ride-sharing applications is streamlined and straightforward, and in most cases two to three taps on a smartphone are all that is required to arrange a ride, with no need to speak to a live dispatcher.

- **Reputational rankings** – Both drivers and passengers rate each other on a 5-star scale after a ride. This mechanism gives both drivers and passengers a better sense of whether they want to be matched with each other, as they can rely on the judgements of those who have previously traveled with the same person.
- **Payment** – Credit cards are kept on file and charged at the conclusion of a ride, which means there is no need to carry cash (or, as critics would point out, passengers are required to have a credit card) and passengers are e-mailed receipts at the conclusion of a ride.
- **Fares** – Ride-sharing service prices are generally lower than the regulated fares that taxis and limos must charge, both in terms of minimum rates and distance/time-travelled rates. However, in order to increase the number of drivers during periods where demand outstrips supply, Uber relies on surge-pricing (Lyft calls this 'Prime Time'), which can dramatically increase the fare charged to passengers and has been subject to criticism as a form of price-gouging during transit shutdowns or unforeseen events.²

Uber and other ride-sharing firms' primary barrier to market entry is regulatory, not capital – they just need to be able to legally operate in a given jurisdiction, leveraging pre-existing cars and drivers. This closely mimics the model of taxi brokerages, which also typically don't own their vehicles or taxi plates. A key distinction is Uber's use of drivers operating without the high costs of plate ownership/rental, when compared to traditional taxis. Uber has also developed

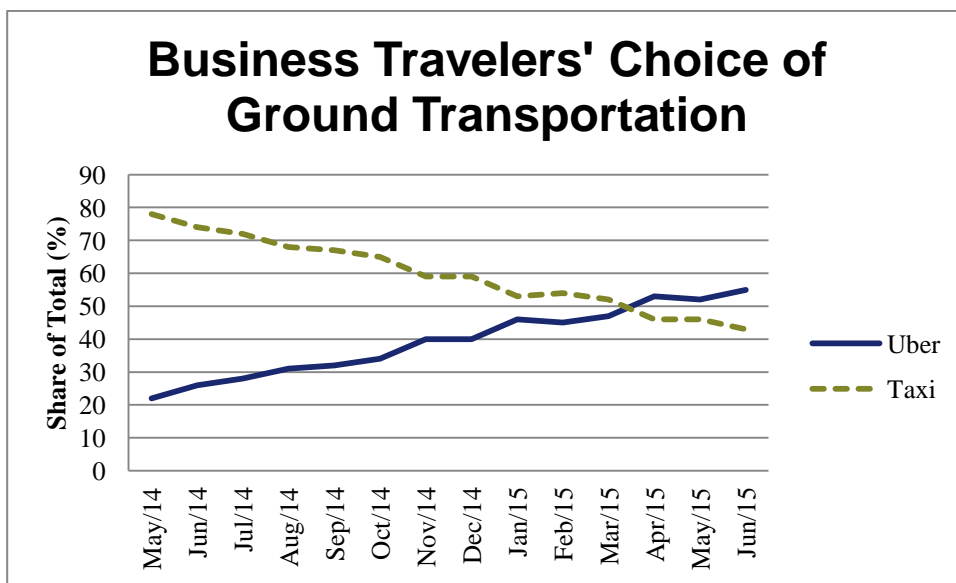
its own approaches to insurance coverage and driver reference checks, which may not align with local regulatory requirements for taxis or other vehicles for hire.

Uber's valuation has skyrocketed in a short time – from \$60 million in 2011 to \$51 billion in 2015, making it both the most valuable ride-sharing firm (by contrast, Lyft was valued at \$2.5 billion in 2015 and BlaBlaCar at \$1.6 billion)³ and one of the fastest growing companies of any type in history.⁴

UBER'S MARKET PERFORMANCE

Uber operates in more than 300 cities around the world, and facilitates more than 1 million trips a day. Roughly 40,000 new drivers join the service a month in the U.S. and cities have seen rapid, exponential increases in usage (New York saw a ten-fold increase in Uber use between 2013 and 2015).⁵ One recent study shows how companies like Uber have driven a significant shift in habits amongst U.S. business travelers — from March 2014 to March 2015 the share of expensed Uber rides rose from 15 per cent to 47 per cent, while spending on traditional taxis and limos fell from 85 per cent to 52 per cent (see Figure 1).⁶

Figure 1 - Ridesharing Increasingly Popular For Business Travelers



Source: Certify, 2015.

The company launched its UberX service in Ottawa in October 2014. In the short time since its introduction, Uber has reached a significant level of awareness amongst Ottawa residents. According to an August 2015 Nanos survey (commissioned by Uber) of 400 Ottawa residents:

- Overall, 98 per cent of residents have heard of Uber, while 60 per cent have a positive or somewhat positive impression of the company.
- Most respondents – 84 per cent – support or somewhat support the City developing new by-laws to permit Uber to operate while only 12 per cent of residents oppose or somewhat oppose this idea.

A recent survey by Ipsos Reid, conducted for the City of Toronto (where UberX started operating in September 2014), sheds some light on perspectives that are instructive for the Ottawa market:⁷

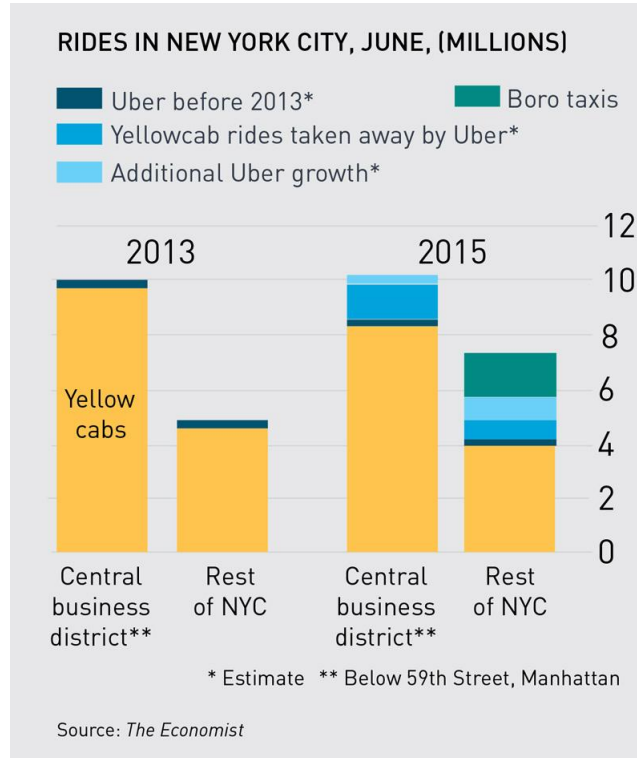
- Uber services were used by 21 per cent of Toronto residents in the past year, and 12 per cent use UberX at least once a month. By comparison, 58 per cent of residents have taken a licensed taxi in the past year, and 28 per cent use taxis at least once a month.
- Satisfaction amongst Toronto residents with Uber (65 per cent) and limos (61 per cent) is high, while 29 per cent are satisfied with taxi service and 38 per cent with public transportation.
- Respondents cited lower costs when compared to taxis and the ease of the mobile app experience as their main reasons for using Uber. Insurance coverage is perceived as the most significant weakness for the service and there is confusion amongst residents about what type of coverage exists.

Against this backdrop of very high awareness and quite high satisfaction with the company's service, it is difficult to determine Uber's actual performance in Ottawa to date, in terms of ridership. There are approximately 2,600 licensed taxicab drivers in the City of Ottawa, and 1,188 licensed taxicabs, (of which 187 are accessible), while Uber estimates it has roughly 1,000 driver-partners in the city.⁸

A significant debate in many markets is whether Uber and other new firms are displacing taxis or acting as a complement to them, in effect generating a new, larger ridership pie. While it is too early to draw firm conclusions on this question, the evidence to date suggests that both displacement and complementary effects are taking place (depending on the clientele and location).⁹ Figure 2

shows the redistribution of a fairly static number of rides over two years in Manhattan’s central business district, while the rest of the city actually saw more rides take place overall and little impact to the business of licensed cabs.

Figure 2 - Growth of Uber May Not Come at the Expense of Licensed Taxis



Information on the number of rides offered by Uber compared to traditional cab companies is not available, but based on our analysis and a comparison with available numbers from Toronto, Chart 1 sets out available information:

Chart 1 - Taxis and Uber in Toronto and Ottawa by the Numbers

	Toronto	Ottawa
Licensed Drivers	10,000	2,600
Licensed Cabs (accessible)	5,000(500)	1,188 (187)
Uber Drivers	13,000	1,000
Daily Licensed Cab Trips	65,000	27,400
Daily UberX trips	17,000	Unavailable
Average response time - Taxi	9 minutes	5 -15 minutes depending on location
Average response time - Uber	2-4 minutes	3.7 minutes

Sources: City of Toronto, City of Ottawa, Uber, Coventry Connections

UberX also launched operations in Kitchener-Waterloo, Guelph, London and Hamilton in the summer of 2015. Elsewhere in Canada, the company operates in Edmonton, Montreal, Quebec City and Halifax.

POLICY AND REGULATORY APPROACHES

To date a number of different responses have been adopted by regulators and policymakers faced with the entry of ridesharing firms into their jurisdictions, including:

- **Transportation Network Company legislation:** More than 20 U.S. states, including Illinois, Nevada, Massachusetts and California, and a similar number of cities, have introduced ‘Transportation Network Company’ legislation or by-laws to recognize the existence of ride-sharing firms like Uber, Lyft and Sidecar as a distinct entity from traditional taxi services. These rules, which are broadly similar in nature across jurisdictions, require companies to purchase a licence in a new “TNC” category, obtain liability insurance and conduct background checks on prospective drivers. The City of Toronto’s licensing staff recently recommended the creation of a new regulatory regime for TNCs in the city.¹⁰
- **Data-Sharing:** The City of Boston went beyond the scope of TNC regulations and entered into a first of its kind data-sharing agreement in 2015 with Uber. Boston will receive anonymized trip data that it can use to both ensure the company is serving all neighbourhoods adequately but also to improve its own services in areas like traffic flow and congestion, transit routes in under-served neighbourhoods and optimal levels of parking availability.¹¹ The data is available at the zip code level, and includes information on where a trip starts and terminates, distance traveled and duration.¹²
- **Pilot Programs:** Portland is in the midst of an eight month trial period which gives regulators the opportunity to monitor market activity under new guidelines. Caps on fares were lifted for both traditional taxis and ride-sharing firms, and ride-sharing firms were required to meet certain requirements (e.g., providing accessible service and service at all hours of the day, certification that drivers have passed city-approved background

checks).¹³ New York City is undertaking a four month trial period to assess the effects of ride-sharing on traffic congestion in the city (against the backdrop of a plan to cap the growth of Uber) and will also use data from Uber to inform regulators' analysis.¹⁴ Other jurisdictions with time-limited pilot programs include Detroit, Pennsylvania and South Carolina.

- **Bans:** Ride-sharing firms have faced bans, fines and threats of criminal prosecution in a number of jurisdictions. At the local level; both Paris and the East Hamptons, and at the national-level; Germany, Spain and South Korea, are high-profile examples where authorities have taken steps to slow or stop the operation of ride-sharing firms.¹⁵

Canadian jurisdictions initially adopted a reactive approach to ride-sharing firms, with cities such as Toronto, Ottawa, Montreal and Vancouver cracking down on drivers for by-law infractions or otherwise imposing barriers to operation. In Vancouver, the barriers led to Uber withdrawing from the city after approximately 6 months of operation. More recently, a number of cities including Waterloo, Hamilton, Toronto and Edmonton, are engaged in, or contemplating, reviews of taxi regimes that could include requirements around cameras in cars, insurance coverage, criminal record checks and vehicle inspections.¹⁶

Additional details on a number of jurisdictions are provided in the Case Studies document prepared by KPMG that is also part of the background for the City of Ottawa's review.

ECONOMIC IMPLICATIONS

The growth of Uber, Lyft and other ride-sharing firms in cities around the world has significant economic implications, above and beyond the companies' own high valuations. The influx of app-based ride-sharing services brings the promise of both new economic opportunities, as well as costs, to local economies, drivers and users.

Local economies

Information about the economic impacts of ride-sharing firms is still in the nascent stage, and the information that exists is often directly or indirectly generated by the companies themselves (e.g., Uber claims it adds nearly \$3 billion per year to the U.S. economy, a claim that is very challenging to verify).¹⁷

With that caveat, some potential impacts are worth noting:

- Lyft states that 78 per cent of its customers spend more at local businesses because of the services it provides.¹⁸ Uber-supplied data claims that roughly 30 per cent of trips in Ottawa in May 2015 started or ended at an independent business, though similar information is unavailable for taxis as a point of comparison.
- City officials in Indianapolis have linked the city's open approach to the sharing economy with a strengthened position to bid for large events – which would generate greater revenue for the city.¹⁹ The sharing economy's flexibility to scale up to meet significant demand during large conferences or events is, for advocates, a key service provision benefit.
- Uber has projected that its services will create 15,000 opportunities for driver-partners in Ontario.²⁰

Some cities have proactively moved forward with regulations to capture ride-sharing revenue amid concerns about the potential loss in revenue from taxes/licensing fees on traditional taxi services. For instance, in Seattle, ride-sharing firms must pay 10 cents per ride to support licensing and enforcement,

as part of an agreement to operate in the city.²¹ The City of Toronto's staff recommendations included a similar licensing cost recovery charge proposal.

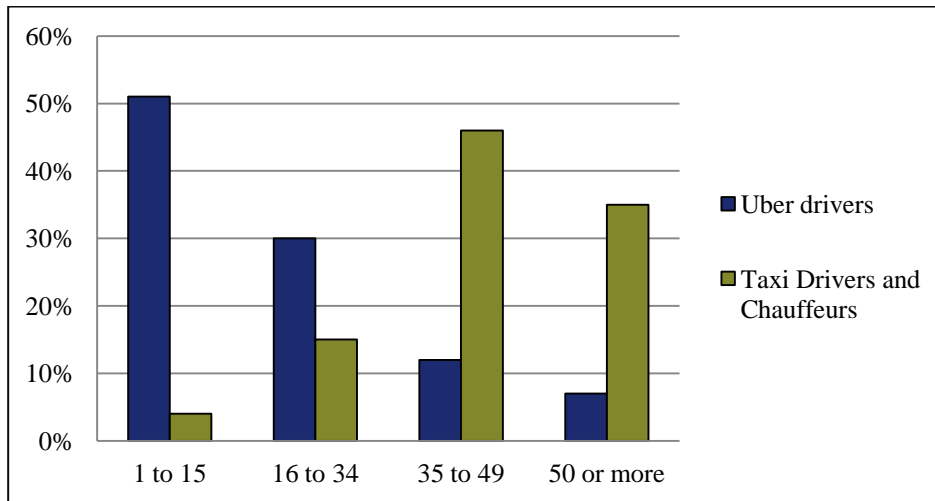
Other cities such as Dallas have taken more of a hands-off approach to tax/licensing issues, with the view that increased mobility opportunities facilitated by these firms will drive up local spending. In Canada, self-employed drivers must charge HST where fares are regulated, but must only remit HST if they earn more than \$30,000 a year for unregulated activities.²² Compliance, or lack thereof, with these requirements, will ultimately determine the additional or foregone revenue implications for tax authorities.

Drivers

One benefit that advocates of ride-sharing firms like to point out is their potential to create new employment opportunities that allow for significant flexibility in terms of when to work and how much to work. Of note:

- A study Uber conducted jointly with Alan Krueger of Princeton found that the company's drivers work significantly less than licensed cab drivers – Figure 3 demonstrates that 51 per cent of Uber drivers work less than 15 hours per week, compared to only four per cent of cab drivers. Uber drivers also tend to significantly vary the amount of hours they drive a week (65 per cent drive more or less than 25 per cent of the hours in a given week that they drove the previous week).²³
- The same study found that Uber drivers had gross earnings (before fuel and other costs) that were an average of \$6 per hour higher than the wages earned by taxi drivers.²⁴

Figure 3 - Hours Per Week Worked by Uber Drivers vs. Traditional Taxi Drivers and Chauffeurs



Source: Krueger and Hall, 2015

However, with the benefits of flexibility there are also risks of increases in precarious work as well as legal questions about the appropriate classification for ride-sharing drivers. A California judge recently certified a class action lawsuit against Uber, alleging that the company has misclassified its workers as independent contractors.²⁵ Ultimately, how this question is determined in different jurisdictions could impact the ride-sharing business model by requiring firms to pay health benefits and expenses like fuel and car repairs for their drivers.²⁶ This would have significant effects on the distribution of economic benefits and costs associated with ride-sharing.

Uber, Lyft and other ride-sharing firms also provide drivers an alternative to the expensive leasing and licensing fees of the taxi system, such as the acquisition of taxi plates or the need to pay a rental fee to drive a licensed cab.²⁷ This aspect of the taxi system has generally benefited plate owners, giving them significant control over entry into the market, but has made the economics of cab-driving difficult and expensive for drivers who do not own a plate. In fact, the costs to acquire taxi plates (or medallions as they are called in many US cities) have decreased markedly since ride-sharing has become more popular, with

prices decreasing by 25 per cent in New York City between 2013 and 2015 and similar, or larger, drops in other cities, including Toronto.²⁸

Users

Consumers likely stand to reap the most benefits from the rise of app-based ride-sharing services, as they offer more choice and the potential for better service along with prices that can undercut the regulated rates charged by licensed cabs. According to a recent survey in Toronto, a key reason residents choose to use Uber is because it offers more affordable pricing than taxis and limos and, in some cases, public transit.²⁹ Data indicates that business travelers also increasingly prefer to use Uber over taxis,³⁰ while the company claims that businesses can save around \$1,000 per employee through its services.³¹

Competition among ride-sharing firms also benefits customers, as offerings evolve to fit their needs by introducing new services and greater discounts.³² New firms, such as Via and Bridj, are entering the app-based market to better serve customers by transporting multiple people with lower fares – comparable to public transit.³³ Meanwhile, Uber recently introduced its UberPool service to allow passengers to share a car and reduce their costs.

However, there could ultimately be significant risks to users if they had to overly rely on ride-sharing firms as they currently operate. In the absence of competition, firms could raise prices, and the criticisms of surge-pricing over several high-profile incidents demonstrates how quickly customers can shift from feeling satisfaction with a service to unfairly treated. Nevertheless, a recent poll of economists indicated that the majority agree that competition on an equal playing field between ride-sharing firms and taxi companies improves the welfare of users.³⁴

SERVICE IMPACTS

Increased competition through the sharing economy has provided significant benefits to consumers not only in terms of cost – but also quality of service. For instance, the number of taxi customer complaints has decreased in some areas since Uber and other ride-sharing firms started to gain traction – suggesting services have improved for passengers.³⁵

A recent Uber study in Chicago suggests key customer concerns with the taxi industry focus on high fares, refusals to pick up certain passengers and unwillingness by some drivers to take credit cards.³⁶ The City of Toronto's recent poll found residents were most satisfied with taxis in terms of personal safety, ease of payment and knowledge of the area, and least satisfied with use of technology, cost of service and driver courtesy.³⁷

In addition to spurring a conversation about service improvements within the industry as a whole, it is worth assessing the ability of ride-sharing firms to meet key customer needs – including those based on geographic/socio-economic implications and accessibility issues.

Geographic and socio-economic needs

Uber, Lyft and other ride-sharing services have responded to the needs of customers that previously had difficulty receiving services, including those in more remote locations and with lower levels of income. Despite similarities between taxis and ride-sharing, there can be marked differences in the characteristics of users and their experiences – with ride-sharing ultimately encouraging greater mobility for certain groups of users.³⁸

Data indicates that Uber serves the outskirts of New York City better than taxis – with 22 per cent of Uber rides starting outside of Manhattan compared to 14 per cent of taxi rides.³⁹ A similar trend was observed in Portland where passengers in certain outer neighbourhoods faced longer waits for taxis compared to ride-

sharing – approximately 30 minutes for a taxi compared to around 12 minutes for a ride-sharing car.⁴⁰

Another study found that Uber provided more reliable and cost-effective services to low-income neighbourhoods in Los Angeles that were not well served by public transit, when compared to taxis.⁴¹ While some have suggested ride-sharing can generate positive environmental impacts, particularly if services encourage less private vehicle ownership,⁴² there is not yet sufficient evidence to evaluate that claim.⁴³

Accessibility

Ride-sharing firms have received mixed reviews in addressing accessibility – though Uber and Lyft have taken some steps to respond to challenges that have emerged. Advocacy groups recently sued both Uber and Lyft for allegedly discriminating against passengers with disabilities.⁴⁴ In some cities, such as Portland, ride-sharing companies offer far fewer wheelchair accessible vehicles than taxi companies⁴⁵ and provision of wheelchair accessible service is not intrinsic to a model based on use of drivers' personal cars.

However, Uber has also received some positive reviews for its services in this regard. In a case study on its services in Chicago, passengers with disabilities were quoted as having positive experiences.⁴⁶ It has also launched pilot programs to expand its accessibility services, including UberASSIST and UberACCESS. Lyft similarly states that it aims to design its services with accessibility in mind.⁴⁷

Some cities have also taken leadership in encouraging greater accessibility among ride-sharing firms by mandating that they have wheelchair accessible vehicles and that they cannot deny service for those requiring special assistance.⁴⁸ In Seattle, accessible services are part of an agreement that allows ride-sharing companies to continue to operate in the city, with those that

are not wheelchair accessible charged 10 cents per trip to offset the higher costs associated with providing wheelchair accessibility.⁴⁹

THE FUTURE

While policymakers, drivers, technology firms and cab companies are rightly focused today on questions around how the taxi industry should be fairly regulated to best provide high quality, accessible and competitive services, other technological innovations continue to advance that may eventually overtake today's debates.⁵⁰ Autonomous vehicle technology is rapidly evolving to the point that it is no longer a fantasy to imagine a driverless future on the streets of Canada's cities.

Against this backdrop, re-thinking existing regulatory frameworks in the face of companies like Uber and Lyft should factor in the possibilities of even more disruptive changes that would demand highly adaptable, flexible approaches.

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