Driving For Uber: A Developmental Evaluation of Occupational Health and Safety Conditions of Ride-Share Work

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EXECUTIVE SUMMARY

Introduction

Companies such as Uber, Airbnb and Task Rabbit are an emerging regulatory concern in Canada and other advanced economies. They are a part of a growing new set of "gig" or "sharing" economy marketplaces that, since the late 2000's, have been allowing people to buy goods and services directly from one another rather than from traditional businesses.

Occupational health and safety risks in the gig economy have not been well documented. A challenge is that the workplace health experiences of gig workers, such as Uber drivers, are relatively invisible because they are considered to be self-employed and therefore they fall outside of key provincial employment regulations such as minimum wage and overtime rules and also occupational health and safety arrangements, including employer requirements to track and report workplace injuries to Workplace Safety and Insurance Board (WSIB).

This study took a developmental evaluation approach to the study of occupational health and safety conditions of Uber work. We focused on Uber, as it has the largest financial presence of all so-called "sharing economy" firms and it was the only large ride-hail firm operating in Canada at the time of our research. This evaluation approach is useful for complex situations including navigating and making sense of issues when it is not clear what should be done because of inadequate knowledge and a large number of interdependent factors. Before this study began, Uber was a novel form of work (barely addressed in academic research and appearing in mainstream media only in 2013). As we conducted the study, ride-hail gig work had become a political arena generating strong media coverage. Our study systematically assembled situated knowledge, from the standpoint of different key players, about the nature of Uber and taxi health risks in order to inform decision-making by policy makers and topics for future research.

<u>Methods</u>

Between December 2016 and August 2018, we conducted focus groups and indepth interviews with 75 participants in a large Canadian city. These included 27 Uber drivers, 17 Uber passengers, 8 taxi drivers, 5 ride-hail managers, 3 taxi operators, and 15 key informants who were regulators and subject matter experts. We also collected documents and media to contextualise what we were learning in focus groups and interviews. The data were gathered using an iterative approach, where ongoing analysis led to decisions about sampling and data collection strategies. The data analysis followed a constant comparative method, where data from one source was continually contrasted with that from other sources in order to develop a coherent overall picture of the context and dynamics of Uber work, health and safety.

Findings

The research findings are organised in five parts:

- 1. Conditions of Uber work: This section describes why people chose to drive for Uber and their work conditions including earnings, various Uber rules, and working via an app;
- 2. Hazards of Uber driving: Here, we draw out Uber driving conditions that may diminish driver and passenger safety, including various Uber rules and conditions, and Uber-driver information asymmetries that leave drivers blind to important information about their rides;
- 3. Hazards associated with driving in general: Some occupational hazards spanned both Uber-drivers and taxi-drivers. These included harassment and poor health, mostly related to prolonged sitting.
- 4. The business situation: This section addresses the insurance and tax situation facing drivers. Almost every driver in our study had failed to fully disclose to their insurers or to pay taxes on their earnings.
- 5. The social protection situation: Finally, we briefly address the issue of classification of Uber drivers as employees or independent contractors and their limited access to workers' compensation coverage.

Risk grid

Following the findings section, we provide a "risk grid" that summarizes the kinds of Uber-related work and health and safety risks that exist for different stakeholders. The purpose of the risk grid is to provide a starting point for researchers and policy makers to consider the type and nature of risks facing ride-hail drivers.

Policy recommendations

Finally, we provide policy recommendations to improve the health and safety of drivers and passengers in relation to labour, licensing authorities, provincial-level authorities in relation to licensing, and employment status. In short, the recommendations are as follows:

- *Increased collective representation* is needed for ride-hail drivers, to create a forum for collective support and organisation.
- More stringent licensing conditions could improve driver and passenger safety.
 This should include the requirement that ride-hail companies provide drivers with full access to information about their rides. A removal of pressure-based ride-hail features, such as required acceptance rates, could reduce driver distraction. Ride-hail companies could prominently communicate driver tax obligations and provide fleet insurance with a low deductible for claims. As well, mandatory cameras in cars could improve driving conditions.

- Provincial-level licensing is recommended to remove the uneven "hodgepodge"
 of municipal regulations across cities and to address the new reality that vehiclefor-hire transportation is increasingly dominated by international, multi-billion
 dollar businesses such as Uber. We recommend a provincial standard for driver
 training and for vehicle-for-hire licenses.
- The employment status of gig workers needs to be addressed.
 - o In the short term, existing protections for workers could be extended to gig workers considered to be self-employed. Existing minimum wage standards (which already apply to workers on commission and who work piece-rate) could be applied to gig workers. Worker's compensation coverage, which already applies to self-employed construction workers and foot and bicycle couriers, could also be extended to gig workers. The "dependent contractor" category, which exists under labour law, could be extended to employment standards and occupational health and safety law.
 - o In the longer term, definitions of "self-employment" and "employment" could be modernised to take account of new, technologically-enhanced working conditions in the gig economy and to bring individuals in this economy under the protection of employment laws and social security provisions.

1 CONTEXT: THE RIDE-SHARE INDUSTRY AND OCCUPATIONAL HEALTH AND SAFFTY

Companies such as Uber, Airbnb and Task Rabbit are an emerging regulatory concern in Canada and other advanced economies¹. They are a part of a growing new set of "sharing" or "gig" economy marketplaces that, since the late 2000's, have been allowing people to buy goods and services directly from one another rather than from traditional businesses. The idea of bartering and sharing of goods and services is not new. However, in the current context, barriers to trade such as time, space, geography, marketing dollars are minimised by digital mobile platforms that connect people across time zones, cultures, and languages. It is estimated that the global revenue from gig economy companies in 2015 was \$15 billion, with the sector expected to reach global revenues of \$335 billion by 2025². In this section, we set the context for our study by describing the characteristics and growth of "gig work" and what we know about the health and safety conditions among taxi drivers and transportation workers. We describe the scarce research available about Uber driving conditions, and set the occupational health and safety policy context for Uber drivers.

1.1 The characteristics and growth of online work in the gig economy

We define the gig economy as online peer-to-peer platforms such as Uber, Lyft and Airbnb that connect workers considered to be self-employed (who own a car or a home they want to "share" for a fee) and customers. The exchange of goods and services occurs via online and phone based applications. There are three parties involved in these exchanges: the worker who performs the labour and normally owns an asset such as a car or home; a customer; and the company that mediates the exchange, sets the terms and conditions of the exchange, and charges a fee for the exchange.

This work is a small but growing feature of the Canadian labour market. A survey on the gig economy in the Greater Toronto Area found that nine percent of respondents reported working (currently or previously) in the gig economy, and 38 percent had purchased "sharing" services. Licensing data from the City of Toronto revealed that between 2016 and 2018, more than 67,000 ride-hail licenses (also

¹ The Economist. (2013). The rise of the sharing economy. The Economist; Zon, N. (2015). The Sharing Economy and Why It Matters For Policy Makers. Public Sector Digest, 7.

² Price Waterhouse Coopers. (2015). The Sharing Economy. Retrieved from https://www.pwc.com/us/en/technology/publications/assets/pwc-consumer-intelligence-series-the-sharing-economy.pdf

³ Block, S., & Hennessy, T. (2017). "Sharing economy" or on-demand service economy? Toronto: Canadian Centre for Policy Alternatives.

known as Private Transportation Company-PTC licenses) were issued by the city.4 It is not known how long drivers remain in ride-hail work or whether they do ride-hail work regularly, though data on US Uber drivers suggests there are very high turnover rates among workers.⁵

Ride-hail work with Uber and Lyft is unbundled into discrete tasks and the services are performed on-demand. 6 Algorithms rapidly allocate and distribute on-demand services between parties. Peer-to-peer ratings, also known as reputation mechanisms, are a required condition of the exchange between drivers and riders. Uber drivers, for example, must maintain high ratings to remain on the platform and to be dispatched rides. The rides are also tracked through GPS.

Investment in Uber as of 2017 was reported to be \$11.5 billion USD.7 Uber has gained fame for disrupting the incumbent taxi industry and evading regulation in jurisdictions around the world. Regulators have struggled to keep pace with the rise of ride-hail and have developed various forms of ride-hail regulation, often through municipal licensing, as is the case in Ontario. These regulations are often new, improvised and local regulations, described as a game of 'whack a mole', where governments struggle to contain new enterprises while more pop up8.

The prevailing legal classification of drivers by platform companies in the ride-hail industry is that of sole self-employment. However, there have been several important legal cases brought against Uber in the US and Britain arguing that drivers are misclassified as independent contractors. Several decisions that ruled drivers were employees indicated that the terms and conditions Uber imposed on drivers significantly limited their independent decision-making.⁹

There have been debates about the accuracy of the term "sharing economy", particularly on the basis that Uber drivers are working, not "sharing" their ride. For some, a more appropriate description of this sector is of the "gig economy" or "platform economy", a term that emphasises how individuals are increasingly reliant on multiple jobs - including those mediated by online platforms - to make a living. 10 Other forms of online gig work go beyond those of "sharing" an asset like a

⁵ Cook, C., Diamond, R., Hall, J., List, J. A., & Oyer, P. (2018). The Gender Earnings Gap in the Gig Economy: Evidence from over a Million Rideshare Drivers. Retrieved from https://web.stanford.edu/~diamondr/UberPayGap.pdf

⁴ Lucs I. Toronto's vehicle-for-hire bylaw under review in wake of "astronomical" growth of Uber, Lyft. CBC News [Internet]. 2018 Sep 17;1–5. Available from: https://www.cbc.ca/news/canada/toronto/uber-lyft-bylaw-consultations-1.4827565

⁶ Eurofound, Typology of Platform Labour, Geneva: Eurofound, 2019. Retrieved from: https://www.eurofound.europa.eu/data/platform-economy/typology

⁷ Juniper Research: https://www.juniperresearch.com/resources/infographics/sharingeconomy-market-snapshot-2017

⁸ Johal, S., & Zon, N. (2015). Policymaking for the Sharing Economy: Beyond whack-amole. Toronto: Mowat Centre. Retrieved from www.mowatcentre.ca

⁹ Aslam v Uber BV (2016), [2017] IRLR 4 [Aslam].

¹⁰ Gregg, M. (2015). The doublespeak of the gig economy. *The Atlantic*. Retrieved at: http://www.theatlantic.com/business/archive/2015/09/gig-economy-doublespeak-newlabour/404779/

car or a ride, and include freelancing and crowdwork through platforms such as Amazon Mechanical Turk (MTurk) where workers have to perform select piece-tasks (like data entry) and may be required to bid on how much pay they are willing to accept for piece-rate tasks. Platform gig work has been characterized as a non-standard, precarious form of employment because it is low-paid, casual, informal, and is broadly characteristic of a "fissured" employment relationship where there is an absence of employment and social protections 11. Uber, Deliveroo and other platform-based companies have created new language to describe employment, such as referring to Uber drivers as 'driver-partners' rather than 'workers'.

1.2 Health and safety conditions among taxi and transportation workers

The taxi industry is notoriously dangerous, even for regulated and licensed professional drivers. Taxi driving has the highest occupational homicide rate in Canada and the US. 12 That is, drivers have the highest chance of any occupation of being murdered on the job; therefore, higher than the rate for police and first responders. In 2010, Ontario's Expert Advisory Panel on Occupational Health and Safety recognised taxi driving as "the most dangerous job in Canada". 13 Risk factors are working with the public, with people under influence of alcohol, with cash, alone, at night, long hours, and in high crime areas. 14 Like ride-share drivers, most taxi drivers in Canada are considered to be self-employed. They work within complex economic and legal relationships as they lease and contract for a vehicle and dispatching services, while having to meet taxi licensing requirements. 15

Taxi work in Ontario is regulated by municipal licensing officials, as taxi drivers must register with municipal licensing agencies and meet certain licensing conditions and checks. In recognition of the hazards of taxi driving, most jurisdictions have had required taxi driver training programs. For instance, Quebec (which licenses at a provincial level) requires all PTC drivers (i.e. ride-hail and taxi) to undergo 35 hours of training. Until recently, Toronto's taxi licensing

¹¹ Bajwa, U., Knorr, L., Di Ruggiero, E., Gastaldo, D., & Zendel, A. (2018). Towards an understanding of workers' experiences in the global gig economy. Toronto. Retrieved from https://www.glomhi.org/uploads/7/4/4/8/74483301/workers in the global gig economy.p df; De Stefano, V. (2016). The rise of the «just-in-time workforce»: On-demand work, crowdwork and labour protection in the «gig-economy». ILO Conditions of Work and Employment Series No. 71. Geneva: International Labour Organization; Weil, D. (2014). The fissured workplace: Why work became so bad for so many and what can be done to improve it. Harvard University Press.

¹² Perreault S. (2011). Homicide in Canada. Ottawa: Statistics Canada; Occupational Safety and Health Administration. (2000). Risk Factors and Protective Measures for Taxi and Livery Drivers. Washington: U. S. Department of Labour.

¹³ Dean T. (2010). Expert Advisory Panel on Occupational Health and Safety Report and Recommendations to the Minister of Labour.

¹⁴ Occupational Health and Safety Administration (2010).

¹⁵ Dean (2010).

requirements included 17 days of training specific to taxi work, which addressed issues such as financial challenges of managing a small taxi business, responding to dangerous and difficult passengers, and improving diet and physical and mental health. Toronto also required bi-annual annual taxi vehicle inspections by city garages. However, in 2015, Toronto removed or changed these regulations in order to create a "level playing field" between Uber and the taxi sector¹⁶. Driver training is no longer required for PTC licensees, and annual vehicle inspections were replaced by proof of an annual vehicle safety certificate, which can be obtained at a Ministry of Transportation approved garage.

According to data from Ontario's Workplace Safety and Insurance Board (WSIB), the transportation industry is a leading sector for lost-time claims, primarily as a result of road accidents. ¹⁷ Yet non-covered workers (e.g. most taxi drivers) do not file workers' compensation claims. As such, occupational health and safety risks among taxi drivers are under-documented.

1.3 Uber drivers and work conditions

There is relatively little research about Uber driving work in terms of their work conditions and social demographics. Recent research has focused predominantly on the US and Western Europe¹⁸ and there is no existing research on Uber and other ride-hail drivers in Canada.

In a US labour market analysis of Uber drivers (a study sponsored by Uber), economists Hall and Krueger identified that US drivers are mainly working to supplement part-time or full-time primary employment. The analysis points to relatively steady wages among Uber drivers and an Uber driver workforce similar in age and education to the general workforce, differing from the predominantly male, older, and visible minority characteristics of the taxi driver workforce. ¹⁹ The study identified that US Uber drivers are attracted to the flexibility that the work offers. Drivers in the Hall and Krueger study also seek income through Uber work to "buffer" them against income volatility. Similarly, an analysis of US financial

¹⁶ CityNews. (2015, Jul 6). Taxis & Uber not operating on level playing field: Tory. Retrieved from: https://toronto.citynews.ca/video/2015/07/06/taxis-uber-not-operating-on-level-playing-field-tory/

¹⁷ WSIB. (2017). By the Numbers: 2017 Statistical Report. Toronto: Workplace Safety and Insurance Board. Retrieved from: http://www.wsibstatistics.ca/

¹⁸ Rosenblat, A. (2018). Uberland: How algorithms are rewriting the rules of work. University of California Press, pg. 3; Mishel, L. (2018). Uber and the labour market. Washington, DC: Economy Policy Institute; Hall, J. V, & Krueger, A. B. (2016). An Analysis of the Labour Market for Uber's Driver-Partners in the United States (NBER WORKING PAPER SERIES No. Working Paper 22843) Cambridge; European Foundation. (2016). Digitalisation and working life: Lessons from the Uber cases around Europe. Retrieved from: https://www.eurofound.europa.eu/observatories/eurwork/articles/worki...alisation-and-working-life-lessons-from-the-uber-cases-around-europe

¹⁹ Hall and Krueger. (2016).

transactions conducted by the bank JP Morgan Chase identified how individuals rely on online platform work to protect their households against income fluctuations.²⁰

Qualitative research on Uber drivers in the US explores how drivers rely on Uber work in addition to other employment. Essentially, Uber work is more than "sharing" or a gig since most drivers are "working hard to make ends meet" through Uber driving, as recent research has argued.²¹

1.4 Occupational health and safety and worker's compensation for the self-employed in Ontario

Occupational health and safety risks in the gig economy have not been well documented. A challenge is that the workplace health experiences of gig workers, such as Uber drivers, are relatively invisible because they are considered to be self-employed and therefore they fall outside of key provincial employment standards regulations (e.g. minimum wage, overtime) and occupational health and safety regulations (e.g. the right to refuse unsafe work) in Ontario's Occupational Heath and Safety Act. They also are not automatically covered under the Workplace Safety and Insurance Act²² (e.g. employers tracking and reporting injuries to WSIB). As well, self-employed work performed through online platforms is not protected by labour (union) rights or by federal unemployment insurance or pension programs.

Under current work and health statutes and regulations in Ontario, it is assumed that self-employed workers are responsible for their work-related health and safety and social security. Basic worker rights under the Occupational Health and Safety Act²³ become irrelevant when the worker is also the employer or where it is unclear who bears employer responsibilities. Self-employed workers may individually opt-in and pay for worker's compensation coverage in Ontario, employment insurance, and/or pension programs. It is not known how many do so.

There has been a growth of unincorporated sole self-employment in Canada. In a study on rates of unincorporated self-employment in Canada between 1989 and 2010, Statistics Canada reported that self-employment tends to rise in relation to economic downturns and periods of unemployment. Self-employment is growing as

²² In Ontario, self-employed workers can opt-in to workers' compensation but to the best of our knowledge few do, likely due to premium costs and limited expectation of reward. None of the drivers in our study availed themselves of this option. Of note, tailored Occupational

employed.

Health and Safety Act regulations exist for construction workers, who tend to be self-

²⁰ Farrell, D., & Greig, F. (2016). Paychecks, Paydays, and the Online Platform Economy: Big Data on Income Volatility. JP Morgan Chase and Co.

²¹ Rosenblat (2018), pg. 3; Mishel (2018).

²³ Ministry of Labour. (2015). A Guide to the Occupational Health and Safety Act. Toronto: Queen's Printer for Ontario.

a share of the workforce; in 2015, the number of self-employed workers overall in Canada rose four times faster than the number of direct-employees²⁴.

Some types of self-employed workers are covered by workers' compensation insurance. The Ontario Workplace Safety and Insurance Act was amended in 2014 to include compulsory worker's compensation coverage for all workers in the construction industry, including independent-operators, to ensure that these self-employed workers received by worker's compensation protections. Policymakers have also acknowledged the problem of "false self-employment", whereby employers classify workers as self-employed in order to evade costs and responsibilities associated with employer obligations. New laws in Ontario (the Fair Workplaces, Better Jobs Act, 2017) included provisions to shift (or "reverse") onus onto employers to prove workers were independent-operators. However, this law was repealed in 2018 under the new provincial government's Making Government Open for Business Act. The purpose of the "reverse onus" provision was to make misclassifying workers as self-employed more difficult for employers. Currently, individual workers bear the onus of contesting their status if they believe they are misclassified as independent-operators.

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²⁴ Tal B. (2015, Mar 5). Employment quality--trending down. Canadian Employment Quality Index.

²⁵ WSIB Ontario. (2019). Mandatory coverage in the construction industry [website]. Retrieved from: https://bit.ly/2FnelNi [shortened URL]. Self-employed Ontario couriers who deliver on foot or by bicycle are also automatically covered by WSIB: WSIB Ontario. (2018). Employer classification manual. Retrieved at: https://bit.ly/2CuwaxA [short URL]

²⁶ Dean (2010); Law Commission of Ontario. (2012). Vulnerable Workers and Precarious Work. Toronto: Law Commission of Ontario.

²⁷ An Act to amend the Employment Standards Act, 2000, the Labour Relations Act, 1995 and the Ontario College of Trades and Apprenticeship Act, 2009 and make complementary amendments to other Acts.

2 STUDY METHOD

This study took a developmental evaluation approach to the study of occupational health and safety conditions of Uber work. This approach is useful for complex situations²⁸ including navigating and making sense of issues when it is not clear what should be done because of inadequate knowledge and a large number of interdependent factors. When this study began, Uber was a novel form of work (barely addressed in academic research and appearing in media only in 2013). Uber was a political arena, with strong media coverage. Our study systematically assembled situated knowledge, from the standpoint of different key players²⁹, about the nature of Uber and taxi health and safety risks in order to inform decision-making by policy makers and topics for future research.

2.1 Research Design

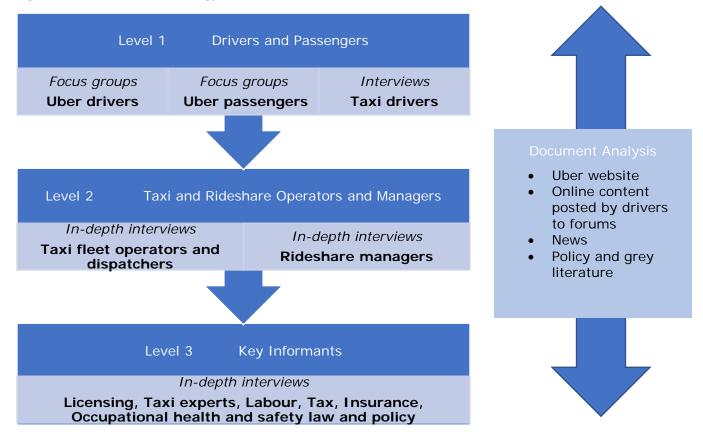
The health and safety conditions of Uber for ride-hail drivers and passengers are complex and cover a wide domain of factors, including weather, algorithms, Uber's terms and conditions, municipal and provincial licensing, car insurance, and taxation. There is little existing research in this area, especially in Canada. As such, the study used context-sensitive qualitative research methods to explore the hazards that exist for drivers and passengers, as understood by a variety of key players, in relation to how they navigate and perceive these risks, and the organisational and regulatory factors that shape rideshare work and health.

The research strategy involved a sequential process of data gathering, data analysis, and knowledge exchange that allowed insights gained at one phase of the study to inform later stages (see Figure 1 below). The study gathered in-depth qualitative data at various levels: first, at driver and passenger levels, second, at organisation and firm levels, and third, at regulator and policy levels, in combination with news, document and online analysis. This strategy allowed the researchers to build knowledge developed at one level into research question's for the subsequent level. This approach provided an understanding of the conditions that drivers and passengers encountered in day-to-day ride-hail activities in relation to organisational and technological practices as well as broader policy frameworks.

²⁸ Patton MQ. (2011). *Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use.* New York: Guildford Press.

²⁹ Eakin JM. (2010). Towards a 'standpoint' perspective: health and safety in small workplaces from the perspective of the workers. *Policy and Practice in Health and Safety*, 8(2): 113-127.

Figure 1: Data collection strategy



2.2 Research Sampling

Data for the study were gathered between December 2016 and August 2018. The study focused on a single large Canadian city with a regulated taxi sector and on recently implemented municipal licensing provisions for ride-hail companies and drivers to operate legally. At the time of data gathering, Uber was the only large "ride-hail" firm operating in Canada. In our city, it had a significant and growing presence in terms of both drivers and riders.

There were 75 participants in total in the study (see Table 1 below).

Table 1: Overview of participant sample

Participant group	Total number of participants and gender distribution
Uber drivers	27 Uber drivers (7 female, 20 male)
Uber passengers	17 Uber passengers

	(11 female, 6 male)		
Taxi drivers	8 taxi drivers (all male)		
Ride-hail managers	5 ride-hail managers, operations and policy (1 female, 4 male)		
Taxi organisation operators	3 taxi operators (fleet and brokerage operators) (1 female, 2 male)		
Key informants	15 key informants (regulators, subject matter experts) (5 female, 10 male)		
	Total participants 75		

Drivers and passengers were recruited through posts to online social media groups and forums. Drivers needed at least three months experience as an Uber driver to participate in the focus groups. In the recruitment posting, the invitation heading was: "Are you a taxi driver or UberX driver? We want to hear from you". Further invitation about registering for a focus group was then provided to people who contacted the research team. Drivers were provided with a \$50 honorarium to compensate them for their time and travel costs. In all, 27 Uber drivers participated in four focus groups and 2 interviews.

Uber drivers in the study sample drove both part-time and full-time hours. Forty-eight percent (13) indicated that they relied on Uber driving income as their primary source of income and 59% (16) indicated that Uber was their sole of income at the time of the study³⁰. Those who did not have other sources of income described taking up Uber driving after quitting or losing previous jobs, being students, and having trouble finding work, especially after immigrating to Canada. Thirty-seven percent (10) of the drivers in the study had professional/skilled work and education experience. Thirty-seven percent (10) of the drivers in the study immigrated to Canada within the past decade (See details in Table 2 below).

Table 2: Select features of Uber drivers' work from study sample

n	%	n	%

³⁰ This makes our study sample different that that described by the Uber-sponsored Hall and Krueger study described in Section 1.3. They described Uber driving as mainly a supplement to other incomes. However, most drivers in our sample had Uber as their main income.

Length of time as a driver		
<1 year	10	37.0
1-2 years	10	37.0
>2 years	7	25.9
No answer	0	0.0
Total	27	100
Hours per week ³¹		
<20 hours	4	14.8
20-29 hours	6	22.2
30-39 hours	4	14.8
40-49 hours	3	11.1
50-59 hours	1	3.7
>60 hours	1	3.7
No answer	8	29.6
Total	27	100

Uber driving as income	primary	
Yes	13	48.1
No	14	51.9
Total	27	100
Works exclusive driver	ely as an Uber	
Yes	16	59
No	11	41
Total	27	100

Passengers were recruited with an invitation post that began with: "Do you use Uber or taxis? We want to hear from you." Passengers had to have experience using Uber, but were not required to be regular Uber riders. They were provided with a \$50 honorarium to compensate them for their time and travel costs. There were 17 passengers who participated in two focus groups. Most of these participants were regular Uber riders, while a small portion regularly used taxis.

Recruitment of taxi drivers took place during taxi rides³². During rides, taxi drivers were invited to share their health and safety experiences related to their work. During recruitment, taxi drivers were informed that the taxi ride would take place whether or not they participated. This was to ensure that individuals felt free to decline to participate in the study without losing the fare. Taxi drivers were provided with a \$50 honorarium (in addition to the taxi fare) to compensate them for their time. Eight taxi drivers participated in the study. This group included both shift-drivers (who rent their taxi vehicle and a taxi license from a license and vehicle/fleet operator) and owner-operators (who own their own taxi license and vehicle); two out of eight drove for Uber in addition to taxi. They ranged in experience: one had less than a month of taxi driving experience, while had over

³¹ Several drivers indicated that their weekly Uber work hours could vary considerably on a week-to-week basis.

³² Taxi driver recruitment was difficult. The approach of direct recruitment during taxi rides was adopted only after other strategies (recruiting via social media and via fliers) were unsuccessful.

10 years of experience, and three had over 20 years of experience. Two out of the eight taxi drivers were engaged in taxi driver advocacy.

Managers and operators in the ride-hail and taxi industries had to have direct knowledge of the industry. At the organisation/company level, there were five ride-hail managers and three taxi fleet and garage operators who participated in interviews.

There were 15 key informant interviews with regulators and subject-matter experts across various domains: tax accountants, insurance executives and brokers, trade union researchers, occupational health and safety policymakers, labour/occupational health lawyers, and municipal licensing officials.

Theoretical sampling guided recruitment for all focus groups and interviews. That is, using an iterative process that involved concurrent data gathering and analysis, we expanded and focused our sampling approach in order to gather the most information-rich data for our evolving research questions. Direct contact through LinkedIn, publicly available online profiles, and "snowball recruiting" were avenues used to identify and invite respondents for interviews and focus groups. Invitations were tailored to the unique experiences of respondents, depending on their roles and expertise in relation to the ride-hail and/or taxi industry.

2.3 Data Collection

2.3.1 Focus Groups and Interviews

Focus groups allowed for common experiences among Uber drivers and passengers to surface, which was particularly pertinent given that these groups normally have no formal channels to meet face-to-face. Focus groups with Uber passengers and drivers were held in private rooms in public spaces in central downtown locations. Uber driver focus groups lasted two hours and there were 6-8 drivers in each of the focus groups. Individual interviews with Uber drivers occurred in locations selected by the participants. Focus group and interview questions addressed the following key topics: background and day-to-day experiences of working as a ride-hail driver; pros and cons of the work; reasons for choosing the work; aspects of the work that make drivers feel safe and unsafe; health conditions and impacts of the work; how ratings and other application features impacted their work, safety and health; insurance and tax; support or lack of support from ride-hail companies; ability to report issues; and areas of improvement.

Uber passenger focus groups lasted 1.5 hours and there were 8-9 passengers in each of the focus groups. Focus group questions for passengers addressed general experiences using taxis and Uber and choices for using one or the other; experiences feeling safe and unsafe with ride-hailing and taxis; and how they decided how to rate drivers.

Taxi driver interviews lasted between 30 minutes and 2 hours. Taxi drivers were asked about how they started doing taxi work, their day-to-day work experiences

and work arrangements (including leasing vs. owning), hazards and health issues they faced, and their opinions on the problems and issues they face more broadly.

Key informant and manager/operator interviews took place in-person and, where it was not possible to meet, by phone. In-person interviews were held in places that were the choice of the participant, normally a café or their workplace. These interviews lasted between 30 minutes and two hours. The topics covered were tailored to the expertise and role of the individual in relation to emerging findings, and focused in particular on the policy, legal and regulatory context for taxi and ride-hail work.

2.3.2 Document and media analysis

Various forms of document data sampling and analysis helped contextualise information gathered through interviews and focus groups. This included publicly available sources such as: Uber web pages; online forums that drivers access to find information about work; magazine and news articles; and reports and policy literature. Drivers also shared additional information about Uber driving with the study team that included emails and app screenshots.

A news media analysis of international ride-hail policy was conducted by the project lead (PI) with a research assistant, and a report on this analysis is available on the study website. ³³ The purpose of rideshare policy analysis was to understand in what jurisdictions Uber had been regulated and what regulatory requirements were put in place. The analysis focused on high income countries, as conditions in these countries are similar to those in Canada. A systematic search of newspaper articles about 33 high income countries occurred between January 2018 and June 2018, using Google was the primary search engine. The media analysis included:

- A chronological summary of policy developments for each jurisdiction
- Tracking the jurisdictional level at which rideshare services were regulated
- Tracking jurisdictions that changed the level of regulation in response to the entry into the marketplace of rideshare organisations

The media analysis helped situate the interviews and focus groups in a broader policy context. It showed that policy approaches are often uneven and regulators have responded in many different ways to ride-hail platforms.

2.4 Analysis

The study used a constant comparative method of qualitative analysis, where data from one source was continually contrasted with that from other sources in order to develop a coherent overall picture of the context and dynamics of Uber work, health and safety. Nvivo software was used to manage organisation of the data collected.

³³ The media analysis is available at: http://ellenmaceachen.ca/wp-content/uploads/2017/03/International-Rideshare-Policy-Evolution-A-Media-Analysis_Final-Report-Sept-10-2018-V2.pdf

Detailed field notes were made for each interview, for documents collected and for details of specific contexts (such as the taxation and insurance). In addition, all interviews were transcribed verbatim and coding (categorisation) of the interview transcripts data was used to identify key findings across focus groups and interviews.

To create these codes, the study team developed a list of themes based on a holistic analysis of the first set of transcripts. After each focus group and interview, the codes were adapted and refined. Dual coding (coding by two members of the research team) enhanced inter-coder reliability. Members of the study team involved in coding (mainly ERM, EB, EM, and SM) regularly shared their work with the broader study team to discuss emerging themes and areas of overlapping and divergent interpretations. From this process, the main areas of coding were developed, which related to administration and rules (e.g. insurance, making money, etc.); driving (e.g. reasons for Uber driving); relationships (e.g., Uber support; interactions between drivers); health and risks (e.g. hazards of driving Uber); and work and health conditions for taxi drivers. Interview and focus group data assigned to each code was then analyzed on an in-depth basis.

The core team (principal investigator, postdoctoral researcher, and research assistants) met weekly to plan data collection and analysis activities, as well as discuss emerging findings. Meetings among the whole team (all co-investigators) occurred on a monthly basis.

2.5 Knowledge Translation and Exchange

A study advisory committee composed of five members provided expert input on the research. The group was convened at several key points during the course of the study (including: study design, early findings, knowledge translation plans, and developing key messages). This committee had representatives from the Ontario Ministry of Labour, the Ontario Office of the Employer Adviser, the Ontario Office of the Worker Adviser, the Worker's Action Centre, and the City of Toronto.

In addition to our study advisory committee, we conducted two stakeholder workshops in November 2018 when we presented occupational health and safety risks identified in the study and received input on practice and policy solutions.

The first workshop was for rideshare drivers. Five drivers³⁴ participated in the event³⁵. The second workshop was for community, government and expert stakeholders, who were invited to identify key areas for policy development. Sixteen participants attended from the following agencies and organisations:

Municipal licensing

³⁴ This was a low turn-out. We realized that we had invited drivers to meet us on a bank

holiday, a time when ride requests would be low and drivers might prefer to stay home.

 $^{^{35}}$ Drivers were provided with a \$50 honorarium to acknowledge their time involved in the workshop.

- A tax accountant
- Ministry of Transportation
- A community legal services organisation
- A worker-based organisation
- A health and safety association
- Ministry of Labour
- WSIB
- A taxi brokerage
- A public transportation company
- A trade union
- A taxi driver association

In both workshops, participants were debriefed on the study findings and main hazards identified for Uber drivers and passengers. Afterwards, participants were asked to identify:

- 1. What risks were the most serious and should be prioritized? What risks may the study have missed that are important to consider?
- 2. How might these risks be managed? What are things that drivers could do? Ride-hail firms could do? Government could do? (participants were asked to link proposed policy to risks)

Facilitators took notes and recorded ideas that were collected and synthesized by the study team.

2.6 Research Ethics

Ethical considerations of informed consent, anonymity, confidentiality and data security were observed for all data gathering events and for the stakeholder workshops. The University of Waterloo's Office of Research Ethics provided formal ethical clearance for this study. Care was taken to ensure the confidentiality of participants. The names used in this report have been altered to protect participants' identity and some identifying details have also been changed to protect participants' privacy. Participants were informed they had the right to skip any question or end or leave the interview or focus group at any time without penalty. They also were informed they had the right to withdraw their participation from the study. No participants asked for their data to be withdrawn. The study material is retained by the immediate study team in a secure location.

3 FINDINGS

The research findings are organised in five parts. In *conditions of Uber work*, we describe why people chose to drive for Uber and their work conditions including earnings, various Uber rules, and working via an app. In *hazards of Uber driving*, we draw out Uber driving conditions that may diminish driver and passenger safety, including various Uber rules and conditions, and Uber-driver information asymmetries that leave drivers blind to important information about their rides. The third section is *hazards associated with driving in general*. Some occupational hazards spanned both Uber-drivers and taxi-drivers. These included harassment and poor health, mostly related to prolonged sitting. The *business situation* addresses the insurance and tax situation facing drivers. Almost every driver in our study had failed to fully disclose to their insurers or to pay taxes on their earnings. Finally, we discuss the *social protection situation*. Here, we briefly address the issue of classification of Uber drivers as employees or independent contractors and their limited access to workers' compensation coverage.

3.1 Conditions of Uber Work

3.1.1 Why drive for Uber?

Drivers in our study sought extra income because their household income was insufficient. Some drivers had full-time or part-time jobs and Uber driving provided a flexible option for accessing income that they needed to support themselves or their families. Some of the drivers in our sample described their Uber driving as full-time, and as a welcome change from previous employment, such as minimum wage factory work that had involved early morning starts and clocking in and out. Some stakeholders, such as this taxi advocate, described Uber drivers as "desperate" for work and "exploited" by businesses such as Uber:

You're going to have a bunch of Uber drivers that are desperate – the majority of them are. They're in between jobs or they are students and they'll work for anything, and they are going to exploit them. Uber is going to exploit because they don't care about the driver. They care about your end product and that the consumer is happy. (George, key informant)

When talking with drivers about why they drove, it became clear that they did this work because of economic need, rather than entrepreneurial spirit. For instance, one driver described the desire for "normal secure employment":

I have to work 7 days due to very low pay to cover my expenses and to pay debt I am in. Is there a normal secure employment in this country? I would take it in seconds. (Samuel, driver)

The drivers in this study had precarious situations, unlike the description provided by a rideshare manager of drivers as informed, entrepreneurial people who drove because they were motivated to "access their own customer base":

There's just this trend toward more independent work. ... My view is, the kind of technology platforms – be it Uber or many different others – enables someone to kind of work directly – help solve the problem in a much easier fashion than they ever could before. So, their ability to, like, access their own customer base on the other side of whatever that technology platform is [the] underlying driver of [why] more people begin [to be] self employed or independent contractors. (Oliver, rideshare manager)

Although Uber drivers described appreciating that they could drive when they wanted, and for as many or as few hours as they wished, the more experienced drivers explained that driving hours were not so flexible. Hourly earnings would be very low unless they drove at certain peak times. Drivers would receive alerts from Uber about the area they should drive in and offer incentives.

...[S]o it would be like this month, if you go and drive from 6 in the morning to 10 in the morning we'll guarantee \$30 an hour but you have to be on, no cancellations and pick up at least two riders. (Carolina, driver)

Uber had many rules and standards (more on this in section 3.2), including that drivers' cars must be seven years old or less. This effectively screened out certain kinds of drivers, such as lower income recent immigrants: drivers had to be able to afford a relatively new car, or at least have regular access to one. It also meant that drivers had a limited time driving for Uber unless they could afford to get a new car when their car reached the seven-year mark. Some drivers in our sample transitioned to the less-lucrative Uber Eats when their cars grew older, as this service had no car-age rules.

Drivers were encouraged to recruit other drivers, which brought their friends and family to Uber driving. Participants explained that, when Uber first came to the city, they provided a \$300 bonus to drivers for every successful recruitment. Although the sign-up bonus dropped to \$200 once Uber became established in the region, the bonus was still an income feature for drivers (See Figure 2 for screenshot).

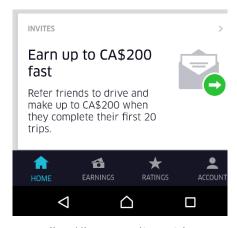


Figure 2: Screenshot from Karim regarding Uber recruitment bonus.

It was easy to become an Uber driver; no training was required. The drivers described an on-line sign up process that involved providing only a few documents: their drivers' license, car registration and insurance.

When I signed up... the training was literally a 12-minute YouTube video. (Ahmed, driver)

It was easy You go online, and you upload your driver's license. The basic items you have to have is a telephone, an email ... your driver's license, proof of citizenship – passport and the vehicle ownership. [Then] they do a background check [A]nd there was this kind of a orientation or session group for beginners. It was not mandatory, but I decided to go just to see people, and I went there, and it was a regular session – half an hour video, and Uber, blah, blah, blah, blah, Two days later, I received an email, 'You can ... start driving'. They approved me, and I didn't have to meet anyone. (Paco, driver)

Unlike taxi drivers, the Uber drivers did not have to apply directly for a special "Private Transportation Company" (PTC) commercial license. Although the city did require Uber drivers to have a PTC license, this was relatively invisible to drivers because it was organised behind the scenes by Uber who, via a "self administration" agreement with the city, screened drivers and paid a license fee of \$10 per license directly to the city. This direct involvement of Uber in licensing (who had to meet city requirements), meant that, when problems arose with the conduct of a driver, the matter was not visible to the city as it was managed by Uber.

The number of private transportation company (PTC) licenses has proliferated since Uber came to the city. According to one key informant (Charlie), by 2016, the city granted around 60,000 PTC licenses, creating a new revenue stream for the city that generated more income than taxi licenses. It is unclear how many of these licenses were renewed annually or still active.

3.1.2 Self-employed drivers

A key feature of Uber work is that drivers are generally considered to be selfemployed, despite this status being contested in several courts of law³⁶. As described by this Canadian rideshare manager, the drivers were contractors:

Because we're a contract provider, right, where, like, you're not an employee – like, Uber drivers are contract workers – they don't get benefits; they don't work for us full time – we can't really tell them to do anything. At the end of the day, we can only give them feedback, and we

³⁶ Loriggio, P. (2019). Proposed class-action lawsuit against Uber can proceed, Ontario appeal court rules. *Globe and Mail*.

can pass along a set of rules that they're required to reach to continue to have access to the platform. (Annette, ride-hail manager)

Being considered as self-employed meant that drivers did not have access to government supports that operate via employee status, such as Employment Insurance, or workplace supports, like a benefits plan. Some drivers worried about their security in light of these conditions:

I'm making money now, but there is not gonna be benefits or pension or retirement. It's in the back of my head. (Rabih, driver)

3.1.3 Lower than expected earnings

Uber drivers described low levels of income from their work. Drivers in our sample who were relatively new to Uber anticipated, as promoted by Uber, high earnings and pleasant, social rides with passengers. However, the more experienced drivers described disappointing earnings and difficult encounters with clients. Once drivers factored in costs related to gas, car repairs and maintenance, and car cleaning, their income was much less than they had imagined (and well below the \$11/hr minimum wage).

When I was started I made approximately \$15/hr, and then I cut up my expenses, I end up making, like, \$7 or \$8 an hour. (Sanjay, driver)

Drivers also earned less money than expected when they figured out that their payment from Uber showed their gross earnings rather than earnings after HST tax deductions, which they were required to submit to the Canada Revenue Agency. Therefore, drivers were earning 13% less than the figure shown on their app.

Surge fares were a feature of Uber that appeared to promote the possibility of high earnings (See Figure 3). Drivers would receive a message from Uber telling them that surge fares were in effect at a certain location. However, they described driving there only to find that the surge fare was not present. Drivers described feeling toyed with, and mistrusting the information on the app:

Ibrahim: I never run behind surges – I never.

Nina: It only used to last about 5/10 minutes – not even 5 minutes – so, you're chasing it, and it's just going further; you're chasing and it's going further. (drivers)

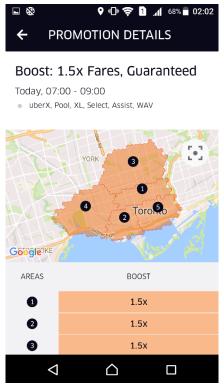


Figure 3: Screen shot from Karim about a surge fare

Indeed, a report on Uber driver earnings in the US similarly described them as earning \$9.21/hour, a rate that was below minimum wage in most states³⁷.

An important feature of Uber is its low price to customers, relative to taxis. Indeed, this was a feature mentioned by many of the passengers in our focus groups. One way that Uber could provide low prices to customers was by paying drivers at fixed rates. That is, the drivers were paid a certain amount based on the destination but not the actual time it took to get there³⁸. Therefore, their compensation did not include extra time needed if the passenger requested a different route to the destination, or if extra time was spent in traffic, or if the driver had to wait for clients who request a mid-ride stop, for instance, to dash into a fast-food restaurant. This lack of compensation for drivers' actual driving time was an important feature of driving that effectively lowered the drivers' hourly driving rate.

³⁷ Mishel, L. (2018). Uber and the labour market: Uber drivers' compensation, wages, and the scale of Uber and the gig economy. Retrieved from Washington, DC: https://www.epi.org/files/pdf/145552.pdf

³⁸ Many Uber policy changes occurred during the course of our study. One change, related to Uber's "180 days of change" program was a minor payment provided to drivers for waiting times: "No More Unpaid Wait-times: You will earn a per-minute rate if you wait for a rider, starting 2 minutes after arrival." See Uber Canada. (2017, Sept 20). "You asked, and we're answering". [webpage] Retrieved from https://pages.et.uber.com/180-days/.

You're... paid an up-front fare so if you deviate from that you're taking money out of your pocket.... It's a source of confrontation and the fact is that you're told to go this route. Your best money is to go this route and when they [passengers] want to go somewhere else." (James, driver)

In every focus group, drivers complained about passengers who request en-route stops, for instance, to pick up a prescription, a few groceries, or fast food. This extra unpaid time detracted from driver's potential earnings during that shift. Drivers felt muted in their ability to avoid these costs. When a ride was requested, there was no way to see if the passenger would request a mid-trip stop. If a driver declines to stop, then they risk a very poor review from the customer (more on the perils of passenger reviews in section 3.2).

3.1.4 Difficult to track earnings

Across our focus groups and interviews, drivers described their distress about not knowing if they were being paid appropriately by Uber for their rides. Uber is a cashless system: passengers register with Uber with a credit card. When they take a ride, Uber takes its cut and pays the remaining portion of the fare to the driver. However, the fares were paid out by Uber to drivers at irregular times, despite Uber receiving the funds from passengers during the ride. Drivers described the difficulty of tracking their ride-by-ride income (for dozens of rides every day) when some payments came from Uber immediately, but others came only hours later, or up to one week later.

Drivers also noted that it was difficult to verify if they were being paid the correct amount per ride by Uber. They complained that they could not clearly see surge pricing rates. Also, if payment to a driver was cancelled (for instance, following a rider complaint), there was no notification to the driver. Drivers described having to be vigilant to ensure they received all fares for the rides they accepted and that they were paid the correct amount. If not, it was up to drivers to notify Uber.

There's no notification, like 'we just took \$100 bucks from you' I think they deliberately design it so that you don't know. (James and Ahmed, drivers)

An additional challenge was that the drivers could not see the fare quote provided to the passenger. This fare opaqueness led some to question whether they and the passengers had been told the same fare by Uber.

3.1.5 Limited choices

Although Uber drivers are categorised as self-employed by Uber, Uber does not provide them with the ability to set their own fares. These rates were unilaterally set by Uber. Uber appeared to take a 20% cut of the driver's fare³⁹, and the rates

³⁹ The study team received a copy of an earnings statement from an Uber driver who was a personal contact but was not in the participant sample. The content was used for the purposes of the study with the individual's consent.

appeared to change without notice. One example of the unilateral actions of Uber in relation to driver payment rates that was well covered in Canadian media was the rates for Uber Eats driver were cut by up to 50% without notice to the drivers. ⁴⁰ The drivers faced a take-it-or-leave-it scenario.

It was in the interest of Uber for drivers to drive long hours, as Uber took a cut from every fare. Drivers described being closely monitored by Uber, who sent them "badges" such as "excellent service" and "above and beyond" when they received high ratings or positive reviews from passengers (See Figure 4).

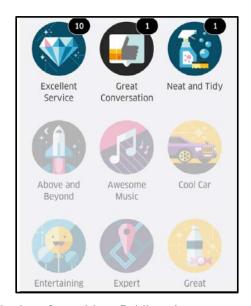


Figure 4: Screen shot of Uber badges from driver Rabih's phone

As per Figure 5 below, drivers received regular messages from Uber about their driving quality; for instance, about their braking and acceleration patterns. Some of Uber's surveillance measures, such as these, can be seen as safety-enhancing. However, the broader picture is one of one-way communication and control between Uber and drivers.

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⁴⁰ CBC News (2016, Dec 4). Toronto UberEats drivers protest pay cuts. Retrieved from: https://www.cbc.ca/news/canada/toronto/toronto-uber-eats-pay-protest-1.3880328

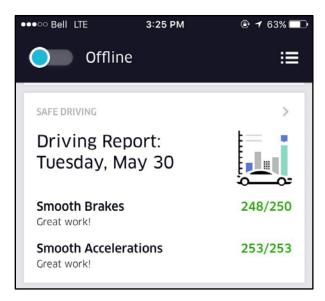


Figure 5: Screenshot from Rabih regarding Uber reports on his braking and acceleration

Interestingly, drivers described receiving messages from Uber when they were signing off the app that urged them to drive longer. This nudge from Uber infringed on driver and passenger safety when drivers were being tempted to stay on the road despite being tired and ready to end their workday:

So, if it's a really busy time of night, the app will give a notification to a driver that says, you know, if the driver says, 'sign off', will say, 'there is surge pricing in the area' – ... (Oliver, rideshare manager)

This behavioural management of Uber drivers was not unique to our city. It was also featured in a 2017 New York Times article, which explained how Uber used behavioural science to manipulate drivers to work longer hours⁴¹.

Uber drivers were provided with surprisingly little choice over the type of ride they provided. That is, drivers understood that they had signed up to "share their ride" as an Uber driver, normally for UberX, UberSelect, or UberXL. However, they described being required also to accept Uber Pool rides, which made their work similar to that of a bus driver⁴². Regular rides involved taking one person or party to a certain destination. In contrast, Uber Pool involved picking up and dropping off

⁴¹ Scheiber, N. (2017, April 2). How Uber Uses Psychological Tricks to Push Its Drivers' Buttons. *New York Times*. Retrieved from https://www.nytimes.com/interactive/2017/04/02/technology/uber-drivers-psychological-tricks.html

⁴² Over the course of the study, Uber sought to promote a better image in response to growing negative publicity, ousting its founder CEO, Travis Kalanick. As part of this revamp, Uber also promoted a series of improvements for drivers, including the ability to opt-out of UberPool. See Etherington, D. (2017). Uber adds more driver-friendly features as it hits \$50M in tips. *TechCrunch*. Retrieved from: https://techcrunch.com/2017/08/22/uber-adds-more-driver-friendly-features-as-it-hits-50m-in-tips/?ncid=mobilenavtrend

different parties concurrently. Drivers had their car full of people who did not know each other and who each wanted to get on and of at a different location. They described Uber Pool as unwanted and undesirable work, and as stressful. Uber Pool driving conditions also posed new safety hazards to drivers (see more on this in Section 3.2).

3.1.6 No face to Uber

Finally, an important condition of Uber work was that is was mediated digitally, via an app. Therefore, when things went wrong or questions arose, drivers had a limited range of communication venues with Uber. They described the dissatisfaction of having to register complaints by selecting options from a limited-option, drop-down menu:

You can't really voice your opinion to a checkbox. (Ralph, driver)

When issues were complex, such as drivers enquiring about accuracy of their payments, drivers found that they received pre-set rote responses that did not resolve their problem:

Nina: If ... you're going back and forth a lot, they will close it off by saying, "We're not seeing eye to eye".

Vera: Or "We've resolved your issue", even though it's not resolved." (drivers)

Essentially, drivers described Uber as remote and impersonal. When problems arose, it was difficult to communicate with them in a satisfactory way.

However, Uber did have the resources and systems to engage personally with people when it suited them. For instance, one driver who had gone several weeks without turning on his app described getting an e-mail from Uber asking if he would like to arrange a one-on-one consultation.

I've had where, if I've gone away and I haven't taken a [Uber] trip in a couple of weeks I'll get a thing saying "Would you like to set up a one-one-one consultation to discuss any issues?' ... So, that's a one-on-one thing and I was just like, I was away. I was on vacation or I kind of get my back up and be like well, I can do this whenever I want, why are you giving me a hard time? (Patrick, driver)

At "Green Light Hubs" where Uber offered face-to-face service to drivers, help was limited to assisting drivers to navigate their apps. Drivers reported that the Uber staff at these Hubs were polite but unable to address any problems; they referred drivers to the complaint function on their app.

In contrast to drivers in our study who described Uber as remote, the passengers in our study described very swift and "seamless" communication with Uber. If they had a complaint, their fare was quickly refunded without questions:

Mine was seamless. Like I've only ever had two issues and they resolved it right away. In the app there's ... a section that you can contact them and

I just explained what happened and, like, I was refunded my money like right away. (Kate, passenger)

I was really surprised at how fast they [Uber] got back to me because ... it was New Year's Eve and it was at, like, 2 a.m... and they got back to me within ... two hours and just refunded my money. (Cindy, passenger)

3.2 Hazards of Uber Driving

The hazards of Uber driving can be broadly categorised in two ways. The first group of hazards, which are described in this section, relates to conditions that are unique to the conditions of "ride-hailing". These relate to issues such as ratings pressure, the pressure to have a high ride acceptance rate, and asymmetrical information between Uber and the driver, such as the driver not knowing the passenger's destination before they must decide whether to accept the ride. The second group of hazards (described in Section 3.3) are no less important than the first, but they are hazards that are common to drivers in general, such as harassment from passengers and health risks associated with long hours of sitting.

3.2.1 Ratings Pressure

A key feature of Uber, and indeed most gig economy app-mediated services, is the mutual ratings system. Drivers and passengers rate each other and each develop online ratings "reputations" that are visible to others wishing to engage with the service. At a superficial level, this ratings system seems to provide transparency and accountability. Indeed, Uber Community Guidelines⁴³ state: "This two-way [ratings] system holds everyone accountable for their behavior." Also, on its website Uber describes the rating system⁴⁴ as one of its safety measures (See Figure 6):

⁴³ Uber Community Guidelines (Canada) for Riders and Drivers. Downloaded April 27, 2017.

⁴⁴ https://www.uber.com/en-CA/ride/safety/ Accessed February 18, 2019

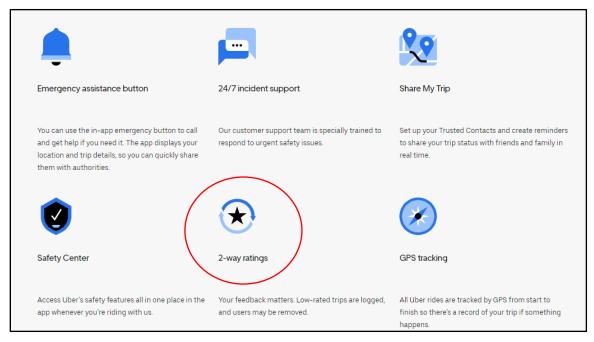


Figure 6: Screenshot from Uber website at https://www.uber.com/en-CA/ride/safety/

However, our study found two key problems with the ratings system: 1) the ratings system was not mutual, as the stakes were very different for drivers and passengers, and 2) the system pushed drivers to take safety risks.

Drivers lived and died by ratings. Their ratings report was front and centre on their app "dashboard" (Figure 7).



Figure 7: Screen shot of Rabih's Uber dashboard.

Unless drivers maintained a consistently high rating, they could be "kicked off" of the app. A challenge for drivers was that they were uncertain about the threshold for being removed. We were unable to locate any information about this rate for our region. Uber remained vague about this, stating only in its Community Guidelines that different rates exist for each city:

What leads to you losing access to your account? There is a minimum average rating in each city. This is because there are cultural differences in

the way people in different cities rate each other. We will alert you over time if your rating is approaching this limit, and you'll also get information about quality improvement courses that may help you improve. However, if your average rating still falls below the minimum after multiple notifications, you will lose access to your account. We may allow you to regain access to your account if you can provide proof that you completed one of these quality improvement courses.⁴⁵

This uncertainly about the required acceptance rate led drivers to feel anxious. They did not know if, one day, they would turn on their app and find it shut down and their livelihood lost.

Different stakes for drivers than for passengers

Drivers complained that they and passengers faced uneven pressure. That is, the drivers' understanding was that passengers did not get kicked off of the app for low ratings and that passenger ratings were re-set annually. In contrast, driver ratings were never reset and their ratings had a severe effect on their ability to get rides and to stay on the app. In this ratings context, drivers worried constantly about their rating levels:

I think it's kind of manipulative. Like, you're ... at the whim and mercy of Uber, right. I mean, I try not to pay attention to it because you can't really do much. But yeah, it's like a double standard. It's not really fair how, you know, the riders [ratings] don't ... really affect them at all, and for us, you know, ultimately, it's gonna affect our performance, how we're tracked and rated. I try not to pay attention to it too much, you know. (Larry, driver)

This driver described how low ratings mean that drivers, but not customers, are deactivated:

My friend, he has 4.2 rating, and his account is locked – deactivated. ... But on the other side – the rider – the riders' side, I saw 3.8, 3.9. (Ishval, driver)

In contrast, passengers in our focus groups were either unaware of their rating or unconcerned about it.

I actually forgot about it until we spoke about it [now in the focus group]. I didn't even know that you could check your rating or anything like that. (Leah, passenger)

Drivers indicated that, ultimately, it was their quest for income that drove their passenger pick-up approach, not the passenger rating.

⁴⁵ Uber Community Guidelines (2017). Retrieved from https://www.uber.com/en-ca/legal/community-guidelines/us-en/

Sometimes you get somebody with [a rating of] 3.91, and you will think, back of your head, this person is a problem. But then it's not busy, and you're like, "You know what, let me just accept it". [Then] this person's the nicest person you ever met. (Meeraj, driver)

Drivers pushed to take risks

A challenge of the ratings system was that it emboldened passengers to request that drivers engage in unsafe driving. In the focus groups, passengers described how they enjoyed the way they were able to hold drivers "accountable" by providing low or high ratings.

I definitely think it [ratings] makes people accountable for their actions and I think that's really important because you want to be able to see that your Uber driver is a good driver and also I guess it keeps you accountable for being a nice person... (Maria, Uber passenger)

Passengers described drivers asking them for favourable ratings, and enjoying the ability to withhold or provide those ratings dependent on whether the driver was "nice":

I think ... too the rating system encourages them to be nicer and Some of them will even mention it to me, like, "I'm going to give you a 5-star rating, it would be nice if you could do the same?" I don't mind. If, you know, they're nice and everything, I'll do it. (Kate, Uber passenger)

In this context, passengers felt empowered to make requests of drivers, including for unsafe driving. Drivers described passengers asking them to speed, to have more people in the car than seatbelts, to transport children without car seats, take illegal U-turns, and to follow last-minute off-route navigating instructions. This driver did not mind going a little over the speed limit, but passengers pushed for even more:

Speed up, right. So usually [in a speed zone of] only 60 [km/hr], I have to go over 80 [km/hr], my max. Some of them say, "Can you go over 80, too? I want to be there at 5", right? I try to say, "No buddy, so I have to respect the limit". (Alphonse, driver)

Drivers quickly learned that if they declined to cooperate with passenger special requests, their ratings would go down. In this example, Erica had been refusing to agree to all unsafe demands of her passengers but then she realised how these refusals adversely impacted her ratings:

People would want to bring their kids [But] you have to have a booster seat or ... a car seat or something. And I would tell them, "No ...I don't feel like I'm comfortable with you." "Oh, but no, no, no my kid will sit on my lap". That's like, if we get into an accident, I'm the one who is going to take the fall here. It's like, "I'm not going to take your navigation directions". And I think that's why ...my rating ... was like all over the place. ... Because I had a couple of passengers who would be like, "Oh yeah, turn

right here" and then it's like, "I don't want to. I can't just swing right, like, nowhere." (Erica, driver)

Drivers were constantly balancing their livelihood (ratings) with legal and safety risks. With the ratings pressure, some drivers simply agreed to passenger requests, such as not wearing seatbelts:

Some passengers when I pick them up, they either put the seatbelt on or some don't. I never require. Some say, "Oh no we don't. I'm sitting in the back. I don't really need that to put the seatbelts on". I'm kind of okay... ...I don't [force them to wear the seatbelt]. (Alphonse, driver)

Trying to please customers left drivers vulnerable to breaking laws. Drivers also worried that agreeing to some passenger requests would help maintain satisfactory rating levels but would involve a loss of support from Uber in the event of a problem:

I think that the riders don't know how it works for the drivers so they think when they're like, "Oh, just like over here" and you're, like, "Whoa!". I mean you know, what if something happens and then Uber's like we're not going to cover you because the directed route was nowhere near where you were. (James, driver)

A challenge with driver ratings is that drivers never really knew which passengers had rated them highly or lowly. This was an additional opaque aspect of the Uber system: drivers only saw their overall ratings number go up and down; they never saw ratings by ride. As well, passengers could provide their ratings for a ride a few minutes, several days or even later so there was no direct correspondence between the drivers' rating and who they had driven that day.

Another challenge was that, in some instances, passengers could be satisfied with a ride but still rate the passenger very low because they are trying to get a free ride from Uber, who gave refunds to passengers for unsatisfactory rides:

There are riders out there that are giving drivers a 1-star because they know that Uber will automatically reimburse them for that particular ride... now these scam artists, you know the people who just want to get a free ride, they've identified that this is what they can do ... (Tabitha, driver)

Passengers could also provide a rating for a ride that they had never taken (e.g. "Mom using the app on behalf of the daughter" Rabih), or for instance, even when a driver had cancelled the passenger's ride:

If you cancel, they [the passenger] can still rate. If you don't go with that trip they can still rate you. For example, if a driver needs to pick up their kid at school and they have time for one more ride, or so they think, because they have 45 minutes. But, because they don't know the destination of where the passenger wants to go until they get in car, they may accept [and] have person get in car [who needs a 60-minute ride] and then have to cancel [to get] the kid. (Robbie, driver)

As with Uber's non-disclosure of the threshold for being removed from the app, the drivers' inability to see their own ratings by passengers was an anxiety-inducing and controlling feature of Uber.

3.2.2 Ride acceptance pressure

Ride acceptance pressure was another feature of the Uber app that led drivers to take risks with their health and safety. On the same dashboard that showed the drivers' ratings number was their acceptance and cancellation rate (See Figure 7 on page 31). As with ratings levels, drivers could be "deactivated" if these ride acceptance rates were too low or cancellation rates were too high.

Drivers feared deactivation if they had low acceptance rates:

From what I heard ... the cancellation rate is the one that really matters. Like, if you accept it then cancel they could delete you. But they do threaten you, like if you have a low acceptance rate. ... Like they ... want to make you believe like you might get kicked off if you have a low acceptance rate. (Ahmed, driver)

One driver contacted Uber in an effort to gain an understanding of the consequences of acceptance and cancellation rates. He explained to other drivers in the focus group that low acceptance rates triggered the Uber algorithm to give drivers fewer passengers, meaning decreased earnings. For this driver, this risk of earnings loss meant that he could not "pick and choose" his rides. He had to accept all rides, however unsafe:

I was told recently by ... Uber that keeping my acceptance rate or "confirmation rate" high—is what they're calling it now—will allow for better trips. If u ignore a call u will get bumped to bottom of list. It's not about the closest driver anymore. Also u get rewarded with more trips if I take all trips. They say we can cancel and refuse trips But then our wait time for getting trips increases. It's very stressful. I had picked up a drug dealer last night and he took me to several spots to make his drops. I reported this to Uber. When I ignore low rated people it affects my earning potential These businesses survive on rider satisfaction and selling convenience. So as a driver we have to do our part and not pick and choose. (Email from Nina, driver)

Some drivers resisted this Uber pressure, despite the deactivation risk:

So, how do I manage the risk? And Uber doesn't like this but as a woman I feel it's my prerogative to cancel any drive that I feel is unsafe. However, on Uber's end, the way they look at that is a cancelled trip and it works against me. ... [But] I've got to be very careful of where I go to pick people up. Sometimes I am called to the middle of [high crime area] ... and I'm sorry I'm not going to put myself in that situation. So when I see the area if it feels unsafe to me I quietly keep driving and I cancel the trip. (Tabitha, driver)

In one driver focus group, the requirement to maintain a low cancellation rate was described by one driver as a "scare tactic" but by another as prompting her to accept rides she would not have otherwise accepted:.

James: Yeah It's like a scare tactic I get emails weekly saying, "Oh, you cancel a lot of rides". Well, that's too bad.

Erica: It affects your acceptance, yeah. (drivers)

The drivers described many scenarios that would prompt them to want to cancel a ride. Nervousness about dangerous passengers was a primary concern. For instance, a driver might cancel because he or she is nervous about the appearance of a passenger, or if the party appears to be a rowdy drunk group.

I keep the doors locked until I see who the people are. I've driven off on multiple occasions on people because they look too intoxicated or someone that just like is being too aggressive or you know is just like in an area that you feel uncomfortable with and then there's no repercussions. And you're just like, you know what, it's not worth it, cancel the ride. See you later. Someone else will pick them up. (James, driver)

If I'm taken into a place where I know there's a lot of drugs or a rehab places I will keep driving and politely decline the call. If I'm taken down a dark alley, which happens many times on a Saturday night, the app takes us down laneways, and I feel unsafe I'm not picking anybody up in a laneway. (Tabitha, driver)

Not accepting rides also led to "time out" penalties from the app. Drivers described finding their app frozen for periods of time, such as five to 15 minutes, during which they could only sit idle, unsure of the duration of the time out, and losing income during that time. The time out penalties were a key concern for drivers who did not want to engage with Uber Pool rides. Drivers disliked these rides because they required them to keep up with constantly changing routes as the app "pinged" and required the driver to divert to pick up yet another passenger.

Just in general, like the uncertainty about, like, who's coming in your car.... I always find I'm a little bit nervous when you're doing the Pool because you never know how the patrons might interact with each other. Like, if they're not gonna get along, you know. I drive a smaller car too, so there isn't as much space in the back so there's always that risk. Just driving, in general, with other obstructions, like, on the road and stuff. You know, you really gotta focus, right. (Larry, driver)

Drivers saw the Uber Pool rides as unsafe, yet many felt compelled to accept them due to the acceptance rate pressure:

The next passengers are added on to the Pool automatically without even signaling the driver. And all of a sudden your directions change and you're going, 'What?' ... For a new driver this is so confusing. ... [S]o now you've got your first passenger, they're in a hurry to get somewhereNow you're going out of your way in rush hour to get the next person and lo and behold

the app changes because now a third rider is joining you which happens to have a gym bag from the cricket club. And the first lady is going to the hospital because she needs an ultrasound and she [hasn't] drank water for the last seven hours and really has to get there. ... The riders get agitated because they're all in a hurry. ...It's very stressful to get UberPool, so many drivers what they're doing is they're not accepting UberPool which now means that operations is getting a negative report on you ... you have a low acceptance rate and it's working against us. (Tabitha, driver)

3.2.3 Blind destinations

Another one-sided aspect of the Uber app was the passenger destination. Just as Uber did not share passenger fares or individual passenger ratings with drivers despite having this information, they also did not share the destination of the passenger. Ride hail officials described this to us as a feature designed to protect passengers by avoiding driver's possible "destination discrimination" which might lead drivers to refuse very brief rides.

So, I think [blind destinations are], in many ways, good, because you're not ... cherry picking There are lots of stories And this has happened to me many times ... where cabs don't want to take me places because it's not far enough or it's not a destination they want to go. You know, the one thing about Uber, like, until the person is in your vehicle, they don't really know where you're going, which is good. [B]ecause we don't want you to be cherry picking. (Annette, rideshare manager)

A consequence of blind destinations was that, when accepting a ride, drivers did not know if it was a ten-minute or a one-hour drive, and they did not know what kind of neighbourhood the ride would take them to. These blinded driving conditions were frightening for some drivers:

[T]hat night I picked up three adult men very drunk. I already started feeling uncomfortable... So that ride took me to Brampton to the area where there's farms, where there's no more electricity, that like no more poles... So I was supposed to drop each of the gentlemen to each of their houses and it was late. (Carolina, driver)

3.2.4 Passenger identity not clear

A purported safety feature of Uber compared with regular taxis is that the driver and Uber know the passenger's identity. This is because passengers must pay Uber using a credit card, and the credit card is normally a link to the passenger's identity. Theoretically, the passenger can be tracked down if anything adverse occurs during the ride.

Yet another information asymmetry occurred between Uber and the driver in relation to the passenger identity. Although Uber had this information, the drivers did not receive the passenger's name until they "accepted" the ride.

A second identity-related challenge is that there were loopholes with this passenger identity system. Drivers described passengers with vague identities such as "Sexy Girl", who were using Uber services via a one-time use Visa or MasterCard that did not require identity authentication.

Anyone can really sign up for Uber and that kind of worries me because ... you can go get a prepaid [card]..... I mean I've gotten people's names, like ... Sexy Girl and that's obviously not her name. So from that point, it kind of makes me nervous, like, who I'm picking up. (Robbie, driver)

A third identity-related issue is that the identity of passengers is unknown when the "passenger" is actually ordering an Uber ride for other people. In the following example, a driver felt unsafe when two men got into his car for a ride that was supposed to be for "Natalie":

I have some times, say for example, a "Natalie" is getting in my car. I pull up to the Canadian Tire and then there are two guys with baggy pants coming into my car, opening my door. And I'm just kind of questioning like, 'this is a Natalie right here?' {laughter}? So, I don't know I guess when it comes to safety and like. (TJ, driver)

The uneven driver and passenger standards in relation to safety and criminal background checks were also a problem for some drivers. They felt that, in order to register to get rides from Uber, passengers should also face a criminal check:

I have a big question about it when Uber says — well, when rider came to me and said, 'Oh well, yeah, I know you have a clear criminal background, and so all information of drivers, Uber have it and everything.' I said, 'Okay, so that's fine. If YOU are criminal or if YOU have some record, right, how do I save myself?' ... Yeah, I asked the question to passenger, right. I have a clean criminal background. I'm sorry, I'm not blaming/accusing to anyone, but I think, if YOU are criminal, then, you know, I'm not safe in this car, and he or she said, 'Yeah, well I know, yeah, we do —' because Uber cannot check a criminal record. It's just name and credit card and that's all. They concerned about the money, right? (Ibrahim, driver)

3.2.5 Distracted driving

The constant "ping" of the Uber app while driving was a particular hazard facing Uber drivers. As described earlier, drivers were required to accept a certain rate of rides. In practice, this meant was that the app would "ping" when a ride was available and drivers had a brief time (approximately 20 seconds or one minute) to respond. In effect, the drivers were required to interact with the app regardless of the driving situation, which could be adverse conditions such as heavy rain, icy roads, or distracting passengers. Drivers explained how this need for a quick response time to the "ping" was, in itself, distracting and unsafe:

Ahmed: I don't know if I mentioned it but like the app itself is inherently distracting....

James: Yeah, yeah.... Flashing at you and....

Ahmed: It pings at you like while you're driving and dropping off a

customer.

Ralph: ... It's while you're moving that you have to ... take it – otherwise it will go to someone else.

James: You have 20 seconds....

Erica: Or, it will mess with your rating. Exactly.

Ralph: Yeah and then you get punished for not taking it immediately. Erica: Yeah because you have to, you're given one minute to accept it.

(drivers)

3.2.6 No camera protection

Unlike taxis in the city, Uber drivers were not required to have a camera mounted in their car for personal safety. Indeed, an Uber spokesperson actively discouraged car cameras, citing passenger privacy needs⁴⁶. Despite this, several drivers in our study described paying as much as \$100 to mount cameras in their cars as a measure of self-protection.

I have a dash-cam that points forward and it points inward.... It just loops 12 hours. If nothing happens, it just keeps looping itself over.... If something is really going on, then you would go to the office but they're not really going to do anything for you or if it's really serious then you'd go to the police. [I]f there's a, like I get a lot of people that are like, oh yeah, they try and say that they never took that ride. And you're like, no I got you on camera bud and I send it in and seriously I had \$100 ride out to Hamilton. The guy tried to say that he never took the ride. (James, driver)

A concern for drivers was that, if a situation arose, it was their word against that of the passenger, and Uber may favour the passenger. For instance, when a passenger lied about an accident, the camera could help to clarify the situation:

I have the dash-cams in my car, front and back I don't want anyone lying about an accident. If there's an accident that's not my fault, the camera will show that—.... I've heard stories of people accusing Uber drivers of stuff [S]o I thought ... if that's the case, like you can replay my whole entire trip. You can hear the audio. I'm driving. I never get out of the car. I figured I'm safe that way too. (Patrick, driver)

A taxi industry expert echoed the notion that cameras are a safety measure for drivers. Without mandatory cameras, Uber drivers had less protection than taxi drivers:

⁴⁶ This issue came to public attention after an Uber driver released footage of NHL hockey players complaining about their coach during an Uber ride. A general manager for Uber Canada publicly stated that video recording rides is a violation of Uber's terms of service. See https://twitter.com/rkhazzam/status/1059646890201964544?lang=en

They don't have cameras, and one of the things ... not only does the camera protect the customer, but it also protects the driver, alright, from – from accusations of assault and physical – physical contact and all that...I mean, you get an accusation, and somebody's in a wheelchair or with a mental disability, and claims that you assaulted them It covers you, and ... the Uber drivers don't have that. (Paul, key informant)

3.3 Hazards associated with driving in general

3.3.1 Harassment

In addition to the particular safety and health hazards posed by the Uber app system (including information asymmetries and opaqueness), drivers experienced hazards that were similar to those described by taxi drivers in our study. Harassment of drivers by passengers was a key concern. Women drivers, in particular, described unwanted sexual attention:

He started asking me, he was very interested in, you know, like, "Oh, are you dating somebody?" You know it was like I'm going, "No and none of your business. I'm not interested. You're like younger than my son is". And then he kept on and I was trying to be calm and pleasant and diplomatic, you know like a mother He said, "Oh that's okay. I have your phone number" and I said, "You have an Uber number. You don't have my phone number". (Megan, driver)

In the next driver harassment situation, police became involved:

You just have to have 911 ready. I've had a guy open my door. Like, so I was driving... He was a big guy {laughs}, his friend. They seemed a bit off, but he just got – all of a sudden, somebody's massaging my neck, like, and like, "Whoa, whoa, whoa, I can't drive! What are you doing? You can't touch me!." There was a bunch of cops at the end because something had happened, and I said, 'You guys need to get out'. We are arguing back and forth. They decided to videotape me. So, they were videotaping me, and I'm saying, "Get out of the car. I don't need you in my private property anymore. You have disrespected me; get out of the car; stop sexually harassing me now,".... And I said, "This is enough"' Two of the guys wouldn't get out, so I was like, "You need to get out of the car!" (Nina, driver)

Male drivers also experienced harassment. For instance, this driver had an angry passenger cursing at him throughout the ride:

I had one lady who I was picking up at the ... hotel... And I was there at the corner ... And I called and I said, "I'm here". She said 'no you're not because I'm downstairs'. I'm going, "I'm here!" And ... then the whole way she started swearing at me. ... You know, "You're a piece of this—" (Brian, driver)

Another male driver had unwanted passenger contact, including passengers tapping and touching him while driving:

I don't know it's almost like Uber is kind of, doesn't really put any rules for the riders so that kind of makes me, like that kind of made me nervous a few times. People are like tapping me and touching me like on my shoulder and that from a safety perspective that kind of so there's no rules for the riders. (Patrick, driver)

Yet another participant described the adverse conditions of dealing with dangerous passengers, while also managing the pressures of the Uber rating system:

All I can say is that it is mind twisting to be an Uberx driver. In a long term a person can easily become a mentally ill. Dealing with drug addicts, drug dealers transporting it, drunk riders who does not know what they are talking, spoiled night club females, prostitutes, spoiled rich ... students etc. Random people..... Rating system hurts you a lot because it causes stress. I do not have time for 50 dollars an hour. I have to work 7 days due to very low pay to cover my expenses and to pay debt I am in. (Samuel, driver)

Uber drivers were alone when they faced these dangers. Unless police are nearby and can respond quickly, Uber drivers must devise their own strategies for managing difficult situations. In this next harassment example, the Uber driver used the only "weapon" she had available to manage her riders—the empty threat of a low passenger rating:

He wanted me to go to the back alley at a certain time to meet him and kiss him They were probably 18 or 19. I said to the one that was less drunk and the one that had actually ordered the car, I said, "If you don't control this guy I'm going to give you a 1 and if you get a 1 your rating will go down so low that nobody is going to pick you up". (Carolina, driver)

Another driver strategy was minimising contact and conversation with passengers:

I don't care about people who are on weed, but it's inebriated people who are the riskiest. So... if they're inebriated ... I make them get in the backseat of the car, not in the passenger seat. So that's one way to mitigate the risk. I don't talk to them. I just ask them where they have to go. (Zaq, driver)

3.3.2 Health

The impact on personal health of driving was another area where Uber and taxi drivers' experiences overlapped. Drivers reported weight gain, back pain, poor diet and restricted bladder breaks.

Diet is a BIG deal. Like, depending on when you're driving and where you're driving, I don't feel like there's enough healthy food options at the price points we want them at [right]. We're not gonna go spend 20/30 bucks on a healthy meal and something that we can eat quickly. (Nina, driver)

The long hours of sitting were difficult for drivers:

You can loose track of time. Like, five hours can go by, and oh, I haven't gotten out. (Patrick, driver)

After 13 or 14 hours of driving continuously, I feel like I'm walking on the moon. (Umair, driver)

Unlike taxi drivers, Uber drivers did not have "taxi stands" and therefore had nowhere to park downtown. Stopping for even a few minutes to stretch was difficult for Uber drivers.

Drivers knew that continuous driving for a long duration without breaks adversely affected their health, but did it nonetheless. One driver emphasized how chasing earnings, including surge pricing, kept her driving for long hours and, by the end, feeling dizzy. She suggested that, for safety reasons, driving time limits should be placed on drivers:

Once you get out of your car after ten hours, you feel like you're disoriented. You feel like your body is stuck. You feel dizzy. It's the surge—the surge makes you sit there. I'm like, "Truckers, it's 13 hours, max," and I said, "You should automatically lock people out after 6 hours, force them to take a 15 minute beak or a half an hour break, just walk, get out and do some jumping jacks [yeah] do something." (Nina, driver)

While drivers knew that job fatigue led to unsafe driving, they also noted that their need for income superseded a focus on their health:

You know let's say and the risk doesn't necessarily have to do with crime, it has to do with fatigue and safety. So let's say you're driving and it's the end of the night. You're feeling sick, kind of tired but you still want to do a couple more trips because you've got a mortgage to pay at the end of the month. (Tabitha, driver)

3.4 The Business Situation

As mentioned in Section 1, it was very easy for drivers to sign up to drive with Uber. However, Uber assignment of drivers as self-employed led to business complications for drivers who did not see themselves as small business owners or did not understand the legal and tax responsibilities of small business ownership. Drivers in our study were focused simply on earning some money; they had not devised business plans or strategies related to small businesses. Business issues such as driving insurance and HST taxes were overlooked or ignored by almost every driver in our focus groups.

3.4.1 Insurance

Uber promoted driving as an easy option. Their promotional materials downplayed the risks and obligations associated with driving. Drivers did not need to take out commercial insurance because, when they were driving with Uber, they were covered by Uber's fleet insurance policy. This policy was phased: drivers were covered by third party liability of \$1 million when they were logged on to their app, and by \$2 million when they had accepted a ride and were en-route to the passenger and when they had a passenger in the vehicle (See Figure 8). In each instance, they had \$1000 deductible, which was a very high deductible for drivers, who usually had low incomes. Drivers had experience of hundreds of dollars of damage occurring, for instance, car seats ripped by sharp items on passenger clothing and this high deductible provided no financial relief.

	Phase Description	Third Party Liability	Standard Accident Benefits	Collision & Comprehensive	
Phase 0	Regular personal use of the vehicle and Uber driver is offline		Personal Policy Coverage		
Phase 1	Uber driver is logged into the Uber app and available to accept a ride request but has not yet accepted one	\$1 million			
Phase 2	Uber driver has accepted a ride request and is en route to collect the passenger(s)		✓	\$1,000 deductible ¹	
Phase 3	Uber driver is transporting the passenger(s) to their destination	\$2 million			

Figure 8: Uber insurance coverage under the Intact policy in Ontario.⁴⁷

By design, Uber fleet insurance relies on a driver's personal insurance. That is, to have fleet insurance coverage, all drivers were required to have personal car insurance and to have informed their insurer that they were driving commercially for Uber. However, we found that almost every driver in our study had failed to

⁴⁷ See Intact Canada. (2019). 'Uber Ridesharing'. Retrieved from https://www.intact.ca/on/en/personal-insurance/vehicle/car/uber-ride-sharing.html

disclose to their personal insurer that they were driving for Uber. Some failed to disclose because they feared this could lead to loss of access to any insurance:

I'm not telling my insurance company. I heard that somebody told their insurance. They cancelled it and it and they flagged it to not let other insurance brokers take it. (Carolina, driver)

Other drivers did not disclose because they feared nullification of their insurance claim:

There's a help section in the app and you tell them, "I've been in a collision". And I reported that right away.... because my app was on. ... They wanted to discuss this with my insurance company and I had to beg and plead for them not to because in the event that my insurance company found out maybe my whole insurance claim would be nullified. (Tabitha, driver)

Still other drivers explained non-disclosure by citing their fear of the possible increased personal insurance costs if they disclosed, and by blindly trying "not to worry about it":

Patrick: I guess that's my biggest thing, is like I, until it happens you just don't know how the insurance [rates will increase], like what, like until it happens I guess that's the one big fear.

Brian: I don't get why you worry about it though. It's not happening yet. You know we've got today. We could leave here and get into a car crash. That's for tomorrow. (drivers)

One driver, who was involved in a minor collision on his personal driving time but had been driving Uber without having reported it to his personal car insurance provider, described how stressed his experience was as he worried about whether Intact would contact his personal car insurance provider.

[The insurance company] didn't have to know [about the collision] because they were not involved, but then, I was thinking, they would have to know because, after all, even though it was a minor collision, it's not the same car anymore, and they have to know it's devalued, and I was a little bit in panic because – what if they know? They're gonna say, 'What are you doing?', they're gonna drop me. I was afraid Intact was going to call them. I mean, Intact asked me for my personal insurance information – 'Here it is'. 'But are you going to call them? Why are you going to call them? They don't have anything to do with this' ... One day I received a call from [my insurance company] – shit. But they called me just to talk about the renewal, and that was that. I was a little bit afraid that I would get in trouble because of this one month that I was driving Uber without telling them, even though I was covered [under] Uber. (Paco, driver)

Our research team's immediate concern was that this driver failure to disclose to their personal insurers that they were driving for Uber placed both drivers and passengers in a perilous situation, as it could render their insurance coverage invalid. However, our interviews with insurers provided a more tempered scenario. In practice, the insurers did not seem to be concerned about driver's disclosure to personal insurers.

We also encourage Uber drivers to advise their personal insurance, but from a risk perspective, there's no increased risk for that personalized carrier, and we're picking up coverage every single time the app is turned on, so personally, I think it's good to advise the carrier, but I don't think there's any increased risk for that insurer, whether that driver tells them or not. (Naheed, key informant)

However, we did hear from one driver that personal insurers were sensitive to non-disclosure in the case of insurance payouts. This driver's colleague did not receive an insurance payout because the insurers suspected that, due to high mileage, he was using his car for purposes other than previously disclosed:

He tell them, "I had an accident at that time. I was going to my home". When they [personal auto insurer] checked his mileage they said, "Your mileage is up too high so we don't cover you". And he paid all – I think \$6000 or \$7000 that he paid from his pocket to all damages. (Ishval, driver, describing fellow driver experience)

A further insurance complexity occurs in relation to the city's by-laws. These require the driver to have disclosed their Uber driving to the personal insurer in order for their PTC license to be valid. If our sample is at all representative of the broader population, then the city has many invalid PTC drivers on the road.

This insurance expert described how, at the end of the day, the Uber fleet insurance provides only limited protection to drivers and is structured so that the risks fall on drivers themselves:

What bothered me about is, you've got a really sophisticated company, and they've made everybody feel like they're winning the lottery because they're working for Uber..."What a great company, we do so much for you." But they're shifting liability down to the driver, and young people are just going to say "I agree to the terms of service" without reading it, and later find they're a quadriplegic and they can't sue Uber because they are saying...The driver's responsible for that", but they would always tell the world that they had insurance in place." (Shannon, key informant)

3.4.2 Taxes

An additional business issue that confronted Uber drivers was their tax liability. All drivers in our focus groups appeared to be in tax default.

Drivers were not aware that their earnings fell into the "taxi driver" category that requires payment of taxes on every dollar, starting with the first dollar earned, rather than on every dollar earned after the \$30,000 earning point as is the case for most categories of self-employed individuals.

Drivers were unaware that they were required to file federal sales taxes (HST) and to declare their earnings to the Canada Revenue Agency for taxation purposes.

Further, as mentioned in Section 3.2, the fare display that drivers receive from Uber showed the driver's gross earnings, leading drivers to believe that they were earning more than their actual income. Figure 9 below provides an illustration of the breakdown of a driver's gross and net earnings on a \$10 fare, in relation to sales tax. The driver is paid \$10.00 by Uber and Uber charges a \$2.00 fee from the total gross pay. (Uber may actually earn more than \$2 from the ride, as the driver does not directly see the total fare actually paid to Uber by the passenger.) On a \$10 ride, Uber remits their portion of the HST, which would be \$0.26. The driver would be required to remit \$1.04 in HST to the Canada Revenue Agency. The challenge is that the earnings are shown to drivers on a gross total earnings basis; the driver might think they had earned \$10.00 on this fare, but after taxes and Uber's fee are taken into account, the driver would have earned only \$6.96, and out of that must pay business expenses such as gas, vehicle maintenance, and other related costs. The driver has to open every individual ride to see their pay breakdown. The essential problem was that driver earnings as reported in the app may be misleading, as these implied inflated earnings.

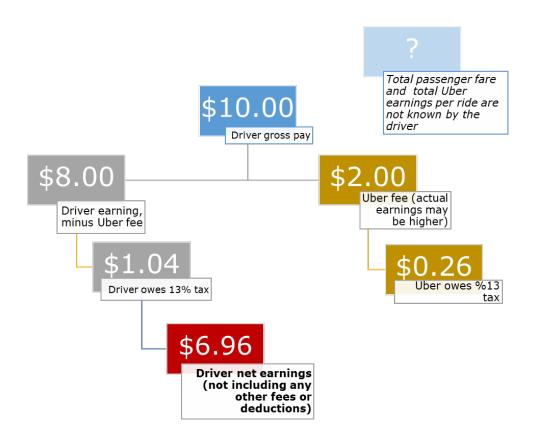


Figure 9: Model of an Uber driver fare with deductions and fees, including HST, on a 'per ride' basis

3.5 The Social Protection Situation

A key issue in the broader "gig" economy and also in relation to Uber is workers' access to employment standards and workplace health and safety protections and, related to this, access to income and healthcare supports when ill or injured. The introductory section of this report lays out some basic provisions around social protections for self-employed workers. In this section, we include data on social protections, mostly generated from our interviews with key informants.

In interviews with key informants, we enquired about the employment status of Uber drivers, as our findings had pointed to the many ways that Uber controls the conduct of their drivers and therefore behaves as an employer. It was unclear if regulators had an appetite to push for a classification of Uber drivers as employees, or even to consider whether the standard tests for determining self-employment remain relevant in today's world of work. According to a policy-maker, making regulatory changes to that could threaten businesses such as Uber posed a political risk, because these businesses are supported by customers:

The political risk on that is are you supporting a growing part of the economy that is highly supported by consumers? Or are you seen as taking that choice away? ... I think that the other risk that you have to balance that with is what are you – how proactive are you being if you know that there might be a risk of harm? If we were looking at having some sort of special regulatory regime for any of these, it would be, like, what would be the impetus for that? (Nora, key informant)

When Uber drivers became injured or ill and unable to work, they had limited access to income or healthcare supports. As people considered to be self-employed, they had the right to opt-in to the Workplace Safety and Insurance Board (WSIB) system. However, no drivers in our sample had done this. A challenge was that their earnings were very low, and they could not afford the insurance premiums. As well, drivers might have had jobs with benefits at the same time that they were driving for Uber. In the event of illness or injury, these drivers might have turned to their other jobs for support.

According to some drivers in our focus groups, Uber could have provided WSIB coverage to drivers even while they were classified as self-employed. They cited food-delivery businesses who provided WSIB coverage to their self-employed workers:

Erica: Other companies like DoorDash and Foodora, they are covered under WSIB. But Uber isn't apparently. ... Even with Foodora you're considered self-employed but they have coverage under WSIB. ... So, [with Foodora] if any of us get injured they'll at least give you a little bit of pay for a certain amount of time. I think like three week's pay.

Ralph: Yeah. And they'll make sure that you can at least kind of stay on your feet while if you got injured on the job. (drivers)

Some key informants suggested that Uber drivers could be considered as dependent contractors, a category under the Ontario Labour Relations Act regarding

who has the rights to collectively bargain. This refers to groups of workers who are not entirely autonomous as independent operators, but neither are they 'directly employed' by an employer; they are an in-between category. To date, no group of workers is considered a dependent contractor by default; rather, this has been decided on a case law basis.

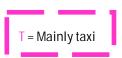
Pockets of taxi drivers in Ontario who have unionized have done so by first being ruled as dependent contractors. According to a legal expert (Andrew, key informant), to be legally considered as a dependent contractor, a taxi driver must prove they depend on a particular source for income for 80 percent or more of their rides. Key informants estimated that approximately 80% of taxi drivers in Toronto would be considered dependent contractors by these measures (key informant interviews with Angela, Nora, and Eric).

4 Risk Grid

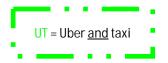
A key objective of this study was to develop a "risk grid" that summarises the kinds of Uber-related work and health and safety risks that exist for different stakeholders. The purpose of the risk grid is to provide a starting point for researchers and policy makers to consider the type and nature of risks facing ridehail drivers. The factors identified in the grid provide information about factors that might be the focus of subsequent larger-scale or quantitative studies. They also provide areas of possible focus for policy makers.

The following grid is based on the accounts of participants in this study. It details the types of risks described, the nature of the risks, and the ways that the risks were mitigated. The risk grid compares Uber and taxi risks, with the goal of distinguishing risks that are particular to ride-hailing, risks particular to taxis, and risks that overlap. The risk grid is organised in three parts: risks to drivers (such as assault, long work hours), risks to drivers and society (such as a lack of social security protections for drivers categorised as self-employed), and risks related to public safety (such as distracted or unsafe drivers).

Table 3: Risk Grid







Risks to Whom?		The Risks	Nature of the risk	How is the risk mitigated? (if applicable)
	T	Poor health	Taxi – Cumulative effects of being sedentary, not taking breaks (back, neck, leg pain; high blood pressure; heart conditions; diabetes; restricted liquids and bladder retention)	Uber – drivers mainly part-time and often do not continue long-term (high workforce turnover); however, drivers may develop conditions over longer term
	Т	Occupational homicide	Taxi – High rates of murder while on-the-job	Uber – tracking, GPS Taxi – mandatory cameras, some GPS tracking
	T	Robbery	Taxi – robbery by passengers	Uber – cashless transactions
	U	Feel unable to refuse unsafe destinations and passengers	Uber – drivers are limited as to number of rides they can decline or cancel; pressure to accept risky rides	Taxi – in practice taxi drivers are able to refuse rides (however, the city bylaw prohibits this)
	U	Ratings – Iow ratings could lead to loss of livelihood	Uber – Removal from app, deactivation	N/A
Drivers	UT	Assault	All – sexual harassment and assault by passenger(s); violence between passengers that may involve driver	Uber – tracking mitigates but does not eliminate assaults
				Taxi – mandatory cameras mitigate but do not eliminate assaults
	UT	Lack of support and representation	All – drivers have little support when things go wrong	Uber – drivers report to the app or to police
				Taxi – drivers report to the police, but often not worth the effort (lost income)
			All – fatigue, risk of accidents	All – limits on driving hours in place by Uber
	UT	Pressure to drive long hours	Uber drivers – pressure to respond to earnings incentives (surge pricing, other bonuses)	and under bylaws, though limits are at odds with extant pressures
			Taxi drivers – must repay fixed 12 hour 'shift' rents	

Risks to Whom?		The Risks	Nature of the risk	How is the risk mitigated? (only if applicable)
Drivers and	U	Lack of knowledge about tax payment obligations	All – drivers owe HST <u>and</u> owe income taxes from \$1 (not >\$30,000) according to Canada Revenue Agency regulations, but most Uber drivers unaware of tax obligations	N/A
Society	UT	Lack of social security	All – exempt by default from workers' compensation, occupational health rights, unemployment insurance, federal pension contributions, employment standards, collective	All – drivers may opt-in to workers' compensation individually but none do All – companies may opt-in to group/fleet
			bargaining rights	compensation policies but Uber and taxi industry do not
Drivers	U	App is distracting	Uber – Driver inexperience; responding to app in moving vehicle ('pings'); managing multiple	N/A
and			riders and automated routing ('Uber Pool')	Previously, the city required drivers to undergo city-operated taxi training in order for new drivers to be licensed
Public	U	Non-disclosure to	Uber – drivers frequently fail to disclose to	N/A
Safety		personal car insurance provider	personal car insurance provider about commercial use of vehicle	
	U	Ratings – created pressures to take risks to please customers	Uber – accepting passenger requests, ex.: accepting more passengers than seatbelts; speeding	N/A

		Mitigating features (existing and previously)
	Feature	About
U	App – 'share my ride'	Drivers and passengers can share their ride with a friend/family
U	App – call 911 from app	Drivers can connect to 911 quickly through the app (without dialling)
U	Peer profiles – tracking, ratings	Customers and drivers rate each other after each ride out of 5 stars and may leave reviews of one another
U	Cashless transactions	Uber – Very few incidents of robberies against drivers
Т	Mandatory cameras	Taxi – Deters violence against drivers; while still mandatory, no longer inspected
Т	Emergency button and lights	Taxi – reported not to be used
Т	Driver training (previously)	Taxi – until 2016, the city required drivers to undergo city-operated taxi training in order for new drivers to be licensed
UT	Vehicle safety checks (existing and previously)	All – drivers must obtain yearly vehicle safety certificates from approved garages
		Taxi (previously) – taxi vehicles underwent stringent bi-annual vehicle safety checks at a city operated garage
UT	Tracking – GPS tracking	Customer-driver rides and routes are tracked in real-time by GPS
UT	Insurance	Uber – commercial fleet insurance applies when logged in to app; to be valid driver must disclose ride-hail/commercial use to personal auto insurance provider
		Taxi – commercial fleet insurance insures the vehicle at all times

5 Policy Recommendations

The ride-hail policy landscape is complex and fast changing. Over the course of our study, the rules changed regularly. Uber made many changes to driver rules and conditions, including their well-publicized "180 days of Change" initiative that began in late 2017. Across Canada, municipalities and governments also made changes to their vehicle-for-hire laws and by-laws to adapt to the reality of ride-hail in their jurisdictions⁴⁸.

The recommendations in this section are based on the sum of our research: the interviews, focus groups and document analysis and our two half-day knowledge translation and exchange workshops conducted in Toronto in November 2017, at which our research findings, including our "risk grid" (Section 3), were shared with drivers and key stakeholders.

A fundamental question is, can customers and workers benefit from new technologies such as Uber and Lyft without undermining workers' wellbeing and labour standards? A question for regulators is how to ensure users can benefit from rideshare platforms while drivers benefit from fair and appropriate work and health standards. This question will be addressed differently by country, depending on their employment standards and social security arrangements. For instance, some countries, such as Sweden and Denmark, have comprehensive systems that provide this kind of support to all citizens regardless of their employment status. In contrast, Canadian workers who are self-employed miss out on employment standards (e.g. minimum wage, overtime), coverage by health and safety regulations, and workers' compensation coverage⁴⁹. In these policy recommendations, we limit our focus to changes that might be achieved within the current Canadian context.

Our study provides the following recommendations for labour, licensing authorities, and provincial-level authorities in relation to both licensing and employment status.

5.1 Recommendations for labour

We recommend increased collective representation of ride-hail drivers.

Most of the ride-hail risks facing drivers and customers are related to the way the work was organised by Uber, and the limitations of our laws and regulations for workers considered to be self-employed. There is room for labour unions to play a role in helping workers to have a forum for collective identity and support.

⁴⁸ Sribaskaran, T. and E. MacEachen (2018). International Rideshare Policy Evolution: A Media Analysis. Waterloo: University of Waterloo.

⁴⁹ Self-employed workers in some provinces, such as Ontario, can register and pay to "opt in" to workers' compensation coverage but we did not come across any workers who were aware of or made this choice.

o It is worth noting that 300 Toronto Uber drivers joined the United Food and Commercial Workers, Canada (UFCW) Union in June 2019 and UFCW is now actively recruiting drivers from across Canada⁵⁰. As well, in May 2019, bicycle couriers for Foodora declared their intention to join the Canada Post workers union⁵¹. Another example of driver organisation is Uber drivers in several US cities organising a National Day of Action on May 8, 2019 in response to Uber lowering driver wages ahead of their IPO.

5.2 Recommendations for ride-hail licensing

The risks of Uber driving, both to drivers and customers, are outlined in the Risk Grid (Section 4). The risks include app-related interruptions leading to distracted drivers, and risks taken by drivers as they navigate the pressures of the Uber rules including ratings and acceptance and cancellation rates. Many of these risks could be mediated by improved ride-hail licensing (e.g. Private Transportation Company (PTC)) conditions:

- Licensers could require that ride-share companies provide drivers with **full** access to information about their rides.
 - At the time of our study, Uber collected the following information but did not share it with drivers: customer's destination (shared only after drivers accepted the ride), customer's quoted fare, and customer's rating of the driver. If drivers are truly self-employed workers, they should have full and equal access to this information.
- Ride-hail companies could be required to remove required "acceptance rates" in order to reduce hazards of distracted driving.
 - We learned that ride dispatching occurred during active drive and drivers had limited time (e.g. 30 seconds) to accept or decline the next ride. The "acceptance rates" led to pressure on the drivers to respond, even while driving in difficult weather or road conditions.
- Ride-share companies could be required to prominently communicate driver tax obligations.

⁵⁰ United Food and Commercial Workers Canada (2019). "Welcome To Uber Drivers United." Retrieved July 11, 2019, from:

http://www.ufcw.ca/index.php?option=com_mcontent&view=indexlist&layout=blog&search word=uberd&searchphrase=exact&Itemid=2424&lang=en; CBC (2019). 300 GTA Uber Black drivers unionize as city mulls regulatory overhaul, from:

https://www.cbc.ca/news/canada/toronto/uber-drivers-union-ufcw-toronto-1.5190766

⁵¹ Gaviola, A. (2019). Foodora Couriers Want to Be Among First Gig Economy Workers to Unionize in Canada. Vice. https://www.vice.com/en_ca/article/gy4qew/foodora-couriers-want-to-be-among-first-gig-economy-workers-to-unionize-in-canada

- o This would help drivers to understand their legal responsibilities and also to be fully aware of their actual earnings, including that their payments from Uber are pre-tax earnings (a 13% HST deduction must be applied).
- Ride-hail companies could be required to **provide fleet insurance coverage** with a low deductible for claims, such as \$300-\$500.
 - o Fleet insurance for Uber drivers in the city studied had a very high deductible of \$1000. However, drivers regularly face car vandalism such as ripped car seats, which cost hundreds of dollars. As low-income earners, they need insurance to cover these costs.
- Car cameras could be a required feature in the car.
 - As with jurisdictions such as Toronto, where cameras are required in all taxis as a safety measure for drivers, cameras could protect the driver from unfair passenger allegations and record dangerous passengers.

5.3 Recommendations for provincial regulation of ride-hail licensing

At present, there is no provincial oversight of Private Transportation Company (PTC) licensing. A key recommendation of this study is that responsibility for licensing for ride-hail drivers be moved from municipal to provincial level.

- "Private ground transportation" companies no longer solely (or mainly) include local municipal taxi firms. Ride-hail transportation is increasingly dominated by international, multi-billion dollar businesses such as Uber and Lyft. Provincial authorities, rather than municipal, are best placed to regulate and enforce the compliance of internationally competitive companies such as Uber.
- Provincial-level licensing would create seamless common driving and safety standards across cities and towns, including driver training⁵² and vehicle safety requirements.

Our analysis of ride-hail licensing trends in 33 high-income economies⁵³ indicated that jurisdictions where taxi and ride-hail licensing was managed at a provincial (e.g. Quebec, B.C.) or national level (e.g. Denmark, Norway) may be better able to secure protections for Uber drivers than jurisdictions (e.g. Ontario) where licensing

⁵² A fatal accident involving a Toronto Uber driver was linked to lack of driver training, leading the City of Toronto to revisit their decision to scrap Uber and taxi driver training: https://www.thestar.com/news/city_hall/2018/12/14/toronto-will-look-at-mandatory-training-for-uber-taxi-drivers.html

⁵³ Sribaskaran, T. and E. MacEachen (2018). International Rideshare Policy Evolution: A Media Analysis. Waterloo: University of Waterloo.

is managed municipally. Municipal PTC licensing in Ontario has led to a hodgepodge of regulations⁵⁴, with each city having its own different standard for a PTC license.

Challenges of municipal-level regulation are evident in the case of Toronto where, in order to manage the anti-regulation demands of Uber⁵⁵, the city removed key taxi licensing requirements including the required 17-day training specific to taxi work that addressed issues such as financial challenges of managing a small taxi business, responding to dangerous and difficult passengers, and improving diet and physical and mental health. The city also removed requirements for bi-annual annual taxi vehicle inspections by the city. Now, PTC drivers require no training and both taxis and PTCs only require proof of an annual vehicle safety certificate (which can be obtained at a Ministry of Transportation approved garage). The advantages of provincial-level taxi and ride-hail licensing regulation were evident in Quebec, where Uber threatened to pull out of the province unless the provincial regulators removed training requirements for Uber drivers. However, training was retained and Quebec requires all drivers (ride-hail and taxi) to undergo 35 hours of training⁵⁶.

5.4 Recommendations about ride-hail driver employment status

Employment insecurity was a key prompt for driver stress and risk-taking. For instance, drivers would speed to avoid a low rating from passengers as this rating could, in turn, lead to driver app deactivation by Uber. The following recommendations provide suggestions for changes in the short term (with ride-hail drivers considered as self-employed, as they are at present) and for the long-term (with ride-hail drivers considered as employees).

5.4.1 In the short term, with status as self-employed workers

Within reasonable effort, all workers should be able to earn a minimum wage. Ridehail drivers' low employment earnings and financial insecurity create poor health and stress. We recommend **extending existing minimum wage standards to self-employed workers**⁵⁷.

⁵⁴ Johal, S. and N. Zon (2015). Policymaking for the Sharing Economy: Beyond Whack-A-Mole, Mowat Centre.

⁵⁵ CityNews. (2015, Jul 6). Taxis & Uber not operating on level playing field: Tory. Retrieved from: https://toronto.citynews.ca/video/2015/07/06/taxis-uber-not-operating-on-level-playing-field-tory/

⁵⁶ Quebec did concede some safety provisions to the ride-hail sector: they reduced the taxi driver training hours from 150 to 35 hours. See CBC News (2016, Jun 10). Quebec passes law to regulate Uber. Retrieved from: http://www.cbc.ca/news/canada/montreal/uber-law-could-pass-today-1.3628992

⁵⁷ Saunders, R. (2006). Risk and Opportunity: Creating Options for Vulnerable Workers. Vulnerable Workers Series No. 17, Ottawa: Canadian Policy Research Networks.

- Currently, minimum wage calculations exist for workers who work on commission⁵⁸ and who work piece rate⁵⁹. Gig workers should also have access to this standard.
- Existing workers' compensation coverage could also be extended to gig workers.
 - At present, self-employed workers in the construction sector have mandatory workers' compensation coverage⁶⁰. As well, all Ontario couriers who deliver on foot or by bicycle receive automatic coverage; companies that employ them must to pay into the workers' compensation system⁶¹. It is worth mentioning that Uber Eats was in violation of this requirement until May 2019⁶², following CBC Marketplace airing their show based on information provided to them by MacEachen about this study's finding that Foodora, but not other similar firms, provided WSIB coverage to their couriers.
- Extend the "dependent contractor" category, which exists under labour law, to employment standards and occupational health and safety law.
 - This hybrid category classification between employee and independent contractor could provide gig drivers considered as self-employed with access to workplace health and employment standards.

5.4.2 In the longer term, with status as employees

We recommend modernising the definitions of "self-employment" and "employment" in order to bring thousands of individuals in the gig economy

⁵⁸ Ontario Ministry of Labour (2019). Minimum Wage. Retrieved at: https://www.ontario.ca/document/your-guide-employment-standards-act-0/minimum-wage#section-0

⁵⁹ Ontario Reg. 285/01, Section 25(2) under the Employment Standards Act. Retrieved at: https://www.ontario.ca/laws/regulation/R01285

⁶⁰ WSIB Ontario. (2018). Mandatory coverage in the construction industry. Retrieved from: https://bit.ly/2HNCUdJ [short URL]. Note: Independent operators in the Ontario construction industry pay for their own coverage under WSIB. If Uber drivers were to be deemed to be workers, then the employer (Uber) would pay for their coverage, but not as an independent operator.

⁶¹ WSIB Ontario. (2018). Employer classification manual. Retrieved at: https://bit.ly/2CuwaxA [short URL]

⁶² Taylor, C. (2019). Uber Eats announces insurance for bike couriers in Ontario. CBC News. Toronto. https://www.cbc.ca/news/canada/uber-eats-insurance-couriers-1.5122197

⁶³ This argument is not new and is more pressing over time. In 2003, Judy Fudge anticipated the challenge of labour classification in the gig economy when she argued that, "Given the transformation in employment relations and the changing nature of self-employment, the current legal situation not only encourages litigation, but it invites the manipulation of contractual arrangements to avoid the incidence of legal regulation". Fudge,

under the protection of employment–related laws and social security protections and to bring gig economy firms into compliance with contributions to our taxation and social security systems, such as employer contributions to workers' compensation insurance, Employment Insurance and the Canadian Pension Plan.

 A challenge for ride-hail drivers and others in the gig economy is that their work does not meet the current strict standard (based on an earlier era) of either self-employment or employment.

Given the changing nature of work (including flexible, digital, app-mediated employment), we propose that it is time to update laws and policies that more clearly distinguish the boundary between self-employment and employment. An example of updated self-employment law was the April 2018 California Supreme Court decision that set a strict new test for self-employment. It assumes anyone is an employee if his or her job is central to a company's core business or if the bosses direct the way the work is done⁶⁴.

Recommendations for updating definitions of employee and employer in Canada have been put forward by the Workers' Action Centre⁶⁵ and Ontario's 2017 Changing Workplaces Review⁶⁶.

J. (2003). "Labour protection for self-employed workers." Just Labour: A Canadian Journal of Work and Society 3, p. 43.

⁶⁴ Roosevelt, M. (2019, Feb 23). Are you an employee or a contractor? Carpenters, strippers and dog walkers now face that question. *Los Angeles Times*. Retrieved at: https://www.latimes.com/business/la-fi-dynamex-contractors-20190223-story.html

⁶⁵ Ladd, D. and M. Gallatly (2016). Building decent jobs from the ground up. Toronto, Workers' Action Centre. Retrieved at: https://workersactioncentre.org/wp-content/uploads/2017/12/Building-Decent-Jobs-from-the-Ground-Up_eng.pdf

⁶⁶ Mitchell, C. M. and J. C. Murray (2017). The Changing Workplaces Review: An Agenda For Workplace Rights. Toronto, Ontario Ministry of Labour. Retrieved at: https://files.ontario.ca/books/mol_changing_workplace_report_eng_2_0.pdf.

6 Conclusion

6.1 Applicability of findings

This study is among the first to examine the health and safety conditions of ride-hail work. Our developmental evaluation of occupational health and safety conditions of Uber work provided an approach for examining a complex new form of work and developing suggestions for managing new occupational health and safety terrain. We systematically assembled situated knowledge, from the standpoint of different key players, about the nature of Uber and taxi health risks and developed policy and practice suggestions for labour and policy makers.

Some of our policy suggestions, such as requiring car cameras and minimum standards for driver training, may not be relevant in jurisdictions that already have these in place. Our suggestion about raising ride-hail licensing to a provincial level will be irrelevant to Quebec and British Columbia where this is already in place, and to countries such as Denmark and Norway that manage this at a national level. However, these suggestions are applicable to most Canadian and American jurisdictions. Our suggestions about employment status and related protections will not be specifically relevant outside of Ontario, but the general concepts of extending protections to gig workers will be generally relevant across jurisdictions. Finally, our suggestions about the conduct of ride-hail firms, for instance, to remove required acceptance rates, are applicable across all jurisdictions.

6.2 Strengths and limitations

The gig economy landscape is fast-moving. A key strength of the research was our flexible research design, which allowed us to adapt to the constantly changing Uber-related policies and rules, up to the end of our data gathering in 2018. We did this by expanding our sampling focus, modifying our recruitment methods, and delving into documentary data (for instance, on insurance conditions and taxation policy).

Our multi-level research design (data at driver and passenger, organisation and firm, and regulator and policy levels) captured the situated knowledge and experiences of key players in Uber work, health and safety. This, together with news, document and online analysis, provided robust triangulation of findings. Our study sample was large (75 participants), which allowed for generation of a broad, detailed picture of Uber work conditions.

Our focus groups with drivers and passengers generated a diversity of data that we could not have anticipated capturing using more standardised and quantitative research methods, such as surveys. Our in-depth interviews with taxi and rideshare operators and managers, and key informants, provided critical context for understanding Uber work and occupational health and safety risks.

Knowledge translation and exchange is an important part of our study. Our stakeholder engagement contributed to the refining of study approaches,

conclusions and recommendations. We had multiple meetings over the course of our study with our Stakeholder Advisory Committee, composed of senior members of each organisation who are well-positioned to apply findings of the research. We also conducted two workshops near the end of our study. At these, we presented occupational health and safety risks identified in our research and received input on practice and policy solutions.

A final strength to note is the quality of our research team, who had strong experience and knowledge of employment and labour landscapes, occupational health and safety policy, and research methods.

Every research study has limitations. Our study was limited to one large Canadian city, and so our findings may not translate directly to other jurisdictions. The context of ride-hailing continues to change rapidly, and some of the work conditions that we describe may not exist at this point. However, across changing conditions, we expect several fundamental conditions to persist: the so-called "self-employment" status of workers, the incitement to workers via algorithms to continue driving, and the unequal information flow between Uber and drivers. As this is a qualitative research study, the generalisability of our findings is not statistical, but rather involves logical extrapolation. The readers of this report are provided with sufficient detail to determine the applicability of findings to their own jurisdictions.