

Occupational Safety and the City: Licensing Regulation and Deregulation in the Taxi Sector

Sécurité au travail dans les villes : réglementation des permis et déréglementation dans le secteur du taxi

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Résumé de l'article

Plusieurs grandes villes nord-américaines possèdent la juridiction sur les règlements qui déterminent l'emploi et les conditions de santé et de sécurité au travail des chauffeurs indépendants de taxi et de voiturage, comme Uber et Lyft. Cependant, il existe peu de recherche sur les effets de ces politiques et règlements municipaux sur les conditions de santé au travail des chauffeurs de taxi. Au Canada, la plupart d'entre eux sont des travailleurs indépendants et se trouvent, par conséquent, exclus des droits en santé et sécurité au travail, tout comme de l'indemnisation des accidentés. De plus, les régimes municipaux qui allouent les permis de taxi ont récemment été forcés à changer leurs règlements d'allocation à la suite des fortes pressions de nouvelles compagnies offrant des services de héliage électronique, notamment Uber.

Notre étude fait partie d'une recherche plus vaste qui porte sur les conditions de santé et de sécurité au travail des chauffeurs de taxi et de voiturage. Nous utilisons une méthode de recherche multidimensionnelle qui vise à établir des liens entre l'expérience quotidienne des chauffeurs, les pratiques des compagnies et les secteurs administratifs qui supervisent les règlements et les lois, entre autres l'allocation des permis, les taxes et les assurances automobiles. Notre analyse se base sur des entrevues de fond avec des chauffeurs, des gestionnaires de taxi et d'Uber, ainsi qu'avec des intervenants-clés dans les sphères gouvernementale, légale et de l'assurance. Nous avons centré notre analyse sur une grande ville canadienne située dans une province où les municipalités administrent le secteur du taxi.

Nous identifions les caractéristiques et les impacts de la déréglementation au niveau municipal dans le contexte de la montée des nouveaux services de héliage électronique sur demande. L'article identifie trois aspects de la déréglementation : 1- l'annulation des inspections de véhicules de taxi; 2- l'annulation de la formation obligatoire des chauffeurs de taxi ; et 3- la transformation brusque du marché de taxi puisque le nombre de permis de voiturage alloué n'est plus plafonné. Ces changements aggravent les vulnérabilités et les risques reliés au travail des chauffeurs de taxi et de voiturage. Ces risques accrus nécessitent des interventions non seulement au niveau municipal, mais aussi des autorités compétentes aux niveaux provincial et fédéral.

Occupational Safety and the City: Licensing Regulation and Deregulation in the Taxi Sector

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Many large North American cities have jurisdiction over licensing rules that shape the employment and health conditions of ride-hail and taxi drivers. Yet, there is a lack of research on the role of licensing agencies relating to the occupational health and safety conditions of taxi work. Based on qualitative research, the paper explores municipal deregulation in the era of on-demand ride-hailing, focusing on a large Canadian city. Changes to the city's bylaws affected taxi vehicle inspections, mandatory taxi cameras, driver training, and taxi license controls. Our analysis argues that regulatory changes put in motion by the city administration, in line with ride-hail company lobbying, have compounded work vulnerabilities and hazards for taxi drivers and extended hazardous conditions to ride-hail drivers. These hazards suggest there should be interventions at a range of levels, actors and agencies, rather than solely by city licensing officials.

KEYWORDS: municipal licensing, occupational health and safety, self-employment, taxi, ride-hail, Uber, Lyft.

Introduction

Driving a taxi has historically been one of the most dangerous occupations in Canada and the US, where drivers suffer high rates of workplace violence and

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even occupational homicide, often “due to violent passengers” (Dean, 2010: 57; OSHA, 2010; Perreault, 2010). Health research shows that taxi work is detrimental to health; common conditions among the workforce include musculoskeletal conditions, kidney disease and diabetes (Dubinsky, Gollom and Rieti, 2012; Facey, 2003; Mirpuri *et al.*, 2018). In addition, taxi drivers have limited employment, health and safety protections due to the fact that they are normally treated as self-employed independent operators (Facey, 2003; Tucker, 2018).

Currently, municipal authorities play a key role in regulating the ground transportation sector in Canada through licensing bylaws (Esbenshade and Shiffrin, 2019; Johnston, 2018; Valverde, 2012 and 2018), except for British Columbia and Quebec, where the sector is regulated at the provincial level. City rules related to taxi driver health and safety are unusual since municipal governments are not primarily responsible for workplace health and safety in the US or Canada; private and public sector workers are normally covered by federal and provincial/state statutes and regulations in the US and Canada. Municipal licensing frameworks are primarily based on mandates to limit competition, protect public safety, and, to a lesser extent, driver safety. This article documents how licensing regimes came to incorporate requirements that directly or indirectly addressed driver health and safety concerns, including new driver training, cameras and vehicle inspections. We show how municipal governments have adopted *ad hoc* and uneven rules related to taxi driver safety through licensing requirements, and describe how these rules have been deregulated in the context of ride-hail licensing. The findings and analysis contextualize municipal-level decision making about taxi work by providing evidence of the failure of broader levels of government (Bernstein *et al.*, 2006) to protect the work-related health and safety of taxi drivers.

The article proceeds as follows. We first describe the state of taxi drivers' health and work conditions, and connect these conditions to the regulatory and economic organization of the taxi industry, based on existing research. In the third section, we present the research methods. In the fourth section, we turn to the municipal licensing regime, focusing on the case of a large Canadian city,¹ and describe four city-operated programs that directly and indirectly impacted taxi driver health and safety: 1- city-run taxi vehicle safety inspections; 2- a city-run taxi driver training program; 3- mandatory taxi cameras; and 4- taxi license controls. In the fifth section, we describe how municipal authorities cancelled or modified municipal programs in the process of regulating ride-hail services, faced with concerted pressures for deregulation from global ride-hail juggernauts like Uber. In the discussion section, we discuss the impacts of deregulation on the health and safety of both taxi and growing numbers of ride-hail drivers. Outstanding questions of at what level ground transportation should be regulated and by whom are highlighted.

Our analysis draws attention to the antecedents of precarious self-employment in the taxi industry in relation to work-related health and safety, and the role of municipal licensing authorities (Valverde, 2012 and 2018) as important interacting factors that have affected, and continue to affect, work and health conditions for both taxi and ride-hail drivers. In doing so, we broadly use a geographical and institutional lens with the goal of ‘denaturalizing’ the prevailing and taken-for-granted *municipal scale* of taxi work regulation.

Lethal conditions and regulatory exclusions in the taxi industry

Taxi work is a hazardous occupation where drivers face high levels of harassment and violence from passengers, and have one of the highest risks of occupational homicide in Canada and the US (Dubinsky, Gollom and Rieti, 2012; OSHA, 2010). Taxi drivers work in a confined, mobile space with their backs turned to passengers. They work with cash and are frequently victims of robbery. Research has also shown that taxi work produces chronic health conditions among the workforce including stress, back and leg pain, kidney illness and diabetes. These conditions are connected to occupational factors such as working long hours, fatigue, poor diet, liquid retention, and prolonged sitting (Burgel, Gillen and White, 2012; Schwer, Mejza and Grun-Rehomme, 2010). These health and safety conditions are inextricably linked to the social position of taxi drivers. Most of the taxi workforce in North American cities are from visible minority and immigrant/refugee backgrounds. Drivers find their way into the work as a ‘last resort’ due to widespread exclusions within the Canadian labour market and discrimination by employers, who may not recognize their education and credentials. Discrimination inflects driver interactions with the public (including licensing and other government bodies), where drivers face “everyday racism” in the form of racist abuse and stereotyping on the job (Facey, 2010; Mirpuri *et al.*, 2018).

The nature of economic relationships in the taxi industry also contributes to the marginalized position of taxi drivers (Tucker, 2018). There is a marked economic difference in the sector between “shift drivers”, who rent taxi licenses and vehicles to drive, and sole owner-operators who both own and operate their taxi business. Shift drivers are particularly dependent on taxi vehicle owners (‘taxi garages’), taxi plate owners (license owners) and taxi brokerages (who offer ride dispatching services). The shift driver segment of the taxi workforce has been characterized as among the ‘dependent self-employed’ due to their economic dependence on various parties within the industry, such as brokerages, fleet operators and license owners (Facey, 2003 and 2010; Tucker, 2018). Shift drivers pay fixed fees on a 12-hour shift basis, while their actual earnings

may fluctuate on a day-to-day basis. Shift drivers may work longer and take more risks due to the economic insecurity they face, such as accepting dangerous or aggressive passengers, in order to pay these rental fees and boost their income (Facey, 2003, 2010).

Lethal working conditions for taxi drivers are also connected to the legal exclusion of own-account self-employed workers from labour protections in Canada, exclusions that are particularly relevant for taxi drivers. As noted earlier, taxi drivers are, for the most part, *effectively* excluded from health, employment and social protections under federal and provincial legislation². Exclusions include OHS, workers compensation (WC), employment standards, employment insurance, public pension programs, and collective bargaining rights (Facey, 2003; Bernstein *et al.*, 2006). For example, worker compensation is a program whereby “employers [are obligated to] assume the cost of premiums to ensure some form of access to health care and economic support for their employees in case of work-related injury or disease” (Lippel *et al.*, 2017: 5). In Canada, WC is administered at the provincial level. Because self-employed operators are, by default, not obligated to register (and instead may ‘opt-in’ voluntarily), it is uncommon for small self-employed operators to pay to opt-in to WC. If they feel they are entitled to employer-paid WC, the onus lies with individuals to litigate to prove that they are ‘workers’ under WC law, in order to gain access to this insurance. Indeed, the costs of litigation for individual workers are high (Faraday, 2017: 13).

In terms of representation, taxi drivers have faced high barriers to organize and very few taxi drivers are unionized in Canada³; drivers lack representation and collective voice in the industry (Tucker, 2018; see also Cranford *et al.*, 2005). Taxi work is arguably paradigmatic of ‘precarious self-employment’ insofar as taxi work is precarious work, defined by insecure terms of employment, negative health outcomes, low unionization rates, low wages and limited social, employment, health benefits (Faraday, 2017). It is also paradigmatic of ‘dependent self-employment’, in which taxi drivers are economically dependent on brokerages and fleet operators for their incomes and livelihood (Tucker, 2018).

Licensing is formally defined as “the conditional permission to engage in activity that would otherwise have been prohibited” (McKee *et al.*, 2018: 6) and licensing regimes in general (not solely in urban taxi sectors) often encompass a wide and often disparate array of unrelated policy goals (McKee, 2018). While taxi licensing regimes are often critiqued for the market inefficiencies they create (Canadian Competition Bureau, 2015; McKee, 2018), they also play a role in the work conditions of taxi drivers and the organization of the industry (Valverde, 2012 and 2018). Esbenshade and Shifrin (2019) recently showed how municipal regulators in San Diego, California, ultimately reinforced ‘precarious self-employment’ among taxi drivers through requirements that incentivized self-employment

yet did not afford the self-employed economic autonomy and independence. In a different vein, Johnston (2018) has explored how the New York Taxi Workers Alliance—a unique ‘alt-labour’ social union composed of both taxi and ride-hail drivers—secured historic wage and regulatory gains through new rules created by NYC municipal licensing authorities. In sum, municipal licensing bodies may produce conditions of economic insecurity and precarious taxi work, but are also key channels for regulatory change for taxi drivers.

In this article, we explore the research question: How do municipal licensing regulations mitigate or contribute to particular work hazards for taxi drivers? This question is especially relevant in the recent context where there have been licensing changes to the taxi industry. It also arises from a broader context where there have been longer-standing patterns of hazardous work and regulatory exclusions of taxi drivers from employment-related health and work protections.

Research design and Methods

Our analysis is drawn from a broader study on the health and safety risks, and regulatory challenges associated with ride-hail and taxi work in a single large Canadian city. The research approach was a multi-level sampling and analysis strategy that primarily focused on the health and safety conditions of ride-hail drivers. At the time of the research, Uber was the sole major ride-hail operator in Canada. The research involved interviews with taxi drivers and taxi industry representatives, as well as ride-hail drivers and ride-hail company officials, and our research touched on various regulatory domains including municipal licensing, taxation and car insurance. It should be noted that the research is context-sensitive, as the study addressed sectors subject to ongoing market and regulatory change.

Qualitative data we draw from for this analysis includes Uber driver focus groups (27 drivers in total; four focus groups in total) and eight taxi driver interviews. At the organizational and industry levels, we conducted in-depth interviews with the taxi industry (three taxi fleet and dispatch operators) and the ride-hail industry (five senior ride-hail managers). To understand the regulatory landscape, we conducted 15 interviews with policy makers in occupational health and safety, taxi consultants, labour and OHS lawyers, tax accountants, labour union representatives and insurance brokers. To ensure respondents’ confidentiality, names used here are pseudonyms and some identifying details like dates and locations have been altered. Interviews and focus groups were recorded, transcribed and coded by multiple members of the research team. Finally, document data including case law, legislation, municipal bylaws, news and social media were also sampled and analyzed.

Taxi drivers who participated in our study interviews had varying levels of experience in terms of length of time as taxi drivers, as well as employment and ownership models (see Table 1). Each driver started taxi work as a shift driver and a smaller number had moved into owner-operatorship. One driver (Amin) had sold his taxi license and returned to shift driving. Two of the eight drivers we interviewed combined taxi driving with app/ride-hail driving or food delivery for Uber/UberEats. None reported owning more than one taxi license or deriving an income from renting the plate.

TABLE 1
Taxi driver sample

Participant pseudonym	Type of Ownership and Experience (current and past)			Length of experience as taxi driver
	Shift driver	Owner-operator	Uber	
Amin	•	•		> 10 years
Fahal	•	-	•	< 1 year
Gio	•	•	-	> 20 years
Kadeem	•	-	-	2 years
Kofi	•	-	-	10 years
Remi	•	-	-	5 years
Eric	•	•	•	> 20 years
Saad	•	•	-	> 20 years

‘Accidental’ health and safety programs: Municipal licensing requirements

In the post war era, the taxi industry in Canada became increasingly structured around leasing arrangements rather than employment relationships (Abraham et al., 2008; Tucker, 2018). Responsibility for the work-related health and safety of the taxi workforce was left unaddressed and undefined at the provincial regulatory level. By default, municipal governments assumed a regulatory role based on their jurisdiction over taxi business licensing, but did not have formal jurisdiction for workplace health and safety. This section explores how municipal licensing officials in a large Canadian city (the focus of our research) adopted the principle of driver health and safety, formally and explicitly, in its bylaws, alongside the principle of public and customer safety. We highlight key regulatory outcomes of these principles: mandatory training, cameras, and vehicle safety inspections. We also discuss taxi license controls, also known as the ‘medallion system’ or plate system, and its impact on economic conditions in the taxi sector. These economic conditions are significant determinants of the health and safety of drivers.

City-operated taxi driver training

Beginning in the early 1970s, the city initiated a mandatory taxi driver training program, the first of its kind in North America. Before it was cancelled, the training ran for 17 days for new drivers. Drivers had to successfully pass an exam at the end of the training to acquire a taxi license. The program ran at no cost to the city, since revenue from drivers’ licensing fees paid for the training. The training curriculum was detailed and specific to the health and safety hazards that taxi drivers faced, such as defensive driving, responding to dangerous and difficult passengers, and improving diet and physical and mental health. It is important to note that the stated objective of the training was primarily to improve the quality of customer service and public safety—not driver safety. The actual contents of the training effectively acknowledged and addressed the risks and hazards of taxi driving, as much as they emphasized public safety and customer service (again, see Table 2).

TABLE 2
Taxi training contents

Customer relations	Street guide
Communication skills	Defensive driving
Geography	Passengers with disabilities
Tourism	Dealing with difficult customers
Municipal Code	Radio support
Human Rights and women in society/Cultural Diversity	Route planning
Taxi maintenance	Taxi meters
Emergency situations and safety procedures	Business management and financial planning
Driver health and wellness	Sharing the road with cyclists

In particular, road accidents and dangerous passengers are among the most serious safety hazards of the job; the training both sensitized new drivers to these hazards, as well as imparted specific techniques to prevent and respond to these risks, such as how to detect a dangerous passenger, manage and remove the customer, and protect themselves (Facey, 2010). Indeed, the taxi drivers we interviewed felt that the training program was valuable, as seven out of eight drivers we interviewed had experienced violent incidents or robberies in their careers—most frequently, these involved fare evasion and theft from passengers. Insofar as the training addressed the realities of small business management, the training also mitigated the financial stresses and insecurities of taxi driving. While not directly pertinent to drivers’ health and safety, this aspect of the cur-

riculum acknowledged that new drivers often lacked business management and financial record-keeping skills or knowledge, related to tax obligations, for example. Taxi and ride-hail drivers' tax obligations are unique under Canada's tax code; unlike other small businesses in Canada, taxi and ride-hail drivers pay sales tax from the first dollar they earn, as opposed to the tax-free \$30,000 threshold to which other small businesses are subject. Drivers may be unaware of their tax responsibilities and/or unaware of strategies for financial record keeping, and it is easy for drivers to find themselves owing money and/or unable to claim expenses. Concern about such phenomena may have cascading adverse effects for the health and safety (such as working longer hours, lacking control, etc., see Lewchuk *et al.*, 2008). City officials recognized this problem. They instituted training and induction for drivers to address their physical safety and health, as well as measures to assist them to manage their financial affairs.

Mandatory cameras

Mandatory taxi cameras came into effect under new bylaw regulations circa 2000. It is not currently permitted to disable a taxi camera, which is installed to operate on a 24-hour basis, or as long as the vehicle is in use. However, the content cannot be accessed by any party (driver or passenger) unless an incident is reported to police; it is only the police who can access and review the camera content. As Eric, who had driven a taxi since the 1970s, explained, the push for mandatory taxi cameras took ten years of taxi driver advocacy directed at City Hall and licensing authorities, as safety conditions for drivers had become extremely poor.

Both taxi drivers and industry representatives described the cameras as highly successful in reducing rates of theft and violence against drivers. Cameras also helped to protect customers.

...prior to 1998, almost every week ... some incident happened in the cab. Somebody robbed the cab driver, somebody hit the cab driver. But since we have this camera in the cab, it's a safety for the driver, and it's reduced significantly, more than 50/60% [violent incidents]. That's the safety of the driver, number one. It's also safety of the customer as well. (Saad, taxi driver)

Remi, another taxi driver, explained that he received victim compensation because of camera records that caught an attack by a passenger against him; the records helped police in an investigation. Drivers were adamant about the importance of mandatory cameras and directly associated cameras with their safety.

Yes, yes, and, I mean, and every time when somebody is getting on our car, it's like, right? You don't know those persons, but when—the minute you go in, it takes, you know—when you open the door, you are recorded on the camera. That means it's safer

for you because, if something happens, that person is on the record. That's the best feature on the taxi. (Kofi, taxi driver)

Most significantly, in our view, it is that taxi drivers led demands for the mandatory camera requirement, and that this was the only licensing rule which was directly, not incidentally, related to driver safety.

City-operated vehicle safety inspections

Taxi vehicles were also required to undergo bi-annual vehicle safety inspections at a centralized, city-operated facility. Onus was on the taxi vehicle owner (not the taxi driver) to prove the vehicle was in safe condition. The vehicle safety requirements were extremely stringent according to drivers we interviewed (both operators and shift drivers). If the vehicle did not meet safety standards, owners could be fined. The risks associated with operating an unmaintained and unsafe vehicle were more acute for shift drivers, who often rented different vehicles for their 12-hour daily shifts—they had little control over the condition of the vehicle they rented. These inspections helped protect shift drivers against unscrupulous fleet/vehicle owners who were otherwise often willing to cut corners on vehicle maintenance (tires, brakes, etc.).

The garage, sometimes they don't care... Sometimes they don't spend the money for the car, but if the city controls it, everything is good. It's more safe for the customer and for us too, you know... (Kadeem, taxi driver)

Thus, shift drivers bore the risks of driving unmaintained, unsafe vehicles, while the city-run safety inspections mitigated these risks. It is important to note that during these inspections, mandatory taxi cameras were also checked. Without conducting archival research, it is difficult to know the historical rationale by city officials for mandating safety inspections, or the year in which these safety inspections were instituted. But it can be inferred that the primary rationale was to protect the public from unsafe and unmaintained vehicles. The fact that shift drivers benefited from these inspections appears to be accidental rather than intentional.

Taxi license controls

Taxi license controls or quotas, imposed and regulated by municipalities, historically restricted the number of taxi licenses that the city issued, in order to protect the industry from competition (such as competition from 'bandit taxis'). While this system was not connected to protecting drivers' health and safety, in our view, these controls had an indirect effect on driver health and safety, in different ways, which we explain here. As other researchers have described, the plate quota system undergirded the exploitative rentier arrangements be-

tween powerful plate and vehicle owners, as well as the brokerages. Plate owners amassed taxi licenses (and had normally long ceased to drive for a living), eventually profiting from the rents paid by shift drivers (Tucker, 2018). Through this system, municipal administrators institutionally buttressed the specific forms of 'dependent self-employment' that became embedded in the taxi sector.

Plates became directly associated, we learned in interviews, with drivers' retirement security and plans. In our respondent sample, for example, owner-operators had begun their careers as shift drivers. By purchasing a license rather than renting it, plate ownership became a retirement asset, especially considering the absence of federal or employee retirement benefits (e.g., taxi drivers are not required to contribute to the Canadian Pension Plan). At the peak of this market, prior to the incursion of ride-hailing, a single plate was of equivalent value to residential real estate. While retirement security is not explicitly part of the OHS regulatory system, social security and the lack thereof impact longer-term health outcomes, as well as shorter-term safety and health impacts (Lewchuk *et al.*, 2008). For example, we learned from interviews that, due to the lack of retirement security, older drivers continue driving despite age limitations, which poses safety risks to the driver and the public (fatigue, risk of accidents, etc.).

Our discussion has shown that driver safety was often sidelined in the interests of customer safety and customer service. As a 2008 independent research report on taxi driving conditions argued, licensing officials "made driver interests invisible in favour of the focus on 'consumer service'" (Abraham *et al.*, 2008: 2). Of the four municipal programs we have described here, only one was purposefully devised to make taxi driving safer—mandatory cameras. The driver health and safety aims of the other requirements, however, were subordinate to the goals of public safety, or altogether incidental. We now turn to discuss how Uber instigated the deregulation of 'accidental' OHS rules through a taxi licensing overhaul.

Deregulating taxi licensing requirements

In the face of pressures from global juggernauts like Uber, municipal licensing regimes have come under attack. The aspects of licensing we highlighted in the previous section were consequently modified or cancelled in the process of legalizing and licensing ride-hail services. In rationalizing the regulatory changes they sought, ride-hail companies argued that urban ground transportation sectors were over-regulated as a result of licensing rules. Uber convinced city officials that ride-hail features like GPS tracking and peer-to-peer ratings acted as a form of self-regulation and were sufficient for ensuring both driver and public safety (Feeney, 2015). Sympathetic regulators, as well as ride-hail companies and media, argued that regulatory changes were necessary to 'level the playing field' between newer and older industry actors, ensuring that ride-hail transport

modes could only operate successfully alongside taxis within less restrictive licensing frameworks (Competition Bureau of Canada, 2015). Broader changes to city licensing requirements included permitting lower fare rates for ride-hail services and allowing ride-hail companies, rather than city licensing authorities, to conduct licensing compliance internally (McKee, Makela and Scassa, 2018), such as driver record, car insurance and criminal record checks. In what follows, we discuss the impacts of regulatory change on the four areas of licensing introduced in the previous section.

Safety inspections and mandatory cameras

The city cancelled centralized taxi safety inspections. Instead, taxi and ride-hail vehicle safety checks were effectively ‘privatized’: drivers now have to submit proof of a vehicle safety certificate, obtained at an approved garage, on a yearly basis. Cameras are still required, but there is no enforcement on whether they work, as the camera checks used to be conducted under the city safety inspections. City officials, such as one key informant in municipal licensing, explained that there were weaknesses with the previous city-run safety inspections. For example, taxi owners were able to swap old car tires out simply for the purposes of passing the inspection, before reinstalling the ‘bald tires’.

However, taxi drivers we interviewed felt the city-run inspections protected them to some degree. One taxi owner-operator, Saad, explained the risks to shift drivers from the cancellation of the city-operated safety inspections.

My last inspection, which city did, was last year in June, okay, and now, this month—this year 2017.... Nine months, I did not check my vehicle. I can hear different sounds that are coming from my car, but ... I’m not obligated, and because my income has gone down, so I’m just, you know, taking this risk.... (Saad, taxi driver)

It is important to consider here how financial insecurity and low earnings make it more likely for taxi owners (both fleet operators and owner-operators) to cut corners in their vehicle safety maintenance. Saad is aware his vehicle is unsafe and he is aware that he is putting his own safety and the public’s safety at risk. Taxi drivers explained to us that it is easy to improperly obtain a safety certificate from a garage, that is, obtain a safety certificate despite operating an unsafe vehicle.

Licensing authorities are now conducting randomized ‘spot checks’ for taxi vehicle safety. However, there are a limited number of city mechanics and bylaw enforcement officers. Overall, the shift from stringent bi-annual checks for *all* vehicles to random spot checks on a very limited number of vehicles is likely to affect the most disadvantaged group of taxi drivers—shift drivers—by increasing the likelihood that they are driving unsafe and under-maintained taxis.

Taxi training

After years of extending and celebrating its ‘flagship’ taxi training program, this initiative was abruptly cancelled by the city. Currently, neither ride-hail drivers nor taxi drivers undergo any centralized training. Connor, a senior manager with a ride-hail company, argued that the training was outdated and ineffective:

You’d have to sit in class to be a taxi driver, studying maps because you need to be able to read a paper map—like it’s 1980 and not 2017... The question is, do you need the historical, traditional, regulatory requirement of sitting in a classroom for three to five weeks, when we have GPS technology, when we have star rating systems, customer feedback that we found, encourages, right from the get go, better driver or customer service. (Connor, ride-hail manager)

Citing redundancies and regulatory ineffectiveness (that the curriculum never had a demonstrated impact on public safety), it appears that Uber’s logic persuaded city officials to cancel the program. Taxi drivers and industry representatives argued that the underlying rationale for cancelling the training program was that Uber wanted to reduce any barriers to the easy, online-based recruitment of new drivers. The question as to who would assume responsibility for safety training—and the role of the training program in driver safety—were side-stepped by ride-hail industry representatives and licensing officials in our interviews. Licensing officials noted that it was the role of trade schools or the industry to deliver workforce training, not the city. Indeed, it is unusual for municipal licensing to take industry responsibility for workforce training and there are few other industries where this is the case. The reasons why the city historically assumed responsibility for taxi training is context specific, since the industry had failed to provide it. This context is relatively unchanged: it is unlikely that the industry will assume responsibility for training now that the city no longer does.

Taxi License controls

Currently, taxi plate licenses remain subject to quotas, while ride-hail licenses are not. There has been a rapid increase in the number of ride-hail licenses relative to the number of taxi licenses, in part due to aggressive ride-hail recruitment strategies, especially since ride-hail driver turnover is very high (see McGee, 2017). Signing up to drive for Uber is extremely rapid; drivers in our focus groups reported that they could sign up to drive and carry a passenger within 24 hours. Since 2016, the city has issued approximately 67,000 new ride-hail licenses, compared to an existing 6,500 taxi plate licenses (according to key informant interviews; there are around 18,000 taxi driver licenses). As a comparison, New York has issued licenses to over 100,000 ride-hail drivers in addition to the existing 12,000-13,000 taxi drivers (Fitzsimmons, 2018).

These rapid changes have had an adverse impact on taxi drivers' wellbeing. There are high levels of competition between drivers, intensifying the level of work drivers have to perform to make a livelihood. Taxi drivers we interviewed explained that they were sacrificing their health for their income—working longer hours and making less income—as a result of unbridled competition from ride-hail services. Competition among drivers for rides has led to a trade-off between health and income, exemplified by Saad's experience:

I never worked on Sundays, and Saturday I always took it easy. Now, I am on the road seven days [a week] because I just can't make enough to cover my expense and my mortgage—all those things. ... I used to work not even ten hours. I had enough time to spend with my kids. Now, if I go in ten hours, my kids ask, 'Is everything okay? You came home early.' (Saad, taxi driver)

For owner-operators, the value of their taxi licenses, often used as a retirement investment, rapidly plummeted. The effects of rapid market changes on driver health are tragically demonstrated by the recent pattern of taxi driver suicides in New York City, for example, with news reports indicating driver suicides are attributable to taxi drivers' economic losses (Fitzsimmons, 2018). While the number of owner-operators who owned plates was relatively small compared to the number of shift drivers, the health impacts related to the loss of value of these plates is undeniable.

City authorities across Canada and the US have adopted varying approaches to regulation in the ride-hail context (Sribaskaran and MacEachen, 2018). We argue that Uber pushed aggressively to remove any regulatory barriers in its way. Uber took advantage of the administrative weaknesses of municipal bylaw regimes, and as a result, have been able to attack those aspects of licensing regulation that had both direct and indirect impacts on taxi driver safety and health. Indeed, because the role of licensing authorities for driver safety was ambiguous to begin with, it was difficult for proponents of driver safety to defend these programs from a driver-safety perspective.

By 2019, however, licensing officials had already begun reviewing the new bylaw regime to assess how licensing rules performed in regulating taxi and ride-hail services. One key change to the bylaw as a result of the review, slated to come into effect in early 2020, is training. New ride-hail and taxi drivers will be required to undergo training, which will be delivered by approved third parties. That is, the city will not revive its previous training program. It is not yet clear who will deliver this training, how it will be delivered, or what the content will be. Nonetheless, the back-and-forth swing with regards to taxi training—cancelling training, only to re-impose a training requirement four years later—appears to respond to some of the safety concerns posed by the deregulation of taxi licensing and 'light' ride-hail licensing.

Discussion

Licensing is an important area of governance that impacts taxi and ride-hail workers' everyday experiences, including health and safety conditions. The role of municipal licensing in industrial relations and occupational health and safety research has been limited. Our findings indicate that deregulation of taxi licensing in the context of legalizing ride-hail transport has exacerbated existing health and safety vulnerabilities among the taxi workforce, while regulators have failed to consider the overlapping impacts of deregulation for both taxi and ride-hail drivers.

Overlapping impacts of deregulation on taxi and Uber driver health and safety

The research shows how, by replacing regular centralised vehicle safety checks for all taxis with random spot checks for a limited number of cars, the city licensing office removed itself from the role of protecting shift drivers against unscrupulous taxi owners and garages who fail to maintain taxi vehicles. The city's new light-touch approach to vehicle safety means shift drivers are more easily able to rent and drive a vehicle that is not adequately maintained and may be unsafe. Second, while taxi driving remains hazardous and growing numbers of ride-hail drivers are exposed to many of the same risks as taxi drivers (Sribaskaran and MacEachen, 2018), the city no longer teaches drivers how to anticipate and protect themselves against hazards. The city's training program previously offered a modicum of injury prevention and health promotion supports by providing taxi drivers with knowledge, strategies and skills related to managing their finances, dealing with aggressive passengers, managing a small business, planning for retirement and healthy eating and exercising. Finally, due to high levels of new competition from unlimited numbers of ride-hail drivers, taxi drivers are working longer hours as they compete for rides since the number of available drivers has dramatically increased in a short period of time.

Taxi driver needs are largely unaddressed and ignored at a time of crisis in the industry and the taxi workforce. This crisis is arguably having significant health and social effects on taxi drivers, their families and communities across the US and Canada. There has been little to no discussion regarding compensation for taxi drivers, who have been politically and economically abandoned by each level of the Canadian government. The historical lack of representation for drivers, reinforced by the broader failure of government and trade unions to support marginalized and non-standard workers, has resulted in a decision-making vacuum for the taxi workforce. In other sectors, like agriculture, where farmers are much more organized as a sector, operators have organized to demand compensation

created by government-instigated changes to market controls and regulations⁴. However, in other jurisdictions, such as New South Wales, Australia, governments acted quickly to allocate revenues generated from ride-hail licensing fees to compensate taxi drivers for their losses created by rapid licensing changes (Sribaskaran and MacEachen, 2018).

As for ride-hail drivers, while they do not work with cash and rarely experience robberies, Uber drivers reported similar hazards to those associated with taxi driving (Bartel *et al.*, 2019). They dealt with aggressive passengers, worked long hours and experienced fatigue, which increased the risk of vehicle accidents. The health impacts of the work included restricting the number of breaks they took, restricting liquids to avoid bathroom breaks and sitting for long periods of time. They also faced new hazards created by the Uber interface: they accepted passenger demands in order to maintain high ratings and drove longer to qualify for incentives and bonuses, for example. They shared with taxi drivers the challenges of economic insecurity, low and unpredictable earnings combined with fixed costs and lack of knowledge about how to manage their small business. The underlying hazards of ride-hail work are therefore not unique, and have many similarities to taxi work. New licensing requirements do not reflect actually existing driver and public safety concerns associated with growing numbers of ride-hail drivers.

Framing deregulation: The outstanding question of regulatory reach and jurisdiction

Deregulation instigated by Uber shifted driver attitudes towards licensing requirements. During our research interviews, drivers criticized the deregulation of licensing rules and emphasized the benefits of the training program and vehicle inspections. Yet previous research has documented how, prior to the advent of ride-hailing, taxi drivers were strong critics of the same requirements they later called upon city authorities to save: in the past, taxi drivers resented having to pay for training and what they viewed as onerous vehicle safety inspections (Valverde, 2018). The changing framing of licensing requirements by taxi drivers reflects the fact that taxi drivers bore the bulk of the costs of licensing programs through licensing fees, which operated on a cost recovery model.

Uber's business model rested upon a deregulated licensing environment. The city appeared to have been swayed by Uber's logic that automated features like GPS and peer ratings were sufficient to protect drivers. City officials we interviewed (at the time of our research) rejected characterizing rule changes as 'deregulation' preferring to call these changes instances of regulatory 'reframing', 'realignment' and 'modernization'. They explained that taxi driver training and city-run vehicle safety inspection programs were no longer needed and that the

city had for too long overstepped its reach. Moving towards a licensing regime more amenable to the ride-hail industry, key informants indicated, also helped secure a new revenue stream for licensing authorities. Currently, 60% of total revenues for city licensing flow from ride-hail license fees (charged on a per-license as well as a per-ride basis). Customer service was much more prominent in interviews with municipal licensing officials whereas they saw driver safety as beyond the scope of licensing goals. If self-employed drivers faced systemic work-related risks, Uber (and licensing authorities) argued, it was not the role of the city to prevent these risks. The city pointed to provincial regulators as the appropriate policy level for workplace health and safety decision making. For their part, provincial regulators emphasized that self-employed work was beyond the scope of applicable OHS regulation.

Licensing at what scale?

The configuration of taxi and ride-hail licensing at *municipal levels* in many North American jurisdictions should be questioned. Uber exploited the administrative weaknesses and regulatory confusion of municipal licensing regimes, regimes which had incorporated disparate regulatory dimensions over time, but had often failed to adequately meet these often ill-defined goals (namely, public safety, customer service and driver safety). Uber also took advantage of its transnational scale, as municipal licensing authorities were not well-positioned to regulate disruptive companies of this scope, echoing Valverde's argument (2018: 200) that, "only provinces can develop and enforce proper regulations governing Uber and similar transportation companies". Indeed, "transnational behemoths" like Uber have "little or no precedent in the long history of municipal business regulation" (*ibid.*, 210). Calls for provincial regulators to respond to health and safety gaps for taxi drivers are not new. The *Dean Report* (2010: 58), an independent inquiry to improve Ontario's provincial OHS system, identified taxi drivers' health and safety needs, and recommended the following in its conclusions: "The Panel recognizes the need to better protect the health and safety of taxi drivers and believes the [*provincial*] *Ministry of Labour* should explore options for doing so" (emphasis added).

Policy responses to the rise of ride-hail services have been patchwork and fractured, mirroring earlier regulatory approaches of municipalities to ground transportation policy. Indeed, in an analysis of ride-hail licensing in more than 30 international jurisdictions, it was shown that provincial and national levels of licensing regulation appeared better positioned to ensure protections for drivers than jurisdictions where licensing was regulated at municipal levels (Sribaskaran and MacEachen, 2018). In Quebec, where the taxi sector is regulated at the provincial level, the government required ride-hail drivers to meet taxi training re-

quirements rather than eliminating it, although the number of mandatory training hours was reduced (Kassam, 2017)⁵. Denmark licenses taxis at the national level and appointed a unique ‘tech ambassador’ role to negotiate regulatory decisions with transnational tech companies like Uber. Developing a single broad licensing standard at higher levels of government would also reflect the geographies of taxi and ride-hail driving, which cross municipal jurisdictional boundaries every day, often within a single ride. Finally, the regulatory challenges of ride-hail platforms are broad and systemic, not localized to particular municipal governments. While cities inarguably merit a strong role in devising policy, it is concerning that provincial and federal regulators in Canada have largely failed to respond to the challenges of ride-hail driving. Our findings reinforce the conclusion that systematic, intergovernmental policy development and reform—beyond municipal licensing agencies—is needed to address outstanding regulatory gaps and exclusions that contribute to the poor safety and health records facing the taxi and ride-hail workforce (Johal and Thirgood, 2016; Graham and Shaw, 2017). Since ride-hail services continue to be regulated by municipal licensing authorities in most Canadian jurisdictions, deeper analysis and research on the role and impact of municipal licensing in taxi and ride-hail work are warranted.

Conclusion

Our research demonstrates how regulatory frameworks instituted by *cities* directly and indirectly regulated work-related health and safety conditions in the taxi sector. Broadly, the plate system of licensing quotas created a lucrative secondary market in taxi licenses that buttressed economic hierarchies and dependencies between shift drivers (who rented plates to drive) and fleet owners, brokerages and taxi owners. In turn, the economic conditions of taxi driving had implications for short- and long-term safety and health conditions among the taxi workforce—such as driving long hours to repay fixed shift rental fees. The role of municipal licensing regimes is unique in this respect, and under-acknowledged in industrial relations and occupational health and safety research.

At the municipal level, programs devised by licensing authorities in a large Canadian city included centrally-operated mandatory taxi driver training and stringent city-operated vehicle safety inspections. One program, demanded by taxi drivers—mandatory taxi cameras—was the only program intentionally devised to address driver safety. In the process of regulating ride-hail platforms, taxi licensing requirements were deregulated, weakening already meagre protections for the taxi workforce. Ride-hail drivers have also been impacted; ride-hail drivers confront many of the same hazards as taxi drivers alongside new workplace challenges such as unprecedented levels of surveillance (e.g., ratings) and ‘information asymmetries’ that leave ride-hail drivers with little information

about platform rules or their obligations as ‘self-employed’ operators (Bartel *et al.*, 2019; Rosenblat and Stark, 2016). In a sense, these information asymmetries have antecedents in the taxi industry and licensing programs recognized these imbalances. The now defunct city-run taxi training program, for example, can be argued to have mitigated health and safety risks to taxi drivers through training and awareness building among new drivers—about how to drive defensively, how to prevent health conditions and manage a small business. The cancellation of mandatory city-run training is an example, then, of how deregulation of municipal bylaw rules can deepen information and power asymmetries for drivers in a broad sense.

Municipal regulation in the taxi industry reflects the path-dependent, accidental and ‘street-level’ institutional complex between the taxi driver workforce, taxi industry, city administrators and public users. Cities indirectly regulate (and deregulate) taxi work and health within a policy vacuum where self-employed people are left at the margins of employment, health and social rights and protections—particularly for racialized and immigrant self-employed workers, like taxi drivers. The limited range of policy responses to address high-risk, low-paid self-employment in the taxi workforce have remained invariably bottlenecked at municipal levels, with little to no initiatives by provincial regulators (to address either the taxi or ride-hail workforce’s OHS, employment standards or labour rights gaps). These exclusions urgently need to be remedied, such that self-employed workers gain access to existing and/or new work and health entitlements. As the number of self-employed workers in the ride-hail sector grows, the challenges and risks of self-employed work as well as regulatory changes in the taxi and ride-hail sector are increasingly salient for worker advocates and concerned researchers—and these challenges should be a crucial priority for policymakers. Cities may still have a role in protecting the health of taxi and ride-hail drivers, but their efforts must be coordinated with broader, more concerted advocacy, legal and policy efforts.

Notes

- 1 We have chosen not to identify the city to protect the anonymity of study participants.
- 2 Most of these frameworks apply to ‘employees’, and where the framework is broader (i.e., where the law applies to ‘workers’), it remains the case that most taxi drivers, as well as the majority of the self-employed population, is not effectively covered by the legislation.
- 3 Ottawa’s Blue Line taxi drivers are unionized.
- 4 The case of dairy farmer resistance to changes to supply management, as well as the 2008 federal compensation package to Ontario tobacco farmers (Wilson, 2008), both stand out.
- 5 A new taxi law in Quebec, passed in 2019 (*Act Respecting Transportation Services by Taxi*), continues to require taxi and ride-hail drivers to obtain training (sec. 27). See <<http://legis-quebec.gouv.qc.ca/en/ShowDoc/cs/S-6.01>>.

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SUMMARY

Occupational Safety and the City: Licensing Regulation and Deregulation in the Taxi Sector

Many large cities in North America have jurisdiction over licensing rules that shape the employment and health conditions of ride-hail and taxi drivers. Yet there is a lack of research on the role of licensing agencies relating to the occupational health and safety (OHS) of taxi drivers. Most taxi and ride-hail drivers in Canada are self-employed workers and are, by default, exempt from OHS and worker compensation laws. Additionally, municipal licensing regimes in Canada and the US have undergone various changes as a result of pressures from new platform-based ride-hail services, like Uber and Lyft.

The analysis is part of a larger study on the health and safety conditions faced by ride-hail drivers. The research approach adopted a multi-level sampling and analysis strategy with the aim of connecting taxi drivers' everyday work experiences to company and sector practices, and with various regulatory arenas, including municipal licensing, taxation and car insurance. In this paper, the analysis draws from in-depth interviews at these different levels: with taxi and ride-hail drivers, with taxi and ride-hail managers, and with key informants in government, law, insurance, tax and elsewhere.

The paper identifies features and impacts of municipal deregulation in the era of on-demand taxi services, focusing on a large Canadian city in a province where municipal authorities regulate the vehicle-for-hire sector. The research identified regulatory changes that included removing centralized taxi vehicle inspections, cancelling mandatory driver training, and instigating rapid changes to competition in the taxi workforce by issuing unlimited numbers of ride-hail licenses. Our analysis indicates that regulatory changes adopted by the city administration have compounded work vulnerabilities and hazards for taxi drivers, while extending hazardous conditions to ride-hail drivers. These hazards suggest the need for interventions at a range of levels, actors and agencies, rather than solely by city licensing officials.

KEYWORDS: municipal licensing, occupational health and safety, self-employment, taxi, ride-hail, Uber, Lyft.

RÉSUMÉ

Sécurité au travail dans les villes : réglementation des permis et déréglementation dans le secteur du taxi

Plusieurs grandes villes nord-américaines possèdent la juridiction sur les règlements qui déterminent l'emploi et les conditions de santé et de sécurité au travail des chauffeurs indépendants de taxi et de voiturage, comme Uber et Lyft. Cependant, il existe peu de recherche sur les effets de ces politiques et règle-

ments municipaux sur les conditions de santé au travail des chauffeurs de taxi. Au Canada, la plupart d'entre eux sont des travailleurs indépendants et se trouvent, en conséquence, exclus des droits en santé et sécurité au travail, tout comme de l'indemnisation des accidentés. De plus, les régimes municipaux qui allouent les permis de taxi ont récemment été forcés à changer leurs règlements d'allocation à la suite des fortes pressions de nouvelles compagnies offrant des services de héliage électronique, notamment Uber.

Notre étude fait partie d'une recherche plus vaste qui porte sur les conditions de santé et de sécurité au travail des chauffeurs de taxi et de voiturage. Nous utilisons une méthode de recherche multidimensionnelle qui vise à établir des liens entre l'expérience quotidienne des chauffeurs, les pratiques des compagnies et les secteurs administratifs qui supervisent les règlements et les lois, entre autres l'allocation des permis, les taxes et les assurances automobiles. Notre analyse se base sur des entrevues de fond avec des chauffeurs, des gestionnaires de taxi et d'Uber, ainsi qu'avec des intervenants-clés dans les sphères gouvernementale, légale et de l'assurance. Nous avons centré notre analyse sur une grande ville canadienne située dans une province où les municipalités administrent le secteur du taxi.

Nous identifions les caractéristiques et les impacts de la déréglementation au niveau municipal dans le contexte de la montée des nouveaux services de héliage électronique sur demande. L'article identifie trois aspects de la déréglementation : 1- l'annulation des inspections de véhicules de taxi; 2- l'annulation de la formation obligatoire des chauffeurs de taxi : et 3- la transformation brusque du marché de taxi puisque le nombre de permis de voiturage alloué n'est plus plafonné. Ces changements aggravent les vulnérabilités et les risques reliés au travail des chauffeurs de taxi et de voiturage. Ces risques accrus nécessitent des interventions non seulement au niveau municipal, mais aussi des autorités compétentes aux niveaux provincial et fédéral.

MOTS-CLÉS : permis municipaux, santé et sécurité au travail, travailleurs autonomes, taxi, service de héliage électronique, voiturage, Uber, Lyft.