# Not Just Along for the Ride:
# Work, Justice, and Municipal Regulation of Ridehailing Platforms

by

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A thesis
presented to the University of Waterloo
in fulfillment of the
thesis requirement for the degree of
Doctor in Philosophy
in
Planning

Waterloo, Ontario, Canada, 2022

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## Author's Declaration

This thesis consists of material all of which I authored or co-authored: see Statement of Contributions included in the thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

## Statement of Contributions

Jonathan Woodside was the sole author for Chapters 1, 2, 3, and 7 which were written under the supervision of Dr. Markus Moos and Dr. Tara Vinodrai and were not written for publication.

This thesis consists of three manuscripts written for publication. As the sole author of chapter 4, Jonathan Woodside conceptualized the research design, carried out data collection and analysis and drafted the manuscript for submission under the supervision of Dr. Markus Moos and Dr. Tara Vinodrai, who provided feedback on draft manuscripts and guided the research through challenges.

Exceptions to sole authorship are present in chapters 5 and 6 of the thesis. Jonathan Woodside was the lead author for both chapters, devised and conducted the research under the supervision of Dr. Marcus Moos and Dr. Tara Vinodrai. Professors Vinodrai and Moos contributed to the analysis and writing of these chapters as well as contributing to revisions prior to publication.

# Abstract

Digital platforms are a package of information and communications technologies that bring together buyers and sellers onto proprietary markets. These platforms have come to dominate services like for-hire vehicles that are some of the most emblematic of city life. However, the rise of ridehailing platform like Uber has been accompanied with a loss of power for workers who make a living providing these services. This is a concern for cities, which have traditionally regulated this service to maintain trust between drivers, passengers, and market facilitators. Where conditions for workers decline and trust is damaged, it could lead to a decline in the service altogether.

This study asks what role municipalities can play to improve conditions for workers. A growing literature documents the regulation of ridehailing platforms in global cities particularly as they grapple with regulatory change. Yet, few studies have captured the diverse range of municipalities that regulate the service or examined these regulatory systems once in place. To help fill this gap, this study surveys a diverse range of cities and towns that regulate ridehailing in a nested qualitative case study within the Greater Golden Horseshoe of Ontario, Canada.

The study documents the conditions faced by drivers and measures those conditions against a standard of justice based upon Fainstein's Just City theory. In Fainstein's work, justice is a movement over time towards greater democracy, diversity and equity expressed in the capabilities of the most marginalized groups. In this study, an assessment of justice in ridehailing platforms is conducted through the analysis of semi-structured interviews with drivers in the GGH region. Interviews are transcribed and subjected to thematic analysis to identify important themes and concepts facing the drivers.

The thesis next examines the current municipal regulatory system applied to ridehailing platforms and the perspective of municipal representatives within the GGH region who fashioned that system. Content analyses of local GGH region media reports, and municipal documents describe relevant events and regulatory strategies across the GGH region. Semi-structured interviews are then conducted with staff and councillors from municipalities with regulations for ridehailing platforms. Together these methods are analyzed to describe the rationale for regulation in the context of challenges facing the ridehailing system.

The study continues with an examination of the current strategies employed by drivers to improve their own conditions to determine if there is a role for municipalities to support drivers. The study examines the potential of workforce development programs and their applicability to platform drivers. Interview analyses of drivers within the GGH region are compared against accounts described in videos produced by platform drivers across English North America and posted online in video diaries (vlogs). These two groups of data are then compared to understand how drivers are currently empowered and the barriers they face when trying to improve their own circumstances.

The thesis contributes to the conceptual understanding of vehicle-for-hire services, the role of cities in that service and the nature of justice for platform drivers. The study finds that the erosion of municipal regulations over for-hire vehicles in the region is largely due to a choice by municipalities not to extend regulations over ridehailing platforms. This choice is attributed to an understanding of the industry as a private market where regulation should be minimized. For policy makers seeking to extend justice to platform drivers, the thesis calls for municipalities to expand the tools of oversight and create mechanisms for workers to direct changes to the structure of vehicle-for-hire services.

# Acknowledgements

This thesis has been a long road and there are many people to thank. To begin I would like to express my deepest gratitude to Dr. Markus Moos and Dr. Tara Vinodrai for their consistent support and stabilizing presence over the years. Their clear-eyed analysis and emphasis on following the evidence were pivotal messages to finding a path forward. I am grateful for their patience and appreciate their clear direction at those times when it looked like I was hitting a wall. I would like to thank my committee members Dr. Jennifer Dean, Dr. Daniel Cockayne and Dr. Pierre Filion for timely comments and patience. It was a privilege to see these distinguished scholars go about their work as I begin my academic career. I would also like to thank the staff, faculty and students in Waterloo's School of Planning who made my time on campus a joy. And I would like to thank the Global Suburbanism project team and the Creating Digital Opportunities Network for the chance to listen and present with such a dynamic array of scholars.

Many thanks to friends who supported me through this journey. Thank you to Baker Turner Inc. who kept me employed in a manageable role throughout my early years of the PhD. It was an indispensable part of my journey to keep the lights on.

Thank you to my family who listened over get togethers to my uncertain plans. To my sister who gave me rides to Waterloo and made the campus feel like home. I am particularly grateful to my parents who would ask to read chapters and piece through my argument no matter how bewildering.

And finally, to my wife, Yuki, and son, Marcus, I could not have done any of this without your love and patience in allowing me on this exploration. It was a long and winding journey. I know we will look back at this time as a moment when struggle led to something more promising.

In the final days of drafting this thesis the Ontario Government introduced a bill to deregulate my wife's profession. It was a lesson I understood from this research project and now feel personally, about the vulnerability of labour and the institutions we use to protect ourselves. Seeing my wife and her co-workers organize to stand up for themselves and their community has been truly inspiring.

# Dedication

To Yuki and Marcus, I love you always.

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# 1.0 Introduction

Information and communications technology (ICT) is growing in importance to the infrastructure of the contemporary city (Ash, Kitchin & Leszczynski, 2018). In the last ten years, purveyors of ICT have extended these technologies to local services in the form of digital platforms that facilitate and mediate individualized transactions between producers and consumers (Sundararajan, 2016; Davies et al., 2017). Among urban services, for-hire vehicles services – including taxis and limousines – have been a prominent example of this trend. Platform firms like Uber and Lyft have come to dominate the service (Schaller, 2017). Their ascendance has installed a private layer of infrastructure to facilitate vehicle-for-hire services that had historically relied upon municipalities to set standards and coordinate a private marketplace. Municipalities, states, and provinces have widely accommodated platforms by encouraging a form of platform self-regulation (Sundararajan, 2016; Collier, Dubal & Carter, 2018). However, this industry transformation has been controversial in part due to the potential for unfair treatment of platform users and platform workers in particular (Rosenblat, 2018).

Poor conditions for drivers have been a persistent problem within the vehicle-for-hire service (Bruno, 2009; Blasi & Leavitt, 2006; Abraham, Sundar & Whitmore, 2008). Some industry watchers celebrated the disruption of taxi services where platforms were expected to free drivers from burdensome regulations (Mitchell & Koopman, 2019). However, the arrival of ridehailing platforms has undone a long-standing system of municipal regulation, including those components like municipal tribunals and limits to competition that protected drivers interests and maintained trust through due process (Collier et al., 2018). Platforms have installed new opaque systems that have yet to demonstrate the consistent governance capacity required for reliable urban services (Rosenblat, 2018). Drivers are increasingly recognized as independent entrepreneurs, but scholars have found many lack the experience, skills, or access to tools necessary to mitigate risks or make

real business decisions (Wells, 2019; Rosenblat, 2018). Consequently, critics have called for greater public oversight. Much organized opposition has agitated for change in the courts and in senior levels of government (Collier et al., 2018; Palagashvili, 2018; Said, 2020; Johnston & Land-Kazlauskas, 2019). Other scholars suggest that municipalities may be a particularly important scale to pursue justice in vehicle-for-hire services due to the long history of municipal involvement in the service and the sensitivity of municipalities to local conditions (Davidson & Infranca, 2019).

Theorist Susan Fainstein (2010) describes the basis of urban justice in the shared infrastructure and social services that the city produces. In this regard, vehicle-for-hire services provide a key component within the local transportation system – ensuring widespread access to prompt transportation. For Fainstein (2010), justice within a liberal democracy demands that services uphold long-standing, broadly accepted liberal values, which include maintaining diversity, supporting democracy and delivering equity to residents (Fainstein, 2010). Fainstein adds to this concept, a pragmatic insistence that these values be expressed in the capabilities of individuals and groups within society to pursue a dignified life of personal meaning (Nussbaum, 2000). This insistence concretizes the abstract notions of distributive justice within the tangible capabilities of people – particularly marginalized people whose life is most affected by policy – to respond and cope with an otherwise uncaring economic system.

It is easy to understate the importance of vehicle-for-hire services in achieving these values as they are often described as a luxury. Studies show that for-hire vehicles serve a diverse range of residents and provide a key supplement to public transportation that is particularly critical for low-income groups (King & Saldarriaga, 2016; Ellis, 2016). Furthermore, the changing price and convenience of services like for-hire vehicles directly impact how people access and reinvest in the city (Srnicek, 2017; Ferreri & Sanyal, 2018; Transportation Research Board, 2015). Consequently, as

a privately delivered service that is critical to the public, the regulation of vehicle-for-hire services must balance a diverse range of public and private interests.

Ride-hailing platforms tip this balance by placing vehicle-for-hire services into the forefront of global financial speculation (Kenney & Zysman, 2016). When Uber and Lyft reached valuations of $82.4 billion and $24.3 billion respectively at their initial public stock offering in 2019 (De La Merced & Conger, 2019; Kelleher, 2019), what had been a niche within the local economy very quickly became a growth market. Plantin et al., (2018) describe the process of adapting infrastructure to platform tools as "platformization" (Plantin et al., 2018). And platformization has produced a new logic at the heart of local services. Public demands for high-quality, safe, and inclusive service are now mediated by platform firms that organize a new structure of production around their proprietary platform software and to maximize private interests. As a result of these changes, ridehailing platforms have become the subject of a growing literature (Sadowski, 2021; Rosenblat, 2018; Sundararajan, 2016; Harding, et al., 2016; Brail, 2018).

The questions facing platforms, how they serve cities and support workers has led to a reckoning with what Foglesong (2012: 134) describes as the "Janus-face reality" of the capitalist urban project. Cities are both the engines of growth, pushing the interests of local elites (Florida, 2018; Molotch, 1976), and also the foundation of collective consumption, securing a dignified life for residents and workers (Nussbaum, 2000; Castells, 1977; Fainstein, 2010). In the past era of the taxi, this dual role was expressed in private markets that were regulated by municipal by-laws controlling the critical components of the service including, service quality, price, and supply. Leopold and McDonald (2012) identify this service with a market-reliant mode of "municipal socialism" pushed by a progressive movement at the turn of the 20$^{th}$ century. This progressive movement did create a number of institutions, such as quasi-judicial boards and systematic fare rates, which allowed for broad democratic oversight over the industry. However, over time it has

been the market rather than the democratic institutions that has grown to structure municipal regulation (Leopold & McDonald, 2012). This has accompanied a wider ideological trend towards neoliberalism, that among other things sees private markets as the ideal structure for regulating behaviour in all manner of social settings (Brenner & Theodore, 2002). Platforms would seem to follow this trend towards neoliberalism where they install private institutions of regulation and provide price mechanisms to organize production.

The contested nature of vehicle-for-hire services makes them an interesting and challenging topic for regulators and planners. Despite the popularity of neoliberal interpretations of vehicle-for-hire markets, many municipalities retain a legal authority and obligation to regulate vehicle-for-hire services. Further, the nature of municipal authority over vehicle-for-hire services has widely focused on fine coordination of the industry through vehicle caps and price controls – questions that employ planning tools to balance the supply of for-hire vehicles and demand within the overall transportation system. Thus, in this study I investigate municipalities with regulatory authority in the Greater Golden Horseshoe of Ontario, Canada. The study looks at the challenges drivers face in navigating the current platform-oriented system and the perspective of regulators in structuring that regulatory system. Together the goal of pursuing these inquiries is to help build understanding of ride-hailing platforms and the role of municipalities in sustaining vehicle-for-hire services that are positive for drivers.

## 1.1 The Research Problem and Research Questions

The growing literature examining ridehailing platforms, looks at broad social and systemic effects of these platforms on urban life. However, there are too few comprehensive studies of regulatory regimes after the initial introduction of policy changes – what Brail (2021) identifies as

ridehailing "regulation 2.0" – and no studies applied to a regional urban setting. Existing research on regulation and regulatory change has frequently remained at the level of theory (Thierer, 2016; Sundararajan, 2016). Where there have been case studies or comparisons, these have typically focused on the process of regulation development (Brail, 2018; Dupuis, 2018; Spicer, Eidelman & Zwick, 2018) and have been limited to large global cities or national government responses (Collier et al., 2018; Puche, 2019; Kim & Hwang, 2019). There has been less examination of the wide range of municipalities implicated by ridehailing platforms, including suburban and rural communities, where ride-hailing platforms have also been active.

In addition, studies of the impact of ridehailing platforms on the working conditions of drivers have often focused on employment policy at the state and national levels. With ridehailing platforms implicated in the broader gig economy, ridehailing platforms have become a subject of conflict for employment law that show potential to create change at upper levels of government. This has resulted in important victories for the labour movement, particularly in Europe, where courts have ordered platforms like Uber to recognize drivers as employees (Lee, 2021). Yet, many aspects of the vehicle-for-hire system are locally determined as part of a broader transportation system. As a result, there is good reason to see how municipal regulation and institutions can complement employment law or compensate for a lack of regulation at the state level.

To understand how ride-hailing platforms have come to organize vehicle-for-hire services and the role of municipalities in producing positive work conditions for drivers, I divide this thesis into three independent manuscripts. Each manuscript tackles a different line of inquiry within this research agenda:

1. What are the conditions facing platform drivers? And to what extent does that reflect justice?
2. How do municipal staff and representatives conceive of vehicle-for-hire services and how have municipalities developed regulations over digital ridehailing platforms?

3. Can municipalities support platform drivers in ways that improve the conditions they face at work?

The thesis addresses these questions by examining the experiences of drivers in the ridehailing platform industry, as well as the regulatory approaches undertaken by municipalities in the Greater Golden Horseshoe of Ontario, Canada. To do so, the dissertation draws upon interviews with drivers, municipal staff, and councillors; a content analysis of video posts by platform drivers (driver vlogs); and a review of municipal documents and local media reports.

The remainder of this chapter introduces the conceptual framework that has guided this research, presents the Greater Golden Horseshoe case study that is the foundation of the research; and describes the contributions of the dissertation to the wider literature and debates about platform labour and the governance of vehicle-for-hire services – including the potential role of municipal planners. The chapter concludes with a roadmap to the remainder of the dissertation.

## 1.2 Just Vehicle-For-Hire Services

Research into the municipal regulation of ride-hailing platforms must begin with a recognition that vehicle-for-hire services are an important service that municipalities have protected for the public interest. Popular discontent with the industry during the depression-era 1930s led municipalities to regulate for-hire vehicles for numerous rationales (Cooper, Mundy & Nelson, 2010; Dempsey, 1996). These rationales included support for an efficient marketplace; maintaining a safe, high-quality, and nuisance-free service; and balancing the distribution of benefits to stakeholders (Dempsey, 1996; Cooper et al., 2010). While senior levels of government typically have authority over transportation, employment, and industrial policy, states, and provinces commonly empowered municipalities to intervene regarding these topics within vehicle-for-hire systems

(Cooper et al., 2010; Papillon, 1982). This empowerment was expressed in an unusual set of powers at the municipal level that are not typically found in the municipal regulation of other service industries. These powers include standards of *quality*, limits to the *quantity* of drivers, and *economic* controls in the form of preestablished fare rates – what Cooper et al. (2010) label the QQE framework.

These regulatory powers fit vehicle-for-hire services into a unique position in the diverse array of approaches to delivering critical urban services across nations, states, provinces, and municipalities. Municipalities have commonly taken on meaningful roles regulating urban services. Municipalities have been known to protect a limited number of regulated providers of important services, or even provide services through municipally owned corporations (Plaiss, 2016; Sancton, 2011; McDonald and Leopold, 2012). Given the public interest of maintaining a functioning vehicle-for-hire industry, but also the private market organization of service deliver, this leaves uncertainty regarding whether vehicle-for-hire services should be understood as a public service, a private market or something else?

Other urban infrastructures that occupy a foundational role in the local economy, like electrical and water service, have been designated as public utilities due to a recognition of natural monopoly, their high cost and geographical specificity (Plaiss, 2016). Other public services like the libraries are often provided by the municipality directly. But each of these public services is different. What holds these disparate services together as a concept according to Stephen Pinch (1985) is not the mode of their consumption or the approach to service delivery, but their position within local politics. Pinch argues that public services are defined by an historical legacy of political mobilization among residents marking this service for collective consumption. One can expect to see public services where residents have reason to value that service for granting access to the city and where residents are organized with the political power to pressure public representatives to intervene. The

vehicle-for-hire industry is a particularly strong example of this. Not only has there been a long history of regulation, but repeated examples around the world of liberalization have ended with re-regulation because of public dissatisfaction (Dempsey, 1996).

Over the past decades, critics of the regulation of vehicle-for-hire services have frequently characterized the system as a 'monopoly', where regulators are 'captured' by industry insiders (Papillon, 1982; Mitchell & Koopman, 2019; Collier et al., 2018). They argue this leaves industry actors unable to innovate or adapt to current market dynamics. This argument is compelling because municipal standards that are the basis for pricing and service quality are indeed controlled by a single economic unit, the city. Yet, municipalities are democratic institutions. It is understandable that local regulators can come to sympathize with industry insiders even against the interests of the public to some degree due to personal familiarity and affinities. However, one should not overstate the power of this 'capture' effect. First, capture should not be confused with corrupt practices in which private interest entice regulators to protect insiders in exchange for lucrative "parachute" contracts once the regulator leaves the public service. The literature does not allege this kind of 'capture'. Second, while the vehicle-for-hire industry has many peculiarities and the industry can be complex, it is not technical to the degree that only industry insiders are expected to understand industry dynamics. Finally, the quick easing of regulations to allow ridehailing platforms market entry despite widespread protests from industry insiders provides historical evidence of the relative lack of power held by insiders with respect to public policy in this sphere.

Critics of the QQE approach to regulation reflect the wide number of political and economic interests that municipal regulators must coordinate with respect to privately delivered public services. Like other infrastructures and public services, the vehicle-for-hire industry as whole enables what would otherwise be impossible for individuals – in this case an on-demand car service. For

Dupuy (2008), infrastructure and service networks that act like a machine, seeking efficiencies and generalizing across the interests of myriad individuals. To understand the value of a public service, therefore, one must grapple with how services are delivered and how they resolve the requirements and desires of residents, the values of stakeholder organizations and economic efficiency. In sum, public service networks are a political compromise that materialize social values into a temporal and spatial pattern of urban life (Marvin & Graham, 2001; Scott & Storper, 2015; Graham & Healey, 1999). Given how public services qualify access to public life and revalue relations between stakeholders, services can be judged as a function of justice (Rawls, 1971).

Scholars of planning practice and theory apply the concept of justice to the practice and theory of planning public services, if inconsistently (Beauregard, 1990; Graham & Healey, 1999; Fainstein, 2010). These perspectives typically follow Rawls distributive description of 'justice as fairness' (Rawls, 1971; Stein & Harper, 2005). In the Rawlsian (liberal) tradition, justice describes the quality of intergroup relations with an emphasis on distribution of resources for the pursuit of self-actualization. Applied to the urban and to public services, Fainstein operationalizes these resources in the form of capabilities. Borrowing from the work of Nussbaum (2000), Fainstein interprets capabilities as the abilities and lack of barriers needed to pursue a dignified life. Justice for Fainstein, does not simply include the appropriate wages to compensate driver efforts, but seeks to provide the capabilities necessary for drivers to develop a working life that bears meaning, promotes recognition from others and allows self-respect.

Engineers, administrators, planners, and other city builders have invested infrastructure and public services with normative standards and a wide range of tools through which to coordinate stakeholders (Dupuy, 2008; Marvin & Graham, 2001). Scholarly accounts of infrastructure development in the modern era describe this system revolving around a "modern infrastructural ideal" that pursued social values of inclusion, uniformity, and universality (Marvin & Graham, 2001;

Coutard, 2008). Tools used to pursue these goals were diverse. They included independent oversight bodies, by-law control, fiscal policy, and even public control of corporations. Within vehicle-for-hire services, these tools were targeted towards achieving standards of universality that were typically built into the system through regulations controlling the prices, supply, and quality of service (Cooper et al., 2010). And these tools were typically adjusted using planning models of demand for vehicle-for-hire services defined by average passenger delay, peak demand, expected growth, affordability, and safety, among other variables. set within an overall transportation system and defined within understandings of affordability and safety (Cooper et al., 2010). Thus, while planning may appear marginal in vehicle-for-hire services, the traditional form of regulation has made use of procedures that depend on measures consistent with planning practice.

In recent years, policy makers and infrastructure providers in all sorts of services have challenged the modern infrastructural ideal as a guiding principle. They have done so by applying innovative technologies, privatizing services, and liberalizing regulations to rely more on market principles (Marvin & Graham, 2001). However, in the process of changing regulations and removing the safeguards, residents bear a burden to monitor the results of these changes and re-mobilize as needed to protect their interests. Such a process places an unfair burden on those with the fewest resources and thus undermines the justness of these institutions (Fainstein, 2010).

Within the goal of this paper to understand the role of municipalities in sustaining a vehicle-for-hire service that is positive for drivers, this study does not aim for a comprehensive account of worker justice. Rather, this study aims to understand the capabilities available to drivers to protect their own interests and to pursue a livelihood that they feel has merit.

### 1.2.1 Digital Platforms Challenging Industry and Challenging Regulation

Platforms are suites of online tools that support transactions between both sides of the marketplace that is ostensibly composed of peers (Kenney & Zysman, 2016; Davies et al., 2017). Through this software, ridehailing platforms automate some managerial tasks, such as setting prices, resolving disputes, and preserving trust between individuals that were previously fulfilled by municipal standards and by-law officers. Proponents argue that platforms have innovated over the previous industry model, producing cost savings for stakeholders, expanding capacity and more personalized services (Sundararajan, 2016; Harding et al., 2016). To allow for this mode of service delivery, municipalities, states, and provinces have re-conceptualized their regulatory regimes, often adopting a more permissive approach that enable platform self-regulation (Collier et al., 2018; Van den Steenhoven et al., 2016; Balaram, 2016; Sundararajan, 2016; Davidson, Finck & Infranca, 2019). These changes have transformed the industry model and produced a new balance between private and public interests.

Platforms have brought meaningful changes to the scope and scale of the industry, the types of participants and the relationships between these actors and the city as a whole (Harding, et al., 2016; Zysman et al., 2010; Sundararajan, 2016; Srnicek, 2017; Hua & Ray, 2018; Zale, 2019). Ride-hailing platforms integrate the for-hire vehicle industry into a wider tech industry premised on the management of data and advertising (Srnicek, 2017; Calo & Rosenblat, 2016). This has triggered new investments in this local industry and introduced corporate and investor interests into the equation. In addition, where platforms make it easier to begin driving in the industry, it has widened the range of providers including temporary workers and non-professionals (Hua & Ray, 2017). This has introduced more diversity among worker motivations, commitments, and competencies. Consequently, regulators have come to consider platform workers as non-professionals, part-timers, and difficult targets for regulation (Zale,2019). Finally, researchers have

documented many policy areas where there may be negative effects due to platform technologies and withdrawals of regulation. These policy concerns include worsening traffic congestion; poor pay and treatment for drivers; and risky conditions for the safety, privacy, and autonomy of consumers (Calo & Rosenblat, 2016; Rosenblat, 2018; Peticca-Harris, De Gama & Ravishankar, 2018; Wells, 2019; Clewlow & Mishra, 2017; Sundararajan, 2016).

Municipalities, states, and provinces have largely left platform companies to resolve public and private demands on the system (Collier et al., 2018; Spicer, et al., 2018). Those in favour of platform self-regulation argue that the platform's interests are aligned with maintaining high levels of service to local drivers and customers in order to ensure the industry profits – and thus all actors are served by empowering platforms (Sundararajan, 2016). However, despite this theoretical alignment policy concerns around for-hire vehicles have not subsided (Collier et al., 2018). There continue to be disagreements about the appropriate price of services, the safety for drivers and passengers, and the privacy of individuals using these services, as well as many other issues that deserve consideration for public policy interventions.

### 1.2.2 Demanding Justice for Drivers

Workers have been an important constituency seeking change in the vehicle-for-hire industry. Cooper et al. (2010), attribute early regulations of the vehicle-for-hire industry to worker strikes/occupations that arose early in the evolution of the legacy taxi industry. There are good reasons for this organization to return today. Scholars and local municipal studies have described platforms treating workers poorly, paying little, contributing to unstable lifestyles, and presenting a of risk from incurred debt (Rosenblat, 2018; Wells, 2019; Peticca-Harris, et al., 2018). These conditions are not so different from complaints of drivers in the era of taxis. Taxi drivers in many

municipalities complained about high costs and poor pay; health and safety risks; as well as various forms of harassment (Blasi & Leavitt, 2006; Abraham et al., 2008).

Today the complaints of drivers have a new target. Scholars criticize platforms for a lack of attention to the industry. The platform algorithm has become the "boss" controlling workers and setting the conditions of work (Lee et al. 2015; Wood et al., 2019; Rosenblat, 2018; Yeung, 2018). Drivers must adjust their operations to agree with rules programmed into the platform. But these rules lack the flexibility to account for changing contexts of each individual ride. Scholars also criticize platforms for imposing the costs and risks of business to individual workers. This transferral of burden splinters the service between workers who must each draw on their own individual resources to make the system work (Malin & Chandler, 2017).

These difficult conditions for platform drivers have resulted in worker organization in some cases. In New York City, concerns about the workplace for drivers and the effect to incumbent taxis resulted in collective action by multiple unions and worker-oriented associations (Johnston, 2018). Drivers in other markets have also begun to mobilize collectively (Dubal, 2019b). Unions and organizations of drivers have built up techniques such as online advertising, polling, and messaging interactions to organize these workers in collective action (Dolber, 2019a). This mobilization along with the sheer growth of platforms has begun to result in state and municipal legislation that attempts to raise the importance of driver interests in the operations of local vehicle-for-hire systems.

With states and nations taking a growing interest in platforms and vehicle-for-hire industries, the challenges facing workers are primarily labour market questions. However, cities also carry an obligation to regulate vehicle-for-hire services to maintain functionality for residents. For cities, ridehailing platforms are not just another company in the labour market, but a form of infrastructure that underlies a critical urban service. Just as in the early part of the 20th century,

cities today must address the challenges that risk undermining urban services and spreading distrust in the system – whether that be a misalignment between corporate practices and inclusive service delivery, or the "misbehaviour" of large numbers of individual drivers acting out against an unjust industry (Ackroyd & Thompson, 1999). It is critical to ensure distributive justice between consumers, drivers, and market facilitators to maintain the functioning of vehicle-for-hire services.

## 1.3 The Greater Golden Horseshoe (GGH) Region Case Study

The GGH region provides a diverse set of cases within a single regional context to examine ride-hailing platforms. The GGH is situated in Ontario, Canada, along the north and west shore of Lake Ontario extending North to Lake Simcoe and is both the largest region in Canada by population and the largest regional economy (see figure 1.1). Toronto's size and economic importance within Canada make it a prominent case and an important case as an example to other municipalities. However, while Toronto is the most populous municipality and the location of the region's central business district, other municipalities within this region vary dramatically in size, population density and economic power including many rural municipalities within the region with less than ten thousand residents. Toronto, like many cities in the United States and Canada, has gone through a process of liberalization of the vehicle-for-hire market (Rosenblat, 2018). Together, the GGH region has many characteristics that make it typical of a wide range of municipalities and therefore a useful target for examining the dynamics of regulation.


Figure 1.1: Regional Boundaries of Greater Golden Horseshoe (Metrolinx Service Area)
http://www.metrolinx.com/en/aboutus/metrolinxoverview/Metrolinx_Map_EN-230x239.jpg

While not a contiguous political jurisdiction, the GGH region has emerged as an important scale of planning and service delivery. The region is divided into multiple tiers of municipal governments that are created by the province and delegated powers, including the power to regulate vehicle-for-hire services, within the *Municipal Act* (2001) and *City of Toronto Act* (2006). These tiers of municipalities overlap to create an upper tier of ten (10) municipalities, a lower tier of 82 municipalities and ten (10) unitary single-tier municipalities across the region. These tiered governments split their jurisdiction as stated in the Municipal Act (2001). Lower-tier municipalities

generally have authority over the regulation of vehicle-for-hire services. However, the act explicitly singles out upper-tier municipalities in Waterloo and Niagara as responsible for this portfolio within their jurisdictions. Since 2006, the GGH region has also become the scale of regional transportation planning. At that time, the province created the Metrolinx corporation to plan, coordinate and operate public transportation across the region, though the coordination of that service has had mixed results in part from poor coordination between municipalities within the region (Schabas, 2013).

Municipalities within the province of Ontario regulate for-hire vehicles in ways that cross between private industry and public service. Before the arrival of ride-hailing, it was primarily taxis and limousines that delivered vehicle-for-hire services. The province still distinguishes these services as delivered in "public" vehicles, similar to bus and ambulance services, not private commercial vehicles (Insurance Act, 1990, Regulation 664). However, this public definition does not mean it is municipalities that provide the service. There is a clear distinction between for-hire vehicles and the public provision of transit that rests on the presence of a public subsidy. The powers delegated to these municipalities in the Municipal Act and City of Toronto Act allow municipalities to regulate businesses to maintain health and safety, protect consumers, and limit nuisances (Municipal Act, 2001; City of Toronto Act, 2006). In the case of for-hire vehicles or "taxis," however, the Municipal Act extends greater powers. The act states that municipalities "may,

a) establish the rates or fares to be charged for the conveyance of property or passengers either wholly within the municipality or from any point in the municipality to any point outside the municipality;
b) provide for the collection of the rates or fares charged for the conveyance;
c) limit the number of taxicabs or any class of them" (Municipal Act, 2001, 156 (1) a - c)".

These additional powers ascribe an exceptional quality to the vehicle-for-hire industry by allowing intervention on the grounds of quality, quantity, and economic control. The act replicates the QQE framework described above and provides municipalities with direct control over important outcomes regarding the distribution and quality of service. The act also inserts service quality and affordability into the framework of the marketplace, establishing a homogenous level of service through quality standards and limits to price and competition. As a result of this unique approach to regulation, I describe this industry as privately delivered, public service.

With the emergence of ridehailing platforms and interventions from upper-level governments to enable platform operations, vehicle-for-hire services have changed. The process of change began in 2016 (Toronto CH. 546, 2016), when the provincial courts ruled against the City of Toronto stating that it could not simply apply existing taxi regulations to the new ridehailing platforms due to a variance in technology (Hui, 2015). Thus, the courts delivered a message to municipalities across the province that demanded a new political solution to ridehailing platforms. Later, in 2018, the Province of Ontario released a policy framework for what they defined as the "sharing" economy[1], that included ridehailing platforms amongst other digital platforms (Ontario, 2018). In this framework, the province identified vehicle-for-hire services with private markets rather than recognizing a hybrid that rested on private and public components. For example, new provincial insurance laws, eliminated the language of public vehicles that previously described for-hire vehicles, and now described vehicles hired within platforms as "private vehicle[s]-for-hire" with reduced levels of insurance coverage (Financial Services Commission of Ontario, 2016). As of July 2018, when the scope of this project was set out, 10 municipalities within the GGH had also

[1] Please note that while the Province of Ontario has used the term "sharing" economy, their definition of "online platforms to sell or rent underutilized property, goods or services" aligns with our definition here of the platform economy (Ontario Ministry of Finance, 2018, p. 3).

updated regulations to explicitly recognize ride-hailing platforms (listed in Table 1.1). Changes included a privatization of vehicle inspections, a relaxation on the limits to drivers so long as they are affiliated with a ride-hailing platforms. This was often accompanied by a reduction to regulations affecting taxis in the interests of maintaining a level-playing field for a competitive marketplace. This is a substantial change with implications for a population over four and a half million residents in total, or 52% of the GGH region's total population (Statistics Canada, 2018).

Table 1.1: Greater Golden Horseshoe Municipalities Intervening in the Digital Ride-Hail Industry (before July 2018).

| Municipalities with regulatory intervention in ride-hailing platforms | |
|---|---|
| Municipality | pop. 2016 |
| Barrie | 141, 434 |
| Brampton | 593, 638 |
| Hamilton | 536, 917 |
| Niagara | 447, 888 |
| Oakville | 193, 832 |
| Orillia | 31, 166 |
| Toronto | 2, 731, 571 |
| Vaughan | 306, 233 |
| Waterloo | 535, 154 |
| Whitby | 128, 377 |
| **Municipalities with experimental intervention in ride-hailing industry** | |
| Municipality | pop. 2016 |
| Mississauga | 721, 599 |
| Milton | 110, 128 |
| **Municipalities with a vendor relationship with ride-hailing platform** | |
| Municipality | pop. 2016 |
| Innisfil | 36, 566 |

Source: https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/search-recherche/lst/results-resultats.cfm?Lang=E&TABID=1&G=1&Geo1=&Code1=&Geo2=&Code2=&GEOCODE=35&type=0

Municipalities took up this program of changing regulations and enforcement allowing ridehailing platforms to operate across both municipalities with updated regulations and those

without (Brail, 2018). This expanding application of market-like tools for structuring the industry introduced a new competitive landscape for drivers to navigate. For example, the City of Toronto previously held the number of drivers to approximately 10,000 (Cook, 2014). Since the emergence of ridehailing platforms, the number of platform drivers on the road has grown, reaching 90,000 just prior to the COVID-19 pandemic (McGran, 2020). This change corresponded temporally to the removal of limits to the number of drivers and reduction in bureaucratic requirements for drivers signing up to drive (Adediji, Donaldson & Haider, 2019).

The expansion of ridehailing platforms and lack of municipal enforcement over incursions into the vehicle-for-hire service were immediately felt by drivers, who organized protests in the City of Toronto (Blinch, 2015). However, this collective energy quickly dissipated and has not returned at such a level of mobilization since. That said, Toronto has seen drivers among the luxury tiers of ridehailing service begin to organize into an unofficial union (Kopun, 2019). But it should be noted that the union appeal has explicitly excluded the largest group of drivers who operate in the lower tiers of service and are more likely to be occasional workers (Kopun, 2019). Still, this overt political mobilization suggests that the conditions of drivers is a critical subject for inquiry regarding questions of justice for this service.

## 1.4 Contribution to the Field

The thesis contributes to the conceptual understanding of vehicle-for-hire services, the role of cities in that service and the nature of justice within vehicle-for-hire systems dominated by platforms. This contribution is particularly relevant for municipal policy makers regulating the vehicle-for-hire system where it concentrates on the role of municipalities in structuring the vehicle-

for-hire system, rather than addressing the complex of other policy questions related to employment law or contract law that are better addressed in upper-levels of government.

The first manuscript (chapter 4) contributes to the literature on urban services and the gig economy. It does so by examining a standard of justice developed from Fainstein's just city theory and applying it to ridehailing platforms. The study also contributes to planning theory. In the application of just city theory principles, the study extends Fainstein's analysis to explore how the pursuit of justice reflects not only the values Fainstein associates with justice but also the expression of those values in dynamic worker capabilities.

The second manuscript (chapter 5) contributes to the conceptualization of vehicle-for-hire services and platform regulation both with reference to a historical regulatory context and by investigating the apparent binary of private markets and public services in vehicle-for-hire industry. In this process it supplies a survey of functioning regulatory systems for ridehailing that addresses on-going regulations not just regulatory change and draws evidence from diverse range of municipalities.

The third manuscript (chapter 6) contributes to our understanding of worker agency within the gig economy and the potential value from supportive local institutions. The study identifies the strategies available to workers and explores where local institutions that address workforce development might provide support for greater agency and power for workers and worker-led organizations.

In total, these studies identify ethical tools for municipalities and other local policy makers to use in restructuring vehicle-for-hire services. The study defines a reformist agenda that aligns with municipal authority, addresses the values associated with justice in vehicle-for-hire services,

and seeks immediate capabilities for workers to build credibility to those workers and trust within the system.

## 1.5 Structure of the Dissertation

This dissertation proceeds following an article-based format that focusses on the manuscripts of three discrete analyses of a single case study. These three manuscripts all focus on the value of municipal intervention in contemporary vehicle-for-hire services particularly with regards to workers on ridehailing platforms. All three of these articles are published in peer-reviewed journals:

1. Woodside, J. (2021). Just rides: Ride-hailing, the capabilities approach, and the just city. *Canadian Journal of Urban Research,* 30(2), 85- [Chapter 4] Available at: http://cjur.uwinnipeg.ca/index.php/cjur/index

2. Woodside, J., M. Moos & T. Vinodrai. (2021). Private Car, Public Oversight: Municipal Regulation of Ride-hailing Platforms in Toronto and the Greater Golden Horseshoe. *Canadian Planning and Policy Journal,* 146-165. [Chapter 5] Available at: https://ojs.library.queensu.ca/index.php/cpp/article/view/14362

3. Woodside, J., T. Vinodrai & M. Moos. (2021). Bottom-up strategies, platform worker power and local action: Learning from ridehailing drivers. *Local Economy,* 36(4), 325-343. [Chapter 5] Available at: https://journals-sagepub-com.proxy.lib.uwaterloo.ca/doi/full/10.1177/02690942211040170

Following this introduction (Chapter 1), dissertation provides an overview of the literature (Chapter 2) and methods (Chapter 3) that inform the overall study. Chapter two reviews the literature on the regulation of vehicle-for-hire services. It does so from an understanding of the diverse interests that are placed upon the service as an industry, a form of collective consumption and a place of work. The chapter then proceeds to introduce a standard of justice as it applies to urban services following the work of Susan Fainstein and her account of the just city. The chapter

then describes the transformation from the taxi industry to ridehailing platforms and examines how this affects the possibility of municipal regulation. Chapter three reviews the methods used in the case study as well as the additional studies that used to supplement the case study. This includes a description of preliminary research on the digital platform literature, a survey of drivers who report their experience on the YouTube platform, and in-depth interviews in the GGH region with drivers, municipal staff, councillors, and industry watchers.

Following from this, the three manuscripts are presented in their final form (Chapters 4-6). Chapter four explores Fainstein's standard of urban justice through in-depth interviews with platform drivers and assesses how ridehailing platform work conforms to this standard. The study identifies Fainstein's standard of justice as the balance of three key values (democracy, diversity, and equity) as expressed in the capabilities of marginalized stakeholders. It finds that ridehailing platforms do not provide a just workplace due to the requirement for drivers to trade between capabilities that are otherwise all necessary components of a just workplace.

Chapter five moves from the effects upon drivers to examine how municipalities in the GGH region have regulated ridehailing platforms in the past and present. Through in-depth interviews with municipal councillors and staff, as well as a content analysis of local media and government documents, the paper explores the conceptualization of vehicle-for-hire regulation. The paper finds that municipal staff and councillors tend to conceptualize vehicle-for-hire services as private services where municipal intervention is undesirable. Platforms have expanded the capabilities of private sector services leading to a plausible argument that municipalities no longer need to facilitate vehicle-for-hire services. Consequently, municipalities that regulate these platform services have reduced their role in facilitating the vehicle-for-hire service. However, given the continual challenges faced by the industry, there would seem to be an on-going need for regulation.

Chapter 6 examines the efforts drivers make to improve their conditions at work and considers the role of local policy makers and other labour market intermediaries to intervene on behalf of drivers. The paper accomplishes this through an analysis of videos posted to the YouTube platform by drivers and interviews with local drivers to the GGH region. The paper finds that drivers prefer to settle workplace challenges with technical and market-based tools but lack the means to address opposition from platforms due to a lack of confidence in collective action. The paper argues that there is a role for municipalities to intervene in ridehailing platforms to support collective organization amongst drivers.

The concluding chapter (chapter seven) synthesizes the findings of the three manuscripts into a set of overall themes, describes insights for planning theory and practice, and develops these themes into recommendations for further policy experimentation. These overall themes then provide insights that extend beyond the vehicle-for-hire service to other similar services and policy frameworks. Recommendations apply the just city theory as a framework for regulating vehicle-for-hire services. The resulting format for conceptualizing intervention seeks to balance values that make up justice, settle those values in the capabilities of the workforce, and ensure a dynamic process where workers can push for improved conditions over time.

## 2.0 Literature Review

Vehicle-for-hire services are just one of many services that provide the connective tissue of the contemporary city (Marvin & Graham, 2001). They do so by providing a dependable and timely mobility service. These services help connect actors within the local economy and provide a service that fills in the gaps of the wider transportation system founded on private automobility and public transit (Transportation Research Board, 2015; Feigon & Murphy, 2018; Wang & Ross, 2019). As a supplement to other forms of transportation, municipalities and other governments have not structured vehicle-for-hire services to be used in all circumstances. Rather, vehicle-for-hire services contribute like bike paths, private automobility, public transit, and limousine services to a suite of services that together provide widespread access to residents (Transportation Research Board, 2015). In this capacity, vehicle-for-hire services fill niche markets from airport ground transportation, accessible taxis for persons with disabilities, and designated driver services. They also service a wide range of consumers from those using luxury services to people with low incomes who lack the means of car ownership but nonetheless need access to on-demand mobility that is not possible with public transit (King & Saldarriaga, 2016; Ellis, 2016).

The rise of ridehailing platforms has challenged the municipal vehicle-for-hire system and the application of municipal regulation over vehicle-for-hire services (Schaller, 2017; Sundararajan, 2016; Posen, 2015). While there has been a long history of local control over vehicle-for-hire services across the United States and Canada, platforms have encouraged upper-level governments and the private sector to take a growing role in regulation (Collier et al., 2018). The literature that has emerged to understand and interpret ridehailing platforms recognizes a range of new practices in the delivery of service that have repercussions not only to platform users but other residents and urban systems as well (Sundararajan, 2016; Pan & Qiu, 2018; Li et al., 2021). In this process, ridehailing platforms have reconfigured local interests, between riders, workers, transit authorities

and others (Davidson, Finck & Infranca, 2019; Malin and Chandler, 2017; Young & Farber, 2019). The change from taxi services to ridehailing platforms has been conceptualized as a process of "platformization" (Plantin et al., 2018), where the governance of city services and local labour processes are re-oriented around the logic of the digital platform.

This review considers how a focus on municipal regulation remains relevant as ride-hailing platforms preside over a new era of for-hire vehicle services, particularly as it relates to the experience of drivers working on these platforms. Much of the analysis of how drivers are treated has focused on the misclassification of their work (Dubal, 2017a). This has proven to be a fruitful line of critique as nations in Europe have clarified the employment status of drivers. However, this critique fails to include the role that municipalities continue to play. This is largely because, while national, state, and provincial policy makers may relate to drivers through changes and enforcement of employment and contract law, municipal authority is oriented to the vehicle-for-hire service as a system (Cooper et al, 2010). Insofar as these services are offered on private markets, it is the task of local governments to facilitate trust in the markets to ensure the functionality, affordability, and on-going presence of the service. Municipalities are unable to address labour markets; but by setting rules across the system, municipal interventions can greatly affect the experience of work, including work times, pay rates, and the level of investment required from drivers.

Despite their great capacity to influence vehicle-for-hire markets, municipalities have failed to protect the interests of residents and workers over many years (Dubal, 2019b; Gaus, 2014). Markets for licenses to drive for-hire vehicles were allowed to reach unsustainable price levels, leading to onerous costs for drivers, long working hours, and little incentive to re-invest in the business. Digital platforms took advantage of this unstable system but have similarly exploited drivers with poor pay and unpredictable work conditions (Rosenblat, 2018; Wells, 2019; Attoh,

Wells & Cullen, 2019). As De Filippis (2009) notes, some of the most exploitative industries are local industries. He laments the withdrawal of local governments from intervening in markets to help citizens, stating that

> "The withdrawal of the state from its redistributive role has been mirrored by its shirking from its regulatory role as well… The fight, therefore, is to rebuild the local regulatory capacity to protect workers in their struggles for economic justice in American cities. Thus, one of the primary goals of planners interested in economic justice should be to find ways to support, facilitate, and enable those movements" (156).

Thus, as the ride-hailing platforms face continued pressures to resolve a wide range of challenges, municipalities and other local labour market intermediaries have a role to improve vehicle-for-hire services and recognize the interests of workers.

To gain an understanding of current conditions in the vehicle-for-hire industry and what justice looks like for this service, this chapter provides a review of the current literature. In this review I will examine the changing vehicle-for-hire industry and government regulation in three sections. First, I will outline the evolving role municipalities have played in structuring the vehicle-for-hire industry, describe the driver labour force, and examine municipal policies and institutions as they relate to drivers. Second, this review considers the notion of justice regarding urban services and introduces the work of Susan Fainstein and her conceptual framework for the Just City. Finally, the review introduces how ridehailing platforms have change the vehicle-for-hire service and how this has influenced regulation and the just city for platform drivers.

## 2.1 The Role of Cities in the Vehicle-For-Hire Industry

Vehicle-for-hire services may be organized in a variety of ways and cities have long played an important role in their delivery (Cooper et al., 2010). However, the role of cities is contested. One common rationale for regulation comes from the tendency of platforms towards monopoly (Plaiss, 2018). Other interpretations of urban services contend they are just like any other service and best left to the private sector, free from government intervention (Papillon, 1982; Mitchell & Koopman, 2019). There may be nothing inherently common to all urban services (Malkin & Wildavsky, 1991). Thus, Pinch (1985) contends public services are best defined as the result of political mobilization. He finds public services are defined by the actions of lobby groups, unions, thought leaders, municipal staff, business interests and the public seeking to correct imbalances from services delivered in the private market (1985: 12).

This political rationale for the definition of public services reinforces a central message from infrastructure studies that public services and infrastructure embed a politics into the fabric of the city (McFarlane & Rutherford, 2008). Scholars of infrastructure studies find that public services and infrastructure systems are composed of heterogenous technical and social components interacting across multiple dimensions (Star, 1999; Bijker, Hughes & Pinch, 2012). For vehicle-for-hire services that message means that the relationships – between platforms and drivers, insurance companies and privately-owned cars, among others – affect the connectivity within cities. Connectivity then impacts the relative convenience of various sites, and thus the mode of agglomeration and production within the local economy.

The political rationale for public services is also consistent with the urban project under capitalism. This is because cities must grapple with the demands for both growth and the necessary reproduction of labour in the local economy (Castells, 1979). The imperative within capitalism for

economic growth leads to downward pressure on worker wages and increasing demand on labour time. In the pursuit of profit, firms ignore the needs of workers, their families, and new untrained workers. Consequently, workers suffer from a dwindling capacity to fulfill their own needs with their shrinking free time and resources. Ultimately, this results in a systemic breakdown where workers are in poor condition to continue working, future workers are not prepared for work, and the system is unable to reproduce the labour pool (Castells, 1979; Fainstein, 2010). Following this logic, the capitalist system undermines itself in fulfilling its internal imperative. And in that moment of contradiction, the state is necessary to transform individual consumption into collective consumption thus securing efficiencies that enable social reproduction (Castells, 1979). With the need to maintain living standards in the service of a sustainable workforce that facilitates economic success, planners must balance the needs of residents with the business cycle, leaving an important role for urban services (Fainstein, 2010).

Applied to vehicle-for-hire services, the role for municipal intervention emerged in the early 20th century. This role was to facilitate the private delivery of vehicle-for-hire services through public institutions of governance (Leopold and McDonald, 2012; Plaiss, 2016; Basen, 1977). Leopold and McDonald (2012) describe how political mobilization at the turn of the 20th century produced a movement for "municipal socialism" that expanded services in municipalities across North America through a range of organizational typologies (Sancton, 2011; Pinch, 1985). These systems have since been defined by their pursuit of a "modern infrastructural ideal", where infrastructure and public services were identified as the very essence of the city – holding the city and its residents together (Marvin & Graham, 2001). To this end, infrastructure in the 20th century was frequently structured to be co-extensive with municipal boundaries and to provide residents with universal access to a homogeneous service across that jurisdiction (Marvin & Graham, 2001; Tarr & Dupuy, 1988; Coutard & Rutherford, 2016). Though just an ideal that may not be fulfilled in practice

(Coutard, 2008), the modern infrastructural ideal has been a guiding principle that continues to offer universality as an aspiration for public service providers (Coutard & Rutherford, 2016).

The approach municipalities took to facilitate private vehicle-for-hire services has been described as the QQE framework – a regulatory framework that sets and enforces *Q*uality, *Q*uantity and *E*conomic standards for the service (Cooper et al., 2010). Within this framework, municipalities take the responsibility of defining standards for the minimum quality of service, limits to the number of drivers on the road, and minimum and maximum fare rates that can be charged to customers (Cooper et al., 2010). Each of these standards functions through the mechanism of a gatekeeper system where individual drivers are permitted to operate only with a license or medallion granted by the municipality (Cooper et al., 2010). While these services are then privately delivered, they are also accountable to democratic institutions, such as quasi-judicial tribunals to adjudicate disputes and redistributive cross-subsidization policies that stabilize prices across the city despite variations in wealth and density between neighbourhoods (Cooper et al., 2010; Thebault-Spieker, Terveen and Hecht, 2017).

The economic rationale for this approach to municipal intervention largely stems from a lack of transparency between drivers and passengers (Dempsey, 1996). Dempsey (1996) reasons that the division of the vehicle-for-hire market within individual cars obstructs price discovery. At the same time, the consumer is at a disadvantage where they are unable to understand the mechanics of the car and thus the quality or safety of the ride (Cooper et al., 2010). Faced with a marketplace where the comparative cost between hiring a ride, driving oneself or using public transit leaves little margin for profit, there are few locales where branded firms with typical employees have been financially successful (Cooper et al., 2010). Without the use of standard firms to coordinate between individual actions, drivers have an incentive to maximize prices once a rider enters their car, leading to potential price gouging and other unfair practices.

For drivers too, this lack of dependable market structures in unregulated markets is troublesome as competition can lead everyone to suffer. Municipal regulation developed from the turn of the century to the 1930s when high levels of unemployment swelled the ranks of for-hire-vehicle drivers leading to congestion and a loss of public utility (Cooper et al., 2010; Dempsey, 1996). Experts at the time concluded that the industry was a declining cost industry, where greater competition in the marketplace would not lead to lower prices but higher prices for consumers (Dempsey, 1996). Concurrently, drivers would cut costs, withdraw from proper insurance coverage, or fail to invest in vehicle safety (Dempsey, 1996). Since that time, in periods of deregulation, drivers have commonly suffered from over-competition: packed into taxi stands, with waits between rides lengthened, and drivers forced to raise prices to recoup the losses from idle time (Dempsey, 1996).

As the QQE system developed it both effectively maintained a vehicle-for-hire system and disintegrated from its own internal contradictions. The vehicle-for-hire industry used municipal regulations to ensure collective consumption of local transportation. However, markets that at one point were perhaps just a tool within that socialist system, gained increasing power across many infrastructure systems to determine the structure of the system (Leopold & MacDonald, 2012). Ultimately, these markets developed a logic of capitalist accumulation that came to pervade throughout the service (Mathew, 2008; 2015). Critics of the system from both libertarian and socialist traditions note the entrenched political relationships that rewarded investors at the expense drivers and passengers (Barrett, 2003; Mitchell & Koopman, 2019; Blasi & Leavitt, 2006). Rent-seeking behaviour by investors motivated the creation of markets for licenses that ultimately led to inflated prices, high barriers to enter the market, and disincentives for real investments in service delivery (Esbenshade & Shifrin, 2019; Abraham et al., 2008).

The QQE framework and the concepts of municipal socialism or the modern infrastructural ideal have declined in influence over the past 40 years. The rising importance of markets and the perception of vehicle-for-hire services as a private marketplace – and not a public service - has undermined the value of universal access and homogeneous service that were the foundation of the QQE framework (Leopold & McDonald, 2012; Dubal 2017a). In the vehicle-for-hire industry this change was first expressed through municipal policies that permitted a private market for municipal licensure and, later, the elimination of licenses altogether in some jurisdictions (Dubal 2017a; Dempsey, 1996). Yet, the modern infrastructural ideal remains part of the imaginary of the city and the legacy of municipal socialism remains present in continued industry regulations, state infrastructure systems and selective programs (Coutard & Rutherford, 2016; Leopold & McDonald, 2012). This legacy has kept municipalities relevant for structuring vehicle-for-hire services and left them as a powerful stakeholder within the system to this day.

Interventionist municipalities may seem unlikely to succeed considering the decline of municipally led taxi systems. However, cities remain of upmost importance to the platform business model and many municipalities retain a level of authority where their jurisdiction over the industry remains. To make this point, Davidson and Infranca (2019) argue that platforms remain highly dependent upon cities to achieve profitability. They note that platforms "rely on a critical mass of providers and consumers who are sufficiently close to each other or to other amenities to make their platforms work, often finding value in the very fact of the beneficial spillover from proximity" (Davidson & Infranca, 2016: 218). In cases, like the vehicle-for-hire industry, where the core business of a platform is "geographically-sticky" – requiring the supply of a goods or services to be co-located with demand – municipalities have influence over platform firms where they can permit access to the market (Graham & Anwar, 2019; Davidson & Infranca, 2016). The premium earnings

for drivers in cities that combine population density with wealth are evidence of the importance of cities (Thebault-Spieker et al., 2017).

Further evidence for municipal relevance is the repetition of deregulation and reregulation in municipal vehicle-for-hire systems. Dempsey (1996) documents a lengthy history of municipal deregulation of vehicle-for-hire services arising in the 1970s and 1980s that successfully produced deregulation and marketization within the service across North America and Europe (also Tucker, 2017). However, municipalities often returned to regulation as deregulated markets struggled to find consistency, resulting in disinvestment, oversupply, price gouging and a decline in service (Dempsey, 1996).

The argument that public services embed politics into the fabric of the city suggests that the reduced role for municipalities today will have a tangible and growing effect on the city over time. Ferreri & Sanyal (2018) argue, where platform firms participate in governance, they help align local systems to the platform, producing tangible effects that make the city easier for platforms to navigate and to organize. Ultimately, they argue, this creates a city that privileges the platform at the expense of other systems and consequently a city that reinforce power that are manifest in the relationships of the current ridehailing platform system. Where policy concerns mount, there may continue to be a role for municipalities to facilitate vehicle-for-hire services and reproduce trust in urban services. The effect of poor working conditions for workers is just one policy concern that demands greater democratic oversight.

### 2.1.1 The Vehicle-For-Hire Workforce

Drivers are among the most impacted from changes to vehicle-for-hire services. One narrative accompanying the rise of ridehailing platforms is that platform drivers are substantially different from taxi drivers (Hall & Krueger, 2018). But while there may be some change among drivers, the changes seem to reflect a longer-term transition that is not necessarily the result of platforms exclusively. What has changed is the commitment of drivers and the number of temporary or part-time drivers taking part in the industry. This change in commitment may impact the agency of drivers within the industry, but it does not necessarily discount how vulnerable drivers are to the poor conditions of work on ridehailing platforms.

The demographic make-up of drivers today is alleged to be more reflective of the overall population than drivers were from the taxi industry (Hall & Krueger, 2018). In their study of the labour market drawing on two previous surveys in the United States, Hall, and Krueger (2018) find that Uber drivers are more like the general population in terms of educational attainment and minority status. 48% of Uber drivers reported having a college or post-graduate degree compared to 41% of the overall workforce and just 19% of taxi drivers. They also find that 60% of platform drivers are racial minority groups compared to 44% in the overall workforce, while 74% of taxi drivers identified with a racial minority group. Such a change in demographics suggest platform drivers may be less vulnerable than previous generations of drivers who might struggle with greater barriers from low educational attainment and who are consistently subject to racial injustice.

Coupled with this assertion of demographic change is an assertion that ridehailing platforms are more flexible than taxis before them (Hall & Krueger, 2018). Presumably, that flexibility grants drivers the capacity to exit this industry where conditions are poor or other opportunities arise. In the legacy taxi industry, there was a focus on full-time employment. Licensure typically came with a requirement for consistent operations and costs of leasing often

required drivers to work as much as possible to recoup their lease and generate an income (Cooper et al., 2010). A study of platform drivers found that as many as 82% of drivers drove less than 30 hours per week (Chen et al., 2017). And among these drivers 30% drove less than 4 hours per week (Chen et al., 2017).

Other evidence suggests that platform drivers are not so different from what came before. Nearly 50% of drivers reported previous experience in driving professionally. And regarding the commitment to work, it may be true that there are large numbers of occasional drivers, it has been found that drivers operating for more than 35 hours per week provide approximately half of the rides on the platform (Mishel, 2018). In Canada and Toronto, educational attainment was already on the rise amongst taxi drivers before the emergence of platforms (Foster, 2009). Xu (2012) finds the rise in highly educated drivers to be common particularly amongst new immigrants working in the industry. Whereas the number of Canadian-born or established immigrants in 2006 with a bachelor's or more advanced degree was 14.4% and 12.5% respectively, that number was 33% amongst recent immigrants working as taxi drivers at that time. With these alternative data points, it is not clear that platform drivers are a dramatically different population of less vulnerable individuals – at least in Canada. Rather, the population of drivers appears to follow existing trends.

Other scholars have suggested instead that platform drivers are more vulnerable than taxi drivers had been. Taxi drivers have long divided into groups with different interests, particularly between license holders, leasing drivers, and unlicensed drivers (Vidich, 1973; Blasi & Leavitt, 2006). With a growing disparity in hours worked amongst platform drivers, Hua and Ray (2018) argue drivers today are more challenged to organize with fellow drivers in labour actions. This is largely due to see the ease of entry and exit from the industry. Drivers with savings and other resources, who can leave the industry at any time, no longer share long term interests with drivers that are truly dependent upon the vehicle-for-hire service to make a living. By historical comparison,

solidarity between drivers from the taxi industry followed multiple forms. In large urban centres like New York City, solidarity emerged through organized unions that often generated power in part by limiting labour movement (Gaus, 2014; Mathew, 2008). Outside of these urban centres, solidarity was ascribed to personal relationships on the job and a commitment to other drivers within a workplace that could be dangerous (Hoffman, 2006). These arguments suggest that platform drivers may be empowered to enter and exit the industry but have fewer avenues to organize for change within the industry.

With stagnant incomes and income volatility growing more common across populations with low to middle income levels, there appears to be a growing segment of society that is subject to precarious economic conditions (Piketty, Saez & Zucman, 2016; Morduch & Schneider, 2017). At the same time, rising costs of living require workers to find new means of securing and supplementing income. Studies like the U.S. Financial Diaries project describe the finances for low to middle class Americans as extremely volatile (Hannagan & Morduch, 2015). Researchers behind this project conclude that costs of living can be volatile, and typical household incomes can vary by as much as 25% for over two months of the year (Hannagan & Morduch, 2015). J.P. Morgan Chase & Co. Institute find that as much as 70% of 18 – 24-year-olds and those in the bottom quintile of the income distribution experience such levels of pay volatility. That number is 55% across all income groups (Farrell & Greig, 2016). An assessment of household emergency funds finds many middle-class households have savings of just one month of gross income (Key, 2014).

With income volatility and precariousness expanding among ever higher income categories, there is reason to believe worker solidarity could bridge the diversity of drivers. This is not to say that the ridehailing platforms are not a difficult context within which to organize labour due to atomization of workers and vulnerable household finances; however, mobilization strategies that address platforms are being identified. Dolber (2019a) recounts the success of gig worker

mobilization in California. In the lead up to two strikes by Lyft and Uber drivers in 2019, Rideshare Drivers United, a driver collective, successfully organized drivers through social media advertising, connections to labour-oriented not-for-profits groups, and widespread polling and surveying of drivers (Dolber, 2019a). As described in later sections there are characteristics of platforms that obstruct driver organization. However, there does not appear to be anything inherent to the population of drivers that has not already been overcome by organizers in the industry over the past century.

### 2.1.2 Local Institutions of the Vehicle-For-Hire Workforce from QQE to Platforms

The important institutions of the vehicle-for-hire industry have seen changes with the rise of ridehailing platforms. Municipalities such as those in the GGH region often continue to have a regulatory authority based upon principals that correspond to the QQE framework. However, where platforms have emerged, municipal institutions have widely tolerated non-conformance of platform operations. And municipalities have often adapted or withdrawn institutions to suit the platform. In this section, I lay out these institutions following the parameters of the QQE framework, with sections on qualitative standards and discipline; quantitative limits and licensure; and economic control. In examining these institutions, I intend to describe in broad terms how these institutions have influenced work conditions for drivers and how they have changed because of platforms.

The institutions of the QQE framework have been described as an "implicit compact" (Cooper et al., 2010: 18) or "political bargain" (Dubal, 2017a) between drivers, cab companies and cities to standardize service quality and rates, while protecting the industry from too much competition. This bargain resulted in modest but predictable incomes for drivers even during dislocations of the economy over all (Dubal, 2017a). Today, the bargain has changed. In some

cases, upper-level governments like California, Texas and Florida have stepped in to withdraw the authority of municipalities over vehicle-for-hire systems (Collier et al., 2018). But in most states and provinces in Canada and the United States, the institutions of the vehicle-for-hire industry did not collapse with the arrival of ridehailing platforms. Rather, the political foundation of these institutions eroded over time (Abraham et al., 2008; Berg & Johnston, 2018; Mathew, 2005; Blasi & Leavitt, 2006; Gaus, 2014). Today municipal powers over the vehicle-for-hire industry often remain in legislation but are not exercised in policy.

*Qualitative Standards and Discipline*

Establishing qualitative standards is a critical component of the QQE approach. It is through these standards that passengers can trust their ride without being able to check the vehicle for mechanical soundness. Standards were historically administered through multiple channels tailored to each municipality. These typically included yearly municipal mechanical inspections, ticketing from by-law inspectors and police, ticketing administered by provincial or state courts, or municipal ticketing administered by semi-judicial tribunals (Cooper et al., 2010). Through these mechanisms, municipalities could selectively restrict drivers from the marketplace. This gatekeeping imposed costs onto drivers, who must maintain safe conditions in their car. But it also provided due process for the resolution of disputes.

Ridehailing platforms eliminate or bypass these institutions to lower the costs of managing compliance. Platforms eliminate annual municipal vehicle inspections in favour of certification from private mechanics. Police and by-law officers may continue to investigate drivers; however, discipline is administered through the digital platforms, with their 5-star rating systems and complaints from passengers (Rosenblat, 2018). In this new environment, discipline of drivers lacks transparent procedures of due process. Once a passenger complains, there is no clarity for how

platforms determine wrongdoing or punishments (Rosenblat, 2018). There is movement towards greater fairness in some jurisdictions, such as The GGH region, where deals between platforms and union or union-sponsored organizations have provided representation to drivers in arbitration (Mojtehedzadeh, 2022). However, these arbitration hearings remain funded by the platform and separate from any democratic institution or oversight.

*Quantity and Licensure*

The QQE framework balanced the costs drivers had to pay to meet standards of service by supporting drivers with limits on competition (Cooper et al., 2010). These limits inserted a political bargain directly into the planning and operations of the city through the administration of a medallion or licensure system. Typically, municipalities planned the number of licenses available for drivers based on a ratio to the population and land use variables (Cooper et al., 2010). In so doing, municipalities were able to use planning principles to align vehicle-for-hire services to municipal goals. For drivers, this meant curtailing supply to ensure consistent business for drivers already within the system. This system was successful throughout the middle years of the 20th century, as it provided drivers with stable, moderately paid work even at times of economic dislocation (Gaus, 2014; Dubal, 2017a).

The political bargain eroded across the United States and Canada in the post-war period. While the early years of regulation saw drivers either own their license or work as hired employees with full employment rights, this uniformity between drivers disintegrated (Berg & Johnston, 2018). From the 1950s to 1980s, municipalities revised licensure regulations to allow licenses to be leased or sold (Abraham et al., 2008; Dubal, 2017a; Gaus, 2014). And this change to policy divided drivers between those who leased and those with medallions (Blasi & Leavitt, 2006). Gaus (2014) finds that the division split drivers by race and generational cohort and weakened the power of

unions to represent all drivers. It was the younger generation of mostly racialized minority drivers who lease their car that fared most poorly (also Blasi & Leavitt, 2006). The market for leasing produced poor conditions for leasing drivers as they had to contend with the high costs for securing a license and a risky mix of fixed costs and unpredictable demand (Abraham et al., 2008; Gaus, 2014). These leasing drivers were ineligible to unionize, to receive holiday pay or workers compensation. It was over this period of the 1970s and 1980s that the market for medallions exploded as small numbers of individuals consolidated the industry (Gaus, 2014).

The trend toward the greater use of market-like tools was then re-employed with the rise of ridehailing platforms. In the early years of ridehailing platforms, this division between drivers yielded a range of perspectives on the new platforms. For leasing drivers who would otherwise need to lease from a limited number of existing license holders, ridehailing would have appeared more flexible. Platforms had few limits to entry and simplified the administration of on-boarding new drivers. At the same time, drivers who had sacrificed years saving to purchase a license on the secondary market or took on massive loans suffered large losses from their investment in the system (Rosenthal, 2019).

*Economic Control*

In the QQE framework the limits placed on the number of drivers and artificial scarcity this induced was halted from transmitting high costs to passengers, because municipalities set pre-determined prices that could be charged (Cooper et al., 2010). In the QQE framework, drivers could only charge passengers fares based on pre-established fare rates. In this manner, passengers could have confidence that service was affordable, and drivers were protected by providing a minimum fare with limited competition (Dempsey, 1996). The combination of limited numbers of drivers and pre-established fares meant that drivers would stay busy but that service efficiency and speed for

passengers would be sacrificed (Cooper et al., 2010). This sacrifice makes sense particularly given the role of vehicle-for-hire services as a supplementary service for independent automobility on one hand and public transit on the other.

Ridehailing platforms eliminate these pre-determined fare rates in favour of a floating rate that balances supply and demand. The move to dynamic prices has had a considerable impact on the experience of drivers. When supply and demand fall out of balance platforms add or remove incentives from prices to encourage a matching number of drivers and passengers in the system. These dynamic prices can lead to sudden price rises for consumers but also falling prices for drivers with little warning (Calo & Rosenblat, 2016). Platforms have tended to introduce lower wages for drivers and take higher margins for the platform over time (Rosenblat, 2018). These systems can at times be difficult for drivers where the boundaries between zones with elevated prices are unclear or change abruptly (Chen, Mislove & Wilson, 2015). Drivers have stated that price signals from the platform are unpredictable and not worth following (Rosenblat, 2018). In some cases, base fares still exist providing a floor to fares. However, it is notable that these minimum fares regard only what passengers pay to the platform, not what is paid to the driver.

Another consequence of floating prices is that it makes the system more efficient in expanding transactions. Whereas the system previously sacrificed efficiency to preserve quality and affordability, dynamic prices emphasize efficient matchmaking and service delivery. The re-orientation of service around efficiency changes the value proposition of vehicle-for-hire services within the overall transportation system. Platforms expanded the delivery of vehicle-for-hire services, and this has expanded the number of drivers on ride-hailing platforms (Schaller, 2017). The effect has been that in some contexts ridehailing services compete with transit and create more congestion on city streets; while drivers find that over-competition from other drivers undermines their earnings (Clewlow and Mishra 2017; Schaller, 2017).

### 2.1.3 The Experience of Vehicle-For-Hire Drivers and Mobilization

The experience documented from drivers within the vehicle-for-hire industry reveals a long list of challenges for drivers but also a history of worker solidarity. The challenges stem from high costs of operations, unenforced limits on the numbers of drivers, and general safety concerns. And these challenges extend throughout both the period of the QQE framework and the period of ridehailing platforms. The literature describing outcomes for drivers in each period suggest that policy makers have generally attempted to address the challenges with market or market-like solutions. Yet, the literature demonstrates that the challenges to drivers are persistent over time and have not been addressed adequately by the transition to market-based systems.

*The Challenges to Drivers – from QQE to Platforms*

The primary challenges to taxi drivers in the QQE period once licensure was permitted to be leased, were safety and high costs to access the business. Of foremost concern, drivers faced safety risks from assault and even homicide that made the profession one of the most dangerous (Dempsey, 1996). And risks extended to all aspects of the work. Studies of drivers across multiple large cities in the United States and Canada found that drivers were forced to pay operating expenses such as insurance and gas, but also high prices to lease a permitted car and licence or medallions (Abraham et al., 2008; Blasi & Leavitt, 2006; Bruno 2009; Gaus, 2014). A study in New York, estimated that costs accounted for 66% of an average driver's daily revenues (Gaus, 2014). And, with fixed up-front costs, drivers had the necessity to work long hours. Bruno (2009) describes the average day of driving in Chicago to be 13 hours. While Blasi and Leavitt (2006) described drivers in Los Angeles working up to 18 hour shifts in some cases. It is revealing that legislation

explicitly carves taxi drivers out of employment status in the United States and provinces like Ontario (Gaus, 2014; Ontario, 2000).

Despite, the heavy demands, remuneration did not reflect the risks. Estimates for Los Angeles prior to the entry of ridehailing put the hourly wage at just over $8 per hour. A similar estimate in New York identifies earnings of just over $12 dollars per hour after costs. And despite the high costs to enter the industry, drivers had little protections built into their contract. A study in Toronto found that license holders could dismiss a drivers access to their cars at any moment and without warning (Abraham et al., 2008). All together, these conditions lead drivers to fatigue, to take few breaks, to eat poorly and even to minimize drinking water to avoid bathroom breaks (Facey, 2003).

In some respects, platforms have improved conditions for drivers. Feeney (2015) notes that by eliminating cash transactions, platforms have withdrawn a common motivator of violent crime. In addition, Feeney notes the requirement to sign up with a credit card reduces the anonymity of the passengers. However, these measures have not eliminated violent crimes from the platforms. Over a three-year span in the United States, Lyft (2021) reported over four thousand sexual assaults. Uber (2019) meanwhile reported six thousand over two years. Other factors make platforms more burdensome for drivers. According to Bartel et al., (2019), mental pressures and distractions constantly arise from dispatch and other phone notifications.

Platforms have also made it easier for drivers to enter the vehicle-for-hire workforce. Municipalities have accommodated platforms with new policies that do away with limits to the number of drivers and licensure fees. However, over time platforms have also revealed characteristics that burden drivers with high costs and risks of business in combination with low pay and little predictability (Rosenblat, 2018; Ravenelle, 2019). According to Ravenelle (2019), the high costs and low pay reflect a business model among platform firms that is premised upon the

shifting of risk onto contractors that are independent of the platform itself. The platform's primary service is encompassed in the moment of exchange as riders enter the car and agree to the price of the service. From that point, the driver is responsible for resolving that transaction; this includes accommodating idiosyncratic demands from passengers that force drivers to divide their attention in innumerable ways (Ticona et al., 2018).

At the same time, platforms control the conduct of drivers through an uneven contractual relationship. Platforms frequently demand that drivers agree to new terms of use at the very moment drivers open their application to begin work. Without agreeing to new conditions, these workers may not even access the application. This creates a unilateral imposition upon workers, where drivers only option is to accept the conditions or leave outright, with no room for interaction or bargaining. This unilateralism is likewise reflected in the disciplinary system. Platforms may remove drivers without warning at any given moment from a single complaint (Rosenblat, 2018). The rationale for these decisions is not typically made explicit to the drivers, and drivers generally have no opportunity to represent themselves to deal with the complaint. The lack of transparency to disciplinary procedures used by platforms requires drivers to balance high-level service with safety. Ultimately, the move to platforms has addressed the problems of the QQE framework without addressing underlying relations of power between drivers and other actors of the industry.

*Driver Mobilization*

As noted above, driver-led organizations played a vital role in the QQE framework. Driver influence was exercised in the form of headline-grabbing direct actions to disrupt and occupy city streets, bridges, and downtowns (Cooper et al., 2010; Gaus, 2014). More recently, driver organizations have made change through the oversight and critique of public regulators and private fleet operators leading to advocacy for new policies (Hui, 2014; Gaus, 2014). In the period

before the rise of platforms there was a re-emergence of mobilization among vehicle-for-hire drivers in the form of new taxi driver cooperatives across the United States (Borowiak & Ji, 2019).

The power to mobilize was supported by strong informal bonds between taxi drivers (Hoffman, 2006; Schlosberg, 2020; Mathew, 2008; Berry 1997, 1998). Accounts of informal driver solidarity networks reveal commitments to ensuring safety for drivers and fairness in the application of rules on drivers (Hoffman, 2006). This has caused some scholars to depict taxi drivers as 'cowboys' who contest rules following practices that range from vigilante "street justice" to maverick work strategies amongst large numbers of drivers acting individual (Hoffman, 2006; Schlosberg, 2020; Mathew, 2008; Berry 1997; Dempsey, 1996; Vidich, 1973).

The transition to platforms has undermined this collective power. While there may be an elevated number of drivers on the platform, platforms maintain barriers between drivers. For instance, drivers on platform do not wait together the way taxis often did (Wells, Attoh & Cullen, 2021; Attoh et al., 2019). Rather than distributing rides to drivers based on who is free, drivers are distributed rides based on proximity to the ride and other algorithmic factors. Thus, drivers have the incentive to avoid groups and to be prepared in their car to accept the next ride when it comes. Wells et al., (2021) find that this has the effect of keeping drivers apart and weakening worker power.

Still, as drivers grapple with poor conditions at work, local guilds and union-sponsors have emerged to represent ridehailing drivers. These organizations have provided services to drivers and built membership similar to worker centers that have emerged in the labour market (Gaus, 2014). Unlike unions that focus on bargaining with employers, worker centres focus on capability building among individuals rather than bargaining with employers (Milkman, 2014; Fine, 2007). These organization struggle to identify drivers and lack the basis in employment law to achieve collective bargaining. This has in some cases led to cooperation between worker centres and ridehailing

platforms where the platform has shared their driver manifest and listened to input from the worker organization. However, in this bargain the worker organizations have voluntarily given up the threat to strike and have instead emphasized a process of negotiations to secure driver gains (Dolber, 2019a; Lichtenstein, 2021). While driver organizations are developing strategies to mobilize drivers without platform help and are growing solidarity on an international basis (Dolber, 2019), cooperative worker organizations remain influential (Lichtenstein, 2021).

One of the remaining sources of power to counter platform power is the legacy of the municipal QQE framework tied to legislation (Johnston, 2018; Dubal, 2017a). Literature documenting driver views suggest drivers feel betrayed by this change in government policy (Esbenshade & Shiffrin, 2019). Addressing these vulnerabilities for drivers is key to providing a system that retains trust between parties in the marketplace. Where drivers lack a dignified workplace or living wage, they are more likely to seek relief in ways that undermine the public goals of vehicle-for-hire services. Cities like New York City have begun to intervene in the interests of drivers because city staff have recognized the link between traffic congestion and low driver pay (Schaller, 2018: Johnston, 2018). The policy response to this connection has been to re-emphasize planning tools that balance supply and demand within the context of a large transportation system through limits on the numbers of drivers and a minimum wage for drivers. This may show early signs that regulatory policy is becoming more acceptable both for the well-being of residents but also for the sustainability of local collective consumption.

## 2.2 Introduction to the Just City Framework

On its face, Fainstein's Just City is a conservative, distributive, and substantive approach to justice consciously placed into the liberal tradition. This orientation builds upon John Rawls Theory of Justice as fairness, where an outcome is just if you would have chosen that distribution without knowing how one would benefit before hand (1971). This acts as a scaffolding for an array of ethical values and strategies that apply Rawls' abstract notion to a city where each of us is defined in large part by the position we occupy. Thus, justice for Fainstein is not the abstract standard of fairness but the movement towards greater democracy, diversity, and equity - the values Fainstein associates with a healthy society.

Fainstein orients much of her thinking to the distribution of material outcomes and prioritizes a focus on policy outcomes rather than procedures used to develop policy. Such an approach and the use of Rawls' theory of justice is consistent with urban planning broadly (Moroni 2004; Stein & Harper, 2005; Basta, 2014). As Stein and Harper (2005) explain, liberalism, and concepts from Rawls' works, are already an implicit assumption of planning theory. Just as Rawls emphasizes the need for equity but also inequity where it leads to a rising tide for all in society, cities emphasize policies that pursue economic growth accompanied by redistributive programs. While this conformity makes liberal theories of justice both practical and easily integrated into bureaucratic decision-making of the contemporary city, it also leaves the theory subject to critique.

A major critique of Fainstein's approach is that it is overly incrementalist, fails to fully outline the practices of a just form of planning, and upholds an elite-driven and technocratic account of justice (Harvey & Potter, 2009; Lake, 2016). This critique has merit. Clearly, Fainstein takes seriously the expectations of stakeholders, including those whose interests leave others in marginalized positions. Fainstein does not pursue an idealist or radical conception of justice that would insist

upon abstract goals without compromise. For Fainstein, expectations must be managed, and this limits the speed of social change. But rather than seeing this understanding as a hindrance, Fainstein uses incrementalism as a stage from which planners can initiate or execute strategies intended to accelerate change over time.

Fainstein (2010) has developed her idea of the just city over the last thirty years to address what she sees as a contradiction between the pursuit of economic growth and collective consumption that are at the heart of the urban project. Fainstein's call for the just city rests on a recognition of the transformative power of collective action that she finds at the very inception of urban planning and the utopian plans of Ebenezer Howard and others (Fainstein, 2005; Fainstein & Fainstein, 1974). In contemporary urbanism, it is the networked infrastructure services, according to Fainstein, that are at the heart of what urban governments can offer to residents. In these services, Fainstein finds a form of antidote to the tyranny of the capitalist system. These infrastructures may not transform capitalism into a more accommodating system, but they are able to transform the conditions that individuals face in their own lives. And this urban system creates greater opportunity for individuals regardless of their economic position. Thus, according to Fainstein, it is this collective dividend that we are likely to lose when decisions are made based on a cost-benefit analysis, where the diverse values of our communities are abstracted to single dollar-value balances.

Fainstein's just city provides a framework for understanding and protecting urban services within the capitalist economy. And at its base this framework is built upon Rawls' *Theory of Justice* (1971) that defines justice as fairness distilled into two principles: (1) The protection of basic liberties (to speech, to vote, to hold public office etc.) for all individuals and a distributive principle that insists upon (2a) equality of opportunity as well as (2b) a justification of inequalities that improve the conditions for all people, particularly the most vulnerable. This second part of the

second principal is often identified as the "maximin" rule, where a set of policies are just where they maximize benefit to the least advantaged (Rawls, 1971). Inequality, in this view, should be permissible only where it improves the conditions facing the most vulnerable among us and leaves our collective future a richer one for all.

For Fainstein, Rawls' measure of justice has been perverted by the contemporary city. It is possible, for example, to read Rawls' test for inequality as a call for maximizing the support of the wealthy so long as they create jobs and allow resources to trickle-down to the vulnerable. This is essentially the ethical framework for the global neoliberal order. Fainstein argues that, unfortunately, we have seen this discourse focus policymakers on prioritizing economic growth with little thought to questions of distribution. Over the past 40 years, cities across North America and elsewhere have undergone a profound change to how urban services are delivered – prioritizing growth and withdrawing oversight aimed at achieving social goals (Marvin & Graham, 2001).

In addressing this change of orientation, Fainstein argues against Rawls. Unlike Rawls, she sees a limited value to abstract theory building. While Rawls levels his argument upon a field of equals within society, Fainstein recognizes that we are each necessarily shaped and our capabilities constrained by our social position. Thus, she worries that a system without oversight will grow increasingly oriented to serving powerful interests over time. Fainstein proposes, instead, to raise the recognition of other social values and to build constituencies for alternative forms of city building through incremental change aimed at countering the power of elites with power at the margins. Fainstein's answer to this call is to identify the essential values for a just city as described in the historical literature on justice in the liberal tradition. Where justice sets the terms across which members of society interact and declare inclusion, Fainstein sees democracy, diversity, and equity as the leading values to which we must attend. Further, amongst these values it is equity

that is supreme for setting the terms of social inclusion. Thus, she urges policy makers to see the outcomes of policy for the least well-off as they judge the value of that policy.

### 2.2.1 Critiques of the Just City

It is fair to ask whether the just city framework is an appropriate perspective from which to examine the vehicle-for-hire industry. Communicative planning theory, for example, provides a method for pursuing justice through planning by explicitly recognizing social principles in its formulation and identifying deliberative tools for improving democratic functions in urban planning. However, in communicative planning theory Fainstein (2010) finds a troubling blindness to power and socio-economic inequality that stand in the way of just outcomes. Fainstein criticizes communicative planning theory for focusing exclusively on discourse and de-emphasizing the city itself or the outcomes of policy as a consideration for planners. Planning when devised as a narrative (Throgmorton, 1996), has the potential to be a smokescreen for powerful interests when subject to pressure from well-resourced elites. Thus, Fainstein argues that democratic strategies place a heavy burden on already marginalized communities to protect their own interests. Communicative planning theory, she argues fails to recognize the unavoidable power differential with which groups who are most affected by policy must contend, leading inevitably to elite cooptation of the decision-making process (Fainstein, 2000).

Other planning movements such as new urbanism promise to create more cohesive communities and thus avoid conflictual politics. However, in this theory, Fainstein finds a lack of social principles to animate this design-based approach. She argues that new urbanism projects are vulnerable to the homogenizing structures present within the development and finance industries. And thus, she finds these projects legitimize exclusion and suggest authoritarian tendencies as

much as they suggest justice (Fainstein, 2000). An alternative to these approaches must address how marginalized voices may emerge in urban decision-making processes. Fainstein (2010) proposes that policy makers advocate for a program of institution building for "empowering those who are excluded not just from discussions but from structural positions that allow them genuine influence" (Fainstein, 2000: 461).

Still, by limiting policy to following Fainstein's values, critics find "a concept without a clear content (Fischer, 2009: 60) and a process without clear procedures (Lake, 2016; Harvey & Potter, 2009). Unlike communicative planning theory, which understands the importance of linking communities to the decision-making processes (Healey, 1997; Innes & Booher, 2005), Fainstein's approach emphasizes outcomes of planning and city building, while offering few details regarding what that might entail. Adding to this critique, Harvey and Potter (2009) note that while liberal theory emphasizes fairness and neutrality, governments commonly favour elites. In the work of Young (1991) this failure of neutrality is more than misleading; it is a key ingredient of state and economic oppression. Young (1990) explains that the concept of neutrality or impartiality supports oppression by legitimizing hierarchical bureaucratic decision-making and projecting the paradigm of the dominant class across society. Indeed, even in the work of Rawls, Harvey & Potter (2009) note, the claim of neutrality is betrayed when Rawls comes to support the very bourgeois values of the social order he grew into and has come to represent, despite not being able to provide adequate arguments against other forms of government organization.

To address class conflicts, Harvey and Potter (2009) see only one option; they call for continued class struggle to affirm the rights of exploited people. Fainstein is hesitant to embrace a radical approach to class struggle that demands conflict in all interactions. She argues instead that radical change and burdensome government intervention leads to radical retrenchment when a new regime fails to honour expectations of those who had interests bound up with the status quo

(Fainstein, 2010). Smith (1996) finds such vengeful retrenchment of elites to be a critical structure in contemporary cities. Instead, Fainstein attempts to thread the needle between pursuing transformative change at the municipal level amid a liberal democratic and capitalist system that operates more broadly (2000, 2010). Within these bounds she asks, "what is the possibility of consciously achieving widespread improvement in the quality of human life within the context of a global capitalist political economy?" (Fainstein, 2000: 452). This is not only to find strategies that are easy or perceived to be within reach but also to find strategies and solutions that are broadly accepted, have institutional foundations and are sturdy in the face of opposition.

Fainstein's response to her critics was to adopt new strategic tools – namely non-reformist reform and the capabilities approach to human development – that creatively apply the abstractions of ethical theory to an application that is more in line with lived experience. While recent scholarship on the just city has focused primarily upon Fainstein's three principles, democracy, diversity, and equity (Medved, 2018; Connolly, 2019; Yiftachel & Mandelbaum, 2017), such abstract principles could be used to rationalize a wide range of conflicting policies. These principles are not enough on their own to avoid the rationalization that Fainstein saw corrupting the neoliberal approach to city-building. Thus, it is worth exploring these additional tools to see how they inform the just city when applied to novel policy questions.

### 2.2.2 Non-Reformist Reform

Fainstein's appeal to "non-reformist reform" provides one conceptual tool that helps translate an orientation to justice and change into policy. The appeal to non-reformist reform addresses two critiques of Fainstein's work: First, that her theory is hopelessly incrementalist in character and could never hope to motivate change on the order necessary to challenge the

injustices of the status quo; And second, that her theory is too narrowly cast onto distributive concerns and therefore fails to address wide-ranging injustices experienced across society. In Gorz's account of non-reformist reform, he takes a traditional liberal strategy (reform) and places the practical direction of reform in the hands of the worker. In their hands, worker can target reform to real concerns and support greater capabilities for those workers. As such, reform is preferred where it grows the constituencies of support and capabilities of those constituencies. To describe this, Fainstein quotes Fraser (Fraser & Honneth, 2003) where she calls for reforms that might "set in motion a trajectory of change in which more radical reforms become practicable over time" (2010: loc.371).

The concept of non-reformist reform was coined Andre Gorz in his *Strategy for Labor: A Radical Proposal* (1964), where he describes an alternative to a common Marxist framework for revolution, which projects change to come from a spontaneous popular uprising as a result of deprivation. Instead, Gorz proposes an approach to address injustice that is reformist but that, nonetheless, leads to substantial change. Gorz seeks more than simply placing limits to the excesses of capital and seeks more for workers than better wages. Instead, non-reformist reforms aim to build democratic power and empower workers to take greater control over their own workplaces. In an updated account of non-reformist reforms, Amna Akbar (2020) describes non-reformist reform as a strategy that seeks direct and tangible policies to address specific problems combined with "radical ideation". She calls for parsimonious strategies that address concerns across interconnected challenges. For example, Akbar (2020) celebrates contemporary protest movements for a "green new deal". In that protest she sees the ability to move beyond discrete problems and to confront human needs directly even as those needs expand the analysis of particular problems to address complexes of intersecting crises facing society. Thus, solutions to climate change are

deployed in ways that improve the local labour market and opportunities for marginalized communities.

Fainstein's explanation for the concept of non-reformist reform is brief and fails to address the challenges to coordinating her theory with that concept (2010: loc. 371). One challenge results from her prioritization of distributive equity and Gorz's account that seeks to move beyond simple monetary redistribution. Gorz demands that workers control workplace policy and oversee policies intended to create change. He is critical of unions that prioritize financial compensation for workers even if greater financial compensation would seem to empower workers and enable greater change in the future. In contrast, Fainstein does frame questions of justice as distributive concerns. The synthesis of non-reformist reform into Fainstein's just city demands a reconsideration of distributive justice to move away from the distribution of financial rewards to the distribution of decision-making power.

To understand how the concept of non-reformist reform and the just city fit together, one must respect Fainstein's critique of procedural models of justice and the vexing inequalities of power inherent to planning and governance. Fainstein (2010) repeatedly critiques the focus on democratic values over substantive results and equity between stakeholders in planning theory. She argues that power cannot be levelled in negotiations, because power is expressed through innumerable benefits to those with power. Yet non-reformist reform is certainly process oriented. Gorz (1964: 8) notes that to move beyond existing conditions to effect radical transformation of government and society each stage of change must de-centre decision-making power, restrict concentrated power and extend popular power. Gorz work is substantive in ways that other procedural planning theories are not. Whereas communicative planning theory seeks to level the field between stakeholder to define problems and build solutions, Gorz theory aims at placing

control over the roll-out of policy in the hands of workers. Adapted to Fainstein's project this would require an administrative organization that enables the least-well off to wield executive power.

It is only where distribution of decision-making power – not financial reward – is prioritized that the concept of non-reformist reform and the just city make sense together. Non-reformist reform provides the just city theory with a procedural content while centering the outcomes for the least well off both as a means and an ends of policy development. Examples of non-reformist reforms offered by Akbar (2020), such as the Green New Deal and the proposal to defund the police suggest a level of ideation and re-framing that comes from empowering those who are marginalized by policy. Further, in the process of empowering those who are marginalized by policy, policy makers build a level of authority into their administration from the intimate understanding of policy challenges brought by stakeholders who are most affected by policy. Thus, where change empowers residents – particularly the least well-off – non-reformist reform does align with Fainstein's three values: democracy, diversity, and equity.

### 2.2.3 Capabilities Approach

Whereas non-reformist reform applies concepts developed in the socialist tradition to embolden Fainstein's liberal theory, the capabilities approach modifies concepts developed in the liberal tradition to enable social change. This change applies to the concept of "primary resources" used by Rawls to measure material freedom in his theory of distributive justice. Rawls conceives of justice maximizing the resources across individuals in society. And yet, to critics Amartya Sen (2009) and Martha Nussbaum (2000, 2011) even in using these resources inequalities abound. In contrast to Rawls focus on resources, Sen and Nussbaum measure justice by "what people are actually able to do and to be" (Nussbaum, 2000: 228). While there is no necessity that individuals follow a particular way of living, the intent is to provide individuals with the capabilities that are appropriate for pursuing a meaningful life (Sen, 2009; Nussbaum, 2000). This includes the resources to live, but

also the means to use those resources. Factors that influence the ability to use resources and often marginalize some individuals more than others include social group affiliation, personal characteristics, and place (Pierik & Robeyns, 2007). Considering other factors that influence capability, planners can compare various policy alternatives. Yet they give up the flexibility to transfer these diverse factors into simple and comparable values that typically accompany a cost-benefit account of urban development.

When applied to workers, these additional factors address the social institutions that define the labour process, compensation, responsibilities, and integration with private life (Sen, 2000; Bonvin, 2008; 2012; Zimmermann, 2012; Subramanian et al., 2013; Miles, 2013). Factors that must be considered as a basis for justice in the workplace include the safety conditions at work; the integrity of workers to confront foreseeable challenges; the risks workers bear; the capacity to participate in decision-making; the ability to withdraw from work to recuperate and play; and finally, the opportunity to affiliate with other workers both for social solidarity and political organization (Subramanian et al., 2013: 295; Bonvin, 2012; Zimmermann, 2012). In no case, are these capabilities reducible to a material alternative. These are not discrete alternatives that one can trade like commodities or generalize across populations using averages (Nussbaum, 2000). These are broadly social considerations, which tie together the material conditions of life with the individual social recognition that is necessary for workers to live with dignity. They also function across multiple actors and scales of agency, at times directed to individual experiences and at other times addressable to collectives (Evans, 2002; Miles, 2013; Deneulin & McGregor, 2010). Thus, they form one approach to identifying a positive account of public values required in the workplace.

In summary, Fainstein's just city theory attempts to align democratic deliberations with a more substantive program that concretizes Rawls' abstract concept of just distribution of resources into an increasingly equitable distribution of capabilities. As networked services enable the

conversion of resources into capabilities for individuals and households, they provide a buffer against the excesses of capitalism and set in place the conditions for alternative ways of living. For policy makers, the imperative to keep urban services accessible to residents requires, first, a recognition of individual and group agency, and second, a sensitivity to the emergence and blockages of capabilities as the relations between stakeholders shift. Through this approach to capability building, policy makers must address diverse conditions within their development of policies that aim at building sturdy institutions while limiting the urge to rationalize simple solutions. And thus, where policy makers consider urban services like the vehicle-for-hire industry they must encourage those institutions that bring marginalized individuals together, that represent the interests of marginalized individuals and groups, and develop resources for countering entrenched political and economic powers.

## 2.3 A Changing Service and Platform Urbanism

Researchers argue that ridehailing platforms have introduced a new structure to vehicle-for-hire services that has shifted the capabilities of drivers and what is possible for people within the capitalist city (Sadowski, 2020). The "platformization" of urban systems, presented by Plantin et al. (2018) describes a shift from the logic of urban services as infrastructure to a logic that expresses a particular private business model. For Plantin et al. (2018), infrastructure is a complex system of heterogeneous organizations, processes and technologies generally operated through bureaucratic oversight and adapted through iterative processes to suit diverse settings and changing public values over time. In contrast, platforms build an unchanging core system with peripheral applications and frequent updates applied to urban services that are meant to control service delivery and deliver profits to the corporation. The modular structure that platforms bring to urban

services create a level of control over the service by the central platform operator as well as an ability to adapt to changing conditions without the large upfront investment that was characteristic of earlier forms of infrastructure. The platform structure operationalizes what Mattern (2017) describes as an implicit – and in her view erroneous – association between the city and the computer, whereby cities and digital technologies are understood to capture the mess of social relationships and package those inputs as commodities. Writers like Langley and Leyshon (2017), Stehlin (2018), and Sadowski (2020) see platforms commodifying service delivery for the production of monopoly rents for the platform firm.

In discussions of platform urbanism, there is a common association between digital and urban space. Just as cities result from a density of individuals, platforms require a density of workers or underutilized resources. And from these inputs across an urban topography, platforms and cities deliver a gradient of locational advantage coordinated through rents. So, just as cities apply higher rents as the location advantages increase, so too may platforms demand rents for greater traffic across a digital property. Stehlin (2018) notes, that just as capital in cities must balance value extraction with a sustainable social life, so too must digital rents preserve the value of digital infrastructure for users. In contrast to Mattern's (2017) celebration of for fostering happenstance events and diverse nodes of agency, Stehlin (2018) and Sadowski (2020) describe the current examples of platforms transferring a dangerous level of control to the rentier class.

Langley and Leyshon (2017) argue that what is distinctive about the platform is the ability to create multi-sided markets and to coordinate the network effects of those markets (2017: 13). The concept of network effects reflects the power of networks as a function of the number of users who are active on the network. By expanding the number of potential connections between users, networks expand the value of those networks and create a powerful benefit for users to participate in the largest networks (Hagiu & Wright, 2015; Hindman, 2018). Bringing together two categories

of user – driver and rider – ridehailing platforms grow their value to each category as they expand their presence with the other. Thus, larger networks have a clear advantage over smaller and new ridehailing platforms must coax both riders and drivers onto the platform before they have a business proposition for either group. The result of this centralizing tendency is that subtle differences between platforms, such as faster loading speeds, can create outsized effects in the marketplace over time as winners consolidate their network and losers languish (Hindman, 2018).

Langley and Leyshon (2017) advance the logic of the platform to its conceptual end. The product, they argue, is not so much the service, but the curation of network effects defined by an orientation to monopoly that permeates their business model. Applied to the vehicle-for-hire industry, Harding et al. (2016) identifies the risk that accompanies this monopoly power: worsening service and higher prices. In both cases, the problem of ridehailing platform market dominance is that these dominant firms are able to apply the costs and risks of business elsewhere. In his analysis of the ridehailing business model, Horan (2015) describes risks to cities and outside investors from this market dominance. Horan finds that platforms have introduced no real efficiencies into the system and, by downloading costs of vehicle servicing from fleet operators to individual drivers, they are likely to increase costs. He asserts that investors have been convinced to invest in vehicle-for-hire services with the promise of remaking the service. Given the rich valuations of these firms, Horan sees no alternative for ridehailing platforms but to meet investor expectations by leveraging market dominance to lower driver wages, raise fares, and re-orient the service to maximize revenue from derivatives in the marketplace.

Mathew (2008) finds that market intermediaries have long exploited market actors through their knowledge of the industry. Proponents of ridehailing platforms contend that platforms wrest control of industry from insiders, by lowering the cost to prospective drivers entering the industry, raising efficiency for consumers, and limiting the regulatory burden for municipalities (Mitchell &

Koopman, 2019; Lobel, 2019). However, writers like Alex Rosenblat (2018) have shown that the industry insider position has simply shifted to the dominant digital platforms. As platforms gain access to individual data from transactions on the service or patterns of phone use gathered by their application, ridehailing platforms gain intimate knowledge of how market actors operate (Srnicek, 2016; Calo & Rosenblat, 2016). This follows a long-standing trend within the industry to subsume an increasing number of practices under the control of investors in the industry previously seen in tools such as GPS transmitters (Mathew, 2008).

Given the common pursuit of monopoly rent by platforms and the technical capacity of platforms to develop increasing control over the industry, there would seem to be many reasons to maintain institutions of local control over the service. However, the effects of ridehailing platforms have been found to carry many implications to cities that not only challenge and provide opportunities for cities but make platforms stand out as a potential tool for local control or a barrier to that control. In the sections below it is to these impacts on local governance that we now turn.

### 2.3.1 Ridehailing Platforms as a Challenge for Municipal Policy

The promise that ride-hailing platforms create more efficient marketplaces and therefore free governments of the need to regulate the space reflects the understanding of government services as a supplement to capitalism. States like Texas and Florida epitomize this perception as they have pre-empted municipal regulation to address challenges to their residents. And yet, the challenges that led to municipal regulation of vehicle-for-hire services have not subsided with the entrance of ridehailing platforms. While platforms have received significant support from consumers, and regulators, challenges typical of vehicle-for-hire systems have returned to the

service under platform control. In addition to that, challenges, such as data privacy, have emerged due to changes to the industry (Table 2.1). Collier et al. (2018) find that policy challenges remain persistent across the industry and that platforms have done little to resolve them. Previously Dempsey (1996) made this same critique after finding in the 1980s deregulation movement, that residents forced municipalities to reregulate as industry actors failed to align processes with consumer and city interest.

Critics point to a large and growing literature that identifies policy challenges resulting from ride-hailing platform operations. These challenges straddle a wide range of social and technical considerations such as the environmental impacts of ridehailing apps (Jalali et al., 2017; Rodier, 2018), the safety of drivers and passengers (Feeney, 2015; Reid-Musson et al., 2020), the discriminatory effects of ridehailing app design (Thebault-Spieker, et al., 2017), the effect of apps on public transit use and congestion (Clewlow and Mishra 2017; Henao and Marshall 2019a, 2019b) plus many other factors. Table 2.1 enumerates the policy challenges explored in the literature.

Plantin et al. (2018) argue that just as infrastructure is becoming increasingly dominated by a logic of the platform, there is also a countervailing force that demands platforms be held to a standard of past generations of infrastructure. There is still an ideal for universal service that is common in discourse over urban services (Coutard & Rutherford, 2016). Thus, while platformization has been a more successful approach to deregulation than what was experienced in last part of the 20$^{th}$ century, it is unclear how current challenges to the system will be resolved.

The struggle facing workers is not the least of these challenges. Studies about the experience of workers on ridehailing platforms have found workers to be highly vulnerable in this setting (Malin & Chandler, 2017). Platforms have a unilateral power to change the terms of relationship they have with drivers and have used this power to alter pay and other processes

(Rosenblat 2018; Wells 2019). Platforms give drivers inadequate information about the direction of their ride or the fare they can expect, making it difficult to make a sound business decision (Rosenblat, 2018). Drivers are subject to strict oversight from customers who rate their performance, as well as platforms who discipline these drivers following an ad-hoc system of warnings and dismissals (Ticona, et al., 2018). Thus, individuals taking loans to purchase a vehicle and begin driving may find the frequent changes to terms of service and constant risk of removal undermine planning (Wells, 2019).

Table 2.1: Policy Challenges in Regulation of Vehicle-For-Hire Industry

| POLICY CHALLENGES | REPRESENTATIVE WORKS |
|---|---|
| Service Quality and Pricing | Chen, Mislove & Wilson, 2015; Calo & Rosenblat, 2016; Bokanyi & Hannak, 2020; NYPLI, 2018; Thebault-Spieker et al., 2017; NYC Taxi & Limousine Commission, 2018. |
| Insurance, Vehicle Safety and Training | Rayle et al., 2016; Davis, 2015; Schoenbaum, 2017; Barreto, Neto & Carazza, 2021; Reid-Musson et al., 2020. |
| Consumer Protection | Calo & Rosenblat, 2016; Attoh, Wells & Cullen, 2019 |
| Worker Protection | Mishel, 2018; Wells, 2019; Rosenblat, 2018; Hua & Ray, 2017; Cook et al., 2018; Dubal, 2017a; Johnston, 2018; Peticca-Harris et al., 2018 |
| Transportation and Transit Planning | Henao & Marshall, 2019; Erhardt et al., 2019; Clewlow & Mishra, 2017 |
| Urban Environment | Jalali et al. 2018; Ferreira & Sanyal, 2018; Rahman, 2016. |
| Public Finances | Viswanathan, 2019 |

Table adapted from Dempsey, 1996, p. 102; Collier, Dubal & Carter, 2018, p. 6.

If platforms fail to resolve the challenges workers have already shown, they will look to other actors to address their concerns. Workers have initiated organizations, cooperated with

unions, and developed campaigns to influence ridehailing platforms. But Dubal (2019b) has found that these organization have had their greatest influence in pushing for municipal regulatory change (also see Johnston, 2018). As one driver representative noted before a hearing on ridehailing platforms in New York City, "You," the municipal regulator, "are our only voice. Right now, you're our only choice. If we can't count on you, who will we be able to count on?" (quoted in Dubal, 2019b). There appears to be a role for municipal regulation. Municipalities can still channel local interests seeking change in vehicle-for-hire services. To understand the relationship of ridehailing platforms and municipalities, I explore the political and economic structures that have given rise to and have formed around ridehailing platforms to find the opportunities and constraints these structures apply to municipalities and municipal intervention into the industry.

### 2.3.2 Ridehailing Platforms as an Opportunity and Tool for Municipal Policy

Rauch and Schleicher (2015) find ridehailing platforms to be an opportunity for municipalities to expand local services and effect more efficient municipal programs. As Table 2.2 identifies, there are four overarching benefits of ridehailing platforms for municipalities: 1) ridehailing platforms provide a technical solution to market failures; 2) ridehailing platforms reduce administrative costs; 3) ridehailing platforms produce agglomerative gains and new ways to engage residents; and 4) ridehailing platforms grow capacity for redistribution. I discuss each of these benefits below.

Table 2.2: Opportunities and Tools for Municipal Policy

| POLICY INTERESTS | REPRESENTATIVE WORKS |
|---|---|
| Technical Solutions | Harding et al., 2016<br>Mitchel & Thierer, 2015 |
| Reduced Administrative Costs and New Ways to Regulate | Van Loo, 2016<br>Lee, Kusbit, Metsky & Dabbish, 2015 |
| Resident Engagement and "Agglomerative Gains" | Brail, 2018; Rauch & Schleicher, 2015<br>Theirer, 2016; Davidson & Infranca, 2019<br>Mitchell & Koopman, 2019;<br>Sundararajan, 2016;<br>Runyon, 2018 |
| Redistribution | Rauch & Schleicher, 2015<br>Rauch, 2019<br>Agyeman & McLaren, 2015<br>Scholz, 2016 |

Table developed with reference to Dempsey, 1996, p. 102;
Collier, Dubal & Carter, 2018, p. 6.

*Technical Solutions to Market Failures*

Sundararajan (2016) sees a great benefit to self-regulated ridehailing platforms due to the confluence of interests between the platform and market participants in favour of a liquid and widespread marketplace. Within the vehicle-for-hire industry, Harding et al. (2016) find that the structure of the platform overcomes some of the critical market failures that led to regulation in the first place. Most importantly Harding et al. (2016), find that ride-hailing platforms overcome the crowding effects of vehicle-for-hire marketplaces within taxi stands and over-burdened phone dispatches. While Mishra & Clewlow (2017) find that this congestion has now been applied more generally across roadways due to additional for-hire vehicles on the road, the burden is less focused on the narrow vehicle-for-hire system. Moving dispatch to online systems with automated ride matching capabilities improved the efficiency of ride distribution.

The improved efficiency of service would seem to demonstrate that platforms are more capable than municipal regulators were in managing the allocation of resources. Scholars such as Lobel (2019) and Mitchell and Koopman (2019) consider governments and bureaucracies to be inherently weak with regards to managing political insiders. For municipal governments, the reliance on market mechanisms provides a buffer between politicians and city staff from the industry. This can benefit the municipality by reducing the negative perceptions of government associated with rent-seeking behaviour (Mitchell & Koopman, 2019).

*Cost Avoidance*

The possibility of avoiding the costs of enforcing regulations may also attract government interest. In vehicle-for-hire markets the benefits of avoiding enforcement may be most clear with regard to market discipline. Municipalities administered the taxi industry through a complaint mechanism and with routine inspections (Cooper et al., 2010). Where there were contraventions of municipal regulations, the disciplinary measures such as ticketing drivers or revoking licensure could lead to time-consuming administrative processes. Many jurisdictions have quasi-judicial boards to decide upon disputes. In contrast, digital platforms administer disciplinary processes privately and immediately through platform mechanics with little use dispute resolution tools (Van Loo, 2016; Lee et al., 2015). This has led to complaints from drivers that discipline is heavy handed or arbitrary (Rosenblat, 2018); however, municipalities benefit from avoiding the costs of balancing disciplinary policies and maintaining fairness.

*Resident Engagement and Agglomerative Gains*

Other scholars have found opportunities for cities where platforms enable citizen involvement in planning and structuring municipal services (Balaram, 2016; Van der Graaf & Ballon, 2018). In their examination of The Waze application – a social media and mapping platform that allows users to collectively identify quick routes to drive through the city – Van der Graaf & Ballon (2018) describe how platforms encourage transparency and efficiency in the use of local infrastructure. In their telling, Waze creates a new privately supported market for the transaction of information relevant for city living. In contrast to big data schemes which gather resources to a small set of decision makers, this open architecture has the potential to disperse information to users for crowd-based decision making. This reduces the onus on regulators and planners to manage questions of efficient infrastructure use and creates a public good through the expansion of market forms of governance (Lobel, 2019).

In a wide-ranging account of municipal interests regarding platforms, Rauch and Schleicher (2015) describe some of the practical benefits that could accrue to municipalities. Services offered on platforms can signal to residents that living in that particular municipality – particularly marginal or suburban municipalities - provides tangible "agglomerative gains" or benefits to locating oneself in the community (Rauch & Schleicher, 2015). Alternatively, platforms can broaden the local economy potentially allowing workers to supplement their income or compensate for a temporary employment dislocation (Freiberger & Sundararajan, 2017). Another benefit these services could have for municipalities relates to community economic development. Municipalities that are competing for business investment may encourage economic development by tapping into a service that is global in reach and recognized by industry trendsetters and investors (Brail, 2018).

*Redistribution*

By reducing costs spent on management and dispatch operations, ridehailing platforms would seem to be able to provide a more efficient service with associated price reductions (Harding et al., 2016). In addition, the variable price these platforms pursue provides a more adaptable mechanism of establishing supply in the marketplace, taking the task away from centralized bureaucracies. Rauch (2019) finds platforms to be relevant as a low-cost providers of transportation services. There are examples of municipalities subsidizing rides in low population density and low-income communities (Brail, 2021). These are explicitly municipal services contracted out to platform firms; However, Rauch sees potential for municipalities to achieve similar aims through regulation by including demands for universal accessibility or stipulating fare rate models that that include a redistributive component.

### 2.3.3 The Platform Economy as a Barrier to Municipal Intervention

Another segment of the literature on digital platforms and governance has focused on the barriers to historic forms of government intervention. These barriers include social and technical practicalities of the service today as well as the niche those operations fill within the larger economy.

*Global Market Niche*

Whereas Rauch and Schleicher (2015), identified cross-subsidization as a key opportunity, other scholars have identified how large corporations embed ridehailing platforms within global operations (Srnicek, 2017). The digitization of services has produced a new commodity upon which platforms can build revenue. Srnicek (2017) describes how platforms gather data from drivers and

passengers to improve services but also to develop a new revenue stream by selling that data or insights generated from that data. Uber, for example, has used rich data flows to move away from pricing rides based on the fundamentals of the ride (distance, congestion) to consider a range of variables – a system that has been called "route-based pricing". In some jurisdictions, Uber arrives at a fare based on a range of variables that are undisclosed to passengers or city regulatory (Newcomer, 2017). Such data enables platforms firms to respond to factors tied to the passenger or the neighbourhood and not directly related to the delivery of the service (Calo & Rosenblat, 2017). Similarly, revenue from the sale of data and insights from data to other industries and governments presents a profound shift. This new revenue stream suggests that a new form of subsidization is present that is not based on local geography. Sales of data mean that rides become more valuable than simply the price a rider is willing to pay. This could benefit local markets where it warrants lower prices for riders. However, by depending on revenue from data, the incentives for ridehailing platforms are to focus on those passengers with the most valuable data in the marketplace – something that is likely to reward those who are already better off.

With the opening of this new revenue stream, the industry faces a fundamental shift from a focus on servicing residents across a particular geography to a focus commodifying data across a broad set of commercial relationships. This may weaken the value of municipal cross-subsidization – where uniform rates across jurisdictions allow simple cross-subsidies to flow from rich densely populated neighbourhoods to low-income, dispersed neighbourhoods – because high value individuals are so much more valuable to the downstream data business operations. Further, with these other scales of cross-subsidization, local incumbent competitors are disadvantaged compared to global actors. Where municipal policy depends on competition between service providers this competitive marketplace is more likely to reward large global firms that are better able to capitalize on the new global scale of data markets at the expense of local incumbents from the taxi industry.

Thus, municipal policy is weakened where local cross-subsidies become less valuable in relative terms and local competitors are unable to compete over price.

This incentive to serve select markets follows a wider trend in the literature on infrastructure that describes a growing "splintering" between communities within the city that were once held together by networks that were primarily local in nature (Marvin & Graham, 2001). Whereas municipal infrastructure might once have aimed to bring all residents access to the city through homogenous and universal services. The concept of urban splintering describes a city that is internally divided, where various classes that are geographically proximate but no longer share the same services and thus lose the capacity for collective consumption that underpinned the capitalist city.

*Labour Market Niche*

It is not only at a global scale the platforms have initiated a new economic niche. Among drivers too, we see a new economic niche for the industry. Past eras of the vehicle-for-hire industry, drivers often committed to the industry as a career. Drivers throughout much of the 20$^{th}$ century could generate stable incomes from the work due to supply constraints (Dubal, 2017a; Dempsey 1996). Further, as the industry became less hospitable to new entrants through higher prices for licenses, drivers were typically committed to ever increasing hours to pay the costs of entering the service. In contrast, platforms have created a system to quickly on-board and release drivers encouraging a greater number of temporary or occasional drivers in the workforce (Farrell, Greig & Hamoudi, 2018). This transience makes the industry more impactful than it would appear when considering the number of drivers on the platform at any one time. The ease of entry and exit allows drivers to participate only when necessary, something that Farrell et al. (2018) demonstrated

when they showed that drivers are more likely to participate when income from other sources are unusually low.

For municipal regulators transience introduces a new class of driver that is less invested in the industry than drivers in the past. Whereas municipalities regulated drivers of the past as professionals with a professional obligation to the public, drivers working on platforms often have no legal obligation to a public body beyond criminal law. Zale (2019) notes that the small scale and limited commitment of these workers makes them difficult to regulate because in large numbers, they can be expensive to access and less responsive to regulations. Further, where regulations are onerous it can lead to individuals being more evasive or opting out as opposed to professionalizing (Van den Steenhoven, Burale, Toye & Bure, 2016). For all of these reasons, regulation in all industries have typically avoided addressing private, informal actors, preferring instead to oversee actions of private commercial institutions with a public orientation including public organizations, commercial firms, and professionals (Lorraine, 2005; Dupuy, 2008).

*New Technical Barriers*

New practicalities of the industry are also holding back municipal intervention. With the service now priced according to competitive rates rather than by municipal standards, digital pricing strategies have become recognized as a matter of competition in the marketplace and, therefore, have not been subject to in-depth overview. Municipalities in the Greater Toronto have affirmed that passengers must agree to the price before commencing the ride; however, regulators do not consider the variables that determine that price. In the past, municipalities set appropriate fares for drivers to follow, but now in the era of ridehailing platforms, municipalities have been unable to learn the exact pricing algorithm used by platforms (Calo and Rosenblat, 2017).

Investigative research by Khan (2016) shows that this competitive pricing is difficult to understand across large populations. Platforms pursuing dynamic or discriminatory pricing use individualized data that vary within populations and are, therefore, not evident from averages across the population. To understand such pricing schemes, municipalities require individualized assessments. However, given the legitimate privacy concerns from transmitting data, municipalities are limited in their capacity to examine transactions at the level of detail that is necessary. Calo and Rosenblat (2016) find that to understand such pricing policies municipalities require a form of "reverse engineering" to gather diverse sets of data – scraping online data, impersonating customers, and other investigative techniques to see how platforms set prices (Calo & Rosenblat, 2016).

Table 2.3: Planning and Regulating the Platform Economy for Local Services

| POLICY INTERESTS | REPRESENTATIVE WORKS |
|---|---|
| Regulability | Sundararajan, 2016; Balaram, 2016<br>Collier et al., 2018; Johol & Zon, 2015<br>Brail, 2018, 2021; Acquier, Daudigeos & Pinske, 2017 |
| Monopoly | Davidson 2019; Harding et al., 2016<br>Rahman, 2016; Horan, 2016<br>Armstrong, 2006; Acquier, 2019;<br>Zale, 2019 |
| Challenges to Incumbents | Collier et al., 2018<br>Mitchell & Koopman, 2019 |

Table adapted from Dempsey, 1996, p. 102; Collier, Dubal & Carter, 2018, p. 6.

### 2.3.4 The New Structure of Governance for the Vehicle-For-Hire Industry

Platforms benefit municipalities where they release the municipality from the burden of overseeing vehicle-for-hire markets. At the same time, this undoes traditional forms of oversight and puts vehicle-for-hire services in the control of corporate actors and a business plan that extends beyond the city to a niche in a global marketplace. To this point, the changes in the industry

suggest that platforms have done more to curtail local power than to build it. Platform lobbying has influenced legislation in some American states, pre-empting municipal regulations (Dupuis et al., 2018; Collier, et al., 2018). In the Canadian context upper-level government intervention has taken the form of directives from the national government to encourage greater market competition rather than municipal standardization (Competition Bureau of Canada, 2015). Among the provinces and states, there have been legislative changes to allow drivers on ridehailing firms to avoid high-cost commercial insurance by providing an on-demand expanded personal auto insurance option (Insurance Act, 2016; Collier et al., 2018).

The challenge to municipal authority also results from industry change and the development of new policy considerations like privacy and data ownership. The delegation of authority over vehicle-for-hire services to municipalities long before data ownership and privacy were a concern. Further, even where cities do attempt to regulate relationships between drivers and the platform, or the use of data gathered from rides, Graham (2020) describes how companies shift much of these operations outside of municipal jurisdiction. Thus, for a long period Uber contracted Canadian drivers to a Dutch-registered company even as the platform operated as a locally regulated entity (Rolfe, 2021)[2].

Regulation at the municipal level continues to exist but many municipalities have chosen not to apply their regulatory program to ridehailing platforms. Municipalities have either allowed ridehailing services to operate outside of the regulated industry or updated regulations to align with ridehailing platforms. The concurrent expansion of private control may threaten the pursuit of values typically attached to urban services like universal accessibility. Yet, such limitations are not complete. Among the most empowered municipalities, like New York City, we see experimentation taking place to find new regulatory tools capable of dealing with the ridehailing platform (Schaller,

[2] Workers have now successfully challenged this in Ontario courts (Rolfe, 2021).

2018: Johnston, 2018). In Dupuy's (2008) analysis of municipal regulation of infrastructure more generally, he finds that planners and regulators have long had to adjust to networks crossing beyond municipal jurisdictions. Dupuy finds that municipalities have played important roles in regulating all manner of infrastructures by understanding those networks, identifying chokepoints within municipal jurisdiction and finding solutions. Dupuy notes that municipal policy solutions are most effective where they coordinate with authorities outside the local jurisdiction but also include solutions that are specific to local conditions (Dupuy, 2008, p. 53-54).

It remains to be seen how platforms will address growing challenges as public interests are confronted by changing economic, social, and technical conditions of vehicle-for-hire operations. Plantin et al. (2018) note that in the past, infrastructure resisted change through the development of complex and heterogeneous systems that could adapt in part to niche conditions while shielding the system as a whole. Platform architecture may be adaptive at the periphery; however, Plantin et al. (2018) argue that at its core it contains a system that is inflexible. Thus, ridehailing platforms remain challenged. Just as infrastructure has had to adapt to the logic of the platform, it could be that platforms will have to adapt to the logic of urban services and the values placed on urban services by residents and policy makers.

Municipalities have historically played a supportive role in the vehicle-for-hire industry, at times supporting drivers themselves but more generally creating the rules upon which the service could develop trust and be successful. As the industry changes and the private sector takes a growing role in facilitation there are new points of weakness for these services. Distributive justice, particularly as it relates to the drivers who provide the service and rely on that service for an income, is one area where the municipality previously played a role and despite past failures may still be able influence better outcomes.

## 2.4 A Just City for Platform Drivers

The call for greater justice on ridehailing platforms has become a successful legal and political movement (Lee, 2021). Popular organizing amongst drivers has been successful in developing a handful of labour organizations for platform drivers (Dolber, 2019), legal proceedings by activist lawyers and workers have secured victories in the courts for drivers (Palagashvili, 2018) and top-down political change has produced new legislation that has reconfigured the interpretation of employment for gig workers (Deutsch & Sterling, 2021; Lee, 2021). Courts in the United Kingdom, Holland, France, and Spain have ruled that drivers are employees or workers for the ridehailing platforms and not independent (Lee, 2021). And States like California have made similar policies through legislation that temporarily classified gig workers as employees in line with previous court decisions in that state (Bellon and Vengattil, 2020). Rulings in the United Kingdom and Holland and mobilization from driver organizations like the App Drivers and Couriers Union and Worker Info Exchange have also begun applying new levels of protection for drivers regarding the data held on the platforms and the approach to decision making made through the platforms regarding the work conditions for drivers (Clarke, 2021).

Despite these successes, the process of securing greater rights for workers has been far from smooth. Even where there have been successes in securing greater rights for workers these policies have not always had the intended effect. In California, the passage of the AB5 legislation marking all platform drivers as employees built upon an earlier court ruling that established new criteria for what constitutes an employee called the ABC rule. Under this interpretation workers can only be considered contractors if (a) their work is done without the direction of the employer, (b) the work is outside the usual course of employer business, and (c) the work is conducted by an independent businessperson that

otherwise conducts that kind of work. Rather than accept this legal requirement the large ridehailing companies, Uber and Lyft, responded by altering their platform procedures. Instead of matching riders to evenly paid drivers through a quick 15 second acceptance process, the platforms reworked the ride matching procedures to allow drivers to set their own rate, though the matching process would still only connect passengers to the driver that is nearby with the lowest rates (Bhuiyan, 2020). Bhuiyan speculates that this market still demands poverty wages for drivers and thus skirts the question of classification by adapting business practices.

In addition to platform adaptations, political campaigns by the platform companies have been successful in gaining support for their preferred work regime. At the same time as Uber and Lyft were adopting alternative ride-matching procedures they were spearheading a political campaign in the State of California to on a referendum to carve out vehicle-for-hire and delivery work from the re-classification legislation (Bellon and Vengattil, 2020). This referendum (Proposition 22) was ultimately supported by a majority of voters in the state. Unsurprisingly, once the referendum passed, the ridehailing platforms reverted to their previous simple matching approach allowing drivers to no longer choose their wage. The change to regulations has been called "Flexible Work +". It does provide additional benefits to workers but does not recognize employment status of those workers. The political success has been recognized as a model for other jurisdictions where there is pressure to add new regulations to control ridehailing platform systems (Bellon and Vengattil, 2020).

The flexible work + model succeeds where drivers are uncertain what benefits they can expect from employee status and the risks that new legislation may impose. The risk for drivers is that regulations will be ineffective and that platforms will pass on the costs of regulations to

drivers. Legislation could potentially reduce opportunities without truly improving the conditions faced by drivers. Such unknown risks are an important consideration for drivers who are commonly coping with immediate financial vulnerability and may only have a temporary commitment to the work (Farrell, Grieg & Hamoudi, 2018). Changes may jeopardize the slim opportunities that such individuals see open to them. It is not surprising that drivers have voiced opposition to legislation that was intended to improve their labour market conditions (Campbell, 2019; Bellon and Vengattil, 2020).

The perception of unfairness can lead to mistrust and cheating in a spiral of decline. For municipalities that have an interest in preserving vehicle-for-hire systems, the maintenance of trust and fairness would seem critical to preserving this system. This rationale to preserve fairness and thus justice harkens back to Rawls' insight that "justice is the first virtue of social institutions" (1971: 3). Thus, it makes sense that the rise of ridehailing platforms was accompanied by a promise of a "sharing economy" built upon a promise of ubiquitous and transparent technology (Botsman & Rodgers, 2009). Unfortunately, the focus on market-like tools to resolve unfairness in the delivery of vehicle-for-hire services has only morphed into unfairness with slightly different characteristics.

The QQE framework once provided a carefully constructed balance of interests, however years of pro-market reforms created a system that no longer protected working people. As Leopold and McDonald argue (2012), the early 20$^{th}$ century progressive political movement began to break down as the concept of markets overcame the institutions within which the markets were embedded. Today, new movements are emerging to re-construct democratic institutions around markets for workers. Workers have increasingly mobilized around rights for gig workers (Dolber, 2019a; Schaller, 2018: Johnston, 2018). For example, delivery drivers in New York City have mobilized to receive protections similar to

what was granted to drivers on ridehailing platforms (Sonnemaker, 2021). Unions have emerged around freelance workers and gig workers (Dolber, 2019). Policy programs have developed that seek to make digital labour markets that are more firmly controlled by democratic institutions. Led by communities in the United Kingdom and California, public platforms have emerged to facilitate gig work (Rowan, 2021; De Souza Briggs & Rowan, 2021).

With respect to vehicle-for-hire services, progressive intervention has focused primarily on the state, nation, and provincial levels of government (Rauch, 2019; Davidson, Infranca & Rauch, 2019). Critiques at these levels have produced a nuanced discourse about changes needed in employment law and the nature of workplace exploitation in the gig economy. Movements fed by this discourse have led to meaningful legal victories particularly in European nations. However, as the example of AB5 legislation in California demonstrates, efforts at senior levels of government may meet resistance. Or platforms may re-constitute around new legal structures. A focus on local regulation provides an alternative and complementary tool for ensuring justice within urban services.

A local approach to regulation requires a very different perspective on regulation that has not been adequately addressed. Scholars frequently focus on municipalities and their limited capacity to address employment status, without examining the authority of municipalities to reform urban system and thus platforms as components of those systems (Wolf, 2021). Among senior levels of government, ridehailing platforms are simply another company and employer. For municipalities, these firms set the terms for a critical urban service that is politically desirable. Consequently, local regulation for vehicle-for-hire services requires a greater understanding of how drivers fit into the system and how their work

conditions can be made more fair within that system. Such knowledge should include the capabilities available to drivers to set the terms of their own work.

Justice within such a perspective on governance does not lie within a system of rights and duties under the law but rather within a pragmatic understanding that safe and reliable service systems depend upon individuals with a minimum capability to make meaningful decisions. Further, in this formulation justice is not the expression of an immediate political decisions even where policy is the outcome of a democratic process. Justice must address the lived experience of individuals and groups most affected by policy and ensure capabilities align with responsibilities. This thesis examines the unique regulatory role municipalities may play in producing positive work conditions for drivers by addressing vehicle-for-hire regulations as a system, where driver interests are a critical component. The study accomplishes this goal by applying Fainstein's just city theory to the vehicle-for-hire service to understand what a standard for municipal intervention based upon Fainstein's concept of justice would entail. The thesis pursues this goal by examining the condition that drivers face, interrogating the conception of regulation over ridehailing platforms in municipalities, and examining the value of municipal policy and driver capabilities for improving outcomes for workers. These goals are explored in the three manuscripts (chapters 4 – 6) that make up the body of this thesis.

# 3.0 Methods

The growth of ride-hailing platforms has led to the substantial restructuring of the vehicle-for-hire service industry (Schaller, 2017) leading to new and evolving economic relations between drivers, industry investors, city regulators and passengers. These new relations may have similarities to the conditions of the taxi industry, such as independent contractor status and precarious incomes for drivers; however, the relations also reflect changing technologies and deregulation that is different from the past. The changes are particularly important for drivers who are often in a vulnerable position when taking on for-hire vehicle work. Vulnerable drivers are then susceptible to exploitation. It is from these pragmatic concerns about the justice of this new system for drivers that I generated the following research questions:

4. What are the conditions facing platform drivers? And to what extent does that reflect justice?
5. How do municipal staff and representatives conceive of vehicle-for-hire services and how have municipalities developed regulations over digital ridehailing platforms?
6. Can municipalities support platform drivers in ways that improve the conditions they face at work?

## 3.1 A Pragmatic Research Paradigm

A pragmatic research paradigm does not aim to capture a comprehensive account of a state of affairs but seeks to understand a phenomenon insofar as it effects human action. This study seeks to understand how the vehicle-for-hire industry and ridehailing platforms influence the practices of drivers, consumers, and policy makers. Drawing on Pierce, Dewey notes that "a theory corresponds to the facts when it leads to the facts, which are its consequences, by the intermediary of experience" (McDermott, 1973). What are the consequences of understanding work as a gig? Or

of submitting the myriad choices for how to operate a transportation service to an algorithmic code? A pragmatic approach examines the consequences of human action in the experiences of stakeholders through a mix of methods aimed at identifying the range of possibilities that can be expected to arise from these practices. As such this study does not aim to capture a comprehensive measure of justice in ride-hailing within the regional economy but to understand how the structure of vehicle-for-hire services based on ridehailing platforms impact the capabilities of drivers to develop a dignified livelihood (Morgan, 2014). Though ridehailing platforms are a relatively new technology, a larger number of workers have already participated in these platforms, establishing patterns. Thus, I seek to understand how business strategy, driver behaviour and regulation have structured the capabilities of drivers in vehicle-for-hire services to guide future policy making.

## 3.2 A Normative Standard for The Just City

Justice is generally concerned with the relationship between individual and the community (Lukas, 1972). The literature on justice within planning theory describes different conceptions of justice between those focused on procedures (Healey, 1997), distributive outcomes (Fainstein, 2010), measures of utility (Campbell & Marshall, 2012), or intergroup recognition (Young, 1990). In this study, I have followed the approach described by Susan Fainstein in her "just city theory" (2010) described in the literature review (chapter 2). This orientation is beneficial due to its inclusive account that has adopted diverse values from other theorists and attempted to integrate them together. As a result of this inclusiveness, the just city is relatively simple to explain and the concepts it produces are easily applied within the contemporary municipal system of governance as well as the procedures common to planning practice. In the following discussion I describe the just

city theory and how I operationalize it here as a standard for justice in examining the for-hire vehicle industry and the structure of work with ridehailing platforms.

For this study, the key normative concepts are: (1) equity, democracy, and diversity, which are the critical values of Fainstein's framework; (2) the concept of justice as fairness as interpreted through the tools of the capabilities approach for human development; and finally, (3) the orientation to non-reformist reform. Together, these conceptual tools define a standard of justice that takes the relative capabilities of workers as the fundamental unit of analysis. As such, the values of equity, democracy and diversity are interpreted insofar as they change the capabilities of drivers and encourage further reforms over time. Rather than pursue abstract principles alone, policy is kept disciplined through a connection to lived experience of stakeholders and an orientation expanding justice. While policy may target achieving abstract principles of justice, the resulting tangible policies must at the same time expand the capabilities of marginalized stakeholders and place those stakeholders in the position to enact further reforms over time.

The manuscripts (chapters 4, 5 and 6) each deal with different aspects of the vehicle-for-hire industry under ridehailing. Whereas chapter 4 explicitly explores the question of justice for drivers, chapters 5 and 6 deal with municipal and worker responses to the changes in the vehicle-for-hire industry. These chapters do not explicitly reference the just city; however, they do describe important consequences regarding justice for workers. The findings from these studies are brought together in the discussion (Chapter 7) where worker practices, municipal intervention and interventions from other labour market intermediaries are assessed explicitly within the just city framework.

## 3.3 A Methodological Framework

In moving from a set of research questions and a research paradigm to the development of a suitable research design, there were some considerations of note. First, digital platforms for urban services are a relatively new idea. Individuals, municipalities, and other stakeholders must adapt to changing conditions while they identify their own preferred way of interacting with the platform. As a result, research must be open to new interpretations and ideas from data collection that could not be anticipated beforehand. But ridehailing platforms also integrate historical communities and touch on well-researched categories of urban governance and justice. The historical embeddedness and novelty of ridehailing platforms suggests that there must be an iterative process of deductive and inductive reasoning to analyze them. Second, platforms like other networks, define discrete classes of entities and the relationships between them (Benkler, 2011); however, platforms conceal these relationships and the algorithms that define them are treated as private trade secrets. While individuals may act to influence their relationships within the platform, the platform firms wield important influence over the behaviour and outcomes possible for individuals and classes of individuals that make use of the network. For this reason, causal relationships are difficult to establish for participants and researchers in the absence of data from the platform.

Qualitative research provides a pragmatic approach to addressing the research questions within these parameters. Qualitative research commonly brings together a wide range of data sources and analytical tools to explore how individuals and groups apply meaning to various phenomenon and problems (Creswell, 2014). Whereas quantitative research structured by hypothesis testing provides a means to uncover causal relationships, qualitative research provides the foundation for hypothesis development by exploring meaning and decision-making. I followed a mixed qualitative approach that combined "grounded" data collection methods with the "thematic analysis" approach described initially by Braun & Clarke (2006) and then by Guest,

MacQueen & Namey (2014). This combination of grounded theory and thematic analysis is common within qualitative research (Lapadat, 2017; Braun & Clarke, 2006). Grounded theory approaches to data collection provide a perspective on data gathering that seeks to include a breadth of data intended to capture the widest range of relations within the population. Following this perspective, I gathered data from media in the GGH region, interviews with participants in diverse roles related to vehicle-for-hire services and from videos broadcast by drivers in a variety of settings. Thematic analysis enables a flexible examination of the data that allows an abductive approach, moving between deductive and inductive analysis (Braun & Clarke, 2006).

At its core, thematic analysis is a tool for organizing and interpreting data that identifies patterns in a dataset and relates them to theory and concepts found within the literature (Braun & Clarke, 2006). This permits the researcher to move between deductive and inductive approaches to theory development that recognize the value of experiential data but also the existing literature (Lapadat, 2017; Gilgun, 2019). For this project, the flexibility of thematic analysis was used to find patterns of meaning within the responses from drivers and municipal representatives regarding their experience working with, or regulating, digital platforms. It also provided a means to assess these emergent experiences against Fainstein's theory of justice within cities (Fainstein, 2010) and governance of social and technical networks (Marvin & Graham, 2001; Dupuy, 2008). The combination of inductive and deductive reasoning is used to provide detailed descriptions of meaning and decision-making processes among individuals situated within a historical and theoretical context useful for planners, local policy makers and civil society leaders.

I used several approaches to validate my analysis. While thick description with extensive observation of participants at work was not possible due to platform regulations that disallow non-paying passengers in vehicles, other methods were possible. One approach taken here was to consider multiple sources of data. The range of data gathered include an in-depth analysis of videos

produced by driver diarists (chapter 6); a survey of the population of driver diarists (chapter 6); interviews with local drivers (chapter 4); interviews from industry watchers with ties to the taxi industry (chapter 5); and interviews with municipal representatives (chapter 5). This approach closely follows the method of "theoretical sampling" described in grounded theory, whereby researchers attempt to maximize the comparative extremes between data sources to examine the broadest array of explanatory possibilities (Charmaz, 2014; Ligita, Harvey, Wicking Nurjannah & Francis, 2020).

A second approach to ensuring validity was the exploration of negative cases. For this, I used an iterative approach to data analysis, where data would be categorized but then revisited again once negative cases emerged in the findings. For example, initial reviews of the data suggested that municipalities had a declining capacity to regulate ridehailing platforms as compared to the taxi industry. However, cases showing regulatory innovation from municipalities led to a re-examination of this conclusion. A closer consideration of regulatory capacity demonstrated a distinction between a consistent authority to regulate among municipalities, but a declining will to regulate.

A final tool for building validity in the manuscripts is the use of quotations and frequencies drawn from the datasets. The use of frequencies may have the effect of simulating counting methods of qualitative analysis and there are many similarities between content analysis and thematic analysis (Vaismoradi, Turunen & Bondas, 2013). However, the two methods differ regarding the consideration of context. Thematic analysis provides greater leeway to include context, without limiting evidence to the presence and absence of keywords. This expansion of context makes these counting methods more subjective. Further, the use of a theoretical sampling approach means that perspectives may be overstated in the data set in comparison with the commonness of that viewpoint in the population. Still, I used descriptive counts at times when it is

important to provide comparison. For this reason, one should only read these counts as broad indicators.

## 3.4 Stages of Research

### 3.4.1 Preliminary Research & Literature Review

This movement between inductive and deductive methods was practiced at the outset of the research project and continued throughout data collection, analysis, and theory development. The research began with a concept – the "platform" economy – that had emerged to describe innovations in the creation of digital platforms (Covan, 2007). I began a literature review on digital platforms in tandem with the collection and informal analysis of video diaries (video logs or vlogs) from drivers on YouTube, a video streaming site. Video makers followed a vlog style in their videos where individuals speak directly to the camera. These videos were examined informally with little documentation at first and then later notes were taken about the main concerns the diarists expressed. After this initial phase of research, a greater focus was placed on exploring theories about the role of public services in the city as well as theories of justice applied to the city. These explorations of platforms, the experience of drivers, public services and theories of justice provided a broad array of perspectives to and enabled me to maintain a "theoretical agnosticism" in developing my approach to data gathering and questions (Charmaz, 2014; Henwood & Pidgeon, 2003).

### 3.4.2 Video Analysis & Supplemental Survey

After the preliminary study of ride-hailing drivers broadcasting on YouTube, a more formal study was conducted, that attempted to identify all ride-hailing driver diarists operating in the United States or Canada that were active in the previous year (March 2017 – March 2018) and review a sample of that work. Vlogs have become an accepted source of data for qualitative researchers over the last decade (Wesch, 2008; Snelson, 2016). The recruitment process followed the method outlined by Vergani & Zuev (2013), using an extended search process on the YouTube search algorithm. This yielded a population of 127 diarists from which a sample of 27 diarists were selected. A sample of videos from these 27 diarists was then selected for review resulting in a dataset composed of 213 videos lasting over 26 hours. These diarists were all contacted on multiple occasions to allow them to withdraw their videos from the study. Where videos were found to be withdrawn from the YouTube platform at the time of the final analysis, those videos were also withdrawn from the study. Following YouTube policies, the specific instances that were selected for use in the manuscript were credited to the YouTube diarists.

Videos included in this study were reviewed and coded for relevance to the study areas. This process was then followed again using NVivo qualitative analysis software where focused codes were used over relevant portions of the videos. With Nvivo coding, the coded portions of videos were then reviewed for closer analysis of individual reactions to various themes proceeding in the data. One challenge related to the for-profit motive of driver diarists that was disclosed in the videos themselves (Chan, 2019). Drivers can be paid recruitment fees when viewers who signed up for ride-hailing platforms used a certain code. This suggested that drivers could provide not only curated opinions on the topic of ridehailing, but also potentially false claims meant to encourage viewers to sign up. Balancing these concerns with the novel and thoughtful videos that were produced by these drivers it was felt that the data were useful within limits. Drivers may focus on

topics that are productive for their interests in creating YouTube videos rather than simply reflecting their views about driving (Chan, 2019). However, because driver diarists are paid only by drivers who successfully join the platform, they are incentivized to provide insightful comments, and demonstrate their critical eye for the profession rather than painting a rosy picture.

As a result of these conflicting interests, a survey was conducted to check how the views of diarists posted on YouTube compared with the private views of diarists. This was also done to cover topics that were later explored in interviews with local drivers in the GGH region. This survey was sent to the full set of driver diarists (127) identified in the study. 30 diarists (24%) participated in the study. The results of this survey clarified that a small minority of driver diarists did make a large proportion of their income from YouTube but that the majority of driver diarists made less than 10% of their income in this way. Driver diarists provide value by combining their personal accounts of driving with novel insights and advice to gather an audience. As a result, driver diarists provide access to innovative ideas for how drivers can adapt to driving with ride-hailing platforms.

### 3.4.3 Document Analysis

Both official government documents, as well as local media reports, were gathered and reviewed. The analysis included 71 municipal documents including legislation, background documents, public reports and presentations were assembled from municipal websites and staff directly. Media reports were identified from a Factiva search using the keywords “ride-hailing” and “rideshare” between the years 2012 and 2019. In total 388 unique media reports were reviewed.

Media reports were used to identify common themes and events that influenced discourse surrounding the rise and on-going operations of ride-hailing platforms. Insights from media reports were valuable in preparing interviews with key informant drivers and city representatives and then

were used to identify themes in the initial analysis of interviews. Government documents were used in the analysis of vehicle-for-hire regulations documented in chapter 5. In this case, documents provided an alternative perspective on vehicle-for-hire operations that might otherwise be limited to individual perspectives.

One limitation of this study is that the keyword search may not have been broad enough to capture the full array of media reporting on the issue. While individual company names were not used to avoid focusing too tightly upon any one firm, historically the firm Uber has dominated the market in the GTA region and has become associated with ridehailing platforms altogether. It is possible that media focused exclusively on Uber's practices in the marketplace was missed and could have identified relationships that were not found in the research.

### 3.4.4 Key Informant Interviews

Multiple sets of in-depth interviews were conducted for this research project. These include key informant interviews with municipal representatives, as well as individuals who drive with ride-hailing platforms. Interviews provide a source of "deep" information that goes beyond what would have been available through surveys (Johnson & Rowlands, 2012). Interviews are open ended research tools that allow information to be inserted into the research by participants but also allow the researcher to focus questioning towards areas of theoretical significance (Charmaz, 2014). They are particularly useful for accessing personal insights from participants including emotions and other experiential accounts that include values, perspectives, decision-making, and adaptive behaviour. Johnson & Rowlands (2012) add that interviews are also valuable "where the knowledge sought is often taken for granted and not readily articulated by most members, where the research question involves highly conflicted emotions, and where different individuals or groups involved in

the same line of activity have complicated, multiple perspectives on some phenomenon, then in-depth interviewing is likely the best approach". A total of 59 interviews were conducted between August 2018 and May 2019. These include 13 municipal council members, 12 municipal staff members, 2 industry watchers with connections to the taxi industry, and 32 drivers with ride-hailing platforms.

One concern regarding interviews as a research method arose due to the social character of the method and the potential for miscommunications that can be avoided in more standardized forms of research. At the same time, the social nature of the research is also a benefit as it allows for an exploration of meaning that might otherwise go undetected. Consider that drivers frequently provided pat answers when asked about their treatment at work. Asking multiple questions about the topic from different angles yielded more detail in their answers and at times revealed accounts that contradicted earlier statements. Examining these contradictions, helped to escape superficial interpretations of the experience of driving on platforms. One example of this was used to explore the financial benefits of ride-hailing platforms. Drivers often had idiosyncratic and superficial methods of describing their profit from the work. With numerous follow up questions about the various costs of driving, drivers began to consider these costs in more detail. This in-depth questioning allowed greater comparability between drivers and prompted some drivers to re-evaluate their accounts of how the ride-hailing system was working for them.

The coding and analysis of these interviews proceeded from both inductive and deductive processes. Broad themes were identified from preliminary research and a study of the literature. All interviews were transcribed, and the transcripts were inputted into NVivo software to manage the analysis. These broad themes were inputted into the research database and were then filled and added to other themes that emerged from the data. These concepts were identified in the data following a method that corresponds to "focused" coding where data on the same subject or

theme is highlighted in the transcript and linked in the database (Charmaz, 2014). This coding process was conducted on two occasions for all transcripts. Themes were primarily action or subject oriented and were not based on driver sentiment. Themes included "flexible schedule" or "use of management application" and would include both positive, negative, and undecided sentiments in the category. In later analysis these themes were grouped together, queried, and examined by keywords in order to identify how such themes were expressed across the population.

*Limitations from recruitment of drivers*

Some limitations of the study arose in the recruitment of drivers. In some cases, I was unsuccessful in inviting participants of an entire class of potential informants. Provincial representatives from various agencies and representatives from ride-hailing platforms were contacted but no interviews were successfully recorded. The failure to include these informants presents a limitation to the study that hopefully can be overcome in future research projects.

During recruitment, one location yielded far more participants than other locations over the same length of time. To avoid any commercial relationship when recruiting drivers, I approached drivers while they were waiting for rides. These approaches were conducted on city streets, public libraries, and mall parking lots. However, these approaches were most successful at an international airport vehicle-for-hire parking lot. In this lot, drivers have a pre-determined spot in a queue, and they are aware of how much time they must wait. For this reason, drivers are free to take an hour to participate in an interview. As a result of this context, over 80% of interviews were conducted in the airport parking lot. The bias this recruitment approach may introduce to the research is not entirely clear. A benefit of the airport is that it is a common ride location for drivers from across the region including those in small towns. However, it is likely that drivers at the airport will not include those drivers who are least dedicated to the work, because any wait at the airport demands

approximately 2 hours, while some drivers only participate during their commute or other limited situations.

A third limitation of the recruitment of drivers was the lack of female participants in the sample of drivers. This is surprising because ridesharing has been identified as more friendly for female drivers compared to taxi systems (Cook et al., 2018). As one reviewer suggested, there is good reason to think that this low number was caused because I approached drivers as an individual, an individual male, which could portend danger. However, it is also important to note that females tend to comprise only 3% to 4% of drivers in large cities. It is possible drivers at airports follow some of the self-sorting patterns that are evident in cities. The results of this recruitment challenge suggest there is need for further research to understand how women benefit or are denied access to opportunities in vehicle-for-hire services.

A fourth limitation in the recruitment of drivers was the lack of experience that was common amongst participants. While it is common for drivers to work in ridehailing for only a short period of time and gaining an understanding of their experience is important, the recruitment process produced a lack of experienced driver capable of reflecting on the industry in more depth. To overcome this limitation, videos from driver diarists that were first encountered in the preliminary research for the project were then included as detailed above. This open stance towards data follows the methodological concept of "theoretical sampling" (Ligita, Harvey, Wicking Nurjannah & Francis, 2020), whereby new sources of data are included because of the previous stage of data analysis. In this case, the addition of driver diarists provided a special class of key informants who actively reflect upon and conceptualize the experience of driving on platforms. The dichotomy between interviewed drivers and driver diarists supplied an opportunity to compare and contrast how experience and professionalism could influence the conditions of work.

The data collected as described here was used as the evidence base to inform each of the next three chapters. In these chapters, I briefly identify and discuss the relevant data sources and methods. In the final chapter, I reflect on how the evidence base taken as a whole can inform future policy approaches at the local level.

## 4.0 Just Rides: Ride-Hailing, the Capabilities Approach and the Just City

Private firms have increasingly applied information and communication technologies to local services through digital platforms (Zysman et al. 2010). For urban policy makers and planners this trend has led to new ways of thinking about organizing the city that challenge centralized regulatory systems and prioritize markets (Sundararajan 2016). Ride-hailing platforms, Uber and Lyft, are prominent examples of this trend. As these platforms have come to dominate the vehicle-for-hire industry (Schaller 2017), their treatment of workers has become an object of political struggle (Dubal 2017a, 2017b; Palagashvili 2018; Tippett 2019). Among some scholars and industry watchers, the experience for workers has improved due to the reduced costs to enter the market and greater market flexibility (Feeney 2015; Lobel 2019; Mitchell and Koopman 2019). Yet, critics counter that the centralization of control by platforms has undermined these gains by leaving workers vulnerable to the whims of the platform (Collier et al., 2016; Rosenblatt, 2018). The contradiction between these perspectives leads to a question of justice: Are the current conditions facing platform drivers just? And what policies might address apparent injustices? To address these questions this paper turns to Susan Fainstein's Just City theory (2010) and conducts a qualitative analysis of the capabilities of a sample of platform drivers aimed at identifying a policy orientation to achieve justice in the vehicle-for-hire industry.

Vehicle-for-hire services are an important industry for cities and contribute to the local economy by providing a prompt transportation link. Consequently, cities have commonly regulated the industry to maintain high quality service, control supply, and set fares to balance competing stakeholder interests (Cooper, Mundy, and Nelson 2010). Moreover, with municipal policy determining minimum fares and limiting the number of drivers among other things, this industry is one in which municipal governments have been unusually influential regarding outcomes for workers (Dempsey 1996; Cooper, Mundy, and Nelson 2010). However, where platforms now

facilitate the practice of vehicle-for-hire services, scholars argue that platforms have now taken on a regulatory role (Harding, Kandilikar and Gulati 2016; Sundararajan 2016; Lobel 2019). At the same time, scholars Collier, Dubal, and Carter (2018) find that municipalities have become less interventionist. Cities such as Toronto have withdrawn from regulating things like the number of drivers in the industry and relied more on the market to determine supply (Harding, Kandilikar and Gulati 2016; Adediji, Donaldson and Haider 2019). This partial shift from municipal to industry-based regulation makes the vehicle-for-hire industry a useful case from which to consider the potential of local policy in the gig economy.

While calls to improve conditions for platform drivers are frequently directed to upper-level governments and the courts (Harris and Krueger 2015; Palagashvili, 2018; Ravenelle 2019), there have been attempts to support platform drivers at the municipal scale in cities like New York and Seattle (Goldman 2018; Groover 2020). However, beyond isolated examples, there is no consensus about best practices to support drivers and studies of the vehicle-for-hire industry before platforms, find that drivers have long been challenged by low wages, burdensome debts, and unsafe conditions despite municipal regulation (Blasi and Leavitt 2006; Abraham, et al., 2008; Bruno 2009; Feeney 2015). Further, occasional driver and commentator Harry Campbell (2019) argues that workers do not always welcome regulation even on their behalf, stating that drivers fear the effects of restrictive policies on their own flexibility – a view that is supported by the recent ballot-box rejection of legislation in California that had been intended to extend employment protections to gig workers (Bellon and Vengattil 2020).

I argue that as platforms personalize the experience of urban services, regulations of these services can come to resemble constraints to personal liberty, invoking a long-debated tension between the concepts of liberty and equity (Nelson 2008). Fainstein's just city theory (2010) provides one tool that may help to navigate this conflict by providing a framework for resolving

diverse values in municipal policy (Medved 2018; Connolly 2019). Fainstein builds from Rawls' abstract theory of "justice as fairness" (1971) but focusses her account on real world urban settings. She does this, first, by recognizing the importance of historical context, and second, by identifying justice with the values of diversity, democracy and equity as expressed in the practical capabilities of individual stakeholders (Fainstein, 2010; Connelly and Steil 2009). That is to say, Fainstein (2010) identifies how these diverse values are integrated together to understand whether or how the capabilities available to individuals can be expected to provide for a dignified life. She then supports urban policies that grant capabilities to those residents who are the least well-off. In this way, the just city theory provides a foundation for reconsidering policy that prioritizes equity and freedom in equal measure.

Following this orientation to diverse public values and individual capabilities, this paper explores justice for ridehailing drivers from an analysis of the accounts of drivers themselves. Thirty-two drivers from the City of Toronto and surrounding Greater Golden Horseshoe (GGH) region were recruited and interviewed to provide their account of driving with ridehailing platforms. This does not allow for a comprehensive assessment of municipal policy in the GGH region directly (alternatively see Adediji, Donaldson and Haider 2019), but presents an analysis of what just policy might look like for drivers. Readers should note limitations of the study. Drivers were predominantly recruited from an airport location, which limits the representativeness of the sample. The study is also limited to a single region and does not capture the diversity of systems that can be found across all municipalities. However, the GGH region does fit a category of municipalities that have adapted vehicle-for-hire regulations to suit platforms and in that respect, it is a typical case (Collier et al., 2018).

The paper begins by reviewing the literature on the changing context of ridehailing policy and the role of municipalities. It then provides an overview of other studies that examine the

experience of drivers and orients this literature to Fainstein's interpretation of justice and individual capabilities. The paper proceeds to introduce the qualitative methods of the research and describes the Greater Golden Horseshoe case study before moving to present the results. These results are reported through an analysis of the capabilities and challenges experienced by drivers. The paper concludes by identifying a vision of a more just vehicle-for-hire industry that empowers drivers without applying arbitrary limitations.

## 4.1 Ride Hailing Policy and The Challenges Facing Drivers

The rise of ridehailing platforms has produced a distinct era of regulation for the vehicle-for-hire industry (Harding et al. 2016). Whereas municipalities have commonly regulated the industry in the past (Dempsey, 1996; Cooper, Mundy, and Nelson 2010), scholars find that upper-level governments, the courts, and the platforms themselves have become increasingly relevant for setting policy in the industry today (Sundararajan 2016; Palagashvili 2018; Plantin et al. 2018; Collier et al. 2018;). Still, scholars like Rauch (2019) and Davidson and Infranca (2019) find municipalities continue to be relevant for the regulation of ridehailing platforms. Not only is the vehicle-for-hire industry particularly influential in regards to local matters such as traffic congestion and public transit (Rauch, 2019), but Davidson and Infranca (2019) explain that many municipalities continue to have a legislated duty to regulate the industry. They add that municipalities have valuable regulatory experience, a small scale that enables regulatory innovation and a sensitivity to social consequences. Rauch (2019) notes that ridehailing platforms are also relevant to municipalities due to their potential for supporting redistributive policies. And finally, Ferreri and Sanyal (2018) expand on this potential where they emphasize the importance of questions of justice regarding urban services and urban form. They note that services help set the

parameters for how cities are built and re-built and, thus, how the emerging city will modify existing patterns of urbanity.

To address these local interests in ridehailing platforms, scholars have produced an expanding body of literature that documents technical, social, and regulatory changes and their effects on local interests (Collier et al. 2018; Spicer, Eidelmann and Zwick 2019). Studies explore the quality of ridehailing services (Brown and LaValle, 2020); the impact of platforms on traffic patterns, public transit and congestion (Clewlow and Mishra 2017; Henao and Marshall 2019a, 2019b); the geographic and cultural distribution of the service (Thebault-Spieker, Terveen and Hecht 2017); the health and environmental impacts of ridehailing (Jalali et al., 2017; Rodier 2018; Reid-Musson, MacEachen and Bartel 2020); and the pricing/matching policies that are used (Chen, Mislove and Wilson, 2015) among other topics. These works have produced an increasingly nuanced understanding of how platforms contribute to urban systems.

The effects of ridehailing platforms on the lives of workers has likewise received significant scholarly attention and in these studies scholars have frequently been critical of platforms and warn of unjust working conditions (Rosenblat 2018; Ravenelle 2019; Wells 2019; Attoh, 2019). These studies document that platforms unilaterally alter terms of service or reduce rates with little warning or consultation (Rosenblat 2018; Wells 2019), demand that drivers agree to rides without the information needed to make a sound business decision (Rosenblat 2018), and subject drivers to strict oversight and unpredictable discipline (Ticona, Mateescu and Rosenblat 2018). Altogether these studies document a combination of falling incomes, limited flexibility and unpredictable discipline that suggest platforms are exploiting workers who are in an otherwise challenged position in the labour market (Hua and Ray 2018; Rosentblat 2018; Peticca-Harris, deGama and Ravishankar 2018; Ticona, Mateescu and Rosenblat 2018; Wells 2019).

Other perspectives on the industry find that drivers benefit from the flexibility of ridehailing (Lobel 2019). For instance, the costs to begin driving with ridehailing platforms are modest when compared to the historical costs of taxi licensure (Rosenthal 2019). This ease of entry and exit makes ridehailing more practical as a temporary job that drivers can use to supplement and stabilize incomes from other jobs (Kantor 2014; Farrell, Greig and Hamoudi 2018; Kumar 2018) – something that is increasingly valuable as incomes generated by individuals throughout the economy can be unstable (Hannagan and Morduch 2015). From such a perspective, ridehailing would seem to be more just than the past iterations of vehicle-for-hire industry. Indeed, Wells' (2019) research finds that despite finding instances of injustice, nearly half of drivers "would recommend the job to a friend" (pg. 11). For drivers there is a risk to supporting a more protected workplace. The ridehailing model, has expanded ridership, creating work for a growing labour market (Schaller 2017), whereas government intervention may well lead to limited demand and result in fewer opportunities.

Fainstein's just city theory (2010) provides a tool to integrate such diverging perspectives on justice in order to direct public policy. According to Steil and Delgado (2019), the theory does so by recognizing a diverse set of values and resolving their contradictions through an analysis of capabilities available to individuals trying to piece together a meaningful and dignified life. The theoretical framework arises from Fainstein's survey of contemporary western theories of justice and her approach to make concrete what are undoubtedly abstract concepts. Fainstein (2010) identifies the values of democracy, diversity, and equity as the foundation of a just city, and she is motivated to confront what she describes as an urban system that consistently works against these values by rewarding those individuals who are already better off. Accordingly, this pushes Fainstein to prioritize equity amongst the three values.

Fainstein's approach is largely based on John Rawls' (1971) theory of justice and his concept of justice as fairness (Fainstein, 2010). For Rawls, a situation is just when one would agree to that state of affairs without knowing one's future position in the state of affairs beforehand (1971: 12). Once guaranteed basic liberties and a fair distribution of "primary resources", individuals are then free to apply their resources to their own pursuits. Under such an evaluation, growth and inequality is desirable only where it maximizes the primary resources that are available to the least fortunate (Rawls 1971: 151). Fainstein's (2010) contribution to this theory is to set it into an urban context, where she argues that the benefits of growth are generally captured by those with the most wealth already. She then contrasts this with the promise that cities can also be places where local infrastructure and collective forms of consumption empower residents and mitigate the destabilizing effects of uneven development (Fainstein, 2010). For Fainstein (2010), this situated balance of growth and social solidarity places a responsibility on urban policy makers to promote justice and the diverse values that inform a dignified and meaningful life.

While the just city has been applied by several scholars in recent years (Yiftachel and Mandelbaum, 2017; Medved, 2018; Connolly 2019; Steil and Delgado 2019;), critics argue that the theory lacks deliberative tools to effectively balance diverse interests (Lake 2016). Others contend that her theory presents an incrementalistic, expert-oriented paradigm that is too restrained to consider the large-scale social changes that are needed to achieve justice (Harvey and Potter 2003). Proponents counter that Fainstein does not refuse the tools of collaborative planning but tempers their use by recognizing the inequalities that result from deliberative procedures (Connolly 2019). In regards to the incrementalism label, Fainstein accepts the argument. But rather than seeing it as a hindrance, she sees incrementalism as a method for building a sturdy basis for social change. Quoting from the work of Nancy Fraser, Fainstein calls on urban policy makers to support those who are most vulnerable and support their political constituencies in order to "set in

motion a trajectory of change in which more radical reforms become practicable over time" (Fainstein 2010: loc. 372). This prioritization of incremental social mobilization is then expressed by Fainstein with a focus on individual capabilities (Steil and Delgado, 2019). In doing so, Fainstein draws on Nussbaum's version of the capabilities approach to human development, where justice is a function of "what individuals are actually able to do and to be" (Nussbaum 2000 n.p.).

The focus on capabilities presents a tool of ethical theory that is used to diversify the goals of public policy (Robeyns 2017). Fainstein integrates this tool into her theory in order to identify how the values of democracy, diversity and equity can be applied to urban policy. To do so, Fainstein (2010) explicitly references Nussbaum's deductive method of identifying just standards of empowerment. Nussbaum identifies a list of essential individual capabilities defined by an "overlapping consensus" amongst stakeholders that are "always rational to want… whatsoever else one wants" (Rawls 1971, 92; Nussbaum, 2000, 2011). This is not to say that individuals will always use their capabilities, even when those capabilities are available to them. But those individuals do have the opportunity to use those capabilities as they pursue their own meaning in life.

Studies of the workplace and conceptualizations of essential capabilities for workers build from Nussbaum's list (Bonvin 2008; 2012; Kolben 2010; Zimmermann 2012; Subramanian et al. 2013; Miles 2014). Kolben (2010), for example, highlights those categories that he finds most relevant: the capabilities of life', 'bodily health', 'bodily integrity', 'practical reason', 'control over one's environment', 'play', and 'affiliation'. The first three categories point to safe and healthy work conditions – critical considerations in the vehicle-for-hire industry that has long been plagued by unsafe conditions (Dempsey 1996; Feeney, 2015). 'Practical reason' and 'control over one's environment' reference the ability of workers to participate in determining the structure of the industry, to participate in decision making, or to respond to conditions with autonomy. Among other scholars this capability is interpreted as a "capability for voice", where one can contest

policies or 'exit' from the industry (Subramanian et al. 2013: 295; Bonvin 2012). 'Play', Kolben interprets as a standard of income for workers that enables them to afford spare time free of excessive overtime work, what other scholars describe as the balance of work and life (Zimmermann 2012). In a platform system where work is described as a form of leisure (Cockayne 2016), such a distinction would appear to be of importance for workers.

Finally, 'affiliation' references two capabilities: First, the capability of individuals to build meaningful relationships with colleagues. And second, the capacity to come together politically. It is in the work of recent scholars on the capabilities approach that we find a growing acknowledgement of the importance of groups insofar as they empower the individual (Evans, 2002). As Evans argues, "for those already sufficiently privileged to enjoy a full range of capabilities, collective action may seem superfluous to capability, but for the less privileged attaining development as freedom requires collective action" (2002: 56). Fainstein's just city theory places an emphasis on those less privileged and therefore would seem to place an importance on this mode of capability building.

To summarize, debate around the just treatment of platform drivers has produced both calls for greater government oversight and skepticism about the value of that oversight. To understand how municipal policy could best achieve justice given these conflicting perspectives, this study follows Fainstein's just city theory and the account of justice as the expression of diversity, democracy, and equity within the capabilities available to individual drivers. The literature has provided a point of departure for understanding the essential capabilities of a just workplace. In the following sections I examine capabilities and vulnerabilities reported by drivers, arguing that just policies in this industry require not just a minimum set of capabilities but a system that is open to expanding those capabilities over time as drivers themselves coalesce around the capabilities that matter most.

## 4.2 Case Study Introduction and Research Methods

To identify how platform drivers experience the industry and express justice or a lack of justice through their capabilities, this study conducts a qualitative analysis of key-informant interviews with platform drivers based in Toronto and the Greater Golden Horseshoe (GGH) region of Ontario, Canada. The GGH region was chosen because, with a population of over 9 million, it is a significant market with multiple platforms in operation. Municipalities in the region have also liberalized the industry (Adediji, Donaldson and Haider 2019), which Collier, Dubal, and Carter (2018) find to be a typical path taken by municipal policy makers across North America.

Like the majority of provinces in Canada, Ontario delegates regulation of the vehicle-for-hire industry to municipalities (Ontario 2001, 2006). And municipalities have typically regulated these industries with a mix of market-based processes and legislated standards (Papillon 1982). Historically, the resulting policy orientation has produced mixed results for drivers (Abraham et al. 2008). An example of this where there has been significant controversy is the policy to limit the numbers of vehicle-for-hire drivers. Over time this limit has been combined with a market approach to buying and selling industry licenses intended to help drivers build wealth. Ultimately the combination of these policies led to a growing financial burden for new drivers as the prices of licenses rose (Abraham et al. 2008). After 1998 and updated in 2014, this secondary market was curtailed by privileging an owner-operator model that limited licenses to one per owner (Abraham et al. 2008; Hui 2014). However, the introduction of ridehailing platforms has pushed regulation to rely more on markets than ever – not only to determine the supply of drivers, but to set standards of quality and market prices as well (Ngabo 2018; Hui 2014). Under this new system, municipalities oversee a system that is largely determined by the platform informed by municipal safety standards (Adediji, Donaldson and Haider 2019).

To examine the outcomes for drivers within the current policy regime, interviews were used to identify the perceived capabilities and vulnerabilities reported by drivers. A total of 32 interviews were conducted with drivers over nine months from September 2018 to May 2019. These drivers represented different levels of dedication to the job including 13 full-time drivers, eight drivers who had another part-time job, and 11 drivers with other full-time jobs. Drivers were recruited for interviews through face-to-face meetings in areas where drivers wait between rides. Recruiting locations included suburban mall parking lots, city streets, library parking lots but over 80% of participants were recruited at an airport parking lot. This location facilitated interviews without engaging in a transactional relationship because drivers there are informed of their place in queue for the next ride and waits can be as long as two hours. While only a small percentage of the overall vehicle-for-hire market are taken from international airports in similar sized cities (NYC Taxi and Limousine Committee 2018), airports provide drivers with a desirable long-distance ride that drivers have an incentive to wait for after getting a ride to the airport (Ravenelle 2019). This suggests the airport could include any driver from across the region. However, future research should be conducted to understand how representative drivers at airports compare to the overall population of drivers. Some differences that could make this sample unrepresentative are that these drivers might exclude occasional drivers who drive for very short periods of the day.

Interview participants from this study hailed mostly from the cities adjacent to the airport (Mississauga = 5; Brampton = 6; Toronto = 10) but a considerable number (seven) arrived from farther flung suburban or ex-urban municipalities across the region, while four drivers did not provide a home municipality. Participants were overwhelmingly male, with only a single female participant and only three female-presenting individuals encountered throughout the recruitment process. The sample of drivers included many (20 of 32) who moved to the Canada within the last ten years but eight having resided in the country for greater than 20 years (see table 4.1). These

participants hailed from households with moderate incomes with four participants declaring incomes under $20,000 on the low end, six participants between $60,000 and $80,000 on the high end and no household incomes reported above $80,000. Among these participants, the majority were new to the job with 19 having less than one year experience and only 12 with more than one year experience. This reflects an industry that Ferrell, Greig and Hamoudi (2018) find to be dominated by part-time and temporary workers even if full-time workers provide a comparable number of rides due to their greater dedication to the job (also see Hall and Krueger 2018).

Drivers from all service levels were invited to participate; however, recruiting at the airport was limited to the parking lot dedicated to UberX/UberSUV/UberPool drivers and did not include the luxury tiers of service. This was done to focus research on the platform tier with the largest number of drivers registered and the most diversity in regards to driver commitment ranging from full-time drivers to hobbyists (Levin 2016). One important note resulting from this focus is that during the time of this research drivers with the luxury segments of ride-hailing platforms were engaged in a self-declared union drive. This movement was not captured in the data collected. Public statements from unionizing drivers excluded the drivers in the less expensive tiers of service due to the lower degree of dedication among those drivers (Kopun 2019).

Interview questions focused on the background and motivation of drivers; the experience drivers have of work including the challenges they face; the strategies they use to overcome these challenges; the examination of earnings; and finally, the opinions of drivers regarding corporate and public policy. Responses to these questions were recorded and transcribed to allow for thematic analysis (Braun and Clarke 2006; Guest, MacQueen and Namey 2014). The capabilities identified from the literature provided an initial set of themes for coding transcripts, but new themes were also identified through multiple readings of the transcripts. This proceeded first, by coding transcripts using Nvivo software, which is software developed specifically to support

qualitative research and analysis. That code was then refined through multiple reviews of the transcripts. Participant perspectives and opinions on each theme were then categorized, tallied, and representative or insightful quotations were selected for use in the paper. These perspectives were then analyzed to understand how they integrate values of democracy, diversity, and equity as well as how those values might inform a vision of justice regarding municipal policy.

Table 4.1: Participating Driver Characteristics

| Work Status | Driver full-time | Has other part-time Job | Has other full-time Job | No response |
|---|---|---|---|---|
| | 13 | 8 | 11 | 0 |

| Length of Time on Platform | < 1 years | 1 - 2 years | > 2 years | No response |
|---|---|---|---|---|
| | 19 | 8 | 5 | 0 |

| Household income | < $20,000 | $20,001 – $40,000 | $40,001 – $60,000 | $60,001 – $80,000 | > $80,001 |
|---|---|---|---|---|---|
| | 4 | 5 | 12 | 6 | 0 |

| Length of Time Living in Canada | < 2 years | 2 – 10 years | 10 – 20 years | > 20 Years | No response |
|---|---|---|---|---|---|
| | 7 | 13 | 1 | 8 | 2 |

| Self-identify as visible minority | Yes | No | No response |
|---|---|---|---|
| | 17 | 10 | 8 |

## 4.3 Driver Perspectives on Ride-Hailing Platforms and Capabilities at Work

Driver participants described a range of interpretations of their work with platforms, however common themes emerged that described a belief in the opportunity platforms provided to drivers, a general satisfaction with the work, but also a disappointment with the treatment they receive from platforms. Many drivers from the sample – including those who were generally satisfied – presented experiences of injustice on the job. These contradictions within the accounts of individual drivers, demonstrate a wide range of factors that affect drivers' assessments of work and that influence how values of diversity, democracy and equity are resolved within their work and lives. Here I outline the capabilities described by participants including the ability to work in safety and with integrity, to contribute to decisions about operations, to balance work and life, and to act collectively to improve conditions.

### 4.3.1 Workplace Safety and Integrity

Despite working in a vehicle-for-hire industry that has long had a poor record of driver safety (Dempsey 1996; Abraham et al. 2008), interviewed platform drivers expressed a general level of ease with the safety risks entailed by the job. Drivers expressed approval of the safety precautions added by the platform such as the need for passengers to register and the presence of an emergency services direct line within their application interface. Greater diversity may be possible as safety is perceived to be less of a problem for drivers. At the same time, nearly all drivers revealed moments when they felt vulnerable on the job and 18 of 32 drivers expressed a desire for further safety precautions even at the expense of flexibility (see table 4.2). It is notable that the lone woman and a small number of male participants stated that they only drove during daylight hours for safety reasons. Consequently, additional safety features and flexibility were considered meaningful factors for improving safety on ridehailing platforms.

Table 4.2: Capabilities From 32 Drivers

| STATEMENTS REGARDING CAPABILITIES | TESTIMONY SUPPORTS STATEMENT | TESTIMONY DOES NOT SUPPORT STATEMENT | DID NOT RESPOND OR TESTIMONY IS UNCLEAR |
|---|---|---|---|
| Capability to Work in Safety and with Integrity | | | |
| I would like further safety protections even if it compromises my flexibility. | 18 | 7 | 7 |
| I experienced or worry about unfair discipline from the platform. | 15 | 10 | 7 |
| Capability to Voice Worker Concerns | | | |
| I am able to resolve problems with platform help. | 9 | 17 | 6 |
| I work on multiple platforms. | 11 | 21 | 0 |
| I understand clearly how much I make from driving after expenses. | 10 | 20 | 2 |
| I am able to select the rides I take strategically. | 1 | 25 | 6 |
| Capability to Balance Work and Life | | | |
| Schedule flexibility is the primary reason I choose to drive on the platform. | 22 | 10 | 0 |
| Pay after expenses is above local minimum wage. | 9 | 15 | 8 |
| A minimum wage or pay floor would help drivers. | 20 | 7 | 5 |
| Capability to Affiliate with Colleagues | | | |
| I would support a union or professional association. | 20 | 11 | 1 |
| I am willing to protest or support protests. | 2 | 28 | 2 |
| I am active in online forums. | 6 | 23 | 3 |

In contrast, drivers expressed feeling more vulnerable in regards to possible complaints from customers. While platform oversight gave these drivers a sense of safety, they felt that this oversight contributed to a disciplinary system that threatened their integrity and promoted unsafe driving. One form of oversight drivers complained about is the five-star driver rating systems that studies

have shown may lead to the removal of drivers from the platform for scores even above 4 out of 5 (Rosenblat 2018; Ticona, Mateescu and Rosenblat 2018). Another method of oversight that drivers were particularly emotional about where times when customers complained directly to the platform. In these cases, drivers could be removed immediately after just one unverified complaint. For example, five of 32 drivers reported being falsely reported to the platform for driving under the influence of alcohol. These accusations caused the drivers to be temporarily or permanently removed from the platform. For some drivers this was particularly disappointing as they stated having never once in their lives trying alcohol or drugs. A driver who was kicked off one platform entirely described that "I wasn't allowed to rebut [the complaint] in any way, shape or form. And the person that [complained] got a free ride… Can you go get a breathalyzer in a police station? No! I'm just cut off completely" (Driver 7). Even for those who later were allowed to return to the platform, it was unclear whether the complaint would remain on their record or how such an accusation would continue to affect them.

Drivers described these systems of oversight as arbitrary and felt compelled to acquiesce to customer demands even when these were dangerous. For instance, two drivers reported an experience of customers pressuring them to drive above the speed limit. As one driver explained

one customer was pushing me very hard to drive fast. He said, 'guy, why are you driving so slow'? I said 'the speed limit is 60 here so why you want me to drive faster? It's not safe for you also'. He said that 'everybody else is driving [fast]'. I said 'I am not responsible for everybody else's ticket'… So that guy gave me a poor rating" (Driver 11).

Another driver recounted actually getting a speeding ticket after being urged by a customer to go faster. These episodes demonstrate a system of oversight that displaces risk onto workers and third parties in the event of a tragedy. These are public safety concerns that municipalities in the region have overseen in the past and which they continue to have an obligation to oversee.

However, drivers described no municipal processes available for them to dispute complaints. Rather, all interactions between drivers and municipal regulators were described as facilitated by the platform.

Where technology has produced tools for greater safety and drivers suggested that they are enabled to tailor their work locations and timing to suit their tolerances, this would seem to make ridehailing platforms a more diverse workplace than past iterations of the vehicle-for-hire industry. However, at the same time, where decision making is inscrutable, the lack of accountability demonstrates a deficit of democratic values and may encourage inequality among drivers who are most dependent upon the job and forced to accept unsafe practices to maintain their good standing. As such this creates a situation, described by Hua and Ray (2018), where those who already have resources are most likely to succeed, while those without resources remain vulnerable.

### 4.3.2 Worker Voice

Accounts from drivers expressed a limited ability to effect change in the workplace, decide upon workplace practices, or influence platform management. On the face of it, these drivers were independent actors and they acknowledged their ability to choose their time and place of work, something discussed in the following section. One additional freedom that did have meaning to drivers was their ability to refuse a customer. Many drivers stated that they would be willing to use this option when feeling unsafe, yet in practice few had ever done so. Drivers described few other functions in which they exercised autonomy over their business. For example, a minority of drivers took advantage of competition between platforms with only 11 of 32 registered with the two largest platforms, Uber and Lyft, and none registered with any other platform operating in the region.

Otherwise, drivers described an inability to exercise practical reason in their own operations due to a monopolization of information by the platform. Drivers could only guess where the best places were to wait for rides and had no understanding prior to accepting the ride of where their next ride would take them. Twenty of 32 drivers lacked an understanding of how much income they made from the job after expenses encompassing a set of drivers that includes those working full time. One driver expressed a lack of trust regarding the distribution of pay between driver and platform. He noted that "I could never even calculate how much they are charging exactly, like what percentage they charge" (Driver 25). Another driver described the revelation he had when he once saw a passenger's receipt from a trip he had given. He recounted that, "they [the platform] charged him [the passenger] like $40 and they only gave me $20. So, like a 50% [margin for Uber]. Although I pay for everything" (Driver 13).

Regarding drivers' ability to deal effectively with platform and potentially influence decisions made by the platforms, the results were not positive. Drivers reported typical interactions as short and efficient. Drivers would typically text the platform when faced with a problem and could expect responses promptly. However, drivers complained that any complication would be met by numerous pre-canned responses that would fail to capture the nuances. Finally, drivers argued that judgements, when rendered by the platform, were unilateral decisions that could not be appealed. This caused drivers to give up on resolving issues such as inappropriate complaints or problems with pay. Altogether 19 of 32 interviewed drivers complained that they were treated unfairly by the platform in regards to disputes over conduct or pay. While drivers were able to easily settle small disputes with the platform, there was a lack of opportunities to share information about more complex topics. This presents a deficit of democracy and equity within the regime.

### 4.3.3 Work-Life Balance

Drivers were most enthusiastic in their approval of flexible working hours. Twenty-two of 32 drivers selected flexibility as the primary quality that led them to choosing this work. Fourteen of 32 drivers had dependents for whom they were responsible and the ability to fashion an individualized schedule helped ease complicated lives. As one driver described, "Well I'm a father, I have a wife and a small daughter, she's 5 years old and lives with me, so it's a matter of when I finish here I'll go pick her up from kindergarten and we'll spend some time together, mommy comes home and I go out and drive again" (Driver 7). While the literature suggests that low prices and pricing policies that reward certain hours over others essentially apply a rigid schedule for drivers, this sample provided several examples of drivers making decisions about when to work for their own reasons. For instance, one driver only worked on their commute to their full-time job, while others refused to work at night for safety reasons.

But high numbers of drivers using the platforms did undermine the expected balance of work and life among this sample of drivers by necessitating longer hours at work over the course of their time on the platform. Among interviewed drivers who felt confident that they knew their income after costs, consensus was that hourly wages were below the $14/hour minimum wage in the jurisdiction. For other drivers whose costs were unclear, most felt that their income was decreasing over time. One driver who explicitly acknowledged his own lack of financial savviness reported that "actually Uber is just paying for my gas and my livings. The depreciation the car works, I don't count it. Uber is just using my car for free… If we go like depreciation, I'm making like $9 bucks an hour, $8 bucks. Which is like – if you're living in Toronto – is not good" (Driver, 31). Twenty-one drivers expressed frustration about the under-valuation of their labor and personal investments in the business. Only four described pay as fair, while seven made no clear statement.

These concerns led drivers to support the idea of new government or company interventions to raise fares for drivers or limit the number of drivers on the road.

For drivers from this sample, work-life balance was a valuable quality that could help facilitate greater diversity and equity in the workforce. Nevertheless, the sample revealed anxiety among drivers about the future of their earnings. With flexibility delivered by the easy entry and exit of drivers from the system, this very mechanism is what risks compromising driver wages, ultimately producing an inequitable market structure where drivers carry all the risks of excess supply, while the platforms carry none.

### 4.3.4 Collective Organization

Collective organization from drivers in the sample was mostly informal. Particularly when discussing safety concerns, drivers mentioned the need for personal connections that would help in an emergency. Frequently, these connections were friends or family, but just as often these individuals were other drivers. Several drivers described participating in a large digital messenger group for drivers that shared news and other forms of support. Among drivers that frequented the airport, there were individuals who would venture out to meet and discuss with other drivers in the airport parking lot where co-location promoted interpersonal connection. Other locations did not appear to offer this same level of interaction between drivers though this is an area where more research would be valuable to understand how physical co-location supports collective organization in the gig economy.

More formal interactions between drivers for the pursuit of collective interests was not evident in this sample. While over the period of recruitment, drivers from the luxury-tier of ridehailing services were mobilizing to form a union, drivers of lower-tier services like UberX were explicitly excluded (Kopun, 2019). There was no similar initiative for mobilization among drivers in

this sample. Nonetheless, drivers in this survey expressed support for more formal organization. Twenty interview participants of 32 supported the idea of a union or professional association of drivers. Among these 20, five drivers noted that they were previously not supportive of unions and were only becoming supportive as a result of poor conditions on the job. Drivers generally supported collective action as cooperative rather than combative, with only two drivers in support of protests and only one stating they would be active in those protests. Instead, many drivers envisioned collective organization as a means to raise the importance of driver concerns and to impress upon platforms the value of a skilled and motivated roster of drivers.

Drivers noted a lack of cohesion and a feeling of alienation that discouraged collective action. These barriers between drivers were generally ascribed to different levels of commitment to the work, particularly between full-time and part-time drivers. Drivers also described seeing their fellow drivers as competition. One driver who described his own changing perceptions noted that in the past "I might feel like they [other drivers] are competition. So, it's kind of my own reservation that I had... [Now,] I see it more as a co-worker type of relationship," (Driver 1). However, the lack of cohesion was also linked by drivers to the ridehailing system. They noted that the market rewards individuals particularly when there are fewer people working, which means one person's protest is another driver's business opportunity. "When you're protesting," one driver argued, "when you start a revolution, you need a bunch of people that think like you. The same thinking. So, if I stop driving, these people are going to work, work, work. They're not going to bother at all". This conflict between drivers challenges democratic values and places vulnerable drivers who would most benefit from collective action in a position where cooperation is strained.

### 4.3.5 Vision of Justice for Drivers

The sample of drivers in this study reveal an experience of ridehailing platforms that enables some capabilities at the cost of other capabilities. In particular, platforms have produced conditions that potentially suit more diversity, including newcomers and those with demanding household obligations. However, the very market mechanisms that enable this diversity also might increase inequality, as drivers – alone – face the costs of a growing glut of drivers in the market.

Still, drivers who might benefit from government intervention were only moderately supportive of policy change to address inequality. The common values that drivers prioritized from the sample were flexibility, driver autonomy and fairness in pay and dispute resolution – values that drivers worried may be incompatible for their industry. Drivers worried that public policy would limit their flexibility and their access to work. Consequently, drivers offered uneven support for specific policies. Twenty drivers, for instance, supported the idea of a minimum wage or a wage floor, while 16 thought a limit should be placed on the number of drivers to increase business for those online. At the same time, there were sizable minorities that strongly disagreed with both of these policies (seven and 11 respectively). They argued that under such a policy, they themselves might not have had the chance to join the industry.

Further, even supporters of these measures identified fears that arbitrary limits, like the date one started on the platform, would curb their ability to work. As one driver said, "just because I got in early doesn't mean everyone else shouldn't have a chance to make their own money too… You come from Newfoundland and you know the importance of having a job, being able to work" (Driver 7). Other drivers were less worried about new drivers but did express solidarity with other current drivers. One part-time driver that demonstrated this dynamic suggested that it is those drivers who have committed to the work that should be given priority.

If I'm using this, you know, two times a week and buddy is using it seven times a week as his full-time job he should have a little bit more priority. But you shouldn't leave the priority to my score rating from some customer just giving me a one. That shouldn't determine why I get that ride. It should be the guy who put in the most hours that week" (Driver 10).

This expression of individual self-interest within a broader concern for drivers as a class hint at an emerging solidarity demonstrated by this sample and a direction for public policy that encourages a dignified livelihood for drivers without hard restrictions to the industry.

These accounts from drivers suggest that municipal regulation and the empowerment of ridehailing platforms has contributed to unjust conditions particularly in regards to the values of democracy and equity. And yet, municipalities have significant authority to intervene for change particularly in regards to standards of quality, limits to the numbers of drivers and oversight regarding fares (Ontario 2001, 156 (1) a-c; Ontario 2006). Thus, there is an opportunity for greater justice where these legislative parameters come to express greater democracy and equity for drivers. For example, municipalities may empower drivers by building a greater understanding of the industry amongst those drivers, establishing clearer rules and procedures for comportment and discipline, stabilizing relationships between industry actors, and setting minimum fares that must be passed on to drivers. Policies that have the potential to align policy to these values include:

*Mandated driver training:*

Cities like Toronto have already identified a need for increased training to drivers that was not being provided by the platform (Moore 2019). This sample of drivers suggests that skills training should include teaching safety procedures, basic business training, and explanations about how platform algorithms reward or punish typical driver practices.

*Impartial tribunals:*

With discipline for platform drivers left to the platform, standards of good work are unclear or left up to individual passenger preferences (Adediji, Donaldson and Haider 2019). Extending tribunals to platform drivers ensures disciplinary procedures are clearer and sets drivers on a more equal footing with platforms and customers.

*Direct municipal licensure of drivers:*

Municipalities have typically used licenses to limit numbers of drivers and ensure high standards of service. While licensure continues in GGH municipalities like Toronto, the relationship between municipalities and drivers are largely mediated by the platform (Adediji, Donaldson and Haider 2019). A return to a direct relationship between municipal regulator and platform drivers, could require platforms to contract with any and all drivers from the municipal roster of licensed operators thus eliminating the direct control platforms currently wield over drivers.

*Support for professional associations:*

Support for drivers could further be achieved through cooperation between the municipality and labour organizations. Such a model has already been seen in New York City where the municipality has coordinated an informal negotiation between collectively organized drivers and ridehailing platforms (Johnston 2018).

*Fare and ride distribution oversight:*

Municipalities may set minimum fares that are paid to drivers not platforms and demand the public disclosure of variables that determine fares on the platform, how rides are distributed to drivers, and the fares that are paid to drivers.

## 4.4 Conclusions

The current platform-centric vehicle-for-hire regime appears to have raised the capabilities of drivers in this sample, particularly where drivers faced hurdles in accessing the job market or have limited availability to work due other life pressures. Yet, in achieving greater diversity, these platforms hinder the pursuit of democracy and equity in the workplace. The policies that enable easy market entry and exit are also what risk driver wages and capabilities for collective organization. Ultimately, drivers described only limited control over their work and had a poor understanding of how they could improve their outcomes. While these results only bear a direct relationship to drivers who frequent the airport within the Greater Golden Horseshoe, the challenges that drivers describe confirm results from past studies that find platform operations to be exploitative of vulnerable workers due to a thin focus on access over other important aspects of a just workplace (Hua & Ray 2018; Wells 2019; Attoh, Wells and Cullen 2019; Rosenblat 2018).

For policy makers, this account of injustice in the vehicle-for-hire industry signals that there remains value to continued regulation at a local level. Solidarity between drivers was present but subdued and drivers showed little capacity to address injustices on their own. At the same time, this sample demonstrated only moderate support for traditional forms of regulation. I argue that the just city theory, with its emphasis upon building capabilities for the least well-off, provides a useful alternative policy orientation for decision makers. This alternative orientation leads to policies that support workers directly rather than placing limits on the industry with the expectation that

outcomes for drivers will be improved as a response. For their part, ridehailing platform firms should be encouraged by their value proposition to drivers and should work with local interests to fill out their approach to find mutually beneficial policies that support drivers and build a solid industry.

Looking to the larger gig economy, where digital platforms are emerging as infrastructure for all manner of local services, the vehicle-for-hire industry provides a useful example of what local intervention might look like. For example, in the era of COVID-19, where food delivery has become increasingly important, North American cities have already begun intervening to ensure positive interactions between delivery platforms and other stakeholders in the economy – notably restaurants (Snyder 2020). In Toronto, it was the city that encouraged provincial intervention in the industry (Draaisma 2020). The troubled history of municipal regulation of vehicle-for-hire services, and the opportunities apparent from municipal policy oriented around capabilities for vulnerable workers present lessons that researchers and policy makers should take care to consider as they weigh the costs and benefits of expanding local intervention in the gig economy more broadly.

# 5.0 Private Car, Public Oversight: Municipal Regulation of Ride-hailing Platforms in Toronto and the Greater Golden Horseshoe

The emergence of ride-hailing services such as Uber and Lyft and the resulting changes to transportation systems have intensified calls to relax existing regulations in the entire vehicle-for-hire industry, including taxis and limousines, while also sparking demand for new regulation to address its potential impacts. Although prior studies have documented regulatory change at a national scale or in major cities (Brail, 2018; Dubal, 2017; Kim & Hwang, 2019; Chen et al., 2019; Puche, 2019; Spicer, Eidelman & Zwick, 2018), none have provided a systematic survey of this transformed regulatory landscape at the municipal scale across an entire region. This paper provides an analysis of municipal ride-hailing legislation in the Greater Golden Horseshoe including and surrounding Toronto. The aim is to understand how municipalities conceive of their roles as regulators of vehicle-for-hire services and how that has developed after the emergence of ride-hailing platforms.

The vehicle-for-hire industry plays an important role in most communities' transportation systems by providing door-to-door, on-demand services to residents (King & Saldarriaga, 2016; Ellis, 2016). Municipalities have long regulated privately-operated, for-hire vehicles to protect the public interest (Cooper, Mundy & Nelson, 2010). Historically, the aim of regulation has been to facilitate efficient operation of the vehicle-for-hire industry while also protecting residents by requiring standards of quality and pricing (Dempsey, 1996). To achieve these goals, municipalities have typically employed what has become known as the QQE approach that places limits on the *quantity* of licensed drivers, standards on the *quality* of the car and driver, and *economic controls* on fares (Cooper et al., 2010). The QQE approach is criticized by those who argue that such regulations have been coopted by industry insiders and/or are poorly enforced, resulting in inefficiencies (Papillon, 1982; Blasi & Leavitt, 2006; Mitchell & Koopman, 2019).

Platforms are now applied to industries across the economy, opening up new forms of innovation in the service economy (Kenney & Zysman, 2016). The application of platforms to local service industries like the vehicle-for-hire industry has remade the business model for these industries, placing data at the centre of the service and creating new and unpredictable relationships between investors, platform firms, consumers, and service providers (Srnicek, 2017). As such, platforms have opened local services up as a new frontier for global capital (Kenney & Zysman, 2016). In the vehicle-for-hire industry, platforms provide a digital network infrastructure to match passengers with drivers and facilitate digital payments (Sundararajan, 2016). It is argued that through these digital tools platforms create an efficient and programmable market structure where time consuming and expensive managerial forms of government were once necessary (Harding, Kandlikar & Gulati, 2016). These platforms create a new layer of private infrastructure in the ride-hailing industry that promises to settle operational inefficiencies without the need for municipal intervention (Harding et al., 2016).

As these platforms have expanded, they have provided a layer of infrastructure in the for-hire vehicle industry that challenges the authority and capacity of municipal regulators. Some scholars praise platforms for this disruption. They argue platforms lower transaction costs for business and open up new market opportunities (Sundararajan, 2016; Lobel, 2019). These platforms also disrupt barriers to market entry previously established under the QQE approach in that they permit a new class of casual drivers operating as private individuals. Because of the perceived efficiencies (and arguably consumer demand), many municipal regulators quickly revised regulations to be more permissive of ride-hailing platform activities (Collier, Dubal & Carter, 2018). In some cases, in the US, deregulation was led at the state level, with municipal regulation pre-empted by changes in state law (Collier et al., 2018). However, in general across both state and municipal governments, there has been a consistent push toward platform self-regulation in the

industry (Sundararajan, 2016). However, this changing regulatory regime does not mean that there are fewer burdens upon those drivers who actually deliver the service. Instead, the study finds that the practices common to past industry regulations remain, but have been transferred to the platform, with only limited public oversight.

Despite the new regime, researchers have identified numerous policy concerns such as traffic congestion, poor working conditions, and market concentration where industry self-interest aligns poorly with public goals (Dubal, 2017; Clewlow & Mishra, 2017; Rosenblat, 2018; Collier et al., 2018). Further, these regulatory changes can have effects on communities that go well beyond the industry itself. For instance, Ferreri & Sanyal (2018) argue that ride-hailing platforms contribute to cementing private interests into urban governance under neoliberalism. The digital ride-hailing services introduce and reinforce new social and technical patterns of cost and convenience that influence how cities agglomerate and deliver services – features that some theorists describe as "the basic glue that holds the city together" (Scott & Storper, 2015: 6; Marvin & Graham, 2001; Ferreri & Sanyal, 2018). In other words, digital platforms may help install a particular politics into the fabric of communities, increasingly oriented to private market ideals and away from public ones.

What remains less known is how this new private and corporate form of regulatory oversight has been conceived and developed in practice. In this study, we thus ask how municipalities conceive of vehicle-for-hire regulation and how they have developed regulatory intervention in digital ride-hailing platforms. We examine these questions through a case study of the City of Toronto and the surrounding municipalities of the Greater Golden Horseshoe (GGH), where urban and suburban municipal governments actually intervened (as of 2018). We study the characteristics of what we might call a new regulatory regime (and its justification) through an analysis of key stakeholder interviews and government documents. The findings suggest that increasing government oversight of ride-hailing platforms would likely benefit residents, but that

there are significant barriers to implementation. These barriers include a lack of tools to expand this oversight over novel industry structures like platform software and algorithms as well as a paradigm among municipal staff and council members that vehicle-for-hire services are, in essence, private-sector industries that require freedom from regulation. We argue that this results in a governing regime that does not provide the oversight necessary to preserve the interests of local residents or the drivers. We conclude that, in order to protect local interests, municipalities must build capacity to oversee local ride-hailing services. A large part of this is to fully recognize the existing authority that is invested in municipalities to regulate the industry and to expand cooperation with other levels of government where there are limits to municipal powers.

## 5.1 The Ride-Hailing Platform under Municipal Regulation

The capacity of platforms to network buyers and sellers of local services has produced systems that are easier to navigate leading to the entry of new market actors across a range of services from short-term rentals to household tasks and for-hire vehicles. Ride-hailing platforms have emerged as a significant development in the governance of vehicle-for-hire industry. After a period of institutional experimentation where platforms developed diverse commercial and non-commercial relationships, these platforms have reached an equilibrium dominated by large commercial interests (Geobey, 2017). This development has challenged existing institutions to account for an industrial scale of non-professionals in these industries.

In the United States and Canada, states and provincial legislatures have commonly vested municipalities with regulatory powers over the vehicle-for-hire industry (Cooper et al., 2010; Papillon, 1982). Historically, governments recognized that market imperfections and potential negative externalities require regulatory intervention (Dempsey, 1996). This regulation became common during the 1930s (Cooper et al., 2010). At that time, for-hire-vehicle markets were

described as a declining cost industry where rising competition was leading to rising costs for consumers (Dempsey, 1996).

For instance, the taxi industry completes transactions in isolated cars making it hard for people to compare prices and leverage competitive pressures; the mechanical condition of cars is not well understood by passengers, making them ill-equipped to ensure their own safety; and low barriers to entry frequently result in market congestion (Dempsey, 1996; Harding et al., 2016). In this context, cars were designated as "public" vehicles, even though they were operated by private companies and individuals, and standards were set to ensure public safety and reasonable fares in order to build trust in the industry (Cooper et al., 2010; Dempsey, 1996). Municipality have thus followed a trend shared widely within urban social and technical networks to target regulation and strategies of oversight to operators rather than consumers directly (Dupuy, 2008).

The QQE approach to regulation that resulted from the focus on the public has been resilient over the years but has also encountered frequent opposition. It is alleged this regulatory approach distorts the vehicle-for-hire market by producing small groups of industry insiders who profit from underinvestment in the industry to the detriment of everyone else (Mitchell & Koopman, 2019). Movements to deregulate the vehicle-for-hire industry spread throughout the world in the 1980s and 1990s following a growing interest in market governance (Dempsey, 1996). According to Dempsey (1996), the resulting regulatory changes often reverted back to the QQE approach due to poor results including a proliferation of drivers crowded into taxi stands, and higher rates for users as drivers compensate for their long wait times. By 1996, Dempsey finds that all but four of the 21 cities he surveyed had returned to regulate the industry, and that those cities that remained deregulated tended to be small (Dempsey, 1996).

Whether intended or not, the rise of ride-hailing platforms today has resulted in a similar but 'more successful' round of regulatory change. Ridehailing platforms challenge the QQE

approach where they deny limits to the numbers of drivers and build their operations around the freedom to set fares. However, platforms differ from past changes in important ways. While past deregulatory movements were primarily a "roll back" of municipal regulation, the platform has "rolled out" a new institution whereby market-based principles are prioritized in the organization of the industry (see Hackworth, 2013; Peck & Tickell, 2002 regarding the roll out and roll back of neo-liberal governance). In so doing, the ridehailing platform does not simply leave an institutional void but replaces the QQE approach with a system that corresponds to neoliberal theory (Brenner & Theodore, 2002).

The success of ridehailing platforms has avoided a repeat of these past cycles of deregulation and reregulation. However, it should be recognized that policy concerns like congestion that accompanied past eras of deregulation remain (Erhardt et al., 2019). Further, scholars have identified new policy challenges (Table 5.1). Whereas Dempsey (1996) was primarily concerned with the economic instability of the industry, Collier et al. (2018) enumerate a more comprehensive regulatory agenda for the ride-hailing industry that prioritizes questions of safety, consumer protection, competition, worker protection and public goods. Still other scholars identify new policy concerns. Examples include privacy concerns over customer data extraction by platforms, asymmetrical power relationships, and trends within the industry toward monopoly concentration (Calo & Rosenblat, 2017). Altogether, these critics argue that the need for operational standards and the risk of negative externalities warrant on-going regulatory controls.

Perhaps what is most salient from the list of policy concerns shown in Table 1 is the growing level of uncertainty in the industry. Prices have fallen in the past. But many question if that will continue; and the current context of the COVID-19 pandemic only serve to intensify uncertainty. It has been posited that investments in platform-building are expected to be recouped over time through rising costs for consumers and falling wages for drivers as a result of

monopolization of the network (Horan, 2015). Indeed, a recent experiment made public by Lyft, demonstrated that the elimination of current subsidies from the platform resulted in an increase in price of 24% and a decrease of driver earnings of 15% over a three-day period (Guse, 2019). Furthermore, decreases in pay for drivers might raise new questions regarding service quality and drivers' abilities to earn a livelihood.

Table 5.1: Policy Interests in Regulation of Vehicle-for-hire Industry

| Goals of Regulation | Policy Interests | |
|---|---|---|
| Quality | Level of service | Discriminatory pricing and fare transparency (Jiang, Chen, Mislove & Wilson, 2015; Calo & Rosenblat, 2016; Bokanyi & Hannak, 2020) |
| | | Speed of service (Thebault-Spieker et al., 2018) |
| | Safety | Condition of vehicle (NYC Taxi & Limousine Commission, 2018) |
| | | Driver Capability (Rayle et al., 2016) |
| | | Driver & platform accountability |
| Distribution of benefits | Consumer protection | Accessibility and non-discrimination (NYPLI, 2018) |
| | | Insurance (Davis, 2015) |
| | | Data ownership and security (Calo & Rosenblat, 2016; Attoh, Wells & Cullen, 2019) |
| | | Permits and Fees (Van den Steenhoven, 2016) |
| | Competition | Organization of market (Armstrong, 2006; Acquier, 2019; Zale, 2019) |
| | | Risk of monopoly (Harding et al., 2016) |
| | Worker protection | Driver income (Mishel, 2018; Wells, 2019) |
| | | Worker discipline and dispute settlement (Rosenblat, 2018) |
| | | Worker health (Hua & Ray, 2017; Reid-Musson et al., 2020) |
| | | Discrimination (Cook et al., 2018; Schoenbaum, 2017) |
| | | Employment status and organization (Dubal, 2017; Johnston, 2018) |
| Public goods | Transportation system | Traffic congestion (Henao & Marshall, 2019; Erhardt et al., 2019) |
| | | Transit integration (Clewlow & Mishra, 2017) |
| | Environment | Pollution (Jalali et al. 2018) |
| | Public finances | Taxation (Viswanathan, 2019) |

Table adapted from Dempsey, 1996, p. 102; Collier, Dubal & Carter, 2018, p. 6.

### 5.1.1 New Local Regulatory Challenges

The rollback of QQE regulations and challenges to finding regulatory answers to policy concerns have been attributed to structural changes to the service as a result of platforms, sometimes referred to as "platformization" (Plantin et al., 2018). Four challenges have been documented in the literature: 1) the changing class of drivers; 2) the changing potential for regulatory capture; 3) the scale of the industry and cross-subsidization; and 4) the practical challenges of oversight.

*Class of drivers*

By creating a tool for organizing casual labour, digital platforms empower a class of drivers that has not typically been targeted by regulation. These are the casual drivers who operate on the platform temporarily or occasionally, on an as-needed basis (Farrell, Greig & Hamoudi, 2018). Previous iterations of vehicle-for-hire regulations regulated drivers as part of an entire industry and could influence operations by licensing a class of licensed full-time or near full-time drivers and focusing regulations on these professionals that were (arguably) invested with an obligation to the public in their conduct. Casual drivers have typically been barred from the market. With these drivers now included through platforms, their small size and temporary commitment present a challenge to regulation. As Zale (2019) notes, small actors – such as casual drivers – are commonly ignored by industry regulations because they are not always considered large enough to be relevant; small actors operate in private rather than commercial premises; and small actors are expensive for regulators to reach. Thus, the expansion of the casual workforce makes it more challenging to regulate. It may also raise new issues regarding professionalism and service quality

that are more difficult to monitor among a large number of small actors who only engage in service delivery (i.e., driving) on an occasional basis.

*Regulatory capture*

Critics of municipal regulation over the past century have lamented the likelihood of "regulatory capture" by industry actors in the vehicle-for-hire industry – that is insiders who are able to promote their interests over the public good as a result of relationship building with the regulator (Collier, et al., 2018). Poor conditions of taxis and discourteous service from some drivers were blamed on a regulatory system that was too lax on industry insiders ignoring the wider public good (Mitchell & Koopman, 2019). Such allegations are likely overstated as taxi firms are small and lack the organizational heft to reward cooperative regulators with contracts after leaving the public service. If ride-hailing platforms were seen as a capture-busting dynamic, scholars today argue that we risk simply transferring capture towards a new political coalition (Collier et al., 2018). With as many as 37 American states having pre-empted municipal regulation in favour of a more lenient form of self-regulation by platforms, critics have argued that new regulations should be attributed to lobbying at the state level of government (Dupuis et al., 2018; Collier et al., 2018). Collier et al. (2018) find that many state regulations for ride-hailing platforms have been written by the platform firms themselves or closely mirror industry promoted policies. As a result of these state policies, they find that regulatory capacity for industry oversight has been reduced.

*Industry scale and cross-subsidization*

The firms that are heavily involved in lobbying include a handful of global businesses that operate in cities across the globe. Even in the past the ride-hailing industry has had some level of

cross-subsidization, for instance through homogeneous service level across neighbourhoods of different population densities and income levels. But the size of platforms, and the scale at which they operate, brings to bear mechanisms of cross-subsidization that are global in scale (Srnicek, 2017). For example, Uber provides a short description of the variables that inform pricing but provides little detail (Uber, 2021). Critics have noted the company pricing can be opaque and unpredictable (Le Chen, Mislove & Wilson, 2015; Calo & Rosenblat, 2017). Uber's approach to leveraging data collection for discriminatory pricing is commonly known as "route-based pricing". In some jurisdictions, Uber varies rates based on proprietary and undisclosed variables (Newcomer, 2017). While it is uncertain as to the data which is actually informing prices, it appears that ridehailing platform firms are reducing the direct relationship between price and the cost-of-service provision (Calo & Rosenblat, 2017).

Further, where this data is valuable for applications in other industries, from sales and marketing to political organization, platforms have a global market for this local resource (Srnicek, 2017). This gives platforms the ability to supplement driver operations with sales from collected data. It also gives platforms the incentive to subsidize those individuals with valuable data in the marketplace. The scale at which the ride-hailing industry operates and the scale of the market for big data permits a new type of cross-subsidization at the global scale, no longer limited to specific geographic jurisdictions. Cross-subsidization is not a new corporate practice for vehicle-for-hire services, but this scale has certainly shifted with dramatic implications for local taxi firms' abilities to compete with global players.

*Practical challenges*

There are also new practical challenges to regulation. For instance, Khan (2016: 763) argues that when platforms "implement discriminatory pricing on a wide scale, each individual

would be subject to his or her own personal price trajectory, eliminating the notion of a single pricing trend" that could be easily monitored across a jurisdiction using aggregated data. Calo and Rosenblat (2017: 1685) also note that those who "investigate [platform] firms may need to reverse engineer platforms, scrape data, impersonate consumers, and perform other activities aimed at exploring firm practices". These are capabilities that are not typically available (or at least not resourced adequately) at the municipal level. Further, in this new more market-driven environment, it is not just platforms that may be exercising control over prices for private gains. There is evidence that groups of drivers are also strategizing in ways that undermine the system itself, for instance, by acting collectively on an informal basis to prompt fare increases (Griswold, 2018).

Digital ride-hailing platforms have transformed the vehicle-for-hire industry by leveraging personal data, activating cross-industry and global subsidization, and changing the scale of operations. But changing social and technical components of vehicle-for-hire services have also challenged the authority and capacity of municipal regulation. Without the comprehensive authority and tools of oversight available to municipal actors, this industry is recreated more along private interests in a sector that once resembled a privately delivered, public service. Ultimately this has created an industry with important local effects that is less accountable to the public broadly and has less space to insert public values. Thus, there clearly remain several policy issues that scholars have found to be unresolved by regulators or self-regulated platforms. The liberalization of this industry suggests that there is falling demand for for-hire vehicles to be controlled as they have been in the past. Moreover, this has placed the onus on residents and workers to re-mobilize over policy concerns in order to see regulatory oversight. Our paper tracks how change to the system of vehicle-for-hire services has been rationalized by municipal regulators to accept this shift from protecting basic transportation services to encouraging private sector innovation focused on higher cost market niches.

## 5.2 Method

To learn how and why specific municipalities are governing digital ride-hailing platforms, we focus on Toronto and the Greater Golden Horseshoe (GGH). The study examines the perspective of municipal actors and the underlying rationale informing regulations. The analysis includes municipalities in the GGH region that regulated or were considering regulation of ride-hailing platforms as of the fall of 2018. The study draws upon a review of literature on digital platforms, historical accounts of the provision of urban services, the emergence of ride-hailing platforms in particular, and the experience of drivers on those platforms. As part of a larger project examining ride-hailing, it also draws upon other evidence, including interviews with drivers and driver-created video logs.

### 5.2.1 Local Context

The Greater Golden Horseshoe (GGH) region surrounds the City of Toronto and stretches across the western shore of Lake Ontario (Figure 5.1). The GGH region was chosen for this study due to its large number of municipal regulators within a single region. The region has a population of over 9 million spread between urban centers as large as the City of Toronto (pop. 2,731,571) and as small as Grand Valley in Dufferin County (Pop. 2956). Though not a distinct legal jurisdiction, the GGH region has been used by the Province of Ontario as an important scale for the governance of processes of urban agglomeration and growth including transportation and land use planning (Ministry of Infrastructure, 2006).

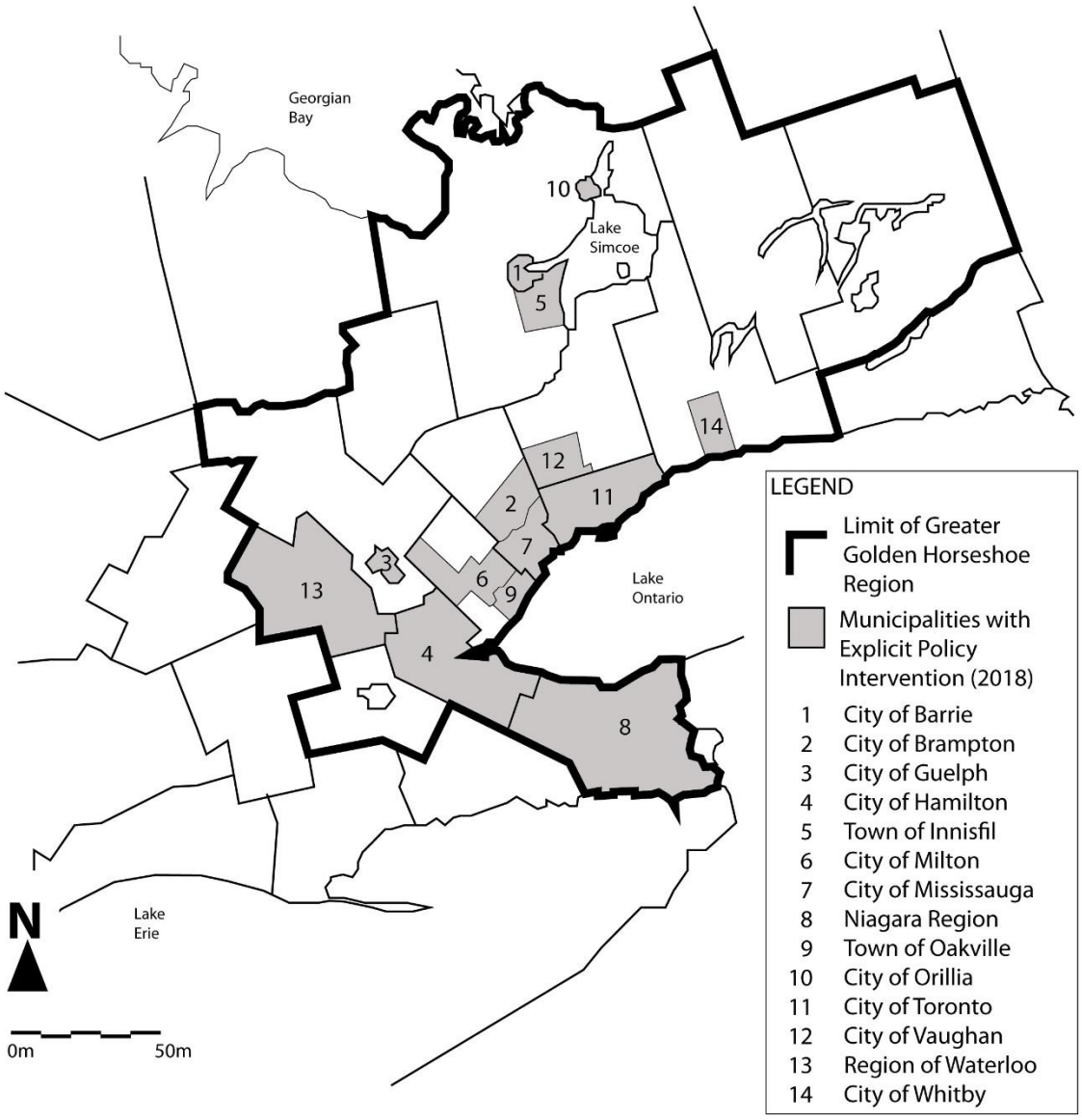


Figure 5.1: The Greater Golden Horseshoe Region

Municipalities in Canada are "creatures of the provinces" and governed via the doctrine of "express authority" (Sancton, 2011: 27, 29). In the case of ride-hailing, powers to regulate are granted to the municipalities via the Municipal Code (2001, Ch. 156) and City of Toronto Act (2006, Ch. 94). In general, vehicle-for-hire services, which typically function on locally owned roads, are generally the responsibility of lower-tier municipalities though upper-tier municipalities, Niagara

and Waterloo, are explicitly singled out to regulate the service. These powers are held more or less consistently across the 75 municipal governments in the region, including two aforementioned regional municipalities, 63 lower-tier municipalities as well as ten single-tier municipalities (Municipal Code, 2001; Association of Municipalities Ontario, 2020).

This distribution of authority categorizes the regulation of vehicle-for-hire services like other businesses tied to consumer protection, health and safety, and nuisance control. Yet, the vehicle-for-hire industry is also explicitly singled out to provide municipalities with broad powers of regulation (Municipal Code, 2001; City of Toronto Act, 2006). These powers, that closely mirror the QQE framework (above), state that municipalities "may,

a) establish the rates or fares to be charged for the conveyance of property or passengers either wholly within the municipality or from any point in the municipality to any point outside the municipality;
b) provide for the collection of the rates or fares charged for the conveyance;
c) limit the number of taxicabs or any class of them" (Ontario, 2001, 156 (1) a - c).

Of the potential 75 municipalities with regulatory authority over vehicle-for-hire services enumerated above, within the GGH region, 13 developed a program or revised by-laws to regulate ride-hailing platforms at the time of the research project. To date, while the province has shown support for ride-hailing platforms by revising the insurance act to enable insurance products for casual drivers, no attempts have been made to pre-empt municipal bylaws with provincial legislation in Ontario. Rather, this case study shows how ready local regulators are to give up their powers. Unlike some other cases (e.g., Austin, Texas), this move to liberalization in Ontario has actually been led by municipal authorities.

### 5.2.2 Case Study Methods

The main method used for this study is a thematic analysis of key stakeholder interviews. The study also includes review of municipal documents and local media articles. The approach to thematic analysis of interviews follows the processes described by Braun and Clarke (2006) and Guest, MacQueen and Namey (2014). This approach seeks to identify patterns of responses or meaning within qualitative data (Braun & Clarke, 2006). Documents were reviewed for a description of the new regulatory regimes and contemporary public discourse. Altogether 388 media pieces were identified in a Factiva search over the years 2012 to 2019 with the keywords "ride-hailing" or "rideshare". These keywords were selected so as to not focus on the main market entrant, Uber and maintain a wider lens. However, this is a limitation of the study given that Uber did and continues to dominate amongst ridehailing platforms; using the company name as a keyword may have yielded more articles. These articles were read to identify common local themes and events that contributed to the public discourse. Another 71 pieces published by the municipalities were also reviewed including legislation, reports, and presentations. The document and media review provided a basis for further exploration in interviews with staff and council members.

Interviews were selected as a method because they provide an effective way of learning how people understand and rationalize their world. Due to the social nature of the interview, this approach also allows both participants and interviewers to engage with the subject (Arksey & Knight, 1999). Thus, participants in this case were both asked questions and challenged to consider alternative perspectives on the issue, exposing rationalizations that may not have been considered on their own. Interview participants were recruited from among industry observers (2); municipal representatives including staff of municipal licensing offices who are engaged in policy, management or enforcement (12); and city council members (13). Among these key informants 11

of 12 staff were involved in the development of the new regulations, one had come to the department since the change in by-laws. Six were involved with handling industry disputes that were brought to the municipality. In total, 27 interviews were conducted representing 10 of the 13 municipalities with regulations of ride-hailing regulations and one municipality studying a change in by-laws. No participants could be secured in the municipalities of Barrie, Whitby, or Milton.

Semi-structured interviews allowed for a consistent set of questions but also the freedom to follow up on novel concepts and views raised by participants. Interviews lasted approximately 50 minutes with staff and 30 minutes with council members. All interviews were recorded, transcribed, and coded by theme and subject matter. N-Vivo software, which has tools for the qualitative analysis of transcript data, was used to code the data. At the initial stages interview transcripts were reviewed and coded based on categories derived from the literature and document review. These categories were then revised as a result of themes that emerged throughout the coding process. Transcripts were reviewed on multiple occasions as well as through a series of N-Vivo keyword queries. Codes were then re-examined as new themes were identified or re-conceptualized (Ignatow & Mihalcea, 2018). To ensure internally valid results, these themes were cross-referenced ("triangulated") with evidence from documents and interviews with drivers (Guest et al., 2014). Validity was also found by exploring exceptional cases where there were a number of unique policies in use (Guest et al., 2014). Over repeated examinations, representative quotations were selected to describe these perspectives and patterns. These themes are reported along with the frequency of similar statements from other participants to demonstrate how common the views are and to provide context.

## 5.3 Local Regulatory Regimes and Policy Agenda

The local regulatory regimes that have developed for ride-hailing platforms across the GGH region are consistent across the majority of the municipalities, with distinct approaches to regulation only in the largest, densest city and smallest most dispersed municipalities (see Table 2). The QQE framework remains foundational for taxi regulation in the region, and many aspects remain institutionalized within contemporary taxi regulation, albeit revised and challenged in some instances. However, it is outside the scope here to fully address taxi reforms. Here we focus on how municipalities have conceived and developed the capacity and authority to intervene in the new regulatory regime applied to ride-hailing platforms specifically. This includes an examination of how municipal regulators have distinguished this emerging regime from the QQE regime; how this regulation has been framed with respect to on-going policy interest concerns, and how tools of regulation have been developed even as public-sector authority has been allowed to whither.

### 5.3.1 Ride-Hailing as Private Industry, Not Public Service?

Interviews with municipal representatives overwhelmingly reveal an approach to regulation of private industry rather than provision of a public service. As one staff person explained, "whenever we undertake a regulatory exercise and we design policy, our main objectives as a municipal regulator are always consumer protection, health and safety, and nuisance control" (Municipal Staff #4). This is the approach taken with local commercial service, such as restaurants. And while participants acknowledged "broad powers" for municipalities to intervene in ride-hailing, 21 of 25 participants prioritized a private industry model to conceptualize service delivery. In fact, the restaurant industry was the most cited precedent. Restaurants are regulated to ensure food safety, but menu items and meal pricing remain at the discretion of individual businesses. Similarly, for the ride-hailing industry, "are they [the drivers] insured? Are the vehicles inspected? Those are

the types of baseline [considerations] that we need to have to ensure consumer safety. Anything beyond that, I don't think needs to be our concern at all" (Councillor #5). A description of the common tenets of vehicle-for-hire regulations across the GGH region are shown in Table 5.2.

The comparison to the restaurant industry aligns with a discourse in favour of ride-hailing deregulation. It invokes an image of an entirely private service and scaled back municipal control over the ride-hailing industry, such as over fares or numbers of drivers. Platforms are encouraged to adapt business practices as they wish to meet minimum standards while serving their customers. At the same time, this framework does not fit the contours of the ride-hailing platform industry seamlessly either. Whereas restaurants operate with significant competition among both small and large operators and at many different price points and among myriad cuisines, there are relatively few ride-hailing platforms. Drivers are required to work under the supervision of a platform. In some ways, this would be akin to demanding restaurants join a franchised chain business and there are only a handful of chains in the market. Furthermore, availability and pricing of mobility services have deep equity implications that don't exist in the restaurant industry; and there are important externalities to ride-hailing platform operations that have an impact on other city services such as changes to transit ridership and the congestion of city-maintained transportation infrastructure (Henao & Marshall, 2019; Erhardt et al., 2019; Clewlow & Mishra, 2017).

However, a number of participants (representing 6 of 11 municipalities examined in this study) also referenced public interests such as the long-term sustainability of the service that point to the perception of the service as a public service. This framing of for-hire vehicles as a typical local service industry rather than a public service operates in the context of continuing QQE for taxis. As one municipal staff person described, "if you look at the TNC model, they're not necessarily in a position to serve some of that market the way they're currently constituted. Taxis are" (Municipal Staff #2). Councillors echoed this description, calling taxis an important "fall back service" where

continued regulation would be required moving forward (Councillor #3). While liberalization of taxis has taken place in some municipalities, regulation across the region has continued to protect that industry by preserving street hail markets for taxi exclusively. However, as street hailing continues to fall in comparison to digital requests for service, the changes undermine the economics of the taxi service, potentially creating a condition where it ceases to operate. Yet platforms are not generally deemed able to provide the same level of service as taxis, effectively applying deregulation across the entire market.

Table 5.2: Municipal Regulatory Policies for Ridehailing Platforms Across the Greater Golden Horseshoe (Municipal regulated since pre-2018).

| POLICY | MUNICIPALITIES WITH RIDE-HAILING REGULATIONS PRE-2018 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Barrie | Brampton | Guelph | Hamilton | Innisfil | Mississauga | Niagara Region | Oakville | Orillia | Toronto | Vaughan | Waterloo Region | Whitby |
| Regulatory Fee Structure | | | | | | | | | | | | | |
| Annual fee | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Per ride fee | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Public subsidy | | | | | ✓ | | | | | | | | |
| Data | | | | | | | | | | | | | |
| Platform maintains data, available for regulator upon request | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Municipality collects or audits data on all trips | | | | | | ✓ | | | | ✓ | | | |
| Driver Standing | | | | | | | | | | | | | |
| Drivers are platform affiliates | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Drivers are licensed by municipality | | | | | | | ✓ | | | ✓ | ✓ | | |
| Background Check | | | | | | | | | | | | | |
| Criminal background check | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Drivers abstract | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Vulnerable sector check | | | | | | | | | Removed 2020 | | | | |
| Training | | | | | | | | | | | | | |
| Driver training for how to use app | | | | | | ✓ | ✓ | ✓ | | ✓ | | | |
| Driver safety training | | | | | | | | | | Added 2019 | | | |
| Vehicle Check | | | | | | | | | | | | | |
| Age limit of vehicle | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Private mechanics safety certificate | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Liability | | | | | | | | | | | | | |
| Periodized fleet auto insurance (usually $2M) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ |
| Platform general business liability (usually $5M) | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Street Hails | | | | | | | | | | | | | |
| No street hails | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Accessibility | | | | | | | | | | | | | |
| Fee per ride in lieu of accessible service | | | ✓ | | | | | | | | | ✓ | |
| Must provide accessible service | | ✓ | | | | | | | | ✓ | | | |
| Wait-time limit | | | | | | | | | | ✓ | | | |
| Enforcement | | | | | | | | | | | | | |
| Spot checks through app | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ |
| Platform licensure subject to good standing | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Rates | | | | | | | | | | | | | |
| Customers must agree to rates up-front | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Signage | | | | | | | | | | | | | |
| Decal to be displayed | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| BYLAW | 2006-265; 2017-024 | 67-2014; 134-2018 | 20272 | 07-170; 17-013 | 009-19; 071-18 | 0109-2019 | 2018-75 | 2016-083 | Ch. 725; 2018-82 | Ch. 546; 750-2016 | 315-2005; 123-2017 | 16-044 | 7398-18 |
| YEAR | 2017 | 2018 | 2018 | 2017 | 2018 | 2019 | 2018 | 2016 | 2018 | 2016 | 2017 | 2016 | 2018 |

### 5.3.2 Authority and Capability Behind Regulation

Changes to the local regulatory system were highly reactive, driven by the arrival of platforms to the municipality. The pressure to change was expressed by interviewees as a lack of authority and capacity to regulate new industry actors in the same manner that municipalities had done previously through the QQE regime. A number of councillors (5 of 13) suggested that municipalities may not have the capability to regulate; whereas municipal staff were far more confident that regulation could work. However, at the same time, several staff (3 of 12) noted that regulation worked only because municipalities had voluntarily accepted the standards of service preferred by the platforms. While municipalities in the GGH region have the authority to regulate prices and numbers of drivers, participants suggested that their focus ought to be only on safety regulations. This view was particularly common among staff, among whom 10 of 12 felt regulations beyond safety concerns to be inappropriate. These findings again point to a shift in local regulatory regime from one previously characterized as private delivery of a public service to a private service altogether.

| Company name | Owner name | [redacted] license # | Vehicle # | License plate # |
|---|---|---|---|---|
| Test type – annual, general, meter, random, new tires | Make | Model | Year | Fuel type | VIN |
| Meter | Make | Serial | Seal # | Tire size | Date of Inspection | Signature of Officer | Signature of company rep. |
| **Exterior** ☐ | Glass ☐ | Side view mirrors ☐ | Tire condition/Whl covers ☐ | Body condition ☐ | Door knobs & handles ☐ | Top sign ☐ |
| **Interior** ☐ | Rear view mirror ☐ | Floor boards ☐ | Seatbelts ☐ | Interior general condition ☐ | Tariff card ☐ | Taxi ID visible ☐ |
| **Mechanical** ☐ | Headlights ☐ | Turn signals–front/rear ☐ | Tail lights ☐ | Brake lights ☐ | Horn ☐ | Backup lights ☐ |
| Hazard lights ☐ | Wipers and washers ☐ | Speedometer working ☐ | Emerg. brake/parking brake ☐ | Fuel type ☐ |

Figure 5.2: In-Field Vehicle Inspection Form from One Municipality

The previous local regulatory regime allowed for direct inspections of cars by municipal mechanics, the collection of driver credentials by municipal staff, and the provision of a quasi-judicial system for resolving complaints for customers, taxi companies and individually regulated drivers. Under the new system much of that has been devolved to the private sector to administer including background checks, vehicle inspections and the resolution of complaints. Vehicle inspections by municipalities may still take place but are likely superficial – conducted by an officer without expertise as a vehicle mechanic (see Figure 5.2). A similar pattern exists regarding complaints. Five of six of the staff interviewed, who were in the position of fielding complaints, remarked that they heard very few complaints regarding ride-hailing platforms. As one municipal staff person explained,

> "let's say that someone gets into an Uber car and they are not satisfied, they report that to Uber. They don't necessarily, and I would say 95% or higher, don't report that to us… So, we get complaints. We generally field them back and work in conjunction with the [ride-hailing platform] company itself. And I hate to use the term, I don't like the term, 'self-regulating'… but from an enforcement perspective it takes a burden off of us" (Municipal Staff #9).

Interview participants also expressed enthusiasm about having more control over workers as a result of cooperating with platforms because, "if a vehicle is found not to be safe, it's removed immediately [by the platform]" (Municipal Staff #12). Ride-hailing platforms face none of the delays associated with municipal hearings that are common for the regulation of taxis and that staff described as "time consuming" (Municipal Staff #9). Reducing this burden is all the more useful for staff members as the number of complaints was identified by councillors as a key metric by which the bylaw should be judged (Councillor #7). This contrasts with the exasperation several participants expressed regarding the previous regime. As one staff person noted, taxis had long been a "regulatory nightmare" (Municipal Staff #6). "One thing you will learn," another council

member stated, "is that any councillor that has had to deal with taxis hates it because it's always awful and it always takes forever" (Councillor #2).

The changing dynamic of perceived authority and capacity is resolved in the new regime as a form of collaboration between municipal regulators and ride-hailing platforms. Platforms themselves are subject to comparably few controls over how they operate. Municipalities retain only a blunt tool whereby they can withdraw a license or fail to renew a license should a platform be found not to be "acting with honesty and integrity" (Municipal Staff #8). One council member that was active in the development of for-hire vehicle regulations was circumspect about the capacity of municipalities to address municipal goals under the new framework. "I mean we have a document that says that we can license [ride-hailing platforms] but the license is effectively meaningless. It has no meaningful restrictions. You keep the principle that we are allowed to license in exchange for giving away the value of licensing" (Councillor #2).

The regulation of for-hire vehicles, it would seem, has settled into a system of control over workers without an equivalent democratic oversight upon the service broadly. Where there is oversight, it is framed by a private system that lacks the contractual or employment agreements that can provide municipalities with clear and predictable outcomes. This was not lost on councillors, 6 of 13 of whom expressed a lack of confidence in the regime to control the industry. Further, a 2019 legal decision in Ontario now moving to the Supreme Court reached the conclusion that drivers are equivalent to customers due to the lack in market power and, therefore, should be protected in legislation (Doorey, 2019). Given the need to set municipal regulation on solid footing there is good reason to focus more resources on regulating platforms, including as a way to protect drivers.

### 5.3.3 On-going Policy Concerns

In the GGH region there are signs that mobilization is occurring around ride-hailing services and that municipalities are responding with policy changes. Safety concerns from high profile fatalities as a result of poor driver training has been a mobilizing story within the GGH region and this has resulted in new policies (Pelley, 2018). Changes to the City of Toronto's policies as a result of this mobilization include a requirement for worker training. Such a change recognizes that workers are not simply subjects to be controlled but key actors in the system that require support. Such a view is more consistent with the definition of vehicle-for-hire services as a public service linked through public mobilization. Policy issues that are less easy to understand or are outside of the topic of safety and require a more fundamental change in policy may be more difficult subjects for change. This includes topics such as price and market competition that are clearly within the authority of municipal regulation in the GGH region as per the Municipal Code (2001).

A lack of competition was highlighted by municipal representatives as a great risk to the service. In order to maintain high quality and accessible services, municipal staff were most supportive of rules that encouraged competition. This was frequently pursued with a graduated scale of fees, with lower fees for small platforms, and a policy of limiting regulation to invite market participation. And yet, even in a liberalized marketplace competition continues to be limited. Of 32 drivers interviewed for this research, none operated on a platform other than Uber or Lyft and many did not even know the names of other competitors.

There is also evidence that liberalization has not preserved the public interest in important niche areas, such as services for individuals with disabilities (New York Lawyers for Public Interest, 2018). Accessible vehicle-for-hire services require more significant upfront investments from local car owners for a smaller overall market. Regulation in the City of Toronto has demanded that the large platforms (500+ drivers) provide accessible services, which led to an additional subsidy from

platforms to drivers for wheelchair accessible services. In other municipalities there are additional fees placed on platforms that are then allocated in grants to pay for wheelchair accessible vehicles among other firms. There is conflicting evidence as to whether wait times have improved for accessible transportation in Toronto (Toronto, 2019; Young & Farber, 2020). However, a review of the multi-year plans of ten major Ontario municipalities "confirmed that none appeared to show a guaranteed proportion of accessible taxicabs or appeared to provide any details with respect to progress toward determining a goal proportion" (Transportation Standards Development Committee, 2018, n.p.).

Concerns about the price of rides is another question that will be difficult to mobilize around as platforms continue to subsidize rides (Calo & Rosenblat, 2017). Currently, ride-hailing platforms Uber and Lyft subsidize rides in order to gain market share and retain drivers. This is often not considered a form of price fixing as consumers are supported with lower prices (Khan, 2016). Yet, scholars warn that rising prices and further discriminatory pricing should be expected in the future as platforms' fluctuations in market share subside and platforms are more empowered to leverage their pricing power (Horan, 2015). It is at this point, scholars argue that platforms can best leverage asymmetries of information with users and discriminatory pricing (Calo & Rosenblat, 2017). With platforms typically tying prices to a range of undisclosed variables, including personal details about the customer rather than the costs of production (Newcomer, 2017), there are clear mechanisms for rides to be priced as a luxury good rather than a basic service or subsidized for a particularly valuable class of rider. This upends historical goals for the industry that prioritized a viable basic service and portends to reduce mobility for low income and disabled individuals who are common users of these services (King & Saldarriaga, 2016; Ellis, 2016). Given that the ridership of ridehailing applications tend to be young and wealthy, the lack of suitability to low-income users is a legitimate challenge (Young & Farber, 2019).

The majority of municipal representatives showed little concern about the potential for price discrimination (20 of 25 participants). Participants did note that "a big component in the bylaw [is] where the passenger has to accept the price of the ride before the ride is confirmed" (Municipal Staff #8). But when confronted with questions about the fairness of the system considering extreme information asymmetries between platforms and platform users, municipal staff were indifferent. "Consumers are not naïve," one staff person reasoned. "They know that they can see what the Uber price is and they can also pull up the [local taxi competitor]" (Municipal Staff #12). As another staff person argued, "it's buyer beware". He continued that data extraction is "just good business" (Municipal Staff #1). Other staff were swayed by the benefits of data collection for municipalities regardless of the effects for residents. Staff described using data from ride-hailing platform to target enforcement in oversight of drivers. Another staff person stated that "we are appreciative of Uber doing that screening and that checking of their drivers. From what we're aware of, it's pretty rigorous surveillance of drivers that operate on the platform. Such as, if they are holding their phone when they are driving, that is something that is detected" (Municipal Staff #5).

The support for ridehailing platform operations without the commensurate oversight of these platforms by democratic institutions suggests that municipal regulators favour market-based solutions. At the same time, our evidence suggests that these same municipal regulators are willing to overlook the negative externalities that exist and remain reluctant to regulate the ridehailing industry. This market-based approach to the for-hire vehicle industry stands in the way of growing regulatory powers over the ridehailing platforms themselves.

### 5.3.4 Building Tools of Platform Governance

The greatest policy adaptation from municipal regulators has been to withdraw direct control over drivers (municipal vehicle inspections, municipal background checks). Instead, regulators are beginning to manage drivers through random sampling whereby only a selection of drivers is inspected over the year. Interviewees argue that this approach should be just enough to have drivers comply (Municipal Staff #6) but arguably it places a real weakness to municipal authority. The focus on individual strategies leaves only vague threats against platforms themselves; and it is the platform that most clearly directs the operations of the industry by determining the costs of the ride, screening drivers, and distributing rides across the platform (Van den Steenhoven, 2017).

Municipal staff showed confidence in their capacity to expand regulatory oversight and participants described some novel programs, which we discuss below. Participants argued that they could secure a budget for greater regulatory measures. For instance, municipalities currently gather fees ranging from $0.08 to $0.30 per ride. These modest fees leave room to raise budgets before these fees become onerous. At the same time, attempts by Ontario municipalities to regulate the platform have been met with resistance. The City of Toronto was rebuffed by provincial courts after an attempt to ban the Uber platform before developing a new set of regulations. In smaller municipalities there is the risk that platforms may determine that it is not worth meeting local regulations and withdraw from the municipality instead. This was the case in the City of Orillia. Regulations in that town requiring drivers to get a vulnerable sector check were opposed by Uber and it abruptly pulled out of the municipality (MacLennan, 2018).

For municipalities where there is a risk of platforms simply withdrawing from the jurisdiction, a strategy that may help expand the perceived authority of municipalities is to subsidize ride-hailing services through municipal budgets as a form of transit. In the Town of Innisfil, direct subsidies for

individual rides – particularly at locations of significant public value – have enabled greater service and a level of municipal oversight tied to contractual agreement between the town and the ride-hailing platform. As a town service there have been numerous additions made to the service to ensure accessibility such as the provision of telephone call-based services through the town hall. Such an approach acknowledges the public value of for-hire vehicle services yet places a financial and administrative burden on the municipality. The use of direct subsidies is particularly important given that vehicle-for-hire service does not benefit from the economies of scale that are typical of transit operations. Thus, as the system expands, the budget for these services could be difficult to contain. Indeed, Innisfil has had to curtail service to maintain budget controls. However, there would seem to be numerous contractual tools for municipalities to build authority and to ensure high-quality and accessible services including the demand for unionized and trained staff, or transparency regarding the variables that determine pricing. Other municipalities in the GGH have examined ride-hailing services as an option for public transportation particularly in other small urban centers looking for greater levels of service in the evenings or for classes of resident with higher service needs.

Another potential strategy for expanding intervention in the vehicle-for-hire industry requires a more collaborative approach to regulation across levels of government. Municipal representatives noted that they "are only one player in the regulation game" (Municipal Staff #7). To integrate for-hire vehicles with transit policy there is a need to pursue both proactive municipal programs with reactive regulation, which requires coordination between municipal agencies and departments. In the GGH region, transit policy is largely regulated among upper-tier municipalities while for-hire-vehicle services is regulated mostly by lower-tier municipalities. In other policy areas this exists as well. Policy areas like pricing and competition are now subject to industry dynamics like anti-trust and data protection that are the jurisdiction of senior levels of government. While few

participants called for provincial intervention into the industry, there is good reason to see collaboration between governments as a means to integrate resident interests into robust regional economic and infrastructural systems through provincial legislative power. The GGH region already has a regional transportation agency called Metrolinx that could be applied to this service.

For municipalities in less risk of full platform withdrawal, direct regulations of platform software and algorithms shows promise. For instance, in the effort to ensure that platforms are communicating prices to passengers clearly before the ride, the City of Toronto has required approval of the platform graphic interface (Municipal Staff #7). For other policy issues oversight requires more data to be supplied to the municipality. Municipal staff noted that demanding more data is well within the rights of the municipality, stating that "we can demand all types of data, if there's a justified reason for it" (Municipal Staff #4). The City of Toronto has a data sharing agreement that collects raw data from the platform within a number of fields including the origin and destination of trips and details about the driver. A couple municipalities (2 of 9 municipalities where staff were interviewed) reported having a data scientist on staff or in a consulting position to help monitor data reports from the ride-hailing platforms. There may also be an emerging industry for "compliance monitoring service[s],… where if our municipality has got a licensing system… they have got an algorithm that can… provide you with the information for enforcement" (Municipal Staff #4). Indeed, one staff member from a rural municipality reported that "we have been approached by… universities to assist with analyzing the data as well. So that's something that may happen in the near future" (Municipal Staff #5).

## 5.5 Conclusions: Defining a Role for Local Regulation

The aim of this paper is to understand how municipal representatives make sense of their role in regulating the vehicle-for-hire industry and how policy has developed as a result. For-hire

vehicle services are considered both a private industry and public service and municipalities have long regulated the industry to ensure an affordable and accessible service is offered. With the rise of ride-hailing platforms, there has been a move to liberalize the service, to remove democratic control over characteristics such as price and competition, and instead place the service entirely within a private market setting. While others have documented how this may be attributed to industry lobbying and pro-business policies among higher levels of government (Collier et al., 2018), this case study demonstrates incentives at the municipal scale for greater liberalization as well. The case also shows, however, that liberalization is leading to further externalities being placed on the public and on drivers as well.

The findings suggest that to maintain basic transportation services, municipalities should build tools of oversight and fully recognize their existing authority to control vehicle-for-hire markets for multiple public interests. To do so demands expanding regulatory oversight of platforms and not only individual drivers. Through flexible interventions municipalities may create more robust systems to address the public interest. Like other areas of infrastructure previously characterized by a desire for a homogeneous level of service, a new balance of interests must now be established in the ride-hailing industry.

We have suggested that regulation should place a greater focus on oversight of platforms in order to meet the diverse public interests of residents and drivers. The mix of private delivery and public service is common in infrastructure markets where public mobilization has placed demands on providers to balance public and private values. To develop democratic oversight and balance diverse interests, municipalities must recognize the benefit and value of municipal regulation and reassert the capacity and authority with which they are already equipped.

## 6.0 Bottom-up Strategies, Platform Worker Power, and Local Action: Learning from Ridehailing Drivers

This article examines the strategies that digital platform workers, Uber and Lyft drivers specifically, use to improve their own working conditions in a precarious workplace that lacks institutions of labor protection and formal collective action. Digital platforms, like Uber, Deliveroo, and other smart phone applications that manage the delivery of services, have grown in popularity over the past decade. These platforms match consumers and workers on a task-by-task basis to produce a labor market defined by the "gig" (Kenney and Zysman, 2016).

Ridehailing applications are one kind of platform that match passengers and drivers for transportation services. In this matching process, platforms manage drivers by distributing rides, overseeing work, and subjecting drivers to more intense competition with an expanding pool of other drivers (Lee et al., 2015). As part of their business model, ridehailing platform firms classify drivers as independent contractors, often as a means to sidestep employment standards and benefits (Rosenblat, 2018). This independent contractor model has been cost-effective for ridehailing platform firms and is often viewed as offering flexibility for both the firms and drivers (Sundararajan, 2016). However, flexibility can be illusory for workers. Ultimately, platforms place significant demands and risks on drivers. While many nations and states are expanding labor rights for ridehailing drivers (Lee, 2021), drivers commonly remain undercompensated resulting in debt, poor health, and exploitation (Ravenelle, 2019; Rosenblat, 2018; Wells, 2019). For local policy makers, not-for-profit organizers and union organizers seeking to balance industry and worker interests, there is value in empowering drivers to campaign for improved workplace conditions.

While legislation by senior levels of government often shapes employment, local organization and activism in industries such as public transit and construction have been effective in raising standards (MacDonald, 2017; Schragger, 2016). This capacity may also apply to vehicle-

for-hire services due to its history of local control and regulation. Municipal regulation often includes standards for maximum hours and fare rates (Cooper et al., 2010; Dubal, 2017). In ridehailing, there is a patchwork with respect to the locus of regulatory control with higher levels of governments being responsible in some jurisdictions, and local governments retaining regulatory powers in many others (Collier et al., 2018). Labor, too, has produced examples of local organization, even as international solidarity movements gain momentum (Dolber, 2019a, 2019b; Dubal, 2017, 2019). For example, in New York, cooperation between unions, associations of workers, and municipal staff has resulted in regulations that raise standards for workers (Johnston, 2018). However, studies find that platforms undermine worker solidarity due to high rates of worker turnover and surge pricing (Graham and Anwar, 2019; Wells et al., 2021). Furthermore, there are barriers to worker organization, including the precarious finances and job insecurity faced by drivers (Dubal, 2017, 2019; Hua and Ray, 2018; Ravenelle, 2019; Rosenblat, 2018). This article examines strategies used by drivers to improve their work conditions to identify challenges and find points of engagement for organizing local labor, as well as advocate for anchoring local programs and policies to the capabilities and practices of drivers in the gig economy.

One set of tools that may allow local policy makers, activists, and other organizations to improve conditions for drivers working on ridehailing platforms are workforce development tools. Delivered at the local scale by municipalities, government agencies, not-for-profit organizations, and unions, workforce development tools aim to better integrate residents into the workforce. In doing so, they fulfill a range of policy goals, including local economic development, poverty reduction, and public health (Bramwell, 2012; Melendez et al., 2004; Pastor and Carter, 2009; Schrock, 2013). Workforce development programs directed toward diverse participants, including those outside of the workforce, self-employed individuals, and platform workers, can improve working conditions and support more equitable local economies (Harper-Anderson and Gooden,

2016; Holland, 2016; Nugent, 2017). Scholars have criticized workforce development programs where they add new mechanisms of control, which can funnel workers into low-quality jobs (Peck, 1996). For this reason, such programs are desirable only where they empower workers and value skills (Hewitt and Anderson, 2015; Peck, 1996). Therefore, understanding the current interests and capabilities of workers is paramount to developing meaningful tools for worker empowerment. Yet, we still know little in this regard with respect to gig workers, including ridehailing platform drivers. Our article contributes to this understanding.

We begin with a discussion of platform work and worker power, including reviewing the limited evidence on using workforce development programs to address the challenges of gig workers. In order to pinpoint appropriate local workforce development interventions, our analysis focuses on identifying and assessing the strategies drivers use to improve their working conditions. We draw upon in-person interviews with 32 drivers in the Greater Toronto Area (GTA), as well as an analysis of English-language YouTube™ video commentaries posted by North American drivers working on ridehailing platforms. While a worker-centric approach places less emphasis on the role of industry structure and state/national policies, it reveals an important — and often overlooked — layer of coordination, which may be valuable for encouraging worker engagement and bridging the shift from individual to collective action. We find that ridehailing platform drivers use strategies in four areas to improve their conditions: business planning, leveraging competition between platforms, building solidarity through social media, and applying technology to manage their workplace. We find that workers use individualized, market-based strategies and technological solutions, rather than strategies involving formal organization and collection action. As a result, the benefits of these strategies are not broadly realized. Thus, our article concludes by discussing how local policy makers and others can support greater organization among drivers through workforce development programs and tools.

## 6.1 Platform Workers and Worker Power in the Gig Economy

While there remains no consensus on the definition of the gig economy, the term normally refers to temporary and informal jobs. Many studies interpret the gig economy as including any alternative work arrangements, including on-call work, temporary contracts, or contracting via temporary staffing agencies (Katz and Krueger, 2018). Other studies define the gig economy more narrowly to refer to jobs mediated by digital platforms (De Stefano, 2016). Typically, digital platforms bring together service providers and customers in proprietary, digital markets where the platform facilitates and monetizes interactions (Kenney and Zysman, 2016). Key to such arrangements is that service providers are treated as independent of the platform rather than as employees; workers are often described as small business owners whose relationship to the platform is governed by terms of service contract (Rosenblat, 2018).

The size of the gig economy is likewise uncertain. A recent study estimates that the gig economy accounts for 16% of the US workforce, with only 0.5% of the labor force working for digital platforms (Katz and Kreuger, 2018). Estimates suggest that ridehailing employment accounts for more than half of all digital platform workers (Farrell et al., 2018). These studies likely underestimate the number of platform workers; many individuals who work on digital platforms do so casually or irregularly (Farrell et al., 2018). However, an analysis of JP Morgan Chase Institute data shows that, in 2018, 4.5% of their US account holders received payments from digital platforms during the previous year (Farrell et al., 2018). In Canada, a recent study found that 9% of GTA residents had worked in the gig economy over the past year with a quarter of those in ridehailing (Block and Hennessy, 2017). Most studies recognize the rapid growth of ridehailing over the past decade (Farrell et al., 2018; Hathaway and Muro, 2016). Undoubtedly, the global COVID-

19 pandemic has influenced the trajectory of ridehailing (Rana, 2021), but it remains too soon to evaluate fully the impacts across jurisdictions; such discussion is beyond the scope of this article.

Ridehailing platforms have been the subject of widespread scrutiny, leading to legal and legislative challenges to the contractor model (Paul, 2019). Industry proponents argue that platforms make work opportunities more accessible allowing workers to address immediate financial challenges (Hall and Krueger, 2018; Kumar, 2018). Indeed, Farrell et al. (2018) find that platform workers work more hours during months when other sources of income are low. Yet, flexibility can also result in low pay and irregular work (Hua and Ray, 2018; Peck, 1996).

There are concerns about the power imbalances between drivers and digital platforms. Contrary to claims that drivers are independent, platform operators coordinate many aspects of work. While local governments have often structured the traditional taxi industry around training systems, tribunals, and other institutions that coordinate drivers, these systems are largely absent in ridehailing. Consequently, there is a risk that platform firm interests will dominate over local worker or public interests. For instance, in jurisdictions without labor standards for drivers, drivers have no minimum pay or holiday pay based on the time they work and are unpaid between rides (Rosenblat, 2018). Drivers also have no formal protections against arbitrary dismissals or access to programs like workers compensation (Ravenelle, 2019; Rosenblat, 2018; Ticona et al., 2018). Court decisions and legislation has expanded labor protections for platform drivers in countries like France, Spain, and the United Kingdom (Lee, 2021). However, legislation and its implementation through policy remains highly uneven across jurisdictions.

Ridehailing platforms commonly develop and deploy networked tools to control the work. Ridehailing platforms commonly vary fares and rates of pay without sharing information about the formulas or algorithms with drivers. For example, Uber's route-based pricing uses a range of undisclosed variables to adjust fares and maximize profit (Calo and Rosenblat, 2017; Newcomer,

2017). Organizations like the App Drivers and Couriers Union and Worker Info Exchange in the UK have successfully litigated for greater access to that data for workers (Butler, 2021). However, workers in most jurisdictions have no access to these data and must guess how their actions will influence their earnings (Mohlmann and Zalmanson, 2017). Additionally, the combined disciplinary power of the platform and customer can require that drivers provide all manner of additional services free of charge (e.g., refreshments), place drivers in demeaning and unsafe conditions, or even trick drivers into performing illegal tasks such as distributing narcotics (Ravenelle, 2019; Rosenblat, 2018). Overall, studies reveal the experience of platform drivers to be precarious and unpredictable (Kessler, 2018; Ravenelle, 2019; Ticona et al., 2018; Wells, 2019).

## 6.2 Worker Power in the Digital Gig Economy

A key variable in explaining the exploitation of platform workers is their lack of worker power or collective voice (Ravenelle, 2019). In the past, vehicle-for-hire drivers have built worker power based on informal relationships, collective bargaining, and collective action. Studies identify strong informal bonds between drivers that provide mutual protection between coworkers facing unsafe conditions (Hoffman, 2006). And, in some jurisdictions, there is a history of unionization and collective action in the vehicle-for-hire industry beginning at the turn of the 20th century and continuing to the present (Cooper et al., 2010; Dubal, 2017; Mathew, 2008; Wells et al., 2021). Nonetheless, platform drivers have only begun to organize in significant numbers in major centers such as New York and Los Angeles, and organization among platform drivers in the United States and Canada is not widespread (Dolber, 2019a, 2019b; Dubal, 2019; Johnston, 2018). The lack of formal organization is often attributed to the gap between casual and full-time drivers' interests, as

well as competition between workers in the platform marketplace (Dubal, 2019; Hua and Ray, 2018).

Without a strong collective voice or formal organization, there is greater pressure on individual drivers to take measures to improve their own working conditions, maximize their pay, mitigate risks, and limit vulnerabilities. In the past, it has been common for drivers to decline undesirable work, avoid fees, raise fares, and perform other forms of resistance (Dempsey, 1996; Vidich, 1973). When adopted widely, these individual strategies have led to change as they have motivated municipalities to set regulatory standards (Dempsey, 1996). Benkler (2011) identifies strategic actions that individual platform workers can take to improve their conditions, including leveraging competition between platforms, making political demands, and influencing platform policies. Digital tools, such as internet-based discussion boards, work review listings, and messenger applications, allow individual workers to identify and develop resources that support their work, as well as build solidarity with other workers (Ettlinger, 2017; Harmon and Silberman, 2018; Mohlmann and Zalmanson, 2017; Schoneboom, 2011). In some instances, individualized forms of resistance have led to collective action, such as price fixing strategies (Sweeney, 2019) or wildcat strikes (Foster, 2016). However, we know little about the specific individual strategies and practices of ridehailing platform workers to improve their working conditions, let alone whether these strategies and practices could be "scaled up" to increase worker power and implement collective action to reduce workers' vulnerability and risk.

## 6.3 Supporting Workers and Improving Working Conditions on Digital Platforms

Several mechanisms could support platform workers and improve their working conditions. Top-down approaches, including the creation of regulations and employment standards are the

most obvious source of support for these workers. Certainly, there is evidence that courts and senior levels of government are beginning to demand higher standards of platforms (Lee, 2021). For example, state legislation and judicial rulings in California—the home of several platform firms including Uber and Lyft—set a new test of employment that promised greater protections for platform workers (Paul, 2019). However, platform companies successfully lobbied against California's regulations and continue to lobby elsewhere (Korosec, 2020), even supporting unionization on the condition of eliminating claims for employee status, thus creating the potential for counterproductive labor power dynamics (Lichtenstein, 2021).

Recalling that local interventions have historically been central to setting standards in the vehicle-for-hire industry, local policies and programs may also play a role in supporting platform workers to the benefit of the local economy. Indeed, programs that support local vehicle-for-hire drivers, where allied with local regulators, have secured benefits for drivers (Dubal, 2017; Johnston, 2018). Local policies do not exhaust the possibilities of activism and are not sufficient to challenge the power of platforms. However, local workforce development efforts can provide tangible targets leading to policies being crafted and adopted by higher levels of government, for instance in the "Fight for US$15" campaign to raise to the minimum wage (Spicer et al., 2020).

More generally, local workforce development policies focus on improving work and labor market conditions, particularly for the most vulnerable. Policies and programs often address broad community goals such as reducing poverty and challenging social exclusion (Bramwell, 2012; Harper-Anderson and Gooden, 2016; Melendez et al., 2004; Pastor and Carter, 2009; Schrock, 2013; Wolf-Powers, 2012). To pursue these goals, workforce development programs coordinate workers and businesses (Fitzgerald 2004; Schrock, 2013), thereby socializing some of the costs, risks, and responsibilities for investment in workers (Fleming, 2017). Scholars have criticized workforce development programs for being more effective at channeling government budgets to

private sector service delivery, rather than achieving substantive benefits for workers (Peck, 1996). Programs have often integrated training and welfare policies forcing workers into any available work without addressing weak labor demand, and thus further burdening workers and destabilizing markets (Peck, 1996; Peck and Theodore, 2000). Worker-led organizations and unions have also used these programs to support workers, define workplace practices, and create ties with the broader local community (Kriechel et al., 2014; Nugent, 2017; Stuart and Huzzard, 2017). As a result, workforce development programs are valued most when they are conceived as tools for the benefit of workers and prioritize careers rather than just filling jobs (Bramwell, 2012; Hewitt and Anderson, 2015).

Local policy makers and other stakeholders have recognized the value of these coordinating and mediating roles and have expanded workforce development programs to pursue goals originating from diverse stakeholders including worker rights organizations, local businesses, and unemployed workers (Fitzgerald, 2004). One emerging focus of workforce development relates to encouraging self-employment and entrepreneurship among low-income and marginalized workers, where vulnerabilities and risks are often acute (Harper-Alexander and Gooden, 2016). In these contexts, workforce development programs provide a mechanism for collective approaches to improving work conditions in areas where formal organization is scarce. This re-orientation of workforce development moves away from building relationships between firms and employees toward building capacity among workers and developing a web of relationships oriented to supporting their small businesses. Such re-orientation aligns well with the dominant characteristics of the gig economy, defined less by employment relationships and more by a series of contracted gigs. Indeed, some local municipalities and not-for-profit organizations have targeted workforce development programs in the gig economy to reduce poverty and to improve outcomes for workers (Kessler, 2018; OEWD, 2019). However, given the relative newness of such programs, there has

been limited academic study of these programs Kessler's (2018) more popular account identified that programs failed to align with participant capabilities. She concludes that local workforce development programs cannot transform the gig economy to tackle problems like poverty. Rather, Kessler's account suggests that these programs need to develop strategies that align with capabilities of individual gig workers.

Thus, in this article, we identify strategies used by drivers working on ridehailing platforms to inform local and regional policy makers as to potential entry points for programmatic and policy interventions to improve outcomes and working conditions for platform drivers and empower drivers both individually and collectively. An example of these tools in the labor market can be found among emergent labor organizations. Organizations like the Independent Drivers Guild and New York Taxi Workers Alliance provide resources for drivers including education, support in accessing government services, and collective purchasing of protective equipment. These programs develop ties between drivers and encourage a collective orientation to problem solving (Johnston and Land-Kazlauskas, 2019). These programs are, therefore, both an end in themselves and a means of building collective power.

## 6.4 Research Data and Methods

To gain an understanding of the strategies that platform drivers use to improve their working conditions, improve pay, reduce risk, and mitigate vulnerabilities our study draws upon three sources of data. First, we analyzed video logs (vlogs) by individuals (herein referred to as diarists) who drive or have driven with a ridehailing platform. Vlogs, posted on YouTube, offer insights into the experiences of drivers. Second, we use insights gleaned from a survey of these diarists, which probed the personal perspective of these drivers and assessed the extent to which

drivers use particular strategies to improve their work conditions and reduce risk. Finally, we conducted in-person, semi-structured interviews with platform drivers. Such an approach is limited to the insights generated by individual users rather than providing a broader structural account of the industry; however, it does generate insights into how individuals interact with these larger structures.

Our analysis proceeded as follows. We analyzed videos from diarists to reveal strategies that drivers use to improve their workplace and reduce risk. Qualitative analysis of videos posted to online platforms, such as YouTube, has become increasingly common in social science research as it provides extensive, rich, and in-depth data on various phenomena (Snelson, 2015, 2016; Vergani and Zuev, 2013; Wesch, 2008). Using the YouTube search algorithm and functions, we limited our search to diarists who were English-speaking, based in North America, and active within the 12-month period between March 2017 and March 2018. This allowed us to identify 127 diarists who were vlogging about ridehailing. Due to the amount of video footage associated with these diarists and the time required to view and analyze this content, we selected a sample of videos based on their relevance to working on ridehailing platforms, as well as to maximize topic coverage. Drivers were located across many different geographic settings, including the largest urban centers in Canada and the United States. While a detailed regional breakdown would provide additional insight into the role of specific local rules and regulations, such data were not available. In total, we reviewed 213 videos from 27 diarists constituting over 26 hours of video footage. Once collected, videos were downloaded, viewed, and coded by theme using NVivo software (Braun and Clarke, 2006; Guest et al., 2014). This included two full viewings of each video to identify the types and frequency of different strategies used by drivers to improve their working conditions.

Vlogs made by diarists normally include video footage where an individual, usually alone, speaks directly to the camera at close proximity. Vlogs have been described as conversational,

"casual, close-up and uncut" videos that use a low fidelity videographic style to encourage realism, intimacy, and authenticity, whether purposefully or not (Werner, 2012: 8; see also Burgess and Green, 2009; Wesch, 2008). This style can appear to give viewers access to an unfiltered view of the diarist's life; however, the literature on videographic analysis advises careful scrutiny about both the explicit and implicit content of the videos (Pace, 2012; Rose, 2001). Careful scrutiny revealed that diarists might have financial incentive to produce videos through a "dual career" on both ridehailing and YouTube platforms (Chan, 2019). Diarists earn financial rewards from recruiting people to the Uber and Lyft platforms and from advertising on their YouTube channel. For the most part, diarists did not hide this commercial relationship and took steps to maintain their credibility by showing screen shots of their phones and ridehailing applications and by performing critiques of the ridehailing platforms from the worker's perspective. As diarist Your Personal Driver (2018) argues

> "Would I do an Uber commercial? Of course... You don't think I make money from advertising? This video is monetized... [but] Uber will never ever ask me to do a video because I keep it real on this channel and I say that there are a lot of things on Uber that suck...".

To understand this dynamic and probe the possibility that diarists could mislead viewers for their own benefit, we collected two sets of additional data using survey instruments to triangulate the findings of our video analysis.

First, we conducted a survey that we sent to all of the identified diarists (127). We distributed the survey via email and the YouTube channel messaging board, yielding a 24% response rate (30 responses). While diarists could potentially earn more from YouTube than from driving, our results indicated that the majority of diarists earned less from YouTube than driving. Moreover, as we will discuss in more detail, our survey results corroborate the findings from our video analysis. Taken together, we are confident that our analysis captures the actual strategies used by these diarists.

Second, we conducted 32 in-depth interviews with drivers in Toronto, Canada, between October 2018 and May 2019 to identify strategies that were more widely used by drivers. We recruited drivers in person while they were parked and waiting for rides at malls, libraries, and an airport parking lot. The interviewer was not a passenger and took no rides with the drivers. Interviews lasted approximately 40–60 min and were audio recorded and transcribed. Based on multiple readings of the transcripts, we coded the interviews by theme as they emerged in the accounts from interviewed drivers. After the first round of coding, interviews were reviewed a second time to refine the codes. We examined these refined themes to understand the range of observations made by drivers on key issues, as well as to record the frequency of these varying perspectives. We also identified quotes that captured these themes (Braun and Clarke, 2006; Guest et al., 2014).

There were some differences between diarists and our interview subjects. In general, diarists more clearly and explicitly identified the strategies they used to improve their working conditions compared to interviewed drivers. This is not surprising, given that diarists have taken an active role providing commentary on this type of platform work. Reflecting on these relationships, we argue that while diarists may not be fully representative of all drivers, they present a useful class of key informant because they are motivated to think through the problems and challenges experienced by drivers and present their thoughts in a coherent manner to viewers.[1] Taken together, insights from diarists and interviewed drivers can help local policy makers identify potential issues and appropriate intervention strategies related to platform work. While these informants do not provide a system-wide perspective, their narratives do identify worker interests and capabilities and provide a basis for considering how workers might coordinate despite the challenges of collective organization.

## 6.5 Hustling the Hustle: Strategies to Build Digital Platform Worker Power

Historically, collective action has allowed workers to build power and improve their working conditions and wages. Whereas vehicle-for-hire drivers have a long history of union organization and cooperative ownership in some jurisdictions, platform drivers have only rarely organized in any formal way (Dubal, 2019). Evidence from our analysis of vlogs and interviews revealed little enthusiasm for collective action. Only three driver diarists mentioned traditional forms of worker power achieved through collective action. As diarist Your Personal Driver (2017) explained, the interests of full-time, part-time, and hobbyist drivers were widely perceived as too divergent to allow for meaningful collaboration between individuals in those groups. Similarly, our survey found that 23 of 28 (or 82%) drivers dismissed collective forms of worker power due to the lack of unity among drivers. Our interviewees indicated a slightly different story, with almost two-thirds of drivers (20 of 31) indicating an interest in some form of collective organization. However, here again, only three of 32 drivers supported the idea of protest and only one said they would participate in protest. Like the diarists, these participants described collective action as a "waste of time," pointing to the lack of common interests between fulltime and part-time drivers.

Diarists and interviewed drivers were more likely to pursue individual strategies mediated by technology or market structures. Diarists provide tips and hints that offer viewers a "narrative of empowerment" (Chan, 2019: 9). Our analysis yields four broad categories of strategies used by driver diarists to improve ridehailing working conditions: typical business or operations planning, strategies that leverage competition between platforms, social media strategies, and technical strategies. All diarists included in this study addressed strategies for improving conditions of work, and these strategies were the subject of 186 of the 213 videos (87%) (Table 6.1). The majority of diarists described platform work less like a career and more like a "hustle," where opportunistic

strategy is central to practice. As one diarist stated, referencing Uber's term "side hustle" used to promote Uber as an easy-going, temporary income supplement, "I've always said to you guys, it's learning how to work through your hustle, how to hustle the hustle." (ToyaATL, 2017a).

However, even enthusiastic diarists revealed frustrations about being managed by an algorithm and coping with financial risk. The same diarist, who encouraged viewers to hustle, also lamented her relationship to the platform, recounting her experience with a platform that dehumanized her.

> I got the email twice. The first time I got it, it was addressed to [redacted]. I don't know who that is. And they sent it to me again and then they addressed me in the email by my name. Which was ok, I guess, I was just a code and they was sending it out, instead of my name being placed where the code was, they sent, I was just a number, I was literally just a number to them. Soak that in (ToyaATL, 2017b).

Such concerns were even more pronounced among our interviewees, who reported little capacity to improve their work conditions or mitigate risk on the platform. Drivers could not identify any consistent strategy to engage with the platform directly regarding work conditions, rates of pay, or the disciplinary policy. While interviewees were thoughtful about how they performed their work, their comments were tempered by their lack of knowledge about the platform algorithms. Diarists engaged with multiple strategies to improve their working conditions and performance on the platform. By comparison, our interviews revealed that local drivers were more passive in their use of the platforms, less knowledgeable about how the platform worked, and often hesitant to reach out to other drivers.

Table 6.1: Strategies for building worker power by YouTube video diarists (n = 27).

| Strategy | Diarists that Mention Strategy | | Selected Strategies Described in Videos |
|---|---|---|---|
| | # | % | |
| Planning Business Operations | 27 | 100% | • Planning wait locations<br>• Selective of rides<br>• Use of cost-controlled vehicle use agreements |
| Leveraging Competition Between Platforms | 18 | 66% | • Driving with multiple platforms<br>• Driving with delivery platforms<br>• Dispute platform discipline |
| Building Solidarity on Social Media | 23 | 85% | • Activity in online communities |
| Applying Technical Solutions | 21 | 77% | • Use of layered-on application management software (e.g. Mystro)<br>• Operating a dashboard camera |

Source: Authors' analysis of YouTube videos.

The remainder of our discussion focuses on the four categories of worker strategies that emerged from our vlog analysis: business planning, leveraging competition between platforms, using social media, and technological solutions. In most cases, there is consistency in the perspectives offered by drivers. However, in some cases, there are important differences in the perspectives of diarists and our interviewees. We explore these differences to add nuance to those insights that policy makers may use in seeking policy solutions.

### 6.5.1 Business planning

The ability of drivers to plan their driving operations was a central theme for diarists. Diarists typically focused on practical considerations such as where to position your car, and they presented numerous individual strategies and practices that drivers could leverage to improve their working

conditions and performance. For example, Diarist Corona (2017) described two general strategies for drivers, one that emphasizes seeking long trips and another that emphasized seeking frequent quick trips. These strategies, used alone or in tandem, can increase earnings for drivers. Many diarists emphasized that drivers should avoid following the advice of the platform regarding when and where to work. Rather, drivers described benefitting from learning about the intricacies of the market, such as locating safe places to park in busy neighborhoods, identifying shift change times at large employer sites, and identifying neighborhoods where there was interest in on-demand services.

Other diarists identified strategies to build their own clientele by distributing a business card or making connections. For example, IgorRyltsev (2018) noted "…those people all me sometimes. They want me to be their Uber driver … [they] get into my car and then they start the Uber application [so] then I get a ride request." While ridehailing companies highlight interpersonal connections within their value proposition to riders, drivers too can leverage this personal connection to their own benefit and subvert the platform's system. Yet, such a strategy had limits. Many diarists warned against taking this strategy too far and taking cash rides without using the platform, as it would leave the driver uninsured.

However, our interviews did not generally identify these types of strategies as part of how drivers operate on ridehailing platforms. Interviewed local drivers were less likely to engage in nearly all strategies identified in our study (Table 6.2). These drivers appeared less confident in their knowledge of the platform, indicating little understanding of how much money they were making when they drove, or the costs they incurred from work. Only nine of 32 (28%) interviewed drivers were able to express a clear understanding of their balance sheet as drivers-for-hire. While a majority of drivers described themselves as independent of the platform, only four of 25 interviewed drivers defined themselves as entrepreneurs or small business owners. Drivers

celebrated their ability to choose what rides they would take, but admitted that they took nearly every ride, regardless of the passenger rating or the distance they must travel to pick up the rider. Moreover, very few drivers would accept private rides. Drivers might begin the day with a strategy, but lamented that once they took their first ride, they could no longer make any decisions about when or where they would drive. "Even if you have all the strategies as a driver," one driver argued, "wherever the rider goes to there goes all your planning cause it's just going to be where she went." Further, a small number of drivers suggested that, due to the unpredictability of the algorithms used by ridehailing platforms to determine fare rates and bonuses, they could not easily plan their work.

### 6.5.2 Leveraging platform competition

Another important opportunity for drivers was to understand their own position within the platform. By understanding themselves to be customers of the platform, drivers could register complaints with the platform, or dispute platform policies through official channels of communication. Drivers who saw themselves as customers of the platform were empowered to take advantage of competition between platforms and work with whichever platform had the best terms and rates at any given time. Diarists frequently encouraged drivers to move between platforms for better rates. Diarists also encouraged other drivers to use a mix of platforms at different times of the day and week to ensure a consistent stream of customers. Our survey of diarists showed that a large majority (25 of 28 or 89%) used multiple platforms to perform ridehailing work. Diarists used an average of three different platforms and some individuals used as many as six platforms over a given month (Table 6.2). However, such variety may overstate the level of competition among ridehailing platforms in North America. It is important to note that many of the platforms identified by the drivers were delivery platforms for food and other services, rather

than ridehailing platforms. In fact, diarists almost exclusively focused on Uber and Lyft in their commentaries, reflecting the market dominance of these two firms in the United States and Canada. Only three of 230 videos made mention of ridehailing companies other than these two platform companies.

Similarly, our interviews with drivers revealed a focus on these two dominant platforms. Despite the fact that the City of Toronto had approved the operation of a number of other ridehailing platforms, including Facedrive, DriverHer, and InstaRyde, all of the interviewed drivers used Uber, Lyft or both; none reported working for an alternative ridehailing platform. Our interviews found that, unlike diarists, less than half of drivers (11 of 32 or 34%) worked for both platforms and just over a third of interviewees (9 of 25) reported working on delivery platforms at some point, with the majority of those working for Uber's food delivery platform, UberEATS. Our interviews suggested that drivers were hesitant to work across different platforms. As one driver described, "going back and forth seems to be a waste of time, because I've heard other drivers say they get two rides at the same time and they have to cancel one… [they can be] deactivated because they were cancelling too many rides. So, why go through all the hassle. Pick one" (Driver 7).

**Table 6.2.** Strategies used by drivers to build worker power.

| Worker Power Strategies Used | Diarists (Survey) | | Interviews | |
|---|---|---|---|---|
| Drive with multiple platforms | 25 of 28 | 89% | 11 of 32 | 34% |
| Argue with platform to resolve problems | 10 of 29 | 34% | 9 of 26 | 18% |
| Willing to protest | 5 of 28 | 18% | 1 of 30 | 7% |
| Active in online community | 31 of 31 | 100% | 6 of 29 | 18% |
| Actively locate and time one's work | 27 of 29 | 93% | 25 of 32 | 78% |
| Selectively accept rides | 21 of 29 | 72% | 1 of 26 | 3% |
| Use layered-on management software | 6 of 29 | 21% | 0 of 32 | 0% |
| Use cost-controlled agreements to access vehicles | 2 of 29 | 7% | 3 of 32 | 9% |

Note: Respondents were free to skip questions.
Source: Survey and interviews conducted by Authors.

We note that Lyft only entered the Toronto market in the year prior to data collection, so it may be that the use of multiple platforms will increase over time. However, among those drivers who had experienced Lyft's entrance into the Toronto market, only one indicated that additional competition seemed to have improved working conditions or pay, and several felt their conditions of work had declined. Drivers explained that it appeared that the platforms prioritized competition for passengers, leading platforms to make greater efforts to retain passengers through lower prices, often at the expense of drivers' incomes.

### 6.5.3 Personal connections and social media use

While there is a lack of formal organization among drivers in most North American jurisdictions, our vlog analysis and interviews highlighted the importance of informal relationships. It was common for drivers to describe calling on personal connections to reduce the risks to their own safety. Drivers often emphasized the importance of making sure there was someone available

to help them should they encounter a problem on the road. These connections were typically enabled through digital messenger applications or other digital means. Whereas earlier studies of solidarity between for-hire drivers suggest that drivers relied on other drivers to overcome safety risks, thus creating strong informal bonds between drivers (Hoffman, 2006), our evidence suggests that platform drivers rely much more on personal connections and resources to provide this support, including friends and family. Furthermore, when drivers referenced other drivers as a source of support, they were typically friends prior to becoming drivers.

Diarists encouraged platform drivers to build solidarity with other drivers through social media, including discussion boards and microblogging platforms. For instance, diarist Drive Girl Drive (2017) advises her audience to

> "... look for the Facebook group addressing the job that you're doing in your city. For instance, Doordash Houston, Doordash LA. If it doesn't exist, take the initiative and create that group... share with your community... When you are generous and you are giving to people you are opening yourself up to so many blessings".

Diarists demonstrated how such informal solidarity might work. Videos referencing other diarists often build upon or critique other vloggers' and diarists' ideas. And live stream question and answer sessions hosted by these diarists allow drivers to interact in real time to consider concrete examples or offer emotional support. Vlogs by these diarists showed their audience the value of exchanging ideas and information among drivers, as well as demonstrating ways to solve common problems encountered by drivers on ridehailing platforms.

While it is clear that diarists, themselves active on social media, advocate for using these channels as a strategy for improving working conditions, our interviews told a different story. Few interviewed drivers reported using social media to access knowledge regarding their work. Only four of 22 drivers stated that they reviewed online discussion boards or YouTube videos. The lack of

engagement did not appear to be due to technical barriers or time constraints. Rather, interview participants expressed little interest in spending their time online within such communities and were more invested in using messenger applications with acquaintances whom they already knew. We note that a recent study identifies successful examples of worker mobilization that leveraged social media (Dubal, 2019). However, our results suggest that the use of social media and personal communications platforms as a strategy for improving working conditions may be limited to specific places or sub-populations of drivers.

### 6.5.4 Mobilizing technology

Finally, our vlog analysis suggested that drivers mobilize new technologies as a strategy for improving working conditions on the platform. Such technologies, including both hardware and software tools, give drivers control in areas where they would otherwise be subject to the decisions of the platform and its algorithms. For instance, the use of cameras, where permitted, on the dashboard of the car (dashcams) was a popular strategy among diarists to dissuade poor behavior by passengers. Diarist PrimeTime TV (2018) explained that "when people get in your car and they see that you have a camera, that's the last thing they are going to try to do now is try to lie on you, because you got the truth. You got big brother." Diarists also found value in using dashcams to provide evidence in relation to complaints and disputes registered with the platform. Drivers ay be suspended or even terminated from the platform due to customer complaints (Rosenblat, 2018), thus customer complaints remain a source of major concern for drivers. Dread Pirate Trucker (2018) explained "…it don't take much man. All it takes is for somebody to give you negative stars or hit one of them buttons there 'I had an issue' and that's it man, you're deactivated." While the rationale for using a dashcam is clear, only one-fifth of our interviewees (6 of 30) made use of a

dashcam. When pressed on this issue, drivers reported that cameras were too expensive or that it had not occurred to them to use a camera for this purpose.

Other technologies gave drivers a means of further understanding and managing their use of the platform. Third-party layered-on software was one tool that diarists described using to monitor or manage ridehailing platforms. For example, the application Uber Cheats provides software to monitor platform payments to catch underpayments (https://youtu.be/nNI2kVAyEQ4). Driver's Seat Cooperative provides data for drivers subsidized by sales to municipalities (https://www.driversseat.co/). Another example noted by several diarists was Mystro, an application that allows drivers to filter requests based on variables such as service tier, bonuses, or customer rating. As diarist Primetime TV (2017) explains,

> [Mystro is] supposed to snatch up surge rides... it's going to push the [accept] button for you…It is definitely worth it. It's definitely worth the money because imagine if you're going to run both your apps [Lyft and Uber] on one phone. [With Mystro] You don't have to worry about touching the phone at all.

While many diarists were enthusiastic about Mystro and other layered-on software applications, other diarists noted that these programs could be unreliable since they are not coordinated with the platform's application architecture and software. For example, the design of Mystro allows it to interface with Uber and Lyft through a feature on Google's android operating system designed to adapt applications for individuals with disabilities (Buhr, 2017). This "backdoor" approach to managing platforms makes these third-party applications vulnerable to changes made by the platform. Further, it is unclear how widely these types of strategies are adopted. Our survey of diarists revealed that 21% (6 of 29) used management software similar to Mystro and none of our interviewees were familiar with or reported using Mystro or similar applications. Consequently, while layered-on applications hold promise for improving work conditions, this potential appears to be underutilized.

## 6.6 Opportunities to Support Digital Platform Workers

Overall, our article sought to recognize challenges to organizing workers in the gig economy and identify existing worker strategies where policy makers and labor organizers may engage drivers and build on existing capabilities to secure better workplace outcomes. Our findings revealed that while drivers are subject to the rules of the platform and often lack the support of formal government institutions, such as state employment protections or extensive local regulatory standards, they are not passive actors. Our analysis of vlogs identified that ridehailing platform drivers actively use a number of strategies to improve their working conditions. These strategies fall into four categories: business planning, leveraging competition between platforms, using social media, and using technology to manage the workplace.

However, our findings also show that not all drivers are aware of or use these strategies. Where diarists were proactive about using strategies to improve their work conditions, our in-depth interviews with ridehailing drivers in Toronto suggested a somewhat different story. These drivers were less likely to use the strategies revealed through our vlog analysis and often indicated a lack of knowledge or awareness of these approaches. Moreover, the strategies identified by drivers were primarily individual, technical, and market-oriented strategies and there was little interest in or mention of broader scale collective action. We recognize that ridehailing is a fast-changing industry and that our study precedes the global COVID-19 pandemic. At the time of writing, the longer-term — and likely uneven — effects of the pandemic on ridehailing across different jurisdictions remains largely unknown. However, our results suggest that despite the potential value of collective action, labor market intermediaries looking to support drivers may find dampened responses to calls for collective action. At the same time, a focus on collective efforts that include technical and

market-based elements may help encourage driver engagement, overcome individual limitations, expand driver capabilities, and build solidarity.

Training and education, which are a hallmark of workforce development programs, would seem to be a particularly germane area of intervention. Whether offered by community organizations, local unions or mandated by the local municipality, education and training programs can raise awareness and help drivers to better understand the ridehailing business and develop tools to protect themselves against risks while taking advantage of opportunities. Critics may worry that focusing solely on driver responsibilities may displace the need for structural solutions and maintain existing inequalities between drivers and platforms. However, training and programming aimed at helping drivers understand their costs of operations, improve their income, learn about how interact with ridehailing platforms, and understand how to protect themselves could allow drivers greater voice in setting their work conditions. Such programs have the potential to empower drivers to assert more agency in their workplace and provide a foundation to interact with and learn from other drivers, as well as develop solidarity and collective voice that can potentially develop into collective action over time.

Another example of where new institutions could be valuable for drivers to develop collective strategies is in the realm of data sharing. As noted, drivers can use layered-on software applications to automate and control elements of the ridehailing platforms. Yet, where these software programs have relied on scraping data without any formal collaboration with the platform, it has made these services unreliable and has demonstrated the limits of these institutions. Rulings in the UK and Holland now call on platforms to make some data available to drivers (Lee, 2021). Local and municipal governments could build on this development with support for layered-on software tools where cities have the authority to collect data such as the City of Toronto's mandatory data sharing agreement (City of Toronto, 2021). Where these programs

collect data, the provision of a publicly accessibly application programming interface (API) such as the "Where Are The Taxis" API developed by Washington, DC (Department of For-Hire Vehicles, 2018; Runyon, 2018) could encourage more formal data sharing and software tools for the benefit of drivers. Driver initiatives such as Driver's Seat Cooperative and The New York Taxi Workers Alliance already support such approaches, which build upon the individualized strategies that drivers already use and allows them to be scaled up to generate collective strategies that benefit a wider group of workers.

We note that given the orientation of our research to individual drivers, we are unable to grapple fully with issues related to power structures beyond the perspectives of our participants. Nonetheless, we argue that a focus on individual workers remains valuable to understand how drivers relate to larger structures. Correspondingly, workforce development tools are not likely sufficient to challenge platform power, but they do provide a potential means for organizers to engage drivers and develop new strategies for building worker power that warrant further exploration.

Overall, our article highlights the inherent tensions in the gig economy. Individual workers use coping strategies to reduce potential vulnerabilities and risks arising from the nature of work arrangements supported by digital platforms. However, simultaneously many drivers remain opposed to—or uninspired by—collective action, arguably because drivers view it is as a potential threat to their already precarious livelihood. We recognize that one may a contradiction between noting drivers' lack of interest in collective action and recommending that local governments and labor market intermediaries support broader collective action. However, our point is to document existing strategies and consider how they might be used to build broader interest among drivers for collective action. Thus, we argue that there is an opportunity for local policy makers and labor market intermediaries to improve the balance of power between ridehailing platforms and drivers

by building local institutions and formal structures around individual strategies that drivers may already use.

Extending our analysis to the gig economy more broadly, our results suggest that organizers would benefit from developing tools that are immediately relevant to gig workers and show tangible benefits for workers. We argue that by aligning programs with workers' existing practices and predispositions, organizers can demonstrate what collective worker power means in practice, thus potentially building broader support for collective action. In this regard, care must be taken to meet workers where they are by aligning interventions with the current knowledge, capabilities, and practices of drivers to support the development of worker solidarity in this relatively new social and technical context.

# 7.0 Discussion and Conclusion

This research project examined vehicle-for-hire services organized by ride-hailing platforms and the role of municipalities in sustaining positive outcomes for drivers. While municipalities have a traditional role overseeing and facilitating the private delivery of vehicle-for-hire services, municipal intervention has declined in tandem with the rise of ride-hailing platforms. Now in the lead role facilitating vehicle-for-hire services, ridehailing platforms have produced a system with on-going concerns about the treatment of drivers that risks undermining trust in vehicle-for-hire services altogether. This study assesses the experience of platform drivers following the standard established in Fainstein's just city theory. To this end, the study reviews the capabilities of drivers for how they express or deny the values most associated with justice: democracy, diversity, and equity. The study then seeks to understand whether municipalities can help improve conditions for drivers through reform aimed at building driver capabilities. The specific research questions that informed this study are:

1. What are the conditions facing platform drivers? And to what extent does that reflect justice?
2. How do municipal staff and representatives conceive of vehicle-for-hire services and how have municipalities developed regulations over digital ridehailing platforms?
3. Can municipalities support platform drivers in ways that improve the conditions they face at work?

The study pursues these questions in a qualitative case study analysis of individual drivers and municipal representatives working in a selection of municipalities within a single metropolitan region – the Greater Golden Horseshoe. The analysis examines the perspectives of municipal regulators and drivers regarding how they interact with and contribute to the current vehicle-for-hire system.

In the remainder of this chapter, I will review each manuscript including the methods and findings of the research. I then extend the analysis of these individual research projects to develop broad themes including the assertion of municipal authority over vehicle-for-hire systems, the recognition of weak solidarity between drivers, and identification of ethical tools for policy development over for-hire vehicle services. Conclusions drawn from the studies, then form the basis for policy recommendations to experiment with policy that follows a reformist agenda aimed at enhancing capabilities amongst drivers in ways that reflect diversity, democracy, and equity in the delivery of vehicle-for-hire services. Finally, I will summarize the limitations of this thesis and outline how this analysis calls for further scholarship related to gender and racial dynamics in the industry today; testing effects of municipal intervention; comparing rural and urban interests in vehicle-for-hire services; and the nature of representation within temporary work situations.

## 7.1 Review of Manuscripts and Research Findings

Overall, the study finds that the current platform-oriented vehicle-for-hire system has not positively improved the conditions facing drivers. Municipalities have broken from past approaches to regulation and now leave platforms largely free of oversight. With this freedom, platforms have eased entry into vehicle-for-hire services, enabling greater diversity among drivers. However, platforms have also made the work more precarious. Without the institutions that historically protected drivers, drivers lack the power to create more predictable conditions and stable pay. The study finds that for municipalities that retain the power to intervene in vehicle-for-hire services, there is good reason to regulate for more predictable conditions for drivers.

The study theorizes that re-balancing the industry upon values associated with justice will require capacity building for drivers. For this purpose, drivers as individuals and in groups must be

able to affect industry policy development and administration through leadership roles, processes of political engagement, and representation. In the current context of limited collective organization amongst drivers, the study finds that drivers are most attuned to understand change in the industry through tools and strategies that address immediate needs. The study suggests that policy programs from labour market intermediaries must target tangible results for drivers to demonstrate credibility and mobilize drivers.

*Chapter 4*

To answer the first research question regarding the experience of justice for workers on ridehailing platforms, I performed a qualitative analysis of interviews with drivers in the GGH region. The analysis follows Fainstein's just city theory by identifying how the constituent values of justice - democracy, diversity, and equity - are balanced in the work experiences of platform drivers. Interview transcripts were subjected to a thematic analysis and then analyzed based on the conformity of driver statements to values associated with justice as described by the just city theory. This analysis contributes to the literature by applying a standard of justice that is adapted to the urban milieu to make sense of and balance the values available from ridehailing platform work. It then offers the ethical tools introduced in Fainstein's theory as a foundation for developing and judging policy options.

The findings of the research project show that platform work for drivers is not just. This conclusion is the result of two themes from the analysis. First, platforms force drivers to choose between basic capabilities that are each aspects of a dignified livelihood. Amongst these trade-offs, the study distinguishes a widespread interest amongst drivers to secure a more predictable income while maintaining a flexible work-life balance. However, the study finds that drivers accept a framing of platform work that contrasts secure wages against work-life balance. This trade-off is

not exclusive to platforms, and ridehailing platforms have succeeded in this framing only in the context of a broader labour market that is characterized by vulnerability. The second theme of injustice is the neglect for values of equity and democracy. While ridehailing platforms do extend opportunities for workers to earn money, this study supports past scholarship findings that the resulting opportunities are exploitative rather than enabling (Wells, 2019; Rosenblat, 2018). Workers continue to lack democratic influence over the workplace and are burdened by unpredictable workplace policies and undependable wages. Thus, drivers described conditions in which they were vulnerable to the interests of both platform operators and customers.

The analysis concludes by recommending municipal regulation to support platform drivers by prioritizing equity for drivers. These recommendations are explicitly aligned with the goal of building capabilities among drivers and encouraging more transformative change over time. These recommendations include developing comprehensive training programs for drivers, re-instating due process in disciplinary matters, demanding direct licensure of drivers without platform intermediation, cooperating with professional associations of drivers to develop policy, and developing monitoring processes to oversee how fares are determined and rides distributed.

*Chapter 5*

To examine municipal regulation and the perspective of municipal representatives on their role in structuring vehicle-for-hire services, the research project has drawn from interviews with municipal staff and council members, as well as a survey of municipal reports and local media. Here again, transcripts are subjected to a thematic analysis to extract key themes that describe the perspective of city representatives and the outcomes from their perspectives upon the regulatory regime. This contributes to the literature where it provides a survey of the regulatory system in action across a number of municipalities. This builds upon previous case studies that are generally

focused upon a single large urban centre or oriented to the period of regime change at the point where regulations were transformed to fit the digital platform. The study also helps place platforms into an historical context with respect to municipal regulation of the service whereby platforms represent part of a trend towards market-based governance.

The study concludes that while municipalities require platforms to register, platforms are otherwise free from regulation. The analysis of the interviews and background documents finds that municipal representatives in the GGH region share at least one of two perspectives. They either feel municipalities lack the tools to provide adequate oversight of platforms or perceive vehicle-for-hire services as an essentially private market that is inappropriate for interventionist municipal policy. These municipal representatives also benefit from reduced regulatory responsibilities resulting from the strict oversight that the private platforms place over industry actors. The connection between city bureaucracies and platforms makes municipal representatives unsympathetic to the concerns of market stakeholders. Given the continued controversies that confront vehicle-for-hire services, the study finds the new passive perspective has done little to overcome challenges inherent to the services. In response, the study recommends that municipalities resume greater intervention in the service. The recommendation follows that municipalities should focus on developing new regulatory tools that align municipal regulation with the processes common to platforms to extend regulation over platforms more thoroughly.

*Chapter 6*

To examine the role of cities and other local institutions in helping support platform drivers, this research project considers the case for local workforce development policies. Through interviews with local drivers and a study of drivers who are also English-speaking video diarists from across North America, this study identifies strategies used by drivers to improve individual

conditions at work. It then considers how such strategies might be broadened to be more effective. This contributes to the literature, where it describes how platform drivers build agency or suffer from a lack of agency and how driver agency may be expanded through municipal policy.

The research finds that drivers often cannot conceive of effective strategies to improve their work conditions and feel disempowered to contend with the conditions placed on them by the platform. The paper then finds where drivers do express empowerment, it most often pertains to technical and market-based tools for improving their working conditions. Drivers expressed more credibility for programs where those technical and market-based elements are foregrounded. Given the importance of collective action in the history of labour, the paper concludes that local labour intermediaries and local policy makers can support drivers by using technical and market-based solutions set within collective organizations. Thus, unions or professional organizations that provide education for workers or broaden the application of otherwise individual strategies may find these programs to be a high value proposition for workers, creating a building block for further collective action.

## 7.2 General Themes and Concepts

This case study of ridehailing in the GGH region, drawing upon municipal and media documents and interviews with from drivers and municipal representatives, reveals an array of insights. This section will bring together the findings of the three manuscripts to identify broad themes aligned to a vision of justice in vehicle-for-hire services. Two themes emerge: 1) The contradictory strength and weakness of municipal regulatory authority over vehicle-for-hire services; and 2) the benefit to municipalities in developing institutions that credibly support drivers and address barriers to driver organization. In addition to these empirical themes, the study has

identified conceptual themes that may be used to inform policy development. These concepts entail scoping the marketplace to balance the values associated with the just city through the building of capabilities amongst drivers and non-reformist reforms (Fainstein, 2010). Together these themes and concepts provide tools and a standard to judge municipal policy for vehicle-for-hire services.

### 7.2.1 The Contradictory Strength and Weakness of Municipal Regulatory Authority

The first theme covered here is the atrophy of municipal vehicle-for-hire regulations despite continued authority that municipalities retain. The foundation of municipal power over vehicle-for-hire services in the United States and Canada rests in the delegation of authority from upper-level governments with the purpose of providing a foundation for a service delivery system. The withdrawal of municipalities from regulation has frequently been attributed to the recall of that power by upper-level governments (Collier et al., 2018; Dupuis et al., 2018). However, the findings of this thesis show that, at least in the case of the Greater Golden Horseshoe, municipalities themselves are withdrawing from many aspects of regulation. This withdrawal may partly be attributed to a loss of functional authority to monitor and enforce rules over the industry, as several council members suggested. One example of this is the story of the moderately-sized city of Orillia that lost platform services when Uber claimed a requirement for extra safety screening violated their interests. In that city, the regulations were eventually modified to align with platform goals, though Uber has not since returned to the municipality.

This account aligns with a narrative that cities are disciplined by market power in the neoliberal state (Harvey, 2007). However, this narrative of powerlessness is not evident throughout the region. All municipalities demonstrated an ability to take a portion of ride fees to cover the costs of regulation. And some municipalities had funds available to test new tools for oversight.

Larger urban centres like Toronto and Mississauga have taken steps to re-extend their regulatory apparatus. Even rural townships like Innisfil have taken a role extending services through private contracts with the platforms. The conflicting evidence suggests an alternative explanation is needed. City staff did not corroborate the interpretation that municipalities had reduced authority. Rather, staff tended to describe the newly subdued role of the municipality as a more appropriate orientation where city systems are attuned to a free market vision of the service. This aligns with the trend toward expanded private markets used to govern the vehicle-for-hire industry.

It is not that municipalities are powerless to reform the service, but that reform is controversial and difficult. Where left to the private sector, it removes political pressure on city representatives. Increasingly market or market-like structures have become the preferred solution even when the problem to be corrected is a poorly functioning market. For example, In the QQE era, markets for commercial insurance and the transfer of licenses produced high up-front costs for drivers, leaving these drivers to work long hours. The QQE system was then vulnerable to market disruption where corporate power in the form of platforms was able to step in and secure more affordable insurance rates and market access for drivers.

The combined aversion from municipalities to intervene, and on-going necessity for municipalities to ensure service delivery, has allowed platforms to transform the vehicle-for-hire infrastructure to follow a logic of their creation. In the context of an industry where drivers have long made use of individual strategies applied by large numbers of drivers to secure better outcomes for themselves, the process of platformization has trended toward a private authoritarian style of management. The data available to platforms to understand the actions of individual drivers as well as their strategic position between driver and passenger, enables great control and promises to reduce individualized strategies through control. Given that platform control has not eliminated the challenges facing the industry, the mobilization of interest groups around controversial issues

continues to place claims on municipalities and platforms to protect values such as universality and affordability (Coutard & Rutherford, 2016).

With regard to the poor conditions and pay facing workers, municipalities have a role insofar as they retain authority over the vehicle-for-hire system. This role for municipalities contrasts, but also complements strategies employed by state, provincial and national legal institutions. The mobilization against the misclassification of drivers through senior levels of government has produced important victories for workers (Lee, 2021). But vehicle-for-hire services show that in places employment law can be sidestepped through changes to the organization of the industry. Returning to the example of California, where platform workers were determined by the courts and state legislature to be employees rather than contractors, the platforms altered their system to allow greater freedom for drivers to compete between each other on price. This allowed platforms to avoid the question of employment temporarily while they mounted a political campaign to defeat the legislation. Once successful in consolidating political support for their original platform model, the platforms re-instituted their system of control over drivers and fares. This story shows how platforms can adapt to one dimensional legislative change to preserve their current strategy no matter how undesirable for society at large. As a result, to address challenges along multiple dimensions there remains an important role for local governments to protect urban services and prevent regulatory evasion.

Clearly, the path for municipal regulation is a difficult balance. While in theory municipalities may set limits around market dynamics and develop a standard of justice for the system, this balance must consistently identify how markets or inefficiencies are arising and address the causes and implications of those dynamics within the system. Thus, on top of the municipal regulatory role to provide oversight, there is a role to empower stakeholders to ensure that policies consider the perspective of those who are marginalized and most affected by the policies.

Regulations among municipalities of the GGH region have been largely developed through democratic institutions and elected representatives, but as Fainstein argues, justice cannot be expected to arise unproblematically from democratic processes. We have seen that despite democratic processes these systems have relied upon private authoritarianism to operate efficiently. Justice instead must ensure the qualities of justice are expressed by the capabilities of those marginalized within the system. In section 7.3, I explore strategies to produce more just institutions including direct licensure of drivers to ensure due process; an algorithm review board; and stipulation of fares to be paid to drivers, not just what is paid by consumers to platforms.

### 7.2.2 Municipal Interests in Building Credible Institutions to Support Drivers

In the face of poor pay and unpredictable work conditions for platform drivers, this research has revealed only a weak form of solidarity between drivers that is not consistent with efforts to mobilize for structural change. Driver organization has grown and declined in waves. Within the current system, the institutions of the ridehailing industry further weaken organizational capacity of drivers due to a lack of training, an industry structure that eases entry and exit from the industry, and a system of ride distribution that rewards those who work when others are not working. On this last point, we see an existential weakness for driver organizing. Drivers who only plan to deliver the service for a short time expect other drivers to ignore collective actions and take the opportunity to profit from the high rates when there are few drivers on the road. Thus, drivers suffer from a free rider problem that discourages organization and would benefit from institutional support.

One counter argument to this idea that driver organization is weak and needs institutional support is the collective organization in the GGH region by drivers working at the luxury tiers of service. Among these drivers, who typically invest more in their cars and have greater experience in

the industry, an unofficial union has been formed that is fighting for the right to represent drivers (Kopun, 2019). However, these more professional drivers have explicitly distinguished their interests from the majority of platform drivers operating at the standard tier of service. Among this larger group, we find both untrained and temporary drivers, who have less reason to struggle for change in the industry in which they are just passing through. This positive relation between well-resourced drivers and collective organization suggests the free rider problem acts to compound existing weaknesses in the position of drivers. Therefore, support for drivers to organize would seem to be a valuable component of an equitable marketplace.

The disruptions of worker organization by platforms becomes a problem for municipalities where it signals to drivers that worker solidarity is ineffective and that there is little opportunity for change. From that conclusion, drivers have a greater incentive to pursue individualized strategies centered on manipulating the market. The vehicle-for-hire industry is historically susceptible to misbehaviour performed by a mass of individuals that can undermine trust in the service that is the foundation for the private delivery of the system. Over an extended period, consistent misbehaviour could result in ever worsening conditions and a systemic vulnerability to disruption or loss of service. For the on-going maintenance of vehicle-for-hire services, therefore justice across the system rather than increasing levels of control would seem to be the most valuable priority.

At the same time, strategies for improving work conditions and develop collective organization for workers must be capable and credible to workers. Interviewed drivers were not enthusiastic for policy change that would limit their capabilities. Even where new policies are advertised as support for drivers, those new policies must demonstrate reliability not just good intentions. Otherwise, where municipal institutions are unreliable, drivers might be just as highly incentivized to follow individual strategies. In the past, systems set up in part to support drivers such as the professional licensure, ended up being coopted by powerful interests in the industry. As

recounted in chapter 2, licensure might have supported driver incomes at one point, but once the secondary market for licenses was allowed to concentrate among a few investors, it forced drivers to take on large debts or pay large leasing fees to enter the market (Rosenthal, 2019). Thus, in rejuvenating municipal policy, there is good reason for cities to pay particular attention to marginalized, highly involved actors to represent these voices in regulatory processes. In section 7.3, I explore how strategies like support for driver organizations may address inequality and develop drivers as a group capable of organizing politically for a more just industry.

### 7.2.3 A Scoped Marketplace, Worker Capabilities and Non-reformist Reform

The just city theory yields a number of conceptual tools that are relevant to the governance of vehicle-for-hire systems and the regulation of ridehailing platforms. The just city theory posits an approach to social justice that prioritizes equity, an emphasis the building up resident capabilities, and an approach to reform that leads to transformation over time. The expansion of ridehailing platforms has produced a system that does not conform with this vision. For platforms and their treatment of drivers, it is diversity that has been prioritized and these drivers are given capabilities in some aspects of their work only to give up capabilities in other aspects. Overall, some drivers may be better off today than under the QQE system, with less debt or a more adaptable work-life, but these benefits come with little certainty that their income is secure due to opaque algorithmic processes and disciplinary measures.

Fainstein's theory (2010) recognizes that trade-offs must take place in regard to values to achieve a just city. No system will be perfect, but where values conflict, she argues for a system that emphasizes equity above other values. The ridehailing system provides for ease of entry and exit and therefore enables a wide array of people to try working in the vehicle-for-hire system. However,

following Fainstein's logic, this emphasis on diversity is unjust where the opportunities that are doled out reflect vulnerability and provide no measure for improving one's own conditions. This is precisely the case within ridehailing platforms where workers have few means to effect change at the platform level and suffer from insecure conditions. It is only with a standard of equity in place that values like diversity contribute to justice for working people.

To measure this balance of social values, Fainstein (2010) points to qualitative measures for what gives meaning in life. To understand the value of a particular government policy one must recognize how that policy influences the capabilities of individuals to lead safe and fulfilling lives as well as to honour responsibilities to others. In the case of drivers, these capabilities include the ability to work with safety and integrity, to contribute to determining work practices; to make use of one's practical reason, to integrate work and life, and then to come together with co-workers on a personal level but also to participate in decision making (Kolben, 2010). What is important to cities, is how these conditions set the terms for trust on the part of workers to have faith in the system and continue to operate in good faith through the system. But in addition to this, it is only with these capabilities that the driver can honour their responsibilities to others - and that is to pick up and transport passengers to their destination in a safe and respectful manner (Zimmerman, 2012).

One might misinterpret Fainstein's approach as re-instating past union strategies that focused on growing wages as the primary means of producing equity. But Fainstein (2010) is clear about producing equity though capabilities. Recognizing the diverse range of capabilities that underpin a meaningful life and livelihood, capabilities cannot be determined based on economic terms alone. Rather, driver interests are attuned to balancing one's livelihood and the delivery of a service. Recognizing these diverse goals, Fainstein appeals to multiple ethical standards and references additional tools like the capabilities approach and non-reformist reforms that, together,

multiply the points of contact between data and theory. These points of contact discipline ideas about regulation and reduce the chance that regulators will rationalize ill-fitting solutions where those solutions are convenient or align with the ideals of the powerful. This sets a standard based primarily on use value rather than submitting to the value determined by markets alone. Critically this requires a focus on the service itself rather than the market for determining policy.

In contrast to Fainstein's thinking on the balance of values, tradeoffs should not be accommodated between the essential capabilities of drivers. If they are, it undermines the potential for drivers to be responsible agents. It is precisely this tradeoff of capabilities that led to the change from taxis to ridehailing platforms. Whereas taxi drivers suffered under the high fees of commercial insurance rates, ridehailing platform firms recognized drivers as an unsophisticated class of worker. Platform firms secured changes to the provincial insurance code that enabled lower levels of coverage and then secured platform-wide commercial car insurance coverage for their drivers. Such changes placed platform drivers more clearly within the realm of typical non-professional drivers with private car insurance. And the dynamics of vulnerability led to destabilization within the QQE framework that led directly to platforms.

However, as we have seen, the move to ridehailing platforms has only addressed a symptom of the marginalization of drivers. In the platform system, drivers still suffer from a poor bargaining position, now in opposition to the platform rather than the insurance broker. In moving to platforms, drivers have lost institutions that once protected their interests. And thus, drivers have lost the capabilities these institutions granted in the QQE framework, such as due process and wages that permit a dignified livelihood. As a result, drivers must continue use their own strategies to protect their interests both following the official system and manipulating that system in their favour. And once again vulnerability gets passed along (Chandler & Malin, 2016).

The recognition of platform drivers as unsophisticated market actors describes what is a broader attribute of this class of driver and provides a useful consideration for municipal regulators. Platform drivers deserve institutions more generally that intervene to enable them to function in a market dominated by large platform firms. Without these leveling institutions, drivers cannot be understood as capable of securing their own position in the market, and just as importantly, cannot be understood as capable of honouring their responsibilities in providing the service.

To apply this vision of municipal policy that prioritizes equity and capabilities amongst unsophisticated service providers, we can follow Fainstein where she points to a reformist approach. This aligns with the reformist perspective of the drivers who participated in the study. Drivers supplied a diverse set of perspectives on the industry but were not supportive of disrupting the industry to a significant degree. Rather these drivers wished to simply devise a means to ensure the distribution of revenue from the operations is more even and discipline of drivers is more transparent. Recommendations outlined in section 7.3, below that follow this reformist agenda to building driver capabilities include the support of driver organization, licensure that is independent of the platform, public tribunals, and training and education. Crucially, following Nancy Fraser (Fraser & Honneth, 2003) and Andre Gorz (1964), Fainstein (2010) identifies a particular approach to such reforms that aims at something more than setting standards. Rather Fainstein argues for building reforms upon reforms to achieve the conditions for a more transformative change over time.

To put this in practical terms, the identification of vehicle-for-hire services as a public service could suggest a need to make this service a fully public service, delivered by municipal staff, the way a public library is often operated. However, a reformist approach, would seek not to dismantle the existing structure outright but rather to devise standards or regulations to preserve public values within a private market. The critical step in this formulation of reform – under the label non-

reformist reform - is that the decision making behind those reforms and the methods of enacting reforms must be in the control of those who will most feel the effects to their capabilities. In conclusion, improvements to the distribution of work must be devised largely under the control of workers. Where workers control these processes, they have the power to align policies to the requirements of the system as they experience it. Only such a system has the potential to enable drivers to fulfill their responsibilities, produce trust for all participants in the system, and thus produce the collective benefit that results from living together in cities.

## 7.3 Implications for Planning

The recognition of unfulfilled municipal authority and eroding trust between stakeholders combined with the awareness of ethical tools identified from Fainstein's just city theory opens up opportunities for municipal regulation. First, there would seem to be value to municipal intervention that builds upon the authority of the municipality over service delivery systems. Second, there is a need for new tools, including planning tools, that embrace both technical changes to the industry but also embed drivers and driver representatives into the decision-making positions for the industry.

While scholars of the gig economy have focused on the state accommodated misclassification of workers as independent contractors. The study shows that many of the structures of the vehicle-for-hire system affect the lives of drivers and, therefore, these industry level regulations may provide a target for changing outcomes. This is precisely where municipalities have their authority in the vehicle-for-hire service. For instance, what drivers know prior to accepting a ride influences driver pay, how much time drivers spend at work, and the capability of those drivers to conduct their job with integrity. Thus, regulation over the structure of the service and the markets that support that service are meaningful. It is chiefly through municipal licensure that

policy makers can limit the types of organizations permitted to offer vehicle-for-hire services. These powers then set the terms within which platforms and other organizations of drivers can manipulate their relationship to drivers.

Within the overall regulatory system there is a role for planners to collaborate with regulatory administrators within the municipality. Planners provide a valuable role where they can develop technical aspects of urban systems but also fit that system within a political bargain between stakeholders. In the QQE framework, planning techniques that derived supply and demand from urban variables were used to balance interests through technical parameters like the permitted number of for-hire vehicles on the road. Developing new technical parameters using the tools available through digital platforms would be best within democratic structures. Dupuy (2008) argues planning is most effective where planners know the important linkages in urban systems and find weak points through which they can influence solutions that benefit all stakeholders.

Today, we are seeing signs of planning leveraging platform tools but retaining the use of the platform in a public setting. In the United Kingdom and California, this ideal for public platforms has led to a policy movement calling for "modern markets for all" which sees a need to establish digital labour markets like Uber's within the public sphere (De Souza Briggs & Rowan, 2021; Rowan 2021). Clearly, examples like this are at an early stage. Further research and experimentation will be needed. In the recommendations below I will identify some policy recommendations where that policy experimentation can begin.

## 7.4 Recommendations for Policy Experimentation

I have argued that municipal regulation has value to compensate for a lack of protections at the provincial, state, or national level of government or to complement those regulations. These

new Ontario provincial regulations provide greater protection for drivers. But these reforms fall short of employment protections and do not enable unionization of drivers. These reforms at the provincial level should be welcome to drivers where they provide greater protection from arbitrary dismissal and greater clarity about the operations of the platform. At the same time, without employment protections these reforms are incomplete. What is troubling about them is that they lack a mechanism for worker organization to expand protections. In some ways these new rights stand in the way of full rights for workers if workers feel further mobilization will risks the limited rights that they already gained.

I argue the reformist approach taken by the province is better enacted at the municipal level where they may structure the industry to provide better conditions for drivers without blocking full employment rights. To be effective regulations should provide a means of worker influence through representation and oversight of the industry. The recommendations here provide options for regulation that would complement employment protections. These recommendations address opportunities and challenges in the current system by offering policies that promote values associated with justice while building capabilities among drivers to preserve and build on drivers interests over time. These recommendations build on the themes identified in the research: to develop tools of municipal oversight and authority and to subject those powers to mechanisms of worker solidarity. To these ends, equity and democracy are the two values that should be prioritized (see table 7.1).

Municipalities have been described as a laboratory for policy development given their large numbers and small scale (Davidson, Finck & Infranca, 2019). The recommendations below follow through on the goal of this study for further hypothesis development for a more just workplace for vehicle-for-hire drivers. The recommendations include calls for a return to past regulatory institutions but also draw out new institutions based on recent examples or interpretations of

municipal authority within existing Ontario legislation. The recommendations are not best practices identified from multiple case studies or a unitary policy that can be enacted across all venues. Rather, the recommendations lay out the framework for reforming the current platform-oriented vehicle-for-hire system by building capabilities among drivers and developing constituencies that may bring about further change over time.

Table 7.1: Measures of Justice for Vehicle-for-hire Policy Reform

| Recommendation | Developing Values | Capabilities Supported | Source of Credibility and Expanding Value | Basis of Authority |
|---|---|---|---|---|
| Direct Licensure | Democracy & Equity | Work with safety and integrity | Ties licensure to democratic institutions. | Regulation of service quality and quantity. |
| Quasi-judicial Tribunals | Equity | Work with safety and integrity | Ties discipline to due process. | Regulation of service quality. |
| Support Driver Organization | Democracy & Equity | Worker co-association | Allow workers to inform regulatory approach., funds drivers to participate in industry development. | Regulation of service quality. |
| Training and Education for Drivers | Democracy & Equity | Use of practical reason, worker co-association, work with safety. | Fund organizations that represent drivers to provide training. | Regulation of service quality. |
| Support for Layered-on Software | Democracy | Use of practical reason | Open API for software providers providing new tools for drivers. | Regulation of service quality. |
| Discipline | Equity | Worker voice | Place workers in a position of oversight | Regulation of service quality and fares. |

| Recommendation | Developing Values | Capabilities Supported | Source of Credibility and Expanding Value | Basis of Authority |
|---|---|---|---|---|
| Fare Monitoring and Algorithm Testing | Democracy & Equity | Work-life balance; worker voice | Verify service outcomes and regulate payment to drivers not just to platforms. | Regulation of fares. |
| Algorithm Review Board | Democracy | Use of practical reason, work-life balance, worker voice | Include drivers as board members. | Regulation of fares. |
| Municipally operated platform | Democracy, Diversity & Equity | Worker and resident voice, Work-life balance. | Delegate responsibility for platform facilitation to boards with driver representation. | Regulation of service quality, quantity, and fares. |

### 7.4.1 Updating Past Regulatory Tools

These recommendations are identified among past regulatory tools that may continue to have value today. Further research and experimentation will be required to understand how these tools interact with ridehailing platforms in contrast to past taxi operations.

*Direct Licensure*

The licensure of drivers by municipalities has been a long running strategy in QQE to control the number of vehicle-for-hire drivers/cars on the road and place demands on those providing service to maintain a high level of service. The move to license drivers through affiliation with a platform means drivers have no standing in municipal regulatory procedures. Interviews with drivers

showed these drivers had no interactions with municipal regulators at all. At the same time, the requirement for affiliation creates a hierarchy between the platform and driver exercised through the rules of the platform algorithm (Lee et al., 2015). The control exercised by platforms was the subject of numerous complaints from drivers in the study. Their experiences suggested drivers were often unable to exercise their practical reason to the job and could have their personal integrity and safety undermined by their lack of control. An alternative regulation for cities would be to require platforms to distribute rides to drivers from a roster of municipally licensed drivers, thereby requiring the municipality to direct disciplinary actions. Such an approach would re-install a democratically controlled institution at the centre of the vehicle-for-hire service and eliminate one function of the platform that intimidates and marginalizes drivers.

*Quasi-judicial Tribunals*

Quasi-judicial tribunals administer a system of due process in disciplinary matters and provide and venue for drivers to represent themselves. Driver participants complained that platforms can remove them from the platform as a result of low driver ratings or even a single passenger complaint – something that could be brought about by any number of legitimate but also illegitimate idiosyncratic reasons. This process of removing drivers from the platform, is largely opaque, provides little to no means for drivers to defend themselves and causes drivers to act deferentially to customers to a dangerous extent. Though tribunals may present costs onto small participants, at their best, tribunals allow grievances to be laid out publicly and enable those accused to provide a rationale and defense for their behaviour. Numerous drivers complained that there were not currently any mechanisms for drivers to defend themselves from complaints. Where successful, tribunals provide drivers with greater certainty and stop drivers from being subject to unilateral decisions of a platform without the ability to represent themselves or retain qualified

representation. Moving forward, such a system might also encourage greater driver solidarity as dismissals from the platform would be more transparent and less likely to result from things like labour action or a disagreement with a single customer.

*Training and Education for Drivers*

Requirements for training is one way to improve service quality while investing in workers. This requirement would give drivers a greater understanding of the industry overall and enable drivers to gain greater mastery of the necessary skills to operate with safety and integrity, apply practical reason to the job, and preserve their interests in the marketplace. The City of Toronto has already concluded that greater training is needed to provide a safe and high-quality service. However, given the poor understanding of the industry economics professed by drivers, training could provide more value to drivers in topics like how to operate as a small business; how to represent oneself with respect to the platform; how to strategize in using the platform for better outcomes at work;, what supports are available to drivers; how other software that is useful in the work; or even how drivers can organize as a class. Altogether, training and education has the potential to put drivers in a better position to democratically influence vehicle-for-hire services and develop the skills necessary to understand the industry on par with platform representatives.

### 7.4.2 Emerging Regulatory Tools

These recommendations emerge from limited examples applied to the service today. Further research and experimentation will be required to understand what types of communities may benefit from these tools and the degree to which municipalities will benefit from their use.

*Support for Driver Organization*

Organizations that represent drivers, whether they are a union or professional organization, provide the potential to systematically influence policy makers on behalf of drivers, oversee policy delivery, represent drivers facing discipline and inform drivers of their rights. Without representation driver reactions to unfair conditions are limited to individual strategies. And while these strategies might be widespread, they will be unpredictable for drivers and undesirable for municipalities that seek dependable services. A focus on driver organization serves municipalities where it represents driver interests, helps encourage drivers to continue operating in ways that build trust in the service, and creates a vector for bottom-up democratic oversight of the service. Municipalities may have several policy opportunities that could encourage driver engagement and group representation. We will identify just a few ideas here, but further research should be undertaken to understand how drivers could develop group coordination and thereby insert more diverse interests into the governance of vehicle-for-hire services.

Support for driver organization could take the form of a regulatory requirement that drivers be represented by a union. However, municipalities have little control over unionization and other components of employment law. Alternatively, municipalities can play the role of intermediary between drivers and platforms where there are no unions. In these contexts, support could take the form of a traditional planning relationship. Drivers organized in a professional association advise the city as a key stakeholder and the city may then place demands on the platform through regulatory policy. In New York City, where this approach has been taken, worker organization and collective bargaining has been applied through city regulations because of engagement between the city regulator and a driver union and driver guild (Johnston, 2018). This has led to minimum wages for drivers in the city and a limit to the numbers of drivers on the road. This model of labour

action connecting driver associations with municipal regulators has created a new venue for labour protections that supports driver organization even among temporary drivers.

*Support for Layered-on Software Applications*

Driver diarists demonstrated the value of using digital tools controlled by the driver to help those drivers navigate the platform and automate portions of their work. Such tools can empower drivers to budget more effectively, accept rides without pulling their attention from the road, and communicate with other drivers. Unfortunately, interviewed drivers described little experience with these programs despite their benefits. Institutional support for layered-on software, could come through driver training but could also come from opening up access to portions of the platform system. For example, in the District of Columbia the Department of For-Hire Vehicles has created an application programming interface called "Where Are The Taxis?" that may then be opened up to third parties and their layered-on applications (Department of For-Hire Vehicles, 2018; Runyon, 2018). This particular program in D.C. not only raises the capacity of taxis to compete with platforms by offering similar services, but the program also creates a way for driver organizations and private actors to empower marginalized actors in the market.

Interviewed drivers were motivated by technical and market-based solutions to the challenges they faced on platforms. Ensuring new technology is geared to drivers, not only consumers and platforms, is a worthwhile goal for regulators and other labour market intermediaries. Layered-on software with access to platform data may help identify and target positive outcomes for drivers at scale. In addition, though software solutions may empower individuals and dissuade drivers from organizing collectively, software may also be used by labour-market intermediaries to create value-added programs to help drivers. Such programs may be a foundation for building membership and supporting collective action. Thus, technical services for

drivers through layered-on software may give labour market intermediaries a foundation for collective organization by building faith in their organization and developing interest in other collective projects.

*Platform Discipline*

Vehicle-for-hire services have long depended upon discipline through the municipality to maintain high levels of service and trust within the system. Municipalities have largely removed themselves from disciplining drivers, however, discipline remains central to the platform regime. Drivers are graded by customers, subject to complaints, and subsumed to an opaque system of ride distribution and pricing. In contrast, platforms in this case study were not much constrained by regulatory discipline adding to the lack of equity in the system. Participating municipal representatives identified just one means of disciplining a platform and that was to remove the platform's license to operate.

Municipalities that are interested in producing change in the ridehailing platform system must identify new tools to regulate platforms. A system where the only tool of discipline is to revoke licenses is limited to an extreme form of punishment that would be equally as damaging to a municipal administration as it would be for the platform removed. Cities like London, England have revoked licenses; however, London is a very important marketplace, and that power is not shared by municipalities in other contexts. An alternative set of disciplinary tools that municipalities could develop is to identify a range of penalties for platforms that would allow penalties to be applied in a stepped-up fashion as offences are incurred. Such penalties should be devised such that they are not downloaded upon drivers. Thus, short term license suspensions over a single weekend, or restrictions on where within a city a platform can operate, or suspension of certain

tiers of service for a period could provide less disruptive strategy for city operations even as it punishes the platform and shifts consumers/drivers to other platforms.

### 7.4.3 Speculative Regulatory Tools

The following are potential tools for regulating vehicle-for-hire services that align with the just city theory and conform in general terms with the authority of municipalities in the Province of Ontario today. These recommendations were not identified in the data but insofar as they align in theory, they may be a useful set of tools for policy experimentation.

*Fare Management and Algorithm Testing*

Regulation of vehicle-for-hire services has historically placed limits on the maximum and minimum fares that could be charged and the number of drivers on the road. This created a central standard for the affordable delivery of the service, defended the wages of drivers delivering the service, and instilled trust in the system. Alternatively, the vehicle-for-hire system based on ridehailing platforms allows fares and numbers of drivers to vary to maximize transactions. This has led to increasingly precarious conditions for drivers with falling pay and downloading of risk for drivers. To preserve wages in this context, and build trust from drivers, intervention in platforms would require returning to limits or influencing how ride matching takes place. However, Calo & Rosenblat (2016) note that oversight of platforms is difficult to achieve due to the individualization of algorithm executed on the platform. Whereas overall price and wage averages may not appear exploitative, platforms may target niche populations with individualized pricing or wages that insert exploitative practices.

Due to the lack of transparency from platforms, Calo & Rosenblat (2016) call for investigative procedures applied at the scale of the individual platform participant for regulators to monitor the platforms effectively. Such powers could also be extended to labour organizations, giving them the ability to monitor platform conditions and gather evidence for policy development. Such investigative powers were not proposed by participants; however, these methods could help make sense of driver frustrations regarding poor pay and lack of clarity about the distribution of rides. With greater transparency drivers as a class could gain access to more equitable conditions and build worker power to hold platforms to account with improved data and evidence.

*Algorithm Design Review Board*

Another institution that might provide an effective means of overseeing fares could be a review board tasked with examining the algorithm that distributes rides and prices the service. Such a review board composed of industry experts, including drivers, could be tasked with interrogating the algorithm and the firms behind those algorithms, to provide recommendations to staff and council members regarding policy and the expected impact of the algorithm on urban development. This concept takes its cue from design review boards typical of the municipal regulators of the land development industry. Given that digital infrastructure is just as important to shaping urban space as the material components of those spaces (Ash, Kitchin & Leszczynski, 2018), a greater emphasis on how the algorithm is composed should be subject to public debate of a high order.

While algorithm design review boards were not suggested by participants, the idea does align with the just city where it would create a venue for drivers and other experts to provide input into what determines the workplace. An algorithm design review board could provide a public

venue to allow for more conceptual and qualitative discourse about how ridehailing platforms and provide a means for drivers and driver representatives to engage with and shape the system.

*Municipally Operated Platform*

To achieve more democratic, diverse, and equitable institutions municipalities may require greater control of the platform infrastructure to integrate policy and service delivery. In many jurisdictions, municipalities retain the authority and duty to regulate vehicle-for-hire services. Yet municipalities lack practical control over many elements of the system where platforms maintain opaque practices or adapt their practices to evade regulations. Greater control of vehicle-for-hire services could be initiated by installing a democratic institution at the centre of the industry in the form of a municipally operated platform. Such a system would enable drivers to offer vehicle-for-hire services, while using the platform to regulate quality of service, quantity of drivers and affordable fares through the platform. Though public digital labour markets were not suggested by participants, such as system would open numerous technical tools to municipalities to improve services including data analytic; tools to implement subsidies or cross-subsidies to various groups within the market; and technical caps to the numbers of drivers on the road, among other things.

Public digital labour markets are gaining interest in policy circles, where "Modern Markets for All" programs have been trialed in the United Kingdom and California (De Souza Briggs & Rowan, 2021). This approach to flexible labour markets seeks to provide neutrality between users, privacy for participants, open data for researchers and unions, and accountability for drivers and residents. Proponents of these markets claim they could be structured to correspond to minimum wage and other employment laws; to integrate with social services, to support skill development by rewarding reliable service delivery or tying job eligibility to credentials.

There are many possible approaches to developing a municipal platform. A municipal platform could be given a monopoly over the distribution of vehicle-for-hire services. Alternatively, a municipally controlled system could be applied in competition with incumbent private platforms and thereby provide a public option for drivers and riders. Such a system would create a tangible alternative to drivers and riders who find fault with commercial platforms and would create an arena where policy alternatives could be enacted in practice. Further research and experimentation will be required to understand where municipal platform control is effective and where it is not.

## 7.5 Current Conditions in Ontario

The vehicle-for-hire industry has undergone tremendous change as the world continues to grapple with the changing business landscape of COVID-19. In the City of Toronto, the number of active drivers fell from approximately 90,000 drivers in 2019 to just 29,000 in 2020 and recovering to 48,195 in 2021 (Rider, 2021). Throughout the pandemic drivers in many jurisdictions particularly in the United States suffered from poor access to healthcare – laying bare the vulnerability such inequalities add to the society broadly. These front-line workers became identified as a point of transmission for the virus at the same time as the drivers themselves languished from low levels of demand for the service and an inability to access unemployment insurance (Katta et al., 2020; Roose, 2021; Rider, 2021).

Recent legal re-interpretations of employment law regarding the gig economy in countries like France, Spain, and the United Kingdom, have re-classified platform drivers as employees or workers rather than independent contractors. However, where these new rules apply to one single mechanism – employment law – they are vulnerable to revanchist politics (Smith, 1996). The experience of California, with platforms altering their production practices in tandem with a well-

funded political campaign, demonstrates just such a revanchist strategy that successfully overcame employment regulations (Bhuiyan, 2020; Bellon and Vengattil, 2020).

In Ontario, new legislation called the Working for Workers Act, 2022 has been introduced to update employment law for platform workers. This legislation proposes a minimum wage for time spent working on the platform but does not include time spent waiting for rides; demands clarity regarding how pay is determined and how work is allocated, and adds some protection regarding workplace disputes (Ontario, 2022). Other recent changes include an agreement between Uber and the United Food and Commercial Workers Union to have that union represent drivers in disputes in Uber's arbitration system (UFCW, 2022). This agreement aligns with agreements made between unions and Uber elsewhere, where Uber provides the union access to workers under the stipulation that there be no collective action or bargaining (Lichtenstein, 2021). While these provisions are new and untested, Darrah & Nesbitt (2022) note that these measures resemble Uber's own Flexible Work + plan, which that company promoted as an alternative to employment status for workers. In the case of Ontario, it is notable that employment status is not provided to platform workers and representation for workers continues to be structured by arbitration funded by Uber. Measured against the just city, this legislation fails to create the obvious institutions that would allow drivers to direct change and grow institutions that protect their interests. However, as these rules are applied in practice, components such as the transparency of the platform algorithm could yield practical value to drivers, that isn't obvious today. Municipalities and drivers are not just along for the ride, they each have strategies available to them to help direct change in the vehicle-for-hire service.

## 7.6 Limitations and Further Scholarship

This research comes with limitations that should not be overlooked and in many cases there is further research needed and further experimentation required to identify appropriate policy choices. First, the results of the research reflect a sample of perspectives from a single region with a particular legislative context for vehicle-for-hire regulation. There are many different local contexts that bear upon the delivery of vehicle-for-hire services. For example, vehicle-for-hire services may be regulated at the state level rather than the municipal level of government. Different states will have different approaches to regulation that may or may not resemble what was described in the QQE approach that is used here to represent a general standard of authority over the service.

Second, within this sample there were biases particularly regarding the recruitment of drivers. Drivers were recruited largely from among those waiting at an international airport in the GGH region. Whereas this location is a common destination for drivers, provided a location that is attended by drivers from across the entire GGH region, and facilitated interviews due to the long period of time that drivers had to wait in the location, the location may also have reduced the number occasional drivers in the sample who may be uninterested in waiting over an hour for a long-distance ride.

Third, the research did not adequately explore the intricate relationship between vehicle-for-hire services, race, immigration status, ethnic communities, the labour market, and local politics. Though the analysis of data was informed in part by the literature on community-labour coalitions that has widely relied on organization from ethnic minority groups, there was little in the data that clearly distinguished the views of ethnic minorities from those who were born in Canada and/or are white. This is due to failures of the data collection methods. When drivers were interviewed and asked if they were visible minorities, the responses were nuanced. The small number of participants

in the interviews did not yield sufficient numbers to yield meaningful analysis between groups. Given that past models of labour exploitation in the field have rested upon a racial axis and even divided groups of drivers from one another (Blasi & Leavitt, 2006), this is a particularly important limitation that requires further research. Some common ethnic groups were encountered in the interviews among drivers. These interviews did not yield much evidence of the ethnic group community organizing, however evidence from elsewhere regarding the taxi industry suggests ethnic group organization has been relevant to the service in the past (Vasconcelos & Hall, 2021). It is very possible a more concentrated line of questioning, with a focus on organizations centered on the community groups with high numbers of drivers would yield different results. Alternatively, research could examine how groups that support various ethnic groups that have large numbers of participants in vehicle-for-hire services, have engaged with drivers or not.

Fourth, while recommendations have been made with input from the research findings, these policy solutions have not been studied to identify which will be the most successful in addressing the challenges of vehicle-for-hire services. The research is limited to individual perspectives on the industry, how those perspectives have steered the regulatory regime and how individuals respond to that regime. Solutions thus may miss some real systemic solutions that could address the challenges documented above. This is partly due to the novelty of the ridehailing regime. Many of the municipalities documented in the research project had only recently developed regulations and had yet to conduct any form of review on the effectiveness of that regulation. Among cities that had conducted a form of review, the second round of regulatory review had not been implemented at the time of the thesis. For this reason, the research project leaves significant room for comparative analysis between different jurisdictions and how they address these challenges.

Comparative analysis was not included in this study partly due to the novelty of the regulatory regime but also due to the limited scope of inquiry. One comparative dynamic that this study shed some light upon is the difference in policy options available to municipalities in the city centre, compared with those in suburban centres and the ex-urban fringe. An hypothesis that emerged early in the analysis of interview data was that smaller municipalities would have less power to regulate and therefore be more permissive of operators. However, while there was some evidence to support this hypothesis, the relationship appeared more complicated. Ultimately, the small number of municipalities in the study and lack of diversity between regulatory strategies within the case study made comparisons difficult. As the interviews and literature on vehicle-for-hire system proceeded it became evident that platforms may be somewhat ineffective in rural settings due to the lack of density to match passengers and drivers, which may limit their power. To understand how regional geographic patterns interact with regulatory opportunities, further research is required and must likely examine multiple regions where there is significant diversity in regulatory strategy.

Another important subject that merits further investigation is the potential for driver cooperatives as an opportunity for worker self-actualization. Driver cooperatives are a valuable form of organization for municipalities to work with and encourage where these organization can represent the interests of workers and direct that interest productively. Enthusiasm for cooperatives has extended to the discourse surrounding platforms in general. 'Platform cooperativism' looks to take the technology of private digital platforms and change their ownership structure to create more democratic organizations. Many platform economy scholars identify platform cooperatives as a means of addressing the marginalization and exploitation of workers (Scholz, 2016). However, examples of platform coops elsewhere are at an early stage of development. There are none operating within the GGH region, and none were mentioned by participants.

There is a legacy of cooperatives within vehicle-for-hire services and evidence that cooperatives were a growing movement at the time ridehailing platforms entered the service (Borowiak & Ji, 2019). Yet, divisions within coops of the past have shown that these structures can harbour exploitative practices themselves. Evidence from digital platform cooperatives also suggest there existing successful platform cooperatives have significant challenges in regard to group dynamics (Schor, 2016). The division of interests between groups of various capacities or stages of life even among workers, can result in conditions and policy choices that require political intermediation. In cooperatives, this political intermediation is a private process and thus a focus on these structures by governments may lack the public institutions that ensure group dynamics are maintaining values like equity, democracy, and diversity – though certainly not impossible.

The final area of research that I highlight is the need to understand is how political engagement or representation of platform drivers can be achieved for municipal institutions supporting vehicle-for-hire services. An emphasis on supporting driver capabilities and the gradual expansion of reform places a heavy burden upon achieving successful engagement and representation. In this thesis we have discussed the emerging literature that documents collective organization of gig workers (Johnston, 2018; Lichtenstein, 2021) including discussions of how labour organization connects with individual drivers (Dolber, 2019a). However, the analysis of how worker voice is applied to the vehicle-for-hire industry is not well explored. Challenges to engagement and representation of drivers comes from the temporary commitment of many drivers and the constant churn in driver population. This thesis demonstrated a lack of connection between drivers and any labour market intermediaries. In addition to strategies for labour organizations to develop means to attracting driver interest through tools and training, there may be value to encouraging engagement both with current workers but also community groups that represent that commonly become platform drivers. Such an orientation to community-labour

coalitions recognizes one niche of platform work in the labour market where it provides temporary work to residents at unpredictable periods of time. It is unclear how such a broad orientation to representation would be expressed or how that might change policies, but further research should be done to explore this dynamic. Given the unique context of vehicle-for-hire services, this research should be tailored to the vehicle-for-hire industry but also expanded to other local urban services where platforms have come to market dominance.

## 7.7 Conclusion

Vehicle-for-hire services play an important role for municipalities in providing urban connectivity. In the past, this motivated regulation that encouraged a market for this service and permitted private actors to provide what might otherwise be a public service. Thus, taxis were both private businesses and "public" cars. This approach to regulation has now been remade following the logic of the digital platform. Scholarship and policy debates about this change have tended to focus more generally on the gig economy and misclassification. This has yielded important insights and generated a new policy agenda at the national, state, and provincial levels of government regarding platforms and platform work. However, due to their historical facilitation of the service, municipalities also have an important role in the ongoing regulation of ridehailing platforms either supplementing or complementing regulations at other levels of government. It does so by identifying how private and public processes are applied to the specific application of the local service and supplementing those systems with additional rules and regulations at the local scale that apply directly to the delivery of the service. Certainly, municipal vehicle-for-hire policies have not always produced just conditions – particularly for workers. However, a focus on justice as a

balance of equity, democracy and diversity applied to the capabilities of drivers and expanding those capabilities over time provides a valuable opportunity for achieving better.

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# Appendix

## Interview Questions with Drivers

> Note: the primary questions for all interviews are numbered (1 to n) below. Interviews are semi-structured and the phrasing of questions may change based on the conversation. Where answers are brief or do not touch on particular issues that I believe are important for this research, I will prompt participants with additional questions signaled by letters (a to z). Additional follow-up questions will be asked to clarify the driver's response particularly where there is conflicting information.

Introductory Script:

This research is looking at the experience of drivers on private transportation companies (also known as digital ride-hailing platforms or rideshare applications), like Uber and Lyft. My research looks at the strategies drivers use to improve their work conditions on these ride-hailing platforms and how these strategies translate between neighbourhoods and between drivers with different levels of resources.

This interview will be approximately 60 minutes long and, with your permission, it will be audio recorded for accurate transcription later. If we are short of time today missed questions could be completed by email. Also with your permission, quotations from these notes will be used in publications but will be attributed to a pseudonym to maintain confidentiality. Physical notes from this interview will be kept in a locked cabinet and held for a minimum of seven years before they are destroyed. Audio and digital notes will be kept in an encrypted folder on a password protected laptop computer. Files that identify individual participants will be separated from the audio recordings and notes no later than a week from the interview date. This identifying file will be held in a separate and unrelated folder from any data from the interviews. All folders will be encrypted on a password-protected laptop computer.

Does that sound ok? Please take a moment to read this consent form and sign if you consent and are ready to begin the interview.

[time for participant to read report and sign consent form]

Alright, thank you. I will begin recording now and we can begin.

## Background

1. How long have you been a driver on ride-hailing platform(s)?
2. Why do you work on ride-hailing platform(s)?
3. What is your employment status? Aside from PTC driving you are:
    a. Working full-time;
    b. Working part-time;
    c. Going to school
    d. Unemployed or laid off;
    e. Caregiver full time;
    f. Retired
4. Do you think of yourself as an employee of (the ride-hailing company) Uber/Lyft?
5. What other responsibilities do you have? (family, caregiving, other personal businesses?)
6. How long will you continue driving?
7. What is your postal code?
8. What is your gender?
9. How long have you lived in Canada?
10. Do you consider yourself a visible minority?

## Resources – This segment is filled in by the driver. Once answers are received the page is folded and verbal questions will continue.

11. Please circle is your household's approximate yearly income?
    a. Under $20,000;
    b. $20,001 to $40,000;
    c. $40,001 to $60,000;
    d. $60,001 to $80,000;
    e. $80,001 to $100,000;
    e. $100,001 to $150,000;
    f. More than $150,000;
    g. Prefer not to answer
12. Please circle the percentage of your personal income is from working on ride-hailing platform(s)?
    a. Uber 5%
    b. 6% to 25%
    c. 26% to 49%
    d. 50% to 74%
    e. 75% to 89%
    f. 90% to 100%
13. Do you rent, lease, borrow or own your own car?
14. Do you receive benefits from other employment or through a family member?
15. Do you have any debt due to driving with ride-hailing platforms?

## Rideshare Operations and Strategy

16. How do you choose where you will drive?

17. How many hours do you work per day?
18. What is your main strategy for making money while driving?
    a. Time of day?
    b. Locations?
    c. Long rides?
    d. Follow surge pricing?
    e. Bonuses?
19. Are you selective about the rides you take?
    a. How do you choose what rides to take?
    b. What info do you wish you had access to about rides before accepting?
20. What are your main costs of driving on ride-hailing platforms?
    a. What percentage of revenue is spent on Gas?
    b. % on Maintenance?
    c. % on Traffic Tickets?
    d. % on Cleaning?
    e. % on Insurance?
    f. Depreciation costs?
    g. Are there other significant costs?
21. How do you minimize or lower these costs?
22. After expenses how much do you think you make per hour?
23. Do you use any software to manage the various ride-hailing platforms (like Mystro or UZURV)?
24. Have you ever connected with passengers to work independently after they found you on a platform?
    a. What is your insurance situation in these cases?
25. How do you maintain your security when driving?
26. Are there any other strategies you use?

## Platform Marketplace

27. Do you drive on one or multiple platforms?
    a. Which platforms do you drive with?
    b. What makes one platform better than another?
28. How has the entrance of Lyft changed market conditions?
29. Do you work with platforms outside of the ride-hail industry - like delivery, odd-jobs, cleaning?
30. Have you thought about what work you could do if you weren't able to drive on ride-hail applications any longer?

## Relationship to Platform and Other Drivers

31. How do you contact the platform in order to address a concern?
    a. Are they responsive?
32. Have you ever been disciplined by a ride-hailing platform?

    a. Time outs?
    b. Suspension?
    c. Not paid for a ride due to passenger complaint?
33. How do you communicate with other drivers about problems and ways to solve them?
    a. Any online groups?
34. Do you have any direct contact with the city who regulates the ride-hail industry?
35. Have you had much contact with police in your role as a driver?
36. What other ways could you influence the ride-hail industry?
37. Have you thought about the benefit of a union or professional association for rideshare drivers like you?
38. Do you participate in any online protests against ride-hail platforms, like #deleteuber?

## Opinions on Pricing

39. How do earnings compare to when you began?
    a. What are the major changes?
40. Have you seen the disconnect between what riders pay and what drivers get paid on platforms using upfront pricing, what does that make you think?
41. Have you heard of new (flat) surge that is being tested in some markets?
    a. What do you think about it?

## Policy

42. What are the biggest problems you face as a driver that you want to change?
43. Given the following policies which would be useful for you?
    a. More control over pricing
    b. Knowing more about rides prior to ride selection
    c. Cheap commercial insurance and personal licenses to do your own ride-hail business
    d. To join a union
    e. Limit the number of drivers
    f. Minimum wage
    g. Others
44. Would you trade the ease of getting started with rideshare work (added costs, limits on driver numbers) in exchange for more workplace stability (stable wages)?
    a. How about in exchange for greater security (fingerprinting, centralized dashcam setup)?

## Interview Questions with Municipal Staff

> Note: the primary questions for all interviews are numbered (1 to n) below. Interviews are semi-structured and the phrasing of questions may change based on the conversation. Where answers are brief or do not touch on particular issues that I believe are important for this research, I will prompt participants with additional questions signaled by letters (a to z). Additional follow-up questions will be asked to clarify the staff person's response particularly where there is conflicting information.

Introductory Script:

This research is looking at the position of digital ride-hailing platforms or private transportation companies, like Uber and Lyft, and the role of municipalities in regulating these platforms – especially as it relates to the outcomes for platform workers. Ride-hailing platforms provide a set of useful tools that are an increasingly important part of a cohesive ground transportation system within and beyond municipalities. There are a number of policy areas, however, where municipal interests may need to be protected. As a result, municipalities may have a role in the regulation and development of programs that manage local economic impacts, transportation inequalities, and safety concerns regarding ride-hailing platforms.

This interview will be approximately 60 minutes long and, with your permission, it will be audio recorded for accurate transcription later. Interview length may vary, as not all questions will apply to your expertise in the field. Please answer only those questions which you feel comfortable answering. If we are short of time today missed questions could be completed by email. With your permission, quotations from these notes will be used in publications but will be attributed to a pseudonym to maintain your confidentiality. However, bear in mind that, given your unique position it may be possible for a sufficiently motivated person to piece together your identity from what you share. Physical notes from this interview will be kept in a locked cabinet and held for a minimum of seven years before they are destroyed. Audio and digital notes will be kept in an encrypted folder on a password protected laptop computer. Files that identify individual participants will be separated from the audio recordings and notes no later than a week from the interview date. This identifying file will be held in a separate and unrelated folder from any data from the interviews. All folders will be encrypted on a password-protected laptop computer.

Does that sound ok? Please take a moment to read this consent form and sign if you consent and are ready to begin the interview.

[time for participant to read report and sign consent form]

Alright, thank you. I will begin recording now and we can begin.

## Background and context?

1. What is the history of your municipality's intervention into ride-hailing platform industry?
    a. What motivated the intervention?
    b. What were the steps taken to identify intervention in the platform economy?
    c. Who provided input into this policy?
    d. Who led this process?
2. How would you describe online ride-hailing platforms?
    a. Who are the key actors taking part in these platforms?
    b. And how do they interact?
3. Would you be able to provide me with some general statistics regarding numbers of rides and drivers using ride-hailing platforms in your municipality?

## Municipal Policy – Goals and Mechanisms

4. Your municipality regulates ride-hailing platforms and has certain policy goals: What policy areas are relevant to ride-hailing platforms? And which are pursued explicitly in your by-laws/regulations?
    a. Consumer protection?
    b. Licensing - number of drivers?
    c. Insurance?
    d. Health and safety?
    e. Local economic development?
    f. Transit?
    g. Use of road network and traffic?
    h. Other?
5. What actors are targeted by municipal policies?
    a. Can you separate the policy areas where drivers are targeted in by-laws and the policy areas where platforms are targeted?
6. What are the mechanisms (benefits and penalties) that enforce compliance?
7. What fees are taken from platforms and drivers and how are those fees allocated?
    a. How do costs compare to what is taken in by fees (staff time and financial resources spent)?

## Policy Outcomes and Monitoring

8. In what ways are you monitoring the success of your policies?
    a. What metrics are being used?
    b. Who is collecting the data and how do your municipality access the data?
    c. Do you access individual cases or aggregated information to find trends?
9. What is the value of platform ratings? Is that an accurate measure of the value of service?
10. The mayor of Richmond, B.C., which is facing several illegal ride-hailing applications has said regulating these applications is "like trying to grab smoke". What do you think of this comment?
    a. How are municipalities able to raise their capacity to regulate ride-hailing platforms?
11. In what ways has your municipal policy been able to direct change in the industry?
12. What are some of the challenges you have faced after enacting these policies?
    a. What has been done to confront these challenges?

13. Let me ask about some concerns that have come up elsewhere, that I am curious if you have confronted:
    a. Are there concerns about drivers leveraging ride-hail applications to work as a private contractor outside of regulated applications?
        i. What problems are there if someone has their own car service?
    b. Is there any evidence of ride-hail platforms operating below the radar?
    c. Are there on-going complaints about ride-hailing platforms infringing on taxi business?
    d. Are there complaints of platforms disciplining drivers unfairly?
    e. Concerns that drivers are being selective about where they drive and not serving some parts of town?
    f. Are you aware of drivers using over-the-top management applications to direct their usage of ride-hail applications and making selectivity more of a problem?
14. How are complaints reviewed?
    a. What is the process of considering consumer complaints?
    b. What is the process of considering driver complaints?
15. Is it possible to appeal decisions?
16. Should ride-hailing platforms be forced to have minimum and maximum rates for rides?
    a. Platforms like Uber and Lyft are moving towards pricing models (e.g. UberPool, up-front pricing, and the new surge model) that de-link the prices riders pay, and the fees paid to drivers. Is this a challenge for municipalities looking to maintain cost effective local services?
    b. Could platforms potentially use their access to data in order to squeeze local participants, and erode the cost savings that have been attributed to these services?

## Economic Inclusiveness

17. We have seen New York City target economic inclusiveness in its policies towards ride hailing platforms. Does your municipality consider policies that target economic inclusiveness on ride-hailing platforms?
    a. Is it the role of municipalities to consider economic inclusiveness? And do they have the capacity to do so properly?
18. How has the development of the ride-hailing platform affected the vehicle-for-hire labour market?
19. Is it concerning that ride-hailing platforms have a notoriously high rate of attrition among drivers? What is driving that turnover?

## Future of Digital Ride-Hailing Applications

20. What is the future of ride-hailing in your municipality?
21. Is there anything else you would like to add?

## Interview Questions with Municipal Councillors

> Note: the primary questions for all interviews are numbered (1 to n) below. Interviews are semi-structured and the phrasing of questions may change based on the conversation. Where answers are brief or do not touch on particular issues that I believe are important for this research, I will prompt participants with additional questions signaled by letters (a to z). Additional follow-up questions will be asked to clarify the councillor's response particularly where there is conflicting information.

Introductory Script:

This research is looking at the position of digital ride-hailing platforms or private transportation companies, like Uber and Lyft, and the role of municipalities in regulating these platforms – especially as it relates to the outcomes for platform workers. Ride-hailing platforms provide a set of useful tools that are an increasingly important part of a cohesive ground transportation system within and beyond municipalities. There are a number of policy areas, however, where municipal interests may need to be protected. As a result, municipalities may have a role in the regulation and development of programs that manage local economic impacts, transportation inequalities, and safety concerns regarding ride-hailing platforms.

This interview will be approximately 30 minutes long and, with your permission, it will be audio recorded for accurate transcription later. Interview length may vary, as not all questions will apply to your expertise in the field. Please answer only those questions which you feel comfortable answering. If we are short of time today missed questions could be completed by email. With your permission, quotations from these notes will be used in publications but will be attributed to a pseudonym to maintain your confidentiality. However, bear in mind that, given your unique position it may be possible for a sufficiently motivated person to piece together your identity from what you share. Physical notes from this interview will be kept in a locked cabinet and held for a minimum of seven years before they are destroyed. Audio and digital notes will be kept in an encrypted folder on a password protected laptop computer. Files that identify individual participants will be separated from the audio recordings and notes no later than a week from the interview date. This identifying file will be held in a separate and unrelated folder from any data from the interviews. All folders will be encrypted on a password-protected laptop computer.

Does that sound ok? Please take a moment to read this consent form and sign if you consent and are ready to begin the interview.

[time for participant to read report and sign consent form]

Alright, thank you. I will begin recording now and we can begin.

## Background and context?

22. What is the history of your municipality's intervention into ride-hailing platform industry?
    a. What motivated the intervention?
    b. What were the steps taken to identify intervention in the platform economy?
    c. Who provided input into this policy?
    d. Who led this process?

## Municipal Policy – Goals and Mechanisms

23. What policy areas are relevant to regulating ride-hailing platforms? And which are pursued explicitly in your by-laws/regulations?
    a. Consumer protection?
    b. Licensing - number of drivers?
    c. Insurance?
    d. Health and safety?
    e. Local economic development?
    f. Transit?
    g. Use of road network and traffic?
    h. Accessibility?
    i. Other?

## Policy Outcomes and Monitoring

24. In what ways are you monitoring the success of your municipal policies in regards to ride-hailing?
    d. What metrics are being used?

25. What is the value of platform ratings in ride-hailing applications?

26. In what ways has your municipal policy been able to direct change in the industry?

27. What are some of the challenges you have faced after enacting these policies?
    a. What has been done to confront these challenges?

28. These are some common concerns that have arisen in other communities which are relevant to your municipality?
    a. Are there concerns about drivers acting as private contractor outside of regulated platforms?
    b. Are there on-going complaints about ride-hailing platforms infringing on taxi business?
    c. Are there complaints of platforms disciplining drivers unfairly?
    d. Concerns that drivers are being selective about where they drive and not serving some parts of town?

29. Should ride-hailing platforms be forced to have minimum and maximum rates for rides?
    a. Platforms like Uber and Lyft are moving towards pricing models (e.g. UberPool, up-front pricing, and the new surge model) that de-link the prices riders pay and the fees paid to drivers. Is this a challenge for municipalities looking to maintain cost effective local services?

b. Could platforms potentially use their access to data in order to squeeze local participants, and erode the cost savings that have been attributed to these services?

## Economic Inclusiveness

30. We have seen New York City target economic inclusiveness in its policies towards platforms. Is it the role of municipalities to consider economic inclusiveness in regards to work on ride-hailing platforms?

31. What tools does the city have to promote economic inclusiveness?
    a. Encourage greater competition from new platforms
    b. Financial grants for companies and products that support and empower drivers
    c. Software for drivers to manage private platforms or as an alternative to private platforms
    d. Unionization
    e. Direct municipal licensure or third-party licensing (a separate body from the ride-hail platforms)
    f. Education programs
    g. Mandate commercial insurance so that licensed drivers can work independently

32. How has the development of the ride-hailing platform affected the vehicle-for-hire labour market?

33. Is it concerning that ride-hailing platforms have a notoriously high rate of attrition among drivers?

## Anything Else

34. What do you see in the future of the ground transportation industry?

35. Is there anything else you would like to add?