

1 **One for the Road: The Threat of Monopoly and Municipal Regulation of Ride-**
2 **hailing Platforms in Toronto and the Greater Golden Horseshoe**

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6

7 **Abstract**

8 The vehicle-for-hire industry is widely recognized as a critical municipal service that is commonly
9 provided in the private sector but regulated to limit market imperfections and externalities (Dempsey,
10 1996; Cooper, Mundy & Nelson, 2010). With the emergence of ride-hailing platforms, such as Uber and
11 Lyft, these regulatory regimes have not been extended to cover new business types, but rather have
12 yielded a parallel self-regulatory regime for platforms (Collier, Dubal & Carter, 2018; Sundararajan,
13 2016). An emerging literature about digital platforms, however, suggest these firms are remaking
14 capitalism in a fashion that encourages monopolistic and domineering practices, something that could
15 threaten the mandate of regulators to protect consumers, protect health and safety, control nuisances
16 and ensure the continued presence of the service (Harding, Kandlikar & Gulati, 2016; Srnicek, 2017;
17 Zuboff, 2019). Through a case study of the regulatory regime for ride-hailing platforms in the City of
18 Toronto and surrounding Greater Golden Horseshoe, this paper examines, how municipalities are
19 confronting these threats from platform firms. The study assesses how local municipalities value the gift
20 of private sector regulation and how they are confronting questions of data extraction, the potential for
21 price discrimination, and the sustainability of local investment in the industry. The paper concludes that,
22 while municipalities may be motivated to move away from regulating the vehicle-for-hire market, they
23 are nonetheless making a concerted effort to develop new frames of analysis and enforcement capacity
24 for managing platform capitalism.

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33 **Introduction**

34 The vehicle-for-hire industry is a critical service for cities that, while privately delivered, has
35 been traditionally regulated by municipalities to ensure safe and affordable transportation without
36 discrimination (Dempsey, 1996). The emergence of digital ride-hailing platforms, or transportation
37 network companies (TNCs), like Uber and Lyft, has transformed these industries and called into question
38 the rationale for public regulation. Indeed, where regulators have loosened rules of vehicle-for-hire
39 markets, we have not seen a repeat of past patterns of deregulation, which were characterized by rising
40 fares, and falling levels of service (Harding, Kandlikar & Gulati, 2016). Yet this new approach remains
41 contested by workers and scholars, who have begun to document a new logic of capitalism at work
42 (Rosenblat, 2018; Zuboff, 2019; Srnicek, 2017). Among features of this proposed capitalist logic, the
43 propensity to form monopolies, the lack of reciprocity with platform participants, and the use of
44 asymmetries of information between market actors have all been identified as concerns for which
45 political leaders, regulators and society at large ought to be concerned (Slee, 2015; Srnicek, 2017;
46 Zuboff, 2019).

47 In confronting this emerging capitalist logic, regulators must contend with a host of unknowns,
48 such as the application of pricing mechanisms and labour practices. Digital platforms have shown
49 themselves to be shrewd interpreters of the law and have frequently operated in ways that challenge
50 existing regulations (Rosenblat, 2018). Regulators, in turn, have hesitated to act quickly in ways that
51 might obstruct the development of the industry overall (Collier, Dubal & Carter, 2018). While this
52 restraint is prudent, a lack of critical inquiry into platforms could jeopardize the capacity of regulators to
53 recognize and limit anti-social business practices. Municipal regulators have a mandate that varies
54 across jurisdictions but generally demands for the protection of health and safety (regarding vehicle
55 inspections, driver background checks), protection of consumer interests (regarding complaints of errors
56 in fares) and the control of nuisances (regarding traffic congestion, impact on transit ridership)
57 (Dempsey, 1996; Cooper, Mundy & Nelson, 2010). Just as past efforts at deregulating the industry have
58 led to market failures, resulting in quick policy reversals (Dempsey, 1996), regulators today must be
59 careful to balance the promises of TNCs with their mandates to maintain the long-term sustainability of
60 the service.

61 This case study of the TNC industry in the City of Toronto and surrounding municipalities that
62 make up the Greater Golden Horseshoe, looks at the discourse and rules developed by regulators
63 throughout the region as they confront TNCs and the dynamics of a remade vehicle-for-hire

64 marketplace. I begin with an introduction to common frameworks of regulation for the vehicle-for-hire
65 industry throughout North America and present the critical literature on digital platforms as a novel and
66 domineering structure of capitalism. From this background, I develop a set of challenges that face
67 municipalities as they move from a highly regulated vehicle-for-hire marketplace to one characterized in
68 large part by self-regulation. After a brief introduction to the Greater Golden Horseshoe region, I
69 examine how regulators in the region have approached this challenge. Through interviews with key
70 informants who work as staff with city licensing departments or represent municipalities as council
71 members and a document analysis of municipal bylaws and reports, I describe the themes that organize
72 the relationship between the platform and regulatory bodies and assess the capacity of regulators to
73 ensure a robust and sustainable marketplace.

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75 **Challenging the Municipal Regulatory Regime**

76 It is unclear how platform businesses will impact market practices and social values in the long
77 term. Whereas a properly functioning market is one important social value, there are numerous social
78 repercussions that can result from changes in the marketplace. In this section we will examine the
79 literature on social consequences of the emergence of digital platforms, with a focus on TNC companies.
80 In the past, the vehicle-for-hire industry, has been found to have several market imperfections and
81 externalities that required regulators to step in. The structure of the industry has traditionally made it
82 difficult for passengers to compare prices or know the condition of the service with which they were
83 engaging. The low barriers to entry frequently resulted in congestion and thin markets, particularly in
84 dispersed settlements made it a challenge to match passengers with rides. (Dempsey, 1996; Harding et
85 al., 2016). Over time, various models of regulation developed to address these challenges. Traditional
86 regulatory mechanisms include *quantity* control of the number of licensed for-hire vehicles allowed on
87 the road, *quality* control of the mechanical reliability of these vehicles, and *economic* control of the fares
88 that are possible to be charged (henceforth the QQE framework, see Cooper et al., 2010).

89 Past challenges to the QQE framework in the decade of the 1980s demonstrated the value of
90 these measures (Dempsey, 1996). In his review of taxi deregulation in 21 markets across to United
91 States between 1980 and 1993, Dempsey (1996) finds that deregulation resulted in higher prices, lower
92 income for workers, and falling levels of service. Drivers proliferated, packed into designated taxi stands
93 and, after waiting long periods between rides, tended to add to prices to compensate for their time,

94 often refusing short-distance rides as a consequence. Overall this led to price increases on the order of
95 21%. By 1996, Dempsey finds that all but four cities had returned to regulation and that these cities that
96 remained deregulated tended to be smaller than the average on the list and did not have an important
97 airport to generate a large number of rides (Dempsey, 1996).

98 Dempsey (1996) characterizes the traditional vehicle-for-hire regulatory regime as an instance
99 of an urban commons. Under such an arrangement what is held in common is the trust between
100 passengers and drivers generated by the application of local regulation. Such regulation, then creates an
101 “implicit compact” where small actors are able to access the marketplace, creating a safe market for on-
102 demand rides at reasonable prices in the context of an otherwise hostile marketplace subject to low
103 liquidity, and high externalities (Cooper et al., 2010). The QQE framework that generated these
104 commons, has now been challenged in many markets with the entrance of ride-hailing platforms. As
105 research on commons has shown, they are vulnerable to rapid expansions of the number of participants
106 (Ostrom, 1990). Little surprise then that TNCs, that are premised on alternative measures such as easing
107 barriers to working in the market, private mechanisms of trust building, and variable “surge” pricing
108 policies to coordinate supply and demand, would threaten municipal regimes as a result of their rapid
109 growth (Harding et al., 2016; Sundararajan, 2016).

110 However, the challenge of TNCs to the QQE framework has not been a repeat of past
111 experiences of reduced regulation but the institution of a form of self-regulation for ride-hailing
112 platforms that is administered alongside existing or modified QQE regulations for incumbent taxis
113 (Collier et al., 2018; Harding et al., 2016). Under this framework, quantity and economic controls are
114 eliminated, while quality controls are delegated to the platform for enforcement (Sundararajan, 2016).
115 Harding et al. (2016) argue that TNCs overcome many of the traditional challenges of taxi markets.
116 These platforms create a system of peer-review that give passengers insight into the quality of the
117 service being offered, while guaranteeing a rate to riders before the ride begins. Ride-hailing platforms
118 also provide a centralized virtual clearinghouse to efficiently distribute service while avoiding congestion
119 in traditional pick up locations.

120 If the contemporary experience of deregulation does not match past experiences, Harding et al.
121 (2016) identify a new threat – the threat of monopoly or cartel-like oligopoly. A recent episode of the
122 reality television series *Dragon’s Den*, where entrepreneurs pitch their ideas to potential angel investors,
123 presents a sobering commentary upon the competitive marketplace facing TNCs. InstaRyde, a licensed
124 competitor for Uber and Lyft in the Toronto market addressed the panel of investors. While InstaRyde

125 did find an investor that day, the demonstration during the pitch revealed not a single driver available to
126 make a pick up in downtown Toronto at 5:30pm. One potential investor made the point that “the driver
127 is going to use the app that’s giving them the rides and the app that’s giving them the most money and
128 right now you’re just not going to have the demand to get those drivers” despite an investment of over
129 \$700,000 (cbc.ca, 2019). As another investor opted out, he added to the description of IntaRyde’s
130 challenge, “there’s a gorilla out there and it’s called Uber and I think to try and challenge them I think is
131 foolhardy” (cbc.ca, 2019). For Harding et al. (2016) the threat for municipalities of a lack of competition
132 due to monopoly or oligopoly that these investors describe is that monopoly companies will “set prices
133 above marginal costs and... act indifferently to market signals due to the absence of the discipline
134 brought by competition” (Harding et al., 2016, p. 22). In the following section we will explore this threat
135 further and consider the qualities of a cautious approach to oversight of these firms.

136

137 **Are Platforms a New Regime of Accumulation?**

138 The threat of monopoly amongst digital platforms has received significant attention in the
139 media as a result of the astonishing rates of growth of these firms, their disregard for many rules and
140 regulations, and their abrupt effect on the surrounding marketplace (Collier et al., 2018; Srnicek, 2017;
141 Slee, 2015; Zuboff, 2015; Wu, 2010, Khan, 2016). Uber, for instance, though only operating since 2009,
142 has reached a valuation of over \$50 billion despite never making a profit and has successfully moved
143 into markets despite local regulators actively barring entry to the company (Rosenblat, 2018).

144 Digital platforms have emerged at a time when service industries are undergoing a dramatic
145 change from “sinkhole” to “a source of productivity growth and dynamism in the economy” (Zysman et
146 al., 2010, p. 1). Zysman et al.’s (2010) analysis of this changing industry landscape categorizes TNCs as
147 “hybrids” bringing together advanced algorithmic tools with human service workers. These companies
148 are updating formerly “irreducible services” in industries that were dependent on local individuals and
149 were, hence, sheltered from international competition. The innovation of these new platforms has been
150 to unbundle service offerings into small tasks that can be managed through digital intermediaries. This
151 invites competition amongst workers on international labour markets, or in the case of TNCs from
152 unlicensed workers, part-time workers, or even self-defined working hobbyists (Rosenblat, 2018).

153 Within this transformed competitive landscape, platform firms provide the infrastructure upon
154 which a host of new marketplaces operate. Matthew Hindman describes these firms, with reference to

155 George Stigler's "dealer markets", which are firms that provide "a meeting place for potential buyers
156 and sellers" (Stigler, 1961: 216; Hindman, 2019). Digital platforms are collections of mostly online tools,
157 such as online payment processes, digital reputation measures, and matching algorithms, that mediate
158 the transaction of goods and services between individuals. Whereas Stigler regards these firms as
159 producing marketplaces which are "largely competitive" (1961: 216), Hindman argues that competition
160 in digital marketplaces consistently produces monopolistic conditions for the dealer market firm itself
161 (Hindman, 2019). Increasingly, it is understood by scholars that what these firms have created is not just
162 a marketplace infrastructure but a new potentially dominant regime for the accumulation of capital
163 (Zuboff, 2015; Srnicek, 2017).

164 The recognition of the digital platform as a new class of capitalist institution proceeds from the
165 language of the regulation school of political economy where scholars have examined the economics of
166 the platform as a consequence of economic valuations drawn from social distinctions of class (Boyer,
167 1989; Aglietta, 1976). In the context of platform mediated industries, the greatest distinction is between
168 participants transacting over the platform and those firms that operate the platform (Rosenblat, 2018).
169 In creating and maintaining the platform, the platform firm occupies a privileged position from which to
170 set the terms of transactions, to extract data, to feed data back into their products, and also package
171 data for use in other businesses (Benkler, 2011; Srnicek, 2017; Zuboff, 2019).

172 Scholar Nick Srnicek (2017), finds that competition in this new form of capitalism is structured
173 by the development of network effects and cross-subsidization, which encourages a winner-take-all
174 dynamic. Given that vehicle-for-hire markets were typically thinly distributed across a city (Harding et
175 al., 2016), what is most deterministic about the competition between TNCs in this industry begins with
176 the need to promote growth on both sides of a marketplace. Arun Sundararajan (2016) argues that,
177 whereas industrial capital mostly competes on the scale of production, two-sided markets (platforms)
178 build value from the growing scale of demand. On two-sided markets value grows as the number of
179 potential transaction partners grow more dense, creating a feedback loop that has come to be labelled
180 "network effects". As Nick Srnicek notes, the buildup of a network "generates a cycle whereby more
181 users beget more users, which leads to platforms having a natural tendency towards monopolization"
182 (2017: PG?). Hindman (2019) adds that technical aspects of digital economies also contribute to this
183 winner-take-all dynamic. He claims that small differences in the speed of loading software; the capacity
184 to use big data and experimentation to personalize products to user tastes; and the ability to build
185 integrated networks of tools can have a dramatic impact on user retention. Over time this builds on the

186 advantages of early movers to “lock in” users to particular networks. As a result, while platforms are
187 often considered unbiased, they must channel user actions for the interests of the platform operator in
188 order to survive (Srniczek, 2017).

189 The threat of ‘monopoly’ is typically attributed to the use of market dominance as a tool to
190 secure rising consumer prices (Khan, 2016). However, this formula has been criticized for ignoring the
191 broad market effects that can come from monopoly even as consumer prices remain low or fall (Khan,
192 2016). In the case of TNCs, for instance, Hubert Horan (2015) argues that large platforms benefit from
193 an uneven regulatory framework compared to incumbent competitors in the taxi industry. He finds
194 argues that TNCs they have fewer restrictions on business operations, lower costs of insurance and
195 lower fees for the provision of regulation. He adds that TNCs also have the ability to incur annual losses
196 in the billions funded by their investors. Faced with well-resourced firms and predatory pricing
197 behaviour, small competitors are likely to be put out of business, thus fulfilling the rational expectation
198 of investors whose valuations of Uber demand market dominance to recoup losses from temporary
199 below-market prices (Horan, 2015). Horan concludes that while consumer prices have indeed fallen
200 from the era of the QQE regime, there is a risk that once a monopoly emerges, consumer prices will
201 begin to rise.

202 The extraction and analysis of data is another factor that appears to help build market
203 dominance at the same time as it threatens users and society with new risks. Firms increasingly benefit
204 from extracting and analyzing data compiled from a wide range of sources using technology that probes
205 deeply into the personality and emotional makeup of market participants (Zuboff, 2019). This data is
206 used to improve and personalize services for users on one hand, but also to develop behavioural
207 prediction products for clients and other business ventures on the other (Zuboff, 2019). Critics allege
208 that consent granted by platform users is often poorly informed and that this surveillance is a
209 transgression of user privacy. It is also not possible to make use of the service without submitting to
210 surveillance. The platform that emerges then resembles a leviathan into which people must submit to
211 be recognized and relevant in the marketplace (Zuboff, 2019; Purcell, 2013). By entering into
212 transactions through the platform, rights to privacy, control of private data, and even the capacity for
213 self-determination are waived to various degrees (Zuboff, 2019). Among TNCs, one illustration of this
214 issue is the development of upfront pricing strategies. Such policies leverage the massive amount of
215 data gathered over time by the TNC to inform an upfront price for passengers that will typically not vary
216 regardless of the details of the ride. This creates a competitive advantage for platforms who can offer

217 customers certainty regarding their final price. At the same time, it presents a risk to individuals where
218 their data may be misused.

219 Critics of this use of personal data by large TNCs argue that upfront pricing allows platforms to
220 conceal their fees and overcharge passengers based on that customer's willingness to pay (Rosenblat,
221 2018). This policy, known in the literature as discriminatory pricing, allows TNCs to use data to assemble
222 customer personas upon which prices may be based regardless of the costs of providing the service.
223 Research from Chen, Mislove, and Wilson on Uber's surge pricing algorithm in 2015 found that
224 customers making requests simultaneously and only meters apart were routinely given different fare
225 estimates. Further, the common variance of fares by 50% or more between adjacent surge areas was
226 identified as a weakness that could allow more sophisticated and dedicated individuals to exploit the
227 system (2015, p. 12). more recently Uber representatives have described their use of "route-based
228 pricing", which "charges customers based on what [the algorithm] predicts they're willing to pay"
229 (Newcomer, 2017). While discriminatory pricing is frequently employed among utilities to subsidize low-
230 income or dispersed populations (Marvin & Graham, 2001), it is unclear how it is used by TNCs. In the
231 past statements from Uber staff, for instance, it has been reported that Uber knows that passengers are
232 willing to pay more when their phone battery is low (Calo & Rosenblat, 2016). While TNCs may not be
233 acting on this kind of information, it shows that there are many factors that could go into determining
234 an individual price that do not support access but are more predatory in nature.

235 Another threat of a monopoly or oligopoly of TNCs described in the literature is the risk that it
236 may lead to undervaluing local investment. Whereas TNCs have invested in software, they do not
237 generally invest in all segments of the means of production, leaving the provision of cars and training to
238 local investors and workers (Horan, 2015). At the same time, the platform software has not made local
239 investors any less necessary for the offering of the service. Given that TNCs have consistently decreased
240 earnings potential for drivers (Rosenblat, 2018), they have relied on alternative means of ensuring
241 sufficient levels of local investment. TNCs have encouraged local investment by lowering regulatory
242 barriers. This has clearly been an important element of their approach as they have pulled out of
243 communities where regulations have been set in ways that would raise barriers (Collier et al., 2018).
244 This policy has been a success insofar as numbers of drivers have risen in recent years. However, success
245 today does not mean that such an approach will be sustainable in the long run. If conditions on the
246 platform deteriorate for drivers, there will be growing pressure for these individuals to exit the market,
247 as was documented in earlier periods of deregulation in the 1980s and 1990s (Dempsey, 1996). Such a

248 result may also happen with less conspicuous outcomes. Already reports have emerged of drivers acting
249 in ways that harm the system by ignoring calls, leading passengers to cancel their rides and triggering a
250 cancellation fee to passenger accounts (Griswold, 2018).

251 The threats described here may never materialize. Many people are already habituated to the
252 idea that business will gather market data. Many local markets continue to have more competition than
253 in the past when one includes traditional taxis in the equation. However, the literature suggests that
254 transparency itself is necessary, whether these threats listed above are real or imagined. Critics demand
255 structures to protect users through democratic control. Measuring and enforcing compliance from
256 platforms to provide this transparency is, itself, a challenge. In regard to price, for instance, Lina Khan
257 argues that when platforms “implement discriminatory pricing on a wide scale, each individual would be
258 subject to his or her own personal price trajectory, eliminating the notion of a single pricing trend” that
259 could be easily monitored across a jurisdiction using aggregated data (Khan, 2016: 763). Calo &
260 Rosenblat note those who “investigate [platform] firms may need to reverse engineer platforms, scrape
261 data, impersonate consumers, and perform other activities aimed at exploring firm practices” (2016, p.
262 1685). Exposing the industry to regulatory oversight presumably then requires the capacity in the
263 regulator to examine data, draw qualitative distinctions regarding acceptable market actions, and assess
264 the conditions for local investment (Calo & Rosenblat, 2016; Khan, 2016). In the study that follows, we
265 examine how such concerns align with the goals and objectives of local municipal regulators and
266 whether these municipalities are undertaking this responsibility.

267

268 **Method**

269 In this study I have asked whether local regulators are capable of regulating the vehicle-for-hire
270 industry given the emerging threat of monopoly that is increasingly being found amongst platforms. To
271 answer this question, I have examined a single regional case study that provides a wide range of
272 regulators of the ride-hailing industry within a consistent political setting. The study includes a
273 document analysis as well as interviews with municipal staff and council members for jurisdictions
274 directly responsible for the regulation of ride-hailing services within the Greater Golden Horseshoe
275 (GGH). The GGH region was chosen for this study due to its economic importance within Canada and
276 North America and because it captures a large number of municipal regulators within a consistent
277 constitutional structure. The GGH region also conforms to the general pattern found in earlier studies

278 that shows a loosening of the regulatory regimes for the vehicle-for-hire industry in North America
279 (Cooper et al., 2010).

280 Documents reviewed for the study included by-laws and municipally produced documents as
281 well as provincial legislation and report. Interviews with key informants included government
282 representatives primarily from staff of municipal licensing offices and city council members as well as
283 industry watchers who provided context in the lead up to interviews. A total of 25 interviews were
284 conducted. Interviews were semi-structured allowing for a consistent set of question themes but also
285 the freedom to follow up on novel concepts and opinions raised by participants. Participants gave
286 responses that represented official municipal policies but often gave personal opinions that went
287 beyond the policies pursued by the municipality. Interviews lasted approximately 50 minutes with staff
288 and 30 minutes with council members. All interviews were transcribed, reviewed on multiple times and
289 coded in an iterative way as themes emerged upon multiple reviews. These themes and representative
290 quotations were then used to identify a discourse and common practices and distinctions between
291 municipalities that describe the regulatory approach taken in the region.

292

293 **The Greater Golden Horseshoe Regulatory Context**

294 The Greater Golden Horseshoe (GGH) region stretches from Niagara Falls around the western
295 end of Lake Ontario, past the City of Toronto all the way to Northumberland County in the East and
296 Simcoe County in the North (See Figure 1). The region has a population of over 9 million spread between
297 urban centers as large as the City of Toronto (pop. 2,731,571) and as small as Grand Valley in Dufferin
298 County (Pop. 2956). Though not a distinct legal jurisdiction, the GGH region has been used by the
299 Province of Ontario as an important scale for the governance of processes of urban agglomeration and
300 transportation (Ministry of Infrastructure, 2006). Altogether, the GGH includes 82 lower-tier
301 municipalities or regions with the legislative authority to regulate the vehicle-for-hire industry in their
302 local jurisdiction. Municipalities throughout the province of Ontario are delegated authority to license
303 business operations within their jurisdiction. These powers, delegated by the province of Ontario in the

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306 **Figure 1: The Greater Golden Horseshoe**

307 (Source: Neptis Institute. 2013. <http://www.neptis.org/publications/introduction/chapters/context-greater-golden-horseshoe>)

308

309 Municipal Code (2001, Ch. 156) and City of Toronto Act (2006, Ch. 94), include the capacity to license
 310 drivers and taxi brokerages, limit numbers of drivers and set pre-determined fares. The taxi industry is
 311 explicitly singled out among business licenses in the Municipal Code and City of Toronto Act, reflecting
 312 the importance of the service to urban life.

313 Among the 82 municipalities, 13 have developed explicit regulations directed at TNCs. TNCs take
 314 a variety of names within municipal bylaws including Private Transportation Providers (PTPs) in
 315 Hamilton, Private Transportation Companies (PTCs) in Toronto, and Auxiliary Taxis in Waterloo Region,
 316 among others. Dempsey (1996) describes those large municipalities with important central business
 317 district, and/or a large international airport as being particularly vulnerable to unregulated for-hire
 318 vehicle industries. And indeed, in the GGH, the two municipalities, Toronto and Mississauga that fit
 319 those criteria are regulated. Among peripheral urban areas, there is an equal chance that the
 320 municipality will have regulation as not, at the present point in time. In rural areas, however, there is
 321 very little regulation of TNCs. Only one community of the GGH, the town of Innisfil, intervenes in the
 322 ridehailing platform industry through subsidies to the business advertised as a form of public transit.

323 Overall this pattern of regulation demonstrates a trend that is broadly based on population density (See
 324 Table 1).

325 Throughout North America state and provincial governments have begun to play an increasingly
 326 large role in the regulation of the industry. Within Canada’s federal system, the province has authority
 327 for municipal affairs and delegates powers to the municipality, including the authority to regulate for-
 328 hire vehicles. It should be noted then that, TNCs were only regulated by municipalities after provincial
 329 legislation was put in place to permit the use of ridesharing insurance by the Financial Services
 330 Commission of Ontario a provincial body that oversees finance and insurance sector. Special concerns
 331 such as insurance, the use and management of passenger data, accessibility for people with disabilities
 332 are among the policy areas where the province has been particularly involved. Still, it generally falls to
 333 the municipality to determine the details about how provincial legislation applies to for-hire vehicles.

334

335 **Table 1: Greater Golden Horseshoe Municipalities that Regulate Ride-Hailing Platforms**

	Total Municipalities	Total population	Average Density	Average Median Income	No. of Participants
GGH Municipalities	82	9,161,612	489.0	\$83,854	23
GGH Municipalities with Regulations	13	6,536,169	1,361.7	\$83,610	22
	Total Municipalities	Regulated Municipalities	Total population	Average Density	No. of Participants
Rural Municipalities	53	1 (2%)	1,493,804	74.5	3
Peripheral Urban Municipalities	27	10 (37%)	4,073,204	1,278.0	14
Core Ride-Generating Municipalities¹	2	2 (100%)	3,453,170	3,401.0	6

336 Source: Statistics Canada (2016) <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/search->
 337 [recherche/lst/results-](https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/search-recherche/lst/results-)

¹ The core ride-generating municipality is distinguished by a large central business district and/or the presence of a large international airport (Dempsey, 1996, p. 116).

338 Consequently, all urban and several rural municipalities in the GGH region have a regulatory agency and
339 established taxi industry.

340 I argue that this long-standing municipal presence places municipalities in the GGH region into
341 the category of municipalities with historically strong regulatory agencies as defined by Collier et al.
342 (2018). Like other cities in this category, municipalities in the GGH initially opposed the entrance of
343 TNCs. Throughout the GGH region, Uber entered the marketplace “extra-legally” and drivers were
344 frequently subject to ticketing operations (Collier et al., 2018, p. 8). In the GGH region this conflict came
345 to a climax in the Ontario Superior Court of Justice decision that services like Uber were not subject to
346 Toronto’s municipal taxi licensing bylaw due to the limited and technology-specific nature of the
347 language used in the legislation (City of Toronto v. Uber Canada Inc. et al, 2015). The judge determined
348 that the regulation of TNCs is a “political” issue that should not be legislated through the courts
349 (Toronto v. Uber, 2015). This decision had an immediate chilling effect on enforcement of the taxi bylaw
350 throughout the region and began a new process to regulating the ride-hailing industry through an
351 independent licensure category (Municipal Staff #10; Municipal Staff #3; Council Member #7).

352 The trajectory of regulation that followed is described by Collier et al. (2018) as a form of
353 regulatory capture (See also Stigler, 1971). While cities with historically strong regulatory agencies have
354 been the most active in pursuing a “level playing field” between traditional taxis and new TNCs, there
355 has been a common experience of “challenger capture” (Collier et al., 2018). Under this theory TNCs
356 have successfully used consumer support, digital forms of populist mobilization, and state level lobbying
357 in order to capture the regulatory process and dictate acceptable policy formulations. Where local
358 politicians demand standards of safety or consumer protection that are deemed excessive by the
359 industry, these strategies have been used to encourage more industry-friendly alternatives. Examples of
360 this strategies were seen in the GGH region where Uber withdrew from the Town of Orillia as a result of
361 demands for more onerous vulnerable sector screening checks (MacLennan, 2018). In a city nearby the
362 GGH, London, Ontario, similar threats led to a revision of the legislation requiring cameras mounted in
363 the car in favour of Uber’s desired camera-optional policy (Dehaas, 2017).

364 The capacity to regulate TNCs has produced a regulatory structure that is far removed from the
365 traditional regulatory regime found in these communities. As a result, distinctions and processes of
366 maintaining compliance are still unsettled and will be subject to review over the coming years. Still a
367 culture has developed in regards to regulation within the past few years. Interviews were used to gain
368 access to how that culture is forming.

369

370 **Interview Results: Perspectives on the Gift of Regulation**

371 The concept of challenger capture by TNCs and the increased role for provincial action for the
372 regulation of TNCs has upended the rationale for regulating local vehicle-for-hire markets. Municipal
373 staff who participated in the interviews primarily grappled with three principles as the basis of their on-
374 going role in regulation: health and safety, consumer protection, and nuisance control. A fourth
375 rationale for on-going regulation also came up where participants shared concerns about the
376 sustainable continuance of vehicle-for-hire services in their municipality. Across the 13 municipalities
377 these have produced a fairly consistent regulatory regime that includes platform self-regulation,
378 platform administration of driver licensure, third-party safety checks, and per-ride licensure fees. Subtle
379 differences, such as additional insurance or licensure requirements were occasionally highlighted by
380 municipal staff. Explanations for these variations were generally motivated by idiosyncratic analyses by
381 municipal staff in their observation of practices in other municipalities.

382 The general trend of regulatory policy moving from the QQE framework to the contemporary
383 regulation for TNCs expressed by municipal leaders was the withdrawal from matters of nuisance
384 control and consumer protection, while maintaining a level of oversight to ensure health and safety
385 amongst passengers and drivers. As one staff person noted,

386 for years we regulated taxi fares, and heavily regulated the taxi industry because they
387 were really the only provider of ground transportation... so we regulated them very much.
388 Now the market is much broader and we are able to say, you know what, we want to take
389 some of those regulations off and let you make business decisions” (Municipal Staff #2).

390 Just the opposite, for several municipal leaders, policy goals should be strictly limited. “Are they
391 insured? are the vehicles inspected? Those are the types of baseline [considerations] that we need to
392 have to ensure consumer safety. Anything beyond that, I don’t think needs to be our concern at all”
393 (Council Member #5). Another Municipal Staff agreed stating that “we actually made a conscious
394 decision to step away from regulating the business. That’s not what our mandate is. It’s not to protect
395 any particular business, and industry or any particular business interest. That’s for the market to decide”
396 (Municipal Staff #10). This idea of withdrawing from active regulation of consumer protection was
397 common, particularly among municipal staff.

398 The new ride-hailing regulations make use of competitive markets rather than deterministic
399 standards and public enforcement to ensure high-quality service. And while municipalities resisted TNCs

400 initially, the benefits of this system have become clear in the years since. As one staff noted, taxis had
401 long been a “regulatory nightmare” (Municipal Staff #6). “One thing you will learn,” one council member
402 stated, “is that any councillor that has had to deal with taxis hates it because it’s always awful and it
403 always takes forever.” (Council Member #2). In contrast, six of the twelve staff persons interview
404 reported hearing very few complaints regarding TNCs. As one municipal staff person explained,
405 “let’s say that someone gets into an Uber car and they are not satisfied, they report that
406 to Uber. They don’t necessarily, and I would say 95% or higher, don’t report that to us...
407 So, we get complaints. We generally field them back and work in conjunction with the
408 [TNC] company itself. And I hate to use the term, I don’t like the term, ‘self-regulating’...
409 but from an enforcement perspective it takes a burden off of us” (Municipal Staff #9).

410
411 For some municipal staff the sheer number of drivers using the platforms and short-term nature
412 of the work makes platform administration not just a gift but an absolute necessity. In some
413 municipalities drivers are not licensed by the municipality at all. Other municipalities made a point that
414 “if we don’t license the driver, then we don’t have jurisdiction over the driver” (Municipal Staff #10).
415 Regardless of this formal relationship, however, compliance to the regulations on ride-hailing platforms
416 are primarily enforced through data gathering from the platforms and warnings or penalties levied
417 against the drivers through enforcement projects. As one municipal staff person described their
418 methods of ensuring compliance thus,

419 “[the platforms] supply us with the data that we require, that’s required in the by-law.
420 We request information from them on an ad-hoc basis based on a complaint. There have
421 been very few complaints about the levels of service that they provide or the type of
422 service they provide. And then we interact with the individual TNC operators themselves
423 through inspections that take place in the field daily for a large number of operators”
424 (Municipal Staff #6).

425 These inspections in several municipalities are done with a statistically significant proportion of the
426 population of drivers over the course of a year to ensure broad compliance. Despite the capacity of
427 municipalities to independently ensure compliance through these procedures, informants expressed
428 enthusiasm about working with platforms because, “if a vehicle is found not to be safe? It’s removed
429 immediately [by the platform]” (Municipal Staff #12). Ride-hailing platform face none of the delays
430 associated with municipal hearings and other legal procedures typical of municipal systems, “which [are]
431 time consuming” (Municipal Staff #9).

432 This system is not without some benefits for the TNCs. By submitting to regulation, the platform
433 gains legitimacy in the eyes of some customers. Municipal regulators are also able to play a role of

434 limiting competition for platforms. As one participant noted, “the limo industry gets really creative and
435 they say, ‘you can download this app and do this’ and they don’t realize they are verging into a different
436 market altogether” (Municipal Staff #7). Municipal staff routinely monitor online advertising to ensure
437 there is no unlicensed operations in the municipality. Alternatively, had the ride-hailing industry’s
438 behaviour resulted in a complete elimination of municipal ride-hailing regulations, it might have
439 undermined large TNCs with the emergence of innumerable small players, dragging down fares and
440 undermining confidence in the industry overall. As it stands, municipalities actively police individuals
441 who attempt to enter this market by leveraging social media or classified websites such as Craigslist and
442 Kijiji (Municipal Staff #9).

443 The new regulatory regime continues to face threats. Relaxed regulations for health and safety
444 standards could eventually lead to declining conditions; data extraction by platforms may become a
445 growing nuisance in itself; pricing policies may threaten consumers with rising costs; and, market
446 dynamics may lead to reduced services particularly for individuals with disabilities. One council member
447 was circumspect about the capacity of municipalities to address these concerns under the new
448 framework. “I mean we have a document that says that we can license [the ride-hailing platforms] but
449 the license is effectively meaningless. It has no meaningful restrictions. You keep the principle that we
450 are allowed to license in exchange for giving away the value of licensing” (Council Member #2). It is
451 noteworthy that prior to the renewed by-laws municipal enforcement officers agree that controlling the
452 ride-hailing space “was a difficult and time-consuming process” (Municipal Staff #9). With the updated
453 regulation of for-hire vehicles, Council Member #2 goes on to list a number of measures where
454 procedures aimed at protecting consumer health and safety, for instance, have been loosened including
455 lower standards for driver screening and the use of third-party vehicle inspections². The recent high-
456 profile death of an Uber passenger in the City of Toronto, and subsequent campaign by the family
457 suggests that issues such as a lack of training may present early signs of strain to this system (cbc.ca,
458 2018).

459 Other areas of concern where new regulations may not be meeting the regulatory needs of the
460 community regard the privacy of passengers and drivers as data is gathered from their use of the
461 platform. One councillor questioned “if the drivers and the ride-takers are actually aware that their data
462 is being mined. That would be the only risk that I see” (Council Member #1). However, this sentiment
463 was limited amongst council members and non-existent amongst staff, who were more likely to support

² Driver screening is what in taxi world?????

464 the process of corporate data extraction or state that the issue that required further consideration.
465 Nuisances, after all, are not a nuisance if no one complains (Council Member #7). Municipal staff were
466 more likely to consider the accumulation of data by platforms “as just good business” (Municipal Staff
467 #1). Others appeared to be swayed by the benefits these practices brought to municipalities. One
468 municipal staffer argued that

469 the collection of data certainly helps us because we have access to that data. You know,
470 it helps me predict where trends are, where there’s a volume trend... So, we can look at
471 where those fares are going, when... So, we can look at the time periods, the days and I’ll
472 look at that and have officers in that area, that go out and do proactive enforcement”.
473 (Municipal Staff #9).

474 Another stated that

475 we are appreciative of Uber doing that screening and that checking of their drivers. From
476 what we’re aware of, it’s pretty rigorous surveillance of drivers that operate on the
477 platform. Such as if they are holding their phone when they are driving. That is something
478 that is detected as well and those drivers are reminded of certain things as well if they
479 are going too fast or breaking, so it’s something that we appreciate that level of
480 surveillance” (Municipal Staff #5).

481

482 Where data gathering is not simply knowing the customer, but allows for discriminatory pricing,
483 municipal leaders are similarly non-interventionist. As one staffer notes, “a big component in the bylaw
484 [is] where the passenger has to accept the price of the ride before the ride is confirmed” (Municipal
485 Staff #8). Another staff person picks up this train of thought.

486 Again, its buyer beware. You have to accept that you’re willing to pay that. And you have
487 to accept that you are only going to receive that much money for what you’re doing as
488 well. If gas is \$1.60 a litre and I’m not making enough money to cover my gas for the
489 night, why am I working part time” (Municipal Staff #1)?

490 Whereas the literature frequently warns readers about the great power of platforms to gather
491 consumer data and modify behaviour (Zuboff, 2019), municipal staff projected much more autonomy
492 upon the platform user. “Consumers are not naïve,” one staff person concluded. “They know that they
493 can see what the Uber price is and they can also pull up the [local taxi competitor] online, on the
494 platform, to see what it’s going to cost from them. So really what’s happening, is... the consumer
495 benefits by choosing the cheapest price” (Municipal Staff #12).

496 Another threat to the system is the potential for drivers and investors to exit the market due to
497 poor operating conditions. Given the lack of direct investment from ride-hailing platforms in vehicles,

498 falling rates for local investors and workers could threaten the reach of the industry. Indeed, the work
499 conditions facing drivers has emerged as an important topic in the literature (See Rosenblat, 2018;
500 Kessler, 2018). There was no overwhelming opinion between municipal leaders regarding this role.
501 Among participants from the largest cities such concerns did not register. In peripheral urban
502 settlements, some informants argued that, “we [municipalities] don’t have a role to ensure that [the
503 vehicle-for-hire industry] exists. We provide a service, it’s called transit” (Municipal Staff #12). And
504 others found these services to be more critical in nature, arguing that

505 We want to make sure across the entire landscape that we’re allowing for the provision
506 of service to the people who need it... if you look at the TNC model, they’re not necessarily
507 in a position to serve some of that market the way they’re currently constituted. Taxis
508 are. So, I think they both provide service that needs to be there” (Municipal Staff #2).

509

510 With the growth in numbers of licensed platform drivers to some 67,000 drivers (Lucs, 2018),
511 alleged poor conditions for drivers does not appear to have resulted in falling investment. By easing
512 entry and exit to the vehicle-for-hire industry, ride-hailing platforms have liberated large sums of time
513 and money to be invested in the industry. However, if a lack of local investment has not been a threat to
514 vehicle-for-hire services in general, the same cannot be stated for services for individuals with
515 disabilities. In 2014, the City of Toronto was moving towards 100% accessibility on public for-hire-
516 vehicles (Hui, 2014). Since that time the entrance of ride-hailing platforms has reversed these plans
517 (Transportation Standards Development Committee, 2018). Drivers of accessible for-hire-vehicles have
518 reported to municipalities that they have withdrawn from those services as they aim to survive under
519 the tough competition from ride-hailing platforms (Municipal Staff #3). A review of the multi-year plans
520 of ten major Ontario municipalities in 2018 “confirmed that none appeared to show a guaranteed
521 proportion of accessible taxicabs, or appeared to provide any details with respect to progress toward
522 determining a goal proportion” (Transportation Standards Development Committee, 2018).

523 In order to improve regulatory outcomes participants suggested, that competition would be
524 encouraged by their use of unobtrusive regulations and inexpensive fee structure. However, market
525 factors were not the only tools identified for monitoring TNC operations. Given the importance of
526 passenger awareness of the fares being charges, one municipal staff person described how the
527 municipality monitors software design. “We look at each of the screens before and after a ride. So, we
528 make sure that the estimated fare comes up, the information about the vehicle comes up. Things like
529 that, we just make sure that those elements that are outlined in the bylaw... are met” (Municipal Staffs

530 #7). Another staff person reported seeing “standard monthly data that [the platforms] give us... that has
531 the number of trips that were taken, the average distance of those trips, the average... fare” (Municipal
532 Staff #5). Yet, no municipality asks for raw data regarding fares and aggregate reports on fares likely fail
533 to provide effective data for oversight by eliminating alternative strategies for data analysis described in
534 the literature (Khan, 2016).

535 While fares were an important subject for which no raw data was collected, there were other
536 data points where the municipalities were improving their capacity. One staff person noted when asked
537 about expanding oversight through data that “we can demand all types of data, if there’s a justified
538 reason for it” (Municipal Staff #4). Some municipalities reported having a data scientist on staff or in a
539 consultant position to help monitor data reports from the ride-hailing platforms. There may also be an
540 emerging industry for “compliance monitoring service[s],... where if our municipality has got a licensing
541 system... they have got an algorithm that can... provide you with the information for enforcement”
542 (Municipal Staff #4). Indeed, one staff member from a rural municipality reported that “we have been
543 approached by... universities to assist with analyzing the data as well. So that’s something that may
544 happen in the near future” (Municipal Staff #5). As threats materialize, all participants anticipate a
545 process of bylaw review whereby these policies will be assessed and potentially changed.

546 In many respects, municipalities are well-placed to grow regulatory capacity. Municipal staff
547 showed no anxiety about securing a budget. With municipalities gathering a modest \$0.08 or \$0.30 per
548 ride there is likely room to raise budgets before these fees become onerous. Municipalities also carry a
549 tool whereby they can generally withdraw a license or fail to renew a license of a TNC in the event that it
550 is found that platform is not “acting with honesty and integrity” (Municipal Staff #8). While this is a
551 relatively blunt instrument it does provide a flexible means of promoting pro-social behaviour without
552 attaching explicit metrics at this early stage of regime development. Staff of different municipalities
553 argued that such a tool is frequently used by the municipality throughout the business licensing regime
554 (Municipal Staff #7; Municipal Staff #2) and in the City of London, England, it was a similar type of
555 regulatory procedure that was used to discipline Uber for failing to report cases of sexual assault on
556 rides with their platform (Kollewe & Topham, 2017).

557

558 **Discussion and Conclusion: Is the Gift of Regulation a Lump of Coal**

559 Municipalities have long held a critical position in the governance of local vehicle-for-hire
560 industries. They have long maintained the common infrastructure of a marketplace to facilitate trust and
561 encourage investment from local actors who would otherwise lack the capacity to overcome the market
562 inefficiencies particular to the vehicle-for-hire industry (Cooper et al., 2010). The entry of ride-hailing
563 platforms has allowed municipal regulators to step back from this contentious role by providing private
564 regulatory services for a critical urban service at no cost to the municipality. Services like the
565 administration of user background checks and mechanical inspections, dispute resolution, and traffic
566 and road network analysis are some of the important functions that TNCs perform that were previously
567 performed only by municipal staff. Whether intended as such, these services are a gift to municipalities.
568 However, at the same time, there is a risk to municipalities from these services. Private safety
569 inspections and background checks may not be effective in the long-run, there exists a potential for
570 discriminatory pricing from platforms, the accumulation of data by platforms may emerge as a nuisance
571 for residents, and poor treatment of local investors and workers could result in falling investment in the
572 means of production.

573 Gifts, such as Google’s web search service and Facebook’s messenger program, have become a
574 common business strategy among companies in digital industries, yielding considerable speculation
575 regarding their role in competitive markets (Eldar-Vass, 2016; Hindman, 2019; Zuboff, 2019). Among
576 many writers there is a sense in which these gifts are “loaded” (Eldar-Vass, 2016). Shoshana Zuboff
577 describes free digital services as a “lure” for participants to seize participant attention for the purposes
578 of targeted advertising. Such an account supports Christian Fuchs’ description of online free services as
579 exploitative processes of commoditizing user data (Fuchs, 2008, 2014). Contesting this point, Eldar-Vass
580 argues that the *quid pro quo* is rather more “incidental” to users, insofar as they volunteer to participate
581 and benefit from the exchange. It is this latter view which was most commonly expressed by municipal
582 leaders, who frequently brushed off concerns about surveillance and the potential for discriminatory
583 pricing, as “good business” (Municipal Staff #1).

584 Rather than understanding this gift of private regulation as the exploitation of municipalities in
585 the way gifts are often framed in relation to individual consumers in the digital economy, I argue that
586 the gift in this context is a political maneuver. Following Mary Douglas, in her discussion of Mauss’
587 original framing of the gift economy, “there are no free gifts; gift cycles engage persons in permanent
588 commitments that articulate the dominant institutions” (Douglas, 2002). Why would TNCs have not
589 been in favour maintaining the status quo of municipal regulation, pooling the costs of regulatory

590 functions with other TNCs in the hands of the city? I argue, for TNCs, the capacity to offer private
591 regulation gives them control to pursue their business plan, it gives them control over the narrative
592 regarding which disputes are made public, and it provides a bulwark against any potential political
593 pressures to impose higher regulatory requirements, as was seen in past periods of industry
594 deregulation of the 1980s and 1990s (Dempsey, 1996).

595 Despite the focus from participants on the free market approach taken by this regime, the gift of
596 private regulation may not be such a clear move to independent markets. Nearly half of municipal
597 leaders interviewed here argued for moving to a model of regulation similar to the restaurant industry.
598 Both industries are monitored by municipal inspectors to maintain safety standards, but participants
599 argued, this does not entail minimum or maximum prices for what's on the menu or limits placed on the
600 number of pizza shops³. Municipal leaders suggest with such a comparison, that traditional taxi
601 regulations are a relic of a by-gone era that is no longer appropriate. Yet, municipalities do not demand
602 that each restaurant owner operate through a franchise, the way drivers are required to be licensed
603 through the TNC. Further, competition on ride-hailing platforms is far from the competitive marketplace
604 we see among restaurants as there are few players competing over price. Continued oversight and a
605 concentrated marketplace imply that there remains an important question of trust in the system.
606 Whether government is creating an urban commons or privatizing that role, municipal governments
607 retain a critical role in defining how that trust is generated and governed.

608 This high level of control within the market does leave the municipality vulnerable to charges of
609 regulatory capture (Collier et al., 2018). The controversy at Facebook regarding the improper
610 accumulation and misuse of data by Cambridge Analytica even allowing for meddling in American
611 electoral politics, highlights the speed and intensity with which public opinion can turn in regards to
612 emerging practices of online business (Wong, 2018). The vehicle-for-hire industry remains a critical
613 urban service for which there continues to be intense local interest. Discriminatory pricing strategies
614 may be acceptable to residents and the municipality where the outcomes of these differential prices can
615 be framed as cross-subsidization with transparent and defensible social and commercial goals. However,
616 under the new regime, while market mechanisms appear to be strengthened, vehicle-for-hire markets
617 remain vulnerable to the threat of monopolistic domination that undermines public goals by centralizing

³ Let's ignore the fact that within the City of Toronto, for example, there are strict limits on the numbers of food vendors, the space they are permitted to use, and the foods they are permitted to serve when operating in the municipal right-of-way.

618 control without any of the democratic governance procedures of the QQE framework (Harding et al.,
619 2016).

620 The literature tells us that the avoidance of domination requires diligent oversight, new tools for
621 monitoring compliance, and thoughtful standards for market behaviour. The discourse that surrounds
622 the TNC marketplace, places great confidence in TNC companies to monitor themselves. This does not
623 however, suggest that municipal leaders are ignoring a responsibility to grow capacity. The regulation of
624 for-hire vehicles has followed a path of continual change. Just as Uber was entering the Toronto market,
625 city council was in the process of significant regulatory changes intended to solve long-standing
626 problems regarding the concentration of power in the hands of taxi license holders (Hui, 2014).
627 Municipal leaders foresee a similar process for TNC regulations. We are likely to continue to see the
628 evolution of this industry in the near and distant future. Whether that be due to changing economic
629 conditions or the proliferation of self-driving cars.

630 I conclude by suggesting areas of future research that could be important for assessing the
631 bylaw in the future. First, given the political nature of the exchange between the municipality and TNCs
632 there is reason to be concerned for how the loss of municipal oversight is affecting outcomes for various
633 classes of user. Already the literature has highlighted the exploitation of drivers as a failing of the
634 current regime (Rosenblat, 2018). An examination of how municipal policies are contributing to these
635 injustices, is one area that deserves further study. Second, in the face of concentrated power in TNCs,
636 there is a need to recognize the potential for discriminatory pricing within this regime, understand how
637 it is currently being applied, and to establish standards by which to judge cross-subsidization policies.

638

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