

## UBER TAKES THE PASSING LANE

### *Disruptive Competition and Taxi-Livery Service Regulations*

ALLISON SCHNEIDER

IT IS RARE THAT MUNICIPALITIES HAVE THE OPPORTUNITY TO REMAKE A SIGNIFICANT PORTION OF KEY INFRASTRUCTURE, AND TO DO SO WITHOUT SIGNIFICANT COST BURDEN ON THE CITIZENS. THE ADVENT OF UBER AND SIMILAR ENTITIES THAT HAVE MOVED THE RIDE-SHARING CONCEPT INTO THE 21ST CENTURY PROVIDE THAT UNIQUE CHANCE IN THE PUBLIC TRANSPORTATION ARENA. HOWEVER, CITIES SUCH AS LOS ANGELES, NEW YORK, AND CHICAGO ARE RESPONDING TO UBER AS A THREAT TO ESTABLISHED TAXI-LIVERY SERVICES AND THEIR ACCOMPANYING REGULATORY STRUCTURES RATHER THAN AN OPPORTUNITY FOR MODERNIZATION. IN ORDER TO CAPITALIZE ON THIS TRANSFORMATIVE MOMENT, CITIES AND GOVERNMENTS MUST RETHINK AND ADDRESS DECADES-OLD RULES, REGULATIONS, AND ENTRENCHED INTERESTS. THE BENEFITS TO AND ACCEPTANCE BY THE PUBLIC THAT SURROUND THE RIDE-SHARING MOVEMENT ARE UNPRECEDENTED. WHETHER TODAY'S POLITICIANS AND REGULATORS HAVE THE COURAGE AND FORESIGHT TO EMBRACE THIS FUNDAMENTAL CHANGE WILL DETERMINE THE LONG-TERM SUCCESS AND THE MEANINGFUL EVOLUTION OF OUR NATIONAL TRANSPORTATION NETWORK.

Technology has transformed much of our ingrained way of life. We no longer watch television at designated times or on predetermined days. We are no longer attached to a wall when making a phone call, and we no longer depend upon paper maps to guide us to our destinations. Similarly, the taxicab industry, an urban institution that dates back at least one hundred years, is being disrupted by the combination of smartphones, robust wireless connections, and ever-growing social networks.<sup>1</sup> The requirement to “hail a cab” or make a pre-determined appointment with a black car service has begun to diminish thanks to a new competitor that leverages the latest technology in order to bypass and streamline those requirements.

The most successful player in this compensatory ridesharing space is known as Uber.<sup>2</sup> Founded just five years ago, Uber now operates in more than forty countries and two hundred cities around the globe.<sup>3</sup> Uber has rethought the entire transportation process, from initiating and completing a transaction, to the ride itself, to even the customer’s experience of the drivers and the cars they use. Acceptance has been extraordinarily successful, and as a result, has caught the attention not only of entrenched competitors, but also of those charged with regulating an industry that has changed only incrementally over the last several decades.<sup>4</sup>

Any industry so deeply established in urban life, when challenged, raises significant questions regarding the way forward. Traditional transportation providers largely operate on the basis of a regulated oligopoly through the issuance of medallions, or franchised licenses, and are subject to a complex set of regulations. Those investments are up-



TAXIS IN NEW YORK (COURTESY OF WIKIMEDIA COMMONS)

front and based upon the value of limited competition.<sup>5</sup> However, they now face largely unregulated competitors who have limited oversight, minimal investment, and no requirement to pay upfront or as a percentage of their revenues for the right to operate. Regulators are now charged with oversight of minimum standards of operation, safety, vehicle selection, insurance requirements, and ensuring service areas that meet community requirements. Because Uber operates in a regulatory grey area, however, local officials have found that their powers of oversight are somewhat limited and have not kept pace with this dramatic change in service delivery.<sup>6</sup> Therefore, they must determine the correct path toward the exercise of their office with respect to a business that does not fit into the existing regime of rules and regulations. As small and even large businesses, taxi and livery providers must discern whether the model is still viable and determine the long-term impact on the valuation of investments.<sup>7</sup>

From the standpoint of a municipality, the issue becomes a deeper financial question as well. Because the livery industry operates in the public right of way, the money derived from a right to operate is a meaningful source of municipal revenue. Since competition diminishes the value of these licenses, the municipality has a vested interest in protecting the status quo.<sup>8</sup> The political implications have become somewhat clouded as it is citizens who have taken Uber from start-up to its current success. The balance between preserving the institution and giving the constituents what they want is tenuous at best.

## OVERVIEW

This research paper explores a relatively new and disruptive social and economic force in major metropolitan areas. Ridesharing services such as Uber not only present a new competitive force in the marketplace, but also challenge the fundamental underpinnings of a long established regulatory framework. As a technological phenomenon, Uber goes further, changing the way its customers use and pay for transport services. By putting dispatch services directly in the hands of the consumer and breaking down barriers to entry, Uber has truly exploited the “social network” in a unique way.<sup>9</sup>

In order to understand and fully explore the integration of the opposing forces, this paper will look at the impact of this new transportation concept from the standpoint of each of the key players. In order to set a historical background, I will first explain Uber’s structure and why it be-

## *“Although there is always someone ‘looking to develop a better mousetrap,’ the Uber service has turned a decades-old business on its ear.”*

believes it can operate outside of the regulatory environment. Additionally, I will analyze the legacy taxi and livery business, reviewing its economic, operating, and regulatory underpinnings to determine its strengths and weaknesses. I will further explore the motivating factors in the response to the new competition in an otherwise exclusive franchise environment.

As the research has revealed, a large portion of what motivates the taxi and livery business is a strict and complex regulatory structure. One might say that this business is truly an extension of the municipal transportation system that it serves. As a result, it is crucial to understand this framework and its political motivations both from a public policy and economic point of view. The municipal response has varied from passive to legislative to legal, each seeking to deal with the opposing forces while appeasing a growing number of ridesharing customers whose patronage is growing rapidly. For example, while Uber is a private company with limited public information, app research firm 7Park estimates that Uber’s transaction growth is up over 400% with sales growth over 250% during 2014, through November 15.<sup>10</sup>

It is this popularity among consumers that has made this issue so dynamic. Although there is always someone “looking to develop a better mousetrap,” the Uber service has turned a decades-old business on its ear. And while it is important to understand what fuels this acceptance, it is also crucial to account for the ancillary benefits of this new urban transportation system. After exploring this, I will then lay out the case for Uber’s ridesharing business concept, not only in terms of the economics, but also of the coincident benefits that impact users, providers, and communities in ways not originally contemplated.

Finally, I will draw conclusions based on research and historical precedents as they relate to current activity. One must draw these determinations, however, with the understanding that this experiment in alternative transportation is still somewhat in its infancy. The competitive responses are still muted, the regulatory framework is in a state of flux, and perhaps most importantly, the customers and

drivers who use and deliver the service are still “inventing” its full application.

My conclusions will focus on the reality that competition in the taxi business has become a permanent part of the urban transportation network. They will center on providing incentives to traditional providers so that they are encouraged to upgrade and modernize their operations and technology. In addition, I will recommend minimum operating standards for all providers so that all participants act in the best interest of the customer and for the betterment of the network. Finally, I will explore and ultimately reject any notion of directly compensating legacy license holders in order to protect their initial investments. Instead, I will conclude that traditional providers have a first mover advantage, an operating history, and the unique public center access to compete effectively, and as such, their ultimate success should be tied to that end.

### WHAT IS UBER?

Uber, along with its smaller competitors, Lyft and Sidecar, is a ridesharing service that uses smartphone applications to connect riders and drivers. This system eliminates the concept of calling a dispatcher or hailing a taxi on the street. No cash is exchanged with the driver; rather, a credit or debit card stored in the application pays Uber, which then transfers the funds to the driver. The transaction on both sides is swift and elegant. Both the passenger and driver know the economics before the ride begins as it is calculated based on time, distance (provided by GPS), and demand (a so-called dynamic pricing model).<sup>11</sup>

Potential riders can use their application to track the location of the driver, as well as his/her timing and approach to the pickup location. Similarly, the driver can easily locate the passenger in order to determine the most efficient approach. In complex urban environments with many one-way streets and minimal stopping and standing zones, this can be an invaluable tool. Once the ride begins, each driver uses a standard smartphone (provided by Uber) to determine the most efficient route, taking into account traffic, construction, special events, and other

known obstacles along the route. As there is no tipping involved, passenger and driver can make a quick and convenient exit.

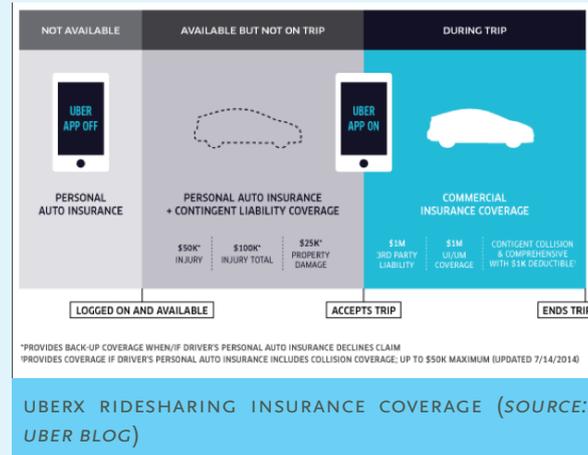
Each of these features stands in stark contrast to the traditional taxi service, which requires a transaction of cash or credit in the vehicle, calculated at the completion of a ride. The driver, without an objective measure of efficiency, determines the length and route of the ride. Further, there is no convenient way to track a taxi (even if it is obtained through dispatch) or for the driver to determine the passenger's exact location.

Uber's service also includes a self-monitoring feature not found in the traditional taxi: a driver and passenger review program. After each ride, the passenger is prompted and encouraged to rate their experience. Each phase, from pick-up to drop-off and from vehicle to driver, is rated for quality and efficiency. At the same time, drivers have an opportunity to report passengers who are problematic or present challenges to the system. This provides instant feedback that allows Uber to leverage its network and deal with consistently subpar service, as well as maintain an ongoing relationship with a customer base that is spread among diverse geographies, communities, and cultures.

As a relative newcomer to the marketplace, Uber has sought to establish credibility for safety and reliability, especially given the unique personal relationship each transaction provides. Most recently, Uber has sought to solidify its background check standards for drivers, an area of concern for municipalities and passengers alike. To that end, Uber hired the consulting firm Giuliani Partners (led by the former Mayor of New York, Rudolf Giuliani) to review the processes and procedures as well as the minimum standards. Giuliani's report draws some early conclusions: "Uber is on track to complete more than 2 million background checks in 2014 ... Uber is setting the safety standard in the ride-sourcing industry." Giuliani further notes, "The normal background check by many taxi services in major cities is a 3-5 year background check compared to Uber's 7 year check ... multi-dimensionally [is] more thorough ... blazing new ground in a quickly evolving industry."<sup>12</sup>

When it comes to stepping into a vehicle, insurance is always top of mind. Uber provides insurance coverage for trips in the amount of \$1,000,000, which is triggered for driver, vehicle, and occupants from the moment a driver

accepts a trip.<sup>13</sup> This coverage is consistent across each city that is serviced by Uber and is nearly double that for taxicab accidents in most major cities. The methodology for such coverage is displayed in the chart below, which shows the insurance coverage for UberX cars.<sup>15</sup>



#### WHY IS UBER DIFFERENT FROM TAXIS?

At first glance, ridesharing may look like a taxi service: it uses a handheld 'smart' device to summon a ride to a specified location, for a fee. However, there are subtle differences that have a meaningful impact. Primarily, Uber drivers are not employees of Uber; they are each independent contractors who use privately-owned vehicles to offer rides ("rideshares") for a fee. In fact, such forms of legal and well-practiced ridesharing have been around and practiced through all manner of personal transportation: offering an acquaintance a ride for some remuneration, for instance reimbursement for gas and tolls, or putting in an expense report for the business use of a car. In fact, all Uber has done is create an efficient way to organize and brand these activities. From a regulatory perspective, Uber is not a car and driver, but a network that connects a willing rider to a willing driver for a pre-arranged fee.

While this may appear to be a distinction without a difference, most governing municipalities have not only recognized that current law is not of force, but have also begun the process of modernizing regulations to encompass ridesharing activities. For example, in 2013, California redefined these services into a category called "Transportation Network Services" with the intent to regulate.<sup>16</sup> Other states and municipalities such as Chicago,

New York, and Los Angeles, which are addressed in this paper, have both recognized their need for expanded regulation and tried to accomplish this through the courts, legislation, statute, and administrative actions. While there is disagreement on how to deal with ridesharing services among the various agencies of the government, there seems to be a somewhat universal acceptance that such services are not directly or adequately covered by existing law.

#### IMPACT ON THE TAXI-LIVERY BUSINESSES

The modern taxicab business was established during the early twentieth century and has proliferated along with the expansion of infrastructure, the explosive growth of the gasoline-powered vehicle, and continued population growth in and around America's urban areas. Generally authorized to serve a municipality by license, taxis are subject to regulated rates, service areas, fares, quality, and insurance. In return, these cars-for-hire expect to be subject to limited competition in their service areas.<sup>17</sup>

The economics of this business were originally simple. In most large cities, the required capital an investor needed included an upfront payment for a medallion, franchise, or license, and an investment in a vehicle that met predetermined criteria.<sup>18</sup> Ongoing operating costs included the cost of the driver, maintenance, tolls, insurance, and fuel. The efficiency of the driver, the demand from the local economy, and the nature of the service area set the revenue stream to determine profitability.<sup>19</sup> Because of the limited number of entrants, the business became not only profitable, but quite predictable. As a result, the medallion or license values consistently grew over time. Medallions were consolidated into large corporate holdings within a single market, with values for single medallions in New York City surpassing the \$1 million mark in 2011.<sup>20</sup>

As Uber entered the ridesharing business with superior technology and no cost of entry, the taxi and livery businesses fell under fire for poor service quality, inadequate service areas,<sup>21</sup> and rate schedules that limited

the ability of riders to predict fares.<sup>22</sup> Uber's sophisticated ridesharing, however, sits in a grey area largely outside of historical regulation.

The impact of competition on the regulated taxicab business has been swift and meaningful. A recent auction of medallions in Chicago drew no buyers.<sup>23</sup> New York, a city that has rarely seen a decline in medallion value, saw the first decline in fifteen years, the last being a slight decline after 9/11.<sup>24</sup> This, along with the growing operational issues of having a new competitor in the market, has left traditional taxi and livery companies on their heels. The value of the New York City taxi medallion has increased in the pre-competitive period and declined slightly in the more recent competitive environment.<sup>25</sup>

The lines have been clearly drawn for the competitors as well as regulators and policy-makers. Lawsuits against cities have been filed as taxi medallion owners sought for protection for the exclusive territory that they are contracted for.<sup>26</sup> Uber claims there are no regulations to cover what they do, as this kind of operation was never conceived. Adding to the complexity, technology, social networks, and the flexibility of the new business model allows the business to morph and change based on the needs and desires of users, who in great numbers have been the beneficiaries of increased access and utility of the service.

#### REGULATORS: BRIDGING THE PAST AND THE FUTURE

Regulation and oversight have historically been evolutionary processes, particularly in the area of municipal transportation. The slow and methodical development of the means of municipal transport save politicians the luxury of time to determine and refine policy as circumstances changed. For example, in 1907, when taxi medallions were first issued in the U.S., there were fewer than 150,000 cars nationwide.<sup>27</sup> While that number has grown to over 254 million in the current decade, the pace of vehicle growth was moderate, at around five percent, since the 1960s.<sup>28</sup> As a result, there was plenty of time to develop an incre-

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mental approach to the use of public infrastructure. Similar incrementalism can be seen with respect to the rollout of air, rail, and livery services. In New York City, there are 13,327 medallions currently in service, actually fewer than the 13,500 that existed in 1937.<sup>29</sup> Government agencies are, by definition, deliberative institutions designed to be methodical. Regulations regarding livery services have not changed much in years except after exhaustive studies in areas related to safety, pollution, and consumer protection.

Uber's entrance into the taxi and livery service marketplace has challenged the status quo on every level in a small amount of time. Municipalities faced with this disruption of the status quo have sought to gain leverage over Uber's activities in order to assert control and maintain regulatory authority and relevance. At the same time, they have incentive to protect their financial and contractual benefits with their current "lessees": the medallion holders.

Cities are now faced with a set of regulations that do not fit this new form of ridesharing, and as a result are trying to fashion existing rules into an area they were not designed to cover, all during a time when technology in general is morphing daily. For example, the city of Los Angeles, among other large California cities, sent cease and desist orders to Uber through their Department of Transportation. Citing a lack of authority to operate, it ordered Uber to stop picking up "passengers for hire." The order was made on the basis of public safety, perhaps the only omnibus regulation that could be stretched to accommodate their goal, threatening drivers with arrest and auto confiscation.<sup>30</sup> The cities, however, did not seem to understand that there was a new entrant in the discussion--the constituent. Regulation or not, consumers have adopted the rideshare service with great gusto. The *Los Angeles Times*, in a timely and pointed editorial just days after L.A.'s assertion noted out the lack of municipal authority, wrote: "The problem is...[the City] does not have the authority to do so... the companies offer ride for hire services that the state Public Utilities Commission oversees... the main danger the companies pose at this point is to the cabbie's hold on what used to be a captive market".<sup>31</sup> Despite the threats, the ridesharing companies still operate in the city of Los Angeles and throughout the rest of California.

In Chicago, the city's mayor, Rahm Emanuel, took a much more direct approach, introducing a law that sought to re-define rideshare companies and protect the entrenched taxi and livery business. A seven-point plan was offered, which included preventing these companies from owning

or financing vehicles, eliminating UberX cars, prohibiting advertisements on the vehicles, prohibiting airport drop offs, and a series of mandatory reporting requirements.<sup>32</sup> The ordinance, clearly aimed at gutting the core of the ridesharing service, drew the ire of populist organizations. Jacob Huebert, senior attorney for the Liberty Justice Center, laid out a view directed toward the citizenry: "Citizens should be disturbed by a city government that is more concerned about pleasing a politically connected special-interest group than in letting consumers choose the services they like best. And they should be more disturbed that government officials are more interested in continuing cronyism for as long as possible than in letting Chicago thrive in the twenty-first century."<sup>33</sup> In August, the City of Chicago rejected the Mayor's plan and instead passed an ordinance with a much more relaxed and workable set of requirements, based largely on feedback from constituents.

In New York City, meanwhile regulators took a different tack. With no desire to change or amend regulations to accommodate the ridesharing service, the Attorney General of the State of New York brought a lawsuit seeking to re-characterize ridesharing, pushing to fit it back into twentieth century standards: "As it has done in every other city in which it operates, defendant has simply waltzed into New York and set up shop while defying every law passed whose very purpose is to protect the People of the State of New York. Defendant runs what is at the core a for-hire livery or taxi service. Defendant portrays itself as a twenty-first century technology business. In reality, it uses a smartphone app to run a twentieth century business..."<sup>34</sup> Whether through regulatory edict, the passage of legislation, or the courts, municipalities are struggling to transition to a service that cannot be put comfortably into an existing regime.

#### BENEFITS OF THE UBER MODEL

Uber's opportunity to rethink the urban ride-for-hire concept arose out of its recognition that the nearly century-old taxi business had, for the most part, become stagnant. The number of taxi medallions or licenses had barely changed since the early 1900s, yet the population in major cities like New York had nearly tripled.<sup>35</sup> Uber's management saw what they perceived as a hole in demand, service offerings, and a faulty municipal framework that allowed for a new, largely unregulated service. Perhaps most important was Uber's ability to marry this concept of alternative transportation with an immediately addressable network of mobile smartphone users who could act as their own



IN A JANUARY 2015 PROTEST, PORTLAND TAXI DRIVERS DEMANDED THAT CITY LEADERS MAKE RIDESHARING COMPANIES PLAY BY THE SAME RULES AS CABS AND TOWN CARS. (COURTESY OF WIKIMEDIA COMMONS)

dispatchers, effectively calling on available drivers for rides. Wireless services, GPS, and sophisticated applications not only surpassed the current system, but also drove overhead dollars out of the model.<sup>36</sup>

Of course, no service can be characterized as successful or disruptive unless it provides demonstrable benefits in the marketplace. Uber services are aimed squarely at providing an enhanced experience, but the benefits generally fall into three general categories: (1) The direct customer usage; (2) The enhancement to the public transportation system; and (3) Those who provide the service as drivers.

In general, Uber and other ridesharing users have shown approval of the service. The CEO of Uber, Travis Kalanick, recently described his company growth: “The company is growing at an alarming rate, quadrupling its sales every year on the back of hundreds of thousands of drivers and millions of riders”.<sup>37</sup> Since its founding in 2009, Uber has expanded into forty-five countries and more than 200 cities. However, while these numbers are impressive, they do not fully explain the factors that drive the popularity of Uber’s concept.<sup>38</sup>

A study by the University of California Berkeley, based upon surveys done with ridesharing customers, sheds light on the motivating factors of using Uber.<sup>39</sup> The top five factors all focus on the simplification of the transportation process. From the payment and the speed to the initiation

of the transaction, participants were more impressed with ridesharing companies than with other forms of transportation. It is no wonder, then, that the existing oligopoly providers are concerned enough to take the actions discussed in this paper. It is interesting to note that, beyond the convenience of use and the immediate need of getting from place to place, users are also developing appreciation based on lifestyle issues. More than twenty percent of respondents noted that this was a convenient alternative to driving under the influence—a meaningful percentage, possibly based upon the technological ease of use and availability of the Uber service as compared to taxis. This social benefit portends additional attributes that appear to be bolstering adoption.<sup>40</sup> This, along with other social motivations such as not needing a parking space, are signs that Uber customers see lifestyle benefits beyond simply having an alternative to taxi or livery services, which is a powerful driving force in Uber’s penetration of the marketplace.

Uber, and ridesharing in general, appears to have a positive impact on the general infrastructure of transportation as well. If the purpose of the transit network is to provide safe, reliable, and on-time transit to its users, Uber seems to be pulling its weight, if not setting a new standard: “UC Berkeley researchers found that in the evening rush, 92 percent of rideshare cars arrived in under 10 minutes, while only 16 percent of taxis did so. And while 37 percent of taxis took longer than 20 minutes, only one percent of rideshares took that long.”<sup>41</sup>

Another social benefit of Uber is the ability for urban and suburban residents to reduce or even eliminate their reliance on personally owned vehicles. A survey commissioned by the City of San Francisco revealed that there is a shortage of taxi services, which affects the overall use of the public transportation system. Since taxis function in large part as the initial or final leg of access to the mass transit system, the lack of availability drives consumers toward private ownership of vehicles: “28 percent would take public transit more often if taxis were more reliable ... 11 percent would consider giving up one or more of their cars.”<sup>42</sup> Because Uber provides greater availability of transportation, the number of cars on the road decreases, and the realization of such a goal becomes more apparent. “Over the next few years, if Uber and other such services do reduce the need for private vehicle ownership, they could help lower the cost of living in urban areas, reduce the environmental toll exacted by privately owned automobiles ...

and reallocate space now being wasted on parking lots to more valuable uses, like housing.”<sup>43</sup>

Another benefit of Uber’s ascension is that of increased employment. Uber’s model is based upon drivers who are not Uber employees, but rather, a new breed of small business owners.<sup>44</sup> As opposed to the upfront fees required for taxi ownership such as medallions or other licensing fees, there are few barriers to entry. Access to a clean car and a somewhat flexible schedule is all that is needed. Uber provides the technology and hardware to connect a driver to the network, helps to initiate and complete the transaction, and handles the bookkeeping. According to its website, Uber creates 20,000 jobs per month.<sup>45</sup> Those jobs come with meaningful compensation for drivers in major urban areas. “UberX driver partners are small business entrepreneurs demonstrating across the country that being a driver is sustainable and profitable. For example, the median income on uberX is more than \$90,000/year/driver in New York and more than \$74,000/year/driver in San Francisco.”<sup>46</sup> While these large cities are areas where Uber has operated for some time, results portray the ease of entry and high demand for those who choose local transportation as a profession, a job, or a part-time enhancement to their income.

### PUBLIC POLICY SUGGESTIONS

While it is still too early in the evolution of ridesharing to determine the long-term financial impact on the legacy taxi industry, it is clear that the effect of Uber, as a new competitor in the market, will be financially material and create significant change. From a regulatory standpoint, municipalities should seek to ensure that this essential portion of the urban transportation system continues to operate efficiently, protect the consumer from potential harm, and ease ridesharing’s inevitable transition from a regulated oligopoly to full-fledged competition. This transition has already benefited the consumer and municipal systems by providing more choice, more predictable pricing, and additional technological leverage in order to provide better and timelier information to the user.

Specifically, the municipalities should seek to level the operational playing field through the adoption of minimum standards. These could include vehicle standards, driver qualifications, insurance requirements, and service standards to ensure consistency in operating the performance necessary to stabilize and ultimately enhance the transportation network. While such standards and regulations

should be codified, it is interesting to note that, as documented in this research, Uber currently meets or exceeds many of the standards that exist for the taxi industry.

Regulators should not, however, adopt the current framework, which protects the status quo of the taxi business and whose methods of operation, pricing systems, equipment, and customer service are quickly becoming obsolete. While entrenched medallion, license, and franchise holders have lobbied vigorously to protect their legacy advantages, it does not appear that they have put that same level of vigor toward a competitive response. Perhaps this is where municipalities can incentivize change. Regulators have the opportunity to go a step further and induce traditional taxi improvements. Providing relief from license or franchise fees to operators who upgrade their fleet or technology would balance operational enhancements with the current financial framework. At the same time, cities should adopt a more flexible pricing structure that can be implemented as certain levels of competitive market penetration are met. Allowing licensed taxis to simplify rates can provide both a competitive tool and an incentive to match market demand with economic return.

While it is tempting to try to recover the original cost of entry through the medallion process, there is little precedent for such relief. History shows no such reimbursement to the horse-drawn carriages of the nineteenth and early-twentieth centuries, when the original medallions and franchises were issued to motor vehicles, nor any governmental assistance to regulated telephone companies when its monopoly was dismantled by competition from unregulated wireless carriers such as Sprint and MCI.<sup>47</sup> Similarly, cable television companies that operate pursuant to municipal franchise now compete with unregulated cell phone and satellite signal providers. In each case, the companies, originally provided with a monopoly advantage in the early stage of development, were forced to reinvent themselves or face extinction.

While meaningful competition has arrived and does not appear to be going away, taxi companies have advantages that are directly related to their implied role as a transportation provider of “last resort”: A long operational history, brand recognition, and a loyal customer base that has come to rely on the ability to “hail and go.” In addition, they understand how to acquire, own, and operate large vehicle fleets, and have preferred logistical positions at public transportation centers such as airports, train station, and city centers. It is in the interest of the taxi indus-

try to leverage these advantages as they recognize the inevitability of a fully competitive environment.

## CONCLUSION

Uber's success and its concept of ridesharing have been driven in large part by technology and more so by the power and reach of the social network, and its implications are nothing short of dramatic. Within five years of operation and with fewer than three hundred employees, Uber has managed to disrupt the taxi and livery business, a business that has otherwise operated without competition for more than one hundred years.<sup>48</sup> Along the way, a loyal following of customers have re-imagined how personal transportation in urban areas may be effectively used. From an alternative to privately-owned vehicles to a "safe-ride" substitute for driving under the influence, customers are molding the product. As a result, the benefits of Uber have become personal to its following, something the entrenched taxi monopoly could never claim.

Just as interesting as the loyalty of Uber's customers is the opposition to its mere presence on the urban stage. The reaction of the taxi and livery business has been to "circle the wagons." Rather than take this disruption as a wake-up call and use their incumbency to their advantage, they have chosen to fight for the status quo, staging protests rather than restaging their operating and consumer service strategy. One such high-profile reaction came in Los Angeles, when two hundred taxis circled City Hall and honked their horns--surely a less than high-tech response with little follow-up support.<sup>49</sup>

In fact, there is likely little chance of going back to the taxi and livery model of limited competition. With such clear and compelling benefits, acceptance by the consumer is without question; the real issues left to be ironed out are clearly in the hands of regulators. Courts will have their say, but that will only serve to guide the political edge of public policy. Public officials will have the opportunity to shape the future of urban transportation, perhaps for decades to come, but the looming question is whether, and how, they will rise to the challenge. With cities resorting to cease and desist letters, restraining orders, and hurried ordinances, thoughtful regulation and reaction have been pushed to the side. Rick Wartzman of the Drucker Institute capsulized the challenge, stating, "As Peter Drucker would have seen it,<sup>50</sup> both taxi operators and their local government overseers are focused on the wrong thing; trying to sweep Uber into yesterday's reality, rather than moving the entire system toward tomorrow's".<sup>51</sup>

It is those overseers who will eventually lay out the parameters of Uber's success or failure. Regulations are the instruments of practice for those charged with the public trust, and they must be handled with care. As Drucker himself wrote, "Regulations, no matter how badly needed at any one time, and how beneficial at any one time, always become obsolete eventually".<sup>52</sup>

The taxi and livery system will continue to fight, perhaps with good intention, and perhaps out of self-preservation. However, without redirecting some of their energy and resources to improved quality, technology, and customer service, they are in danger of going the way of the payphone: eventually becoming extinct despite their preferred position on our city streets. City and state officials have the opportunity to stay relevant on this issue, but only after objective recognition of the economic, technological, and municipal advantages of this new augmentation to the public transportation system, while working in the best interest of their constituents. The question that remains is whether those regulators will be looking forward or through the rear-view mirror.

## ENDNOTES

1. Downs, *Lessons from Uber*, 2014.
2. Ridesharing is a ride matching system that formally or informally links riders to drivers traveling between the same places at the same times. So-called "dynamic" or "real-time" ridesharing is a form of ridesharing that is used for single, one-way trips rather than for trips made on a regular basis at the same time (Levofsky and Greenburg 3).
3. Seward 2014;3 Uber was founded in 2009 by Travis Kalanick, the then and current CEO, along with Garrett Camp. Both men had financial and technological success selling prior businesses to established internet companies. The original idea for Uber stemmed from trying to solve what Kalanick described as a "horrific taxi problem in San Francisco" (Kalanick 2014). The name Uber appears to have come from an American interpretation of the German "über". In America, the word Uber has become a relatively common, if slangy synonym for "super" or "topmost"; it reflects what Uber CEO Travis Kalanick has called in interviews the company's "disruptive ambitions" (Peterson 2014).
4. An 'Uber' Problem for Cities, 2012.
5. Badger, *Taxi Medallions*, 2014.
6. Mann, *Cities Move to Rein in Smartphone Taxi Services*, 2012
7. Generally, the difference between a taxi service and livery service is two-fold. First is the way they are dispatched. One can "hail" a cab on the streets. For example, in New York City, only yellow medallion cabs can legally pickup street hails. Livery, or black car, services generally only respond to radio calls. The other difference relates to pricing. Taxi cabs have a metered pricing

system based upon time and distance while livery cars operate on a zone pricing system, which is fixed fees based upon location or distance (Dawid 2011).

8. Badger, *Taxi Medallions*, 2014.

9. Uber is not alone in as a force of change in highly regulated environments. Another example with similar impact is Airbnb, which is challenging the hotel business by allowing users to share their homes or otherwise rent them to prospective “tenants”. Using a similar matching application, Airbnb brings interested parties together outside of the conventional regulatory framework that controls the traditional hotel business. Rebranding and refreshing an outdated means of access, while at the same time allowing providers and consumers to define their niche in the marketplace has created what is referred to as the “platform culture” (Sundararajan 2014). The social network platform allows an organized interaction between market participants where market content is created and distributed through local channels rather than a central dominant provider. Uber, Airbnb, and other such application platforms provide an elegant way to interact, while the forces of market demand are shaking the foundations of legacy providers.

10. Lunden, *Uber Ride High*, 2014.

11. Dynamic pricing refers to the setting of prices for a good or service based upon demand at a particular moment and the availability of supply; the added complexity in Uber’s case is that pricing becomes a moving target, changing almost in real time depending upon what is happening in the market at a particular moment (Morphy 2014). According to Uber, with dynamic pricing (referred to as “surge pricing”), rates increase to get more cars on the road during the busiest times. When enough cars are on the road to meet the demand, prices go down (“What Is Surge Pricing” 2014).

12. Giuliani, *Uber Setting the Standard*, 2014.

13. Nairi, *Insurance for UberX*, 2014.

14. Generally, states require taxi companies to carry between \$250,000 and \$500,000 of liability insurance, and there is no uniform requirement to carry uninsured motorist coverage (Denmon 2014).

15. UberX is the brand name that Uber uses for its lower cost option, with fares targeted at 20% below that of a taxi. UberX drivers have mid-range or hybrid vehicles with seating for up to four passengers. This is distinguished from Uber Black Car service, which provides luxury level cars and SUVs. While UberX cars are driven by licensed drivers, Uber Black Cars are driven by licensed limousine drivers (Fiorillo 2014).

16. Geron, *California Becomes First State to Regulate*, 2013.

17. Federal Trade Commission, Bureau of Economics, *An Economic Analysis of Taxicab Regulation*, 1984:64

18. Approximately 60% of the top-ten U.S. cities by population operate on a franchise or medallion basis while the other 40% operate on a license platform. While both formats have strict regulatory requirements, they differ in that medallion and franchise holders pay substantially higher upfront payments, while licenses pay a higher percentage of revenue to the municipality on an ongoing basis. An expanded review of large, but not top ten, cities reveals that older and more densely

populated urban environments, such as Boston, Detroit and Newark, tend to operate on a medallion or franchise basis, while newer, more expansive cities with several urban centers tend to license taxi businesses. See the chart below for the specific methods for taxi regulation in the top ten U.S. cities.

Top-Ten U.S. Cities by Population (and Their Methods for Taxi Regulation):

New York City (Medallion)

Los Angeles (Franchise)

Chicago (Medallion)

Houston (License/Permit)

Philadelphia (Medallion)

Phoenix (License/Permit)

San Diego (Franchise)

Dallas (Franchise)

San Jose (License/Permit)

San Antonio (License/Permit)

Source: US Census and individual municipalities’ transportation regulations

19. Federal Trade Commission, Bureau of Economics, *An Economic Analysis of Taxicab Regulation* 1984:80-2.

20. Coscarelli, *Taxi Medallions Hit 1 Million Mark*, 2011.

21. Many urban taxi companies are reluctant to carry passengers beyond their local service area. To do so would limit the number of trips that could be made on a particular shift. The further a taxi travels from its core service area, the less likely a return fare will be available, creating an uncompensated or “dead” run. While regulations discourage this behavior, it has been difficult to enforce (McArdale 2012).

22. Badger, *Taxi Medallions*, 2014. Taxicab fares, while highly regulated, can be confusing and difficult to predict. In the metered environment, fares are based on both mileage as well as time. Both are variable and dependent on traffic and detours, as well as the route taken by the driver (Mathis 2008). In addition, the rate of fares can be highly complex. In New York City, the fare starts based on \$0.50 per 1/5 of a mile, depending on the rate of speed. There are also surcharges depending on time of day. As a result, the regulated fare cannot be easily predicted or calculated (“Rate of Fare” 2014). This is in contrast to the Uber practice, which predicts the full fare to the customer before the trip is initiated.

23. Ibid.

24. “The average price fell by \$5 in June [2014]—a slight decline for medallions, which trade for a bit more than \$1 million apiece, but still an unheard-of occurrence in recent years ... Bloomberg keeps quarterly data on New York medallion pricing going back 10 years, and the last time prices fell for a full year was from 2000 to 2001 ... There are similar signs of strain on medallion values in Chicago and San Francisco” (Brustein 2014).

25. Brustein, *Uber’s Fare War*, 2014.

26. Tuttle, *Rideshare Battle Shifts to L.A.*, 2013.

27. *Facts and Figures of the Automobile*, 2013

28. US Department of Transportation, Section B, *National Transportation Statistics*, 2011.

29. Horowitz and Cumming, *Taken for a Ride*, 2012; Schaller and Gilbert, *Villain or Bogeyman?*, 1996.

30. Tuttle, Rideshare Battle Shifts to L.A., 2013.
31. The Times Editorial Board, L.A. Times, Uber, Sidecar and Lyft, 2013.
32. Huebert, Chicago's Uber Ordinance, 2014.
33. Ibid.
34. State of New York v. Lyft, Inc., 2014.
35. Census Scope, Population Growth, 2014.
36. Elliott, Taxi or Tech Company?, 2014.
37. Segall, Our Growth is Unprecedented, 2014.
38. (Seward 2014:3)
39. Rayle et al., Comparing Taxi and Ridesourcing in San Francisco, 2014.
40. Ibid.
41. Ferenstein, 2 New Studies Show how Uber Makes Cities More Productive, 2014.
42. Hara and Canapary, Best Practices Studies of Taxi Regulation, 2013.
43. Manjoo, Less Reason to Own a Car, 2014.
44. Craig, An Uber Impact, 2014.
45. Ibid.
46. Ibid.
47. Both MCI Communications and Sprint Corp. started as telecommunications bypass companies. Building or acquiring private networks, each offered businesses and then consumers lower cost access to the long distance communications network. They relied on loopholes in a complex and archaic set of regulations (not unlike Uber) that were, at the time 70 years old. Using a simple and direct rate structure and the perception of higher quality service, each made inroads with respect to market share. Ultimately, MCI brought a lawsuit against the bell system of telecommunications companies that led to their ultimate breakup (Cantelon 1993).
48. Lagorio-Chafkin, Resistance is Futile, 2013
49. Srikrishnan, L.A. Taxi Drivers Refuse to Protest Uber, 2014
50. According to the Drucker Institute website, "Peter F. Drucker was a writer, professor, management consultant and self described 'social ecologist' ... hailed by BusinessWeek as 'the man who invented management,' Drucker directly influenced a huge number of leaders from a wide range of organizations across all sectors of society."
51. Wartzman, The Uber Challenge, 2013.
52. Ibid.

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