POLICY BRIEF

Driving Public Good: How Collective Bargaining Can Increase Reliability & Safety in the Seattle For-Hire Transportation System

November 2015
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Puget Sound Sage works to promote good jobs, quality employment opportunities, a cleaner environment and affordable housing for low/moderate income families in the Seattle metropolitan area. Our mission is to ensure that all families benefit from economic growth, and that local and regional policy decisions meet the social and environmental needs of our communities. Sage provides timely, critical research on issues of the regional economy, jobs, housing and the environment. Find more information at our website, www.pugetsoundsage.org, and our blog, soundprogress.wordpress.com.

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ACKNOWLEDGEMENTS
We are deeply indebted to the following people who contributed research or editing to this brief: Jenn Hagedorn, Myani Gilbert, Mariah Montgomery and Rebecca Smith. We also want to thank Dawn Gearheart for her insights into the for-hire transportation industry in Seattle and lived experiences of for-hire drivers. We would also like to thank the Ford Foundation and Public Welfare Foundation for their support.
SUMMARY AND KEY FINDINGS

For-hire vehicle services, such as taxis and app-dispatched cars, play a vital role in urban transportation systems. In Seattle and Kings County, the traveling public takes over five million for-hire trips each year and, with demand growing, the number of trips provided is increasing.¹ For-hire transportation often works in tandem with public transit systems and can provide an essential service for people with limited physical mobility or limited access to other transportation options.

Despite the important role of for-hire transportation, cities across the country have struggled to put public policy into place that ensures that these privately run but publicly relied upon services are safe, reliable, economically stable, and efficient. Cycles of de- and re-regulation in the late 1970s and early 1980s created a fragmented for-hire industry in which problems with safety and reliability abound and, relatedly, drivers take on significant personal and financial risk.

With the introduction of on-demand transportation companies like Uber, Lyft, and Sidecar, substantial evidence points to even less stable conditions now for drivers and passengers. While regulators have historically stabilized prices in their city or county, new for-hire providers reportedly make frequent and unilateral changes to fares and to company commissions.² As many as 65 percent of app-based drivers have been reported to have under six months on the job,³ suggesting an inexperienced⁴ and unstable workforce, and drivers across the country have reportedly staged public protests and work stoppages in response to these conditions.⁵ Such dynamics can negatively impact the safety and reliability of for-hire services, as well as driver livelihood.

This widely reported upheaval in the industry has created an urgent need for the City of Seattle to address both long-standing and new challenges. In this context, the Seattle City Council is considering an innovative strategy: creating a mechanism for for-hire drivers to collectively bargain with their for-hire companies on a wide variety of issues that affect safety and reliability. This approach accommodates the different business models present in the for-hire driver sector, making it the appropriately flexible solution for an industry in flux.

As this report details, collective bargaining provides a mechanism for addressing many of the challenges of the for-hire industry, which public policy has not addressed, making the industry safer and more reliable for passengers, drivers and the residents of Seattle. Collective bargaining is a proven avenue for increasing:

- Reliability:
  - by providing reasonable economic standards for drivers that decrease turnover, and thus keep a stable supply of experienced drivers on the road.
  - by discouraging work stoppages by providing mechanisms for resolving disputes.
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- Safety:
  - by reducing incentives for drivers to drive for extended periods without breaks, thereby reducing fatigue, or while sick, which threatens driver and public health.
  - by setting training standards for drivers and creating processes for them to systematically resolve safety concerns.
  - by lowering turnover to keep more experienced drivers on the road.

The proposed legislation to give workers a voice on the job represents an innovative and real opportunity to both solve long-standing challenges in the for-hire industry and provide a path forward for how cities can ensure safe and reliable transportation in our ever-evolving economy.
1. INTRODUCTION

Seattle and other major U.S. cities hold public oversight of “for-hire” transportation, the realm of personal vehicle services that includes taxi, flat rate, limousine and now app-based services. The stakes for the public are large – over five million for-hire transportation rides are provided in Seattle and King County every year, and riders look to public officials to ensure safety and reliability of the system.

And yet, ongoing problems with for-hire transportation require that policy makers seek innovative solutions, particularly in the face of the massive industry upheavals that have accompanied the emergence of app-dispatch firms Uber, Lyft, Sidecar and others. The City of Seattle, like many jurisdictions in the U.S., is grappling with the complexity of the industry, its importance to the public, quickly changing conditions and concerns over a lack of transparency from new industry participants.

In this context, the Seattle City Council has crafted a promising new strategy to improve the for-hire system. Borrowing from other industries where workers can form unions to negotiate over the conditions of their work, the City has proposed a mechanism for for-hire drivers to collectively bargain with traditional taxi companies, like Yellow Cab and Orange Cab, and newer app-based for-hire companies, such as Uber and Lyft. The proposed policy recognizes that many drivers are not classified as direct employees of these companies and establishes a special process for them to collectively bargain with all for-hire companies.

This brief explores the challenges to safety and reliability that trouble the for-hire transportation system and how collective bargaining by drivers can improve the whole system. It examines:

- the specific challenges in the system;
- how the working conditions for drivers affect reliability and safety of the system, and how conditions are changing with the emergence of new companies, like Uber and Lyft; and
- and how collective bargaining addresses these challenges.

2. IMPORTANCE OF FOR-HIRE DRIVERS AND CARS IN URBAN TRANSPORTATION SYSTEMS

For-hire car services play an important role in urban transportation systems. Taxis, in particular, have long been a main source of non-pedestrian travel in large downtown areas, regions that face inclement weather and tourist destinations like Seattle. Travelers making late night trips for recreation, airport journeys and after-hours commutes have long-relied on for-hire services. Also, mobility impaired
travelers and low-income households without a viable public transportation option have relied on the for-hire system.

For-hire services provide transportation to the public at significant scale. The public takes over two million taxi trips a year in Seattle alone (not including the county). With growing demand in Seattle, the number of trips provided by all for-hire services is increasing.

Research also shows that for-hire services are not just an isolated mode of travel, but function in tandem with public transportation systems. A recent paper on taxi service in New York shows that taxis can play a role in supporting public transit ridership by giving riders a quick option to leave work or do shorter trips once they are at their destination. Uber has claimed to be improving Portland’s public transit system by “completing the first and last mile of your commute.” Lyft is reported to have partnered with DART in Dallas to do the same and expressed an interest in greatly expanding its integration with transit across the country. Any local government that invests in public transit should also care about the role of the for-hire system.

The public has long supported policy to ensure both the efficiency of, and confidence in, our overall transportation system. For example, bus drivers are highly trained, light rail infrastructure is designed to minimize conflicts with pedestrians, ferries are frequently inspected and highways are patrolled for unsafe driving. The scale of for-hire services alone warrant strong public policy that ensures that the industry is safe and reliable.

3. CRITICAL ROLE OF REGULATION IN FOR-HIRE TRANSPORTATION SYSTEMS

Policymakers in the United States and abroad have long struggled to make for-hire transportation a reliable and safe component of urban transportation systems, as well as ensure fairness for market participants. While the emergence of Uber and Lyft has generated widespread attention to industry changes, the goals, tools and challenges of policy have evolved little since the advent of automotive mass production and the Great Depression. Some municipal officials have proposed eliminating all regulations. However, there are many reasons for continued public oversight in the for-hire market, though the approach of that oversight requires change and innovation.

Unique Characteristics of the For-Hire System

Several aspects of for-hire vehicle transportation make it unique among transportation options and create multiple challenges to safety and reliability.
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First, although it serves the public, for-hire transportation is almost entirely provided by private enterprises. Unlike public transit and public roads, the for-hire system does not directly receive public monies nor is it operated by a public agency.

Second, for-hire transportation providers are fragmented and decentralized, making effective and affordable oversight difficult. Although major brand names dominate the for-hire market in Seattle, such as Yellow Cab, Orange Cab and Uber, these companies provide services through drivers who are classified by for-hire companies as independent contractors. Ownership is also very complex – some drivers own many cars, some just own the one they drive and most owners lease their vehicles to other drivers who don’t own at all. One study of taxi accessibility in Seattle called the system “fragmented” in comparison to other cities.

Third, market failures abound. For example, because drivers are paid by the trip and bear the cost of operation, they reportedly focus on the best-paying trips. While areas with concentrated demand, like downtowns and airports, may economically sustain a for-hire system, other market segments, such as wheelchair users, the elderly, low-income neighborhoods, and distant suburbs are often not self-supporting. From the driver side, providing enough supply at the right time is challenging, as demand surges based on time of day, weather and events. Too much supply and drivers lose; too little and consumers lose. Also, raising the capital for vehicles, licenses and medallions is risky. For-hire companies, especially new entrants into the market, and regulators, like Seattle, King County and the Port of Seattle, can make decisions that dramatically impinge on driver and owner incomes.

Finally, for-hire transportation requires a face-to-face customer service model that other travel modes do not. Passengers enter into a small, not easily escapable space controlled by a single driver. For both passengers and drivers, this arrangement requires an assumption of good faith by the other party and can lead to dangerous situations if that good faith is broken. In addition to possibility of accidents, this aspect of for-hire transportation creates a unique imperative for protecting public safety.

The Failure of Deregulation and Emergence of Non-Employee Drivers

In the belief that deregulation could lead to lower prices, higher quality of service, and increased availability, many local governments experimented with deregulating taxi services in the 1970s and 80s.

The results proved so disastrous, and so contrary to predictions, that within a few years most cities reintroduced some version of the laws they had just abandoned. Seattle’s experience with taxi deregulation over 30 years ago followed this same trajectory. Seattle removed long-standing limits on the number of taxicabs, abandoned fare restrictions, and dropped minimum operating standards for drivers and vehicles. As proponents predicted, the number of cabs increased. But, contrary to their expectations, so did rates; one study estimated that fares increased 35 percent. And, despite having
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20 percent more cabs on the road, ridership decreased 25 percent in the two years following regulatory repeal. The value of a license dropped 84 percent.\textsuperscript{23} At the same time, the quality of service declined with a dramatic increase in passenger complaints of price gouging, short-trip refusal and poor service at SeaTac airport and the King Street train station. Fights over passengers and long cue lines at transit hubs and cabstands became public issues.\textsuperscript{24} These problems prompted Seattle’s City Council to reestablish taxi regulations in 1984 and to act again, in 1987, to further limit availability of new licenses.

As a result of those experiments, most policymakers and academics having long concluded that some comprehensive form of regulation in the for-hire taxi system is necessary.\textsuperscript{25} Although the industry is different today than it was 30 years ago, abandoning public oversight altogether would ignore history and risk unintended consequences.

The re-regulation of for-hire transportation in the 1980s did not, however, return for-hire drivers to the conditions they had before. Deregulation allowed companies to reclassify their drivers as independent contractors instead of employees.\textsuperscript{26} That change survived even as cities re-introduced limits on vehicles, fares and other standards. Today, contracting is reported to be the industry’s dominant, and near exclusive, model of workforce relations, although there are public and private challenges to that model that may yet cause upheaval in the next few years.\textsuperscript{27}

\textbf{Emergence of Transportation Network Companies (TNCs)}

The rapid rise of Uber, Lyft and other services that connect riders with a car and driver through smart phone applications (often called transportation network companies, or TNCs) has plainly revealed that the for-hire transportation system was in need of change. Even before they emerged, failing economic security for drivers showed that the system was deeply troubled.\textsuperscript{28}

However, as TNCs began operations, the companies have reportedly ignored existing regulations and claimed to operate outside of the for-hire transportation system as it had been historically defined.\textsuperscript{29} One \textit{Los Angeles Times} article sums it up this way, “Uber's core argument has remained consistent, that it is a technology company, not a transportation company: Uber’s app merely connects private drivers with paying passengers. So traditional rules governing such matters as insurance and commercial vehicle registration shouldn’t apply.”\textsuperscript{30} Uber has also been reported to have made this argument in Portland, Berlin, and Boston.\textsuperscript{31} In addition, TNC drivers have been reported to say that Uber and Lyft instructed them to ignore regulations.\textsuperscript{32}

As local and state governments have ramped up their response to the TNCs’ market disruption, the companies are reported to have employed more traditional strategies to ensure that public policy aligns with their business model, namely through lobbying, campaign donations, and court challenges.\textsuperscript{33}
All of this has coincided with an upheaval in the for-hire transportation system only comparable to earlier experiments of complete de-regulation. The situation has been unambiguously great for TNCs. Reported to be worth $62.5 billion as of December 2015, Uber has the highest valuation of any private technology company in the world, and a higher valuation than 80 percent of the S&P 500. Even the much smaller Lyft is valued at $2.5 billion. Meanwhile, evidence points to traditional for-hire companies having lost significant market share to the upstarts.

4. OVERSIGHT CHALLENGES IN THE FOR-HIRE TRANSPORTATION SYSTEM

Policymakers working to ensure safety and reliability of for-hire transportation quickly come up against a structural issue: the industry largely classifies its drivers as independent contractors. Instead of a few companies with many employees, the for-hire transportation system in Seattle comprises thousands of drivers and business entities who are inter-related through contracts and leases. For public officials, the challenge is to adopt policy that advances public welfare and passenger interests while ensuring a level playing field between drivers and for-hire companies.

A particular challenge lies in addressing the role of drivers. As one report explains, many drivers are classified as self-employed but in practice have little control over aspects of operations you would expect to see in an independent business. For public officials, this quandary creates a real challenge in ensuring that policy benefiting dispatchers does not hurt drivers, or regulation of one type of for-hire sector does not hurt another. In a recent study of the for-hire industry in Portland, the City’s Office of Management and Finance determined that “strong regulation of some aspects of taxi service (permit distribution and fares) without adequate regulation in other areas (driver payments and working conditions) contributes to the poor working and economic conditions for professional, full-time taxi drivers.”

Another challenge lies in asymmetrical political power. Typically, it seems, a few large market players, such as for-hire companies or owners with dozens of vehicles, have the resources to engage in public processes to secure their interests. These large market players, however, may not always have the same interests as their drivers and often work against them. Meanwhile, drivers are fragmented across multiple for-hire companies and, until recently in Seattle, have had few means to collectively advance their interests through public decision-making. Unlike in other industries with traditional employer-employee relations, for-hire drivers currently cannot form a union under the National Labor Relations Act and collectively bargain with the for-hire companies, nor do they have the ability to raise resources through universal membership dues. Although drivers in the Seattle region have recently formed the Western Washington Taxi Drivers Association and App-Based Drivers Association, these are the exception to the norm in major U.S. cities. Moreover, these associations do not have the benefits of labor law protection and their existence does not seem adequate to address the safety and reliability problems highlighted below.
5. PROBLEMS IN THE FOR-HIRE TRANSPORTATION INDUSTRY

The persistent problems of the for-hire industry, as well as new challenges presented by TNCs, demand that cities consider innovative strategies in their oversight of the sector. Already, TNC entry into big cities markets appears to have dramatically changed the market share of more traditional for-hire companies. For example, while downtown Seattle and SeaTac airport have experienced phenomenal growth, taxi trips in King County have dropped by 40 percent and taxi revenue has dropped by 30 percent - in just one year. Recent figures from California show that from September 2013 to August 2015, TNC trips in that state exploded from one million a month to 11 million.

Hence, new policy to improve the for-hire transportation system in Seattle requires analysis of problems under both the pre-existing market - dominated by taxis, flat-rate cars and limousines - and in the new market, in which TNCs have increasing market share.

Reliability

A reliable transportation system provides accessible and predictable travel that allows people to plan their trips and count on the service. Can I access a service when I want it and will it serve my needs? Will the trip take me where I need to go in the time and for a predictable price? And, from a public policy perspective, can both accessibility and predictability be provided to everyone?

Drivers in the for-hire industry have long faced conditions that threaten to undermine reliability for consumers, and industry changes brought on by app-based dispatchers have introduced additional sources of instability for drivers. High turnover among drivers and substantial labor strife suggest that current conditions are not sustainable for either drivers or the public.

Economic insecurity and poor health undermines reliability of workforce

Seattle’s for-hire vehicle industry reportedly relies on a largely immigrant workforce. Stability and viability of the system has relied on the willingness of professional drivers to put in staggeringly long hours in order to earn sufficient income to support themselves and their families. However, with rapidly increasing housing costs and gentrification in Seattle, drivers are more economically squeezed than ever, raising the question whether the workforce can continue to bear such onerous conditions.

The difficult working conditions for drivers are well documented. In a thorough and rigorous 2006 study, researchers at the University of California at Los Angeles found that:

- Taxi drivers worked an average 72 hours per week, sometimes putting in 18 to 20 hours per day.
- Drivers made a median hourly wage of $8.39—less than the California minimum wage with overtime protections.
• Drivers reported high rates of significant health problems associated with such long hours behind the wheel. More than half have medically diagnosed back and leg problems.
• Drivers reported exceptionally high levels of job stress, with more than half assessed as experiencing severe or extremely severe levels of stress.

Other studies conducted in major U.S. cities find similar results:
• The City of Portland (2012) found taxi drivers earned an average hourly wage of $6.22 and that drivers often worked 12-14 hours per day, six to seven days per week.
• The Center for Policy Initiatives and San Diego State University (2013) found that non-employee drivers in that city worked more than 70 hours per week and earned a median of less than $5 per hour.
• A 2010 survey of taxi drivers in Austin found an average wage, after expenses, of just $3.48 per hour.
• Researchers at University of Illinois at Chicago (2009) found that drivers worked 13 hours a shift for less than the minimum wage, many clocking an equivalent of two full-time jobs in a year.
• In Boston, a 2007 study found drivers working an average of 72 hours each week, in six 12-hour shifts, for as little as $3.44 an hour.

One scholar, in reporting the results of a taxi driver study in Chicago, summarized the implications of these conditions this way: “Allowing so large a workforce to labor so near the margins of economic failure would seem to put at risk the infrastructure necessary to promoting Chicago as first-class international city.”

While no similar study exists for Seattle for-hire drivers, much anecdotal evidence from driver testimony and media coverage of the for-hire industry consistently indicates similar working conditions.

On top of economic insecurity, for-hire drivers experience poor health. The grueling schedule alone for most drivers places them at higher risk of injury – jobs with 12-hour-per-day schedules result in a 37 percent increases in occupational injury hazard. Long hours and other factors, such as sedentariness, fatigue, and lack of access to healthy food on the job combine to increase rates of diabetes, hypertension, and chronic musculoskeletal pain. Research has also identified additional factors contributing to poor health, such as economic uncertainty, fear of occupational violence, high levels of competition-related stress and discrimination.

Many drivers do not have health insurance and have difficulty accessing care, for reasons including lack of time off and language barriers, which further contribute to poor health. A recent survey of New York for-hire drivers found that half had no insurance at all and less than a quarter had adequate knowledge of the Affordable Care Act. Long hours, lack of health insurance and economic insecurity also impact the health of their families.
The combination of economic insecurity and poor health outcomes undermines the stability of the for-hire driving workforce. The Bureau of Labor Statistics considers taxi a high-turnover industry and, as discussed below, turnover rates may be increasing with the growth of TNCs. Human resource researchers have long established links between high turnover and decreased performance, including perceptions of service quality. A 2014 study across industries showed that high turnover’s negative impacts to company performance were higher in the transportation sector and had the greatest effect on customer service, quality and service. A fatigued, stressed, and ailing workforce also negatively affects the quality of service for the entire industry.

**Emergence of TNC’s has created yet more insecurity for the workforce**

Wage data for TNC drivers is not nearly as robust as that for traditional for-hire drivers, and what little data appears to be available is provided by TNCs themselves, which have a vested interest in portraying these jobs as well paid. An Uber-commissioned study reports that UberX drivers make an average of $16.37 to $17.56 before expenses. Some drivers report that net of costs, wages can be closer to $9 or $10, below the City of Seattle’s minimum wage. In Seattle, news reports include drivers indicating that wages can be much lower—less than $3 per hour. These driver reported wages are also far below what Uber has reportedly advertised to attract drivers, which could be particularly problematic for drivers who purchase cars in order to drive, and may find themselves having to work extremely long hours to pay for that investment.

Additionally, TNCs have introduced a number of practices that have created further uncertainty for drivers and, by extension, the public. At least one TNC has reserved the right to change conditions that impact driver wages unilaterally and without warning. Drivers working under such an arrangement cannot be certain that their working conditions will continue to be the same as those to which they originally agreed, or even the conditions they drove under the month before.

As described below, TNCs are reported to regularly make substantial changes to fares, commissions, fees and other working conditions. When asked why Uber would increase its cut of each fare, an executive reportedly responded, “Because we can.”

According to news reports, intense price competition between TNC operators over the last two years has led to repeated fare cuts, about which drivers get no advanced warning. News reports indicate that Uber cut fares in 16 cities in January 2014, in an undisclosed number of cities in June 2014, in 51 markets in January 2015, and 22 cities between July and September 2015. Lyft was reported to have cut fares by 30 percent nationwide in April 2014, by up to 20 percent in 10 cities in January 2015, and up to 24 percent in 5 cities in June 2015.
News sources also reported that, in Seattle, repeated cuts between January 2014 and February 2015 meant that, in a years’ time, Uber drivers faced a 33 percent reduction on a per-mile and per-minute basis and almost a 50 percent cut in the base fare.\textsuperscript{71} Further reports indicate that while Uber increased rates again a month later—for the first and thus far only time in Seattle—, it did so only by 17 percent.\textsuperscript{72} Uber has been reported to be increasing the percentage of fares it keeps as commission in multiple cities. In mid-2015, the company reportedly began taking 25 percent commission from new drivers in New York City, Toronto, Indianapolis, Boston and Worcester (MA).\textsuperscript{73} In San Francisco, Uber reportedly takes a 30 percent commission of drivers’ first 20 rides in a week, 25 percent on their next 20 rides, and then 20 percent on any rides beyond that.\textsuperscript{74} Lyft also has reportedly demonstrated shifting fare structures. The company reportedly stopped taking any commission at all for a few months in 2014.\textsuperscript{75} News reports state that when it began again, Lyft announced that, for the first time, it would apply the commission to “prime time” pricing and introduced a tiered system in which driver commissions depend on how hours driven each week.\textsuperscript{76} As a final example of unpredictability, TNCs also reportedly change driver income by charging new fees. In August 2014, Uber reportedly started charging drivers $10 a week to use the iPhone they previously received for free, and new drivers reported having to pay a $100 phone deposit.\textsuperscript{77} TNCs’ apparent refusal to engage directly with their drivers may exacerbate these conditions. According to one article just on TNC-driver communications, drivers say that the primary way for Uber drivers to contact the company with a concern is through email.\textsuperscript{78} The article also reports that drivers receive stock responses that often contain “inaccurate or incomplete information, or lack a nuanced understanding of the challenges drivers face.”\textsuperscript{79} This dynamic between TNCs and drivers may contribute to high turnover among drivers. A recent survey of on-demand economy workers found that the most common reason workers leave a contract job is insufficient pay.\textsuperscript{80} A report based on Uber’s own data shows that nearly half of all drivers who started in the first half of 2013 were no longer driving for Uber a year later.\textsuperscript{81} A recent survey by SherpaShare, an app which helps “on-demand” workers manage their wages and expenses, found that about two-thirds of Uber and Lyft driver respondents had been driving for fewer than six months.\textsuperscript{82} Work disruptions and strikes In response to apparently different rules for TNCs, taxi drivers across the country have gone on strike. Such work disruptions have occurred in Seattle,\textsuperscript{83} Chicago,\textsuperscript{84} Minneapolis,\textsuperscript{85} Montreal,\textsuperscript{86} Toronto,\textsuperscript{87} Boston\textsuperscript{88} and Washington, DC.\textsuperscript{89}
Several US cities have also seen strikes and protests by TNC drivers. Over 100 Seattle Uber drivers reportedly “walked off the job” in protest over fare cuts instituted by Uber.\(^9^6\) Beyond Seattle, Uber drivers have reportedly staged – or threatened to stage – strikes in New York City,\(^9^1\) San Francisco,\(^9^2\) Santa Monica,\(^9^3\) Dallas,\(^9^4\) and Phoenix.\(^9^5\) Company drivers called for a national strike in October and November 2015.\(^9^6\) In September 2015, according to news reports, UberBlack drivers in Dallas struck for four days after Uber announced that their drivers would be required to pick up lower-fare UberX passengers.\(^9^7\) Uber was reported to have ultimately reversed this policy.\(^9^8\)

Protests and strikes by drivers present an obvious threat to reliability for consumers. Unfortunately, the current structure of the industry, based on non-employee relationships such as contracts and leases, hinders conflict resolution of structural issues facing drivers.

**System accessibility**

Many local governments regulating for-hire companies, including Boston, San Francisco and Seattle, require availability of vehicles accessible to disabled passengers as part of ensuring reliability of the transportation system for all travelers.\(^9^9\) They also require for-hire companies, such as taxi and limousine services, to adhere to American with Disabilities ACT (ADA) requirements to accommodate mobility impaired passengers. The City of Seattle and King County became a national leader when it created a program to increase the number of accessible vehicles by subsidizing costs to operate them.\(^1^0^0\) Forty-five accessible vehicles in Seattle and King County currently provide service 24 hours a day.\(^1^0^1\) By and large, the program has been seen as successful.\(^1^0^2\)

However, Seattle does not require TNCs to maintain accessible vehicles, and, according to news sources, TNCs generally do not require their drivers to purchase them.\(^1^0^3\) News sources also report that, like other for-hire companies, TNCs are required to follow ADA rules, but lawsuits and critique from disability rights organizations have alleged poor performance for disabled passengers.\(^1^0^4\) Allegations include driver refusals to pick up disabled passengers, inadequate training for drivers and inadequate vehicle inspections.\(^1^0^5\)

TNCs are also reportedly interested in expanding into the paratransit market.\(^1^0^6\) As TNCs continue to grow and take market share from other for-hire companies, like taxis and flat-rate cars, reliability of Seattle’s for-hire transportation for passengers with limited mobility may be at risk.

**Safety**

As discussed above, policymakers have long made safety in for-hire transportation a paramount concern. Under the traditional structure of local for-hire oversight, municipalities have employed a variety of safety standards for the industry, including vehicle safety, licensing, driver training and
minimum vehicle insurance. Over the last several years, TNCs have reportedly resisted or sought to weaken these standards, and new ones, to accommodate their business model.107

Below, we discuss some of the safety issues that trouble the for-hire industry, including vehicle accidents, violence and public health concerns.108

Vehicle accidents
For-hire vehicles pose a unique safety issue for passengers, pedestrians, bicyclists, other vehicles and drivers themselves. Risk of collision is inherent in an industry comprised of individual vehicles, many being driven in extremely long shifts, on the road 24 hours a day (with multiple drivers) and in difficult or inclement conditions.

One of the few studies on for-hire driving indicates that riding in taxis is safer than riding in private vehicles – taxis in New York get into accidents 33 percent less per mile than private vehicles.109 Of course, the study assessed largely full-time, experienced drivers. Furthermore, the sheer amount of miles that for-hire cars drive still result in regular accidents and passenger injury. The same analyst found in another study that medallion taxicabs were involved in 14.7 percent of all vehicle crashes in Manhattan and involved in 15.5 percent of all vehicular injuries in the city to pedestrians and bicyclists.110

Long hours and fatigue contribute to risk of collisions. As discussed above, taxi drivers work onerously long hours out of economic need. After fixed expenses are paid, drivers have to keep going until they earn enough to begin netting income. Another study of New York taxi drivers found that increasing income for drivers was correlated with decreases in accidents.111 In a recent, tragic example, a 73-year-old New York taxi driver – compelled to drive 16 hour shifts every weekend for economic reasons – reportedly struck and killed an 88-year-old grandmother at the end of his shift.112

In addition to passengers and bystanders, for-hire drivers face considerable risk by being on the road for long periods of time. In one study that collected data across cities, researchers found that taxi drivers suffer from the highest rate of occupational injury in non-fatal vehicle accidents.113

The rapid growth of Uber and Lyft has earned a sharp focus by the media on accidents and risks posed TNC for-hire cars. Risks have been highlighted in stories about reported loss of vehicle control,114 the possibility of TNC passengers riding in recalled vehicles,115 reported inadequate driver training116 and reported efforts by Uber and Lyft to circumvent rigorous vehicle inspection requirements put in place for taxis.117 One group of passengers was reportedly taken on a high-speed chase between an UberBlack driver and taxicab inspector in Washington DC, a story which was promptly tweeted and taken up on social media.118
As TNCs increase market share, incidents involving harm to pedestrians or other bystanders have grabbed headlines. Most notable was the story of the death of a six-year-old girl for which Uber has reportedly denied responsibility by claiming, among other things, that the driver involved was not its employee. Other reported incidents include a woman killed when a vehicle driven for Uber was pulling away, a valet employee attacked with a gun by an Uber driver who was asked to move the vehicle, a pedestrian attacked by a Lyft driver and Lyft driver killing a motorcycle driver in a collision.

A recent report by the California Public Utilities Commission (PUC) shows a dramatic increase in the rate of collisions by all TNC drivers (see Figure 1). Based on self-reporting from TNCs to the PUC, incidents have skyrocketed from one per mile to 17.5 per mile, from September 2013 to August 2015. This increase occurred simultaneously as TNC have scaled up their operations, from a less than a million miles driven per month to over 10.5 million per month. One possible explanation is that the initial group of drivers may have been more experienced than drivers added as TNCs reached a much larger scale. Another would be growing operations in urban markets where accidents are more likely.

Figure 1: TNC Self-Reported Incidents/Collisions Per Mile in California, 2013 to 2015

These incidents have reportedly caused concerns that vehicle inspections and background check procedures in the industry are inadequate. In addition, policy makers and industry observers have reportedly raised concerns for several years that TNCs drivers are inadequately insured or carry less insurance than traditional for-hire drivers, such as taxi drivers.

In Seattle, the City recently adopted new safety rules that require licensing, vehicle inspections, and training for all drivers, including TNC drivers. However, the revised standards dramatically weakened the prior system for taxi safety. For example, TNC drivers can only obtain a license by applying through their company and cannot directly apply to the City or County like taxi drivers. Instead, the TNC sends the application on behalf of the driver to King County’s Records and Services Licensing Division and, after approval by the County, controls pick-up of the license. The new process privatizes approval for TNC licenses in a way that cedes significant control and oversight.

**Violence**

Getting into a stranger’s vehicle requires good faith by passengers that a driver will operate the vehicle safely and maintain professionalism inside the vehicle. As such, assaults by drivers on passengers typically receive high visibility from the media. Less reported but equally important are risks of violence faced by drivers.

Assaults on passengers have unfortunately been a consistent problem in the traditional taxi industry for many years, despite increasingly rigorous safety oversight. For example, in 2014 there were reports of assaults against passengers in Seattle, Washington, D.C., Portland, Fort Lauderdale, and elsewhere. In 2012, the Washington D.C. Taxicab Commission reported that seven taxi drivers were arrested for assaulting passengers over just a few weeks. It is possible that the public oversight has brought down the rate of incidents in taxis, but little data exists to assess a trend.

The emergence of TNCs has corresponded with a flood of reported incidents of violence involving drivers associated with TNCs, such as Uber and Lyft. Allegations in the reports include kidnapping, sexual assault, sexual harassment, rape, child molestation, burglary, drug sales, assault, stabbing, stalking and driving under the influence among others. Several writers have questioned whether TNCs are adequately safe for women or advise specific precautions when using TNC services. In particular, Uber has come under withering criticism that it disregards the safety of women passengers.

According to news sources, district attorneys in Los Angeles and San Francisco jointly filed suit against Uber in 2014, alleging that it makes "misleading representations regarding the measures it takes to ensure customer safety in order to induce people to get into a stranger's car." City attorneys in Portland, Oregon, Columbus, Ohio and Cambridge, Massachusetts are reported to have also
sued Uber or taken other legal action to halt Uber’s operations at some point, alleging concerns related to consumer protection and safety.

The largely anecdotal evidence outlined above paints a disturbing picture of safety in the for-hire transportation industry. Unfortunately, it lacks the completeness of reliable data to show true scale and trends. Nor does it distinguish between rates of assaults between experienced for-hire drivers, many of whom have 10 years or more in the profession, and inexperienced drivers. That said, the alarming incidents of personal injury and risk to passengers elicits sharp public concern over for-hire safety – particularly with the growing market share of TNCs operating under much weaker, or even without, oversight.

While public attention lies mostly on passenger and bystander safety, for-hire driving also poses significant safety risks to drivers. For-hire drivers face far more danger and hazard on the job than the average U.S. worker. For example, for-hire drivers are five times more likely to die on the job than the average U.S. worker – higher than police or firefighters. 147 For-hire transportation is currently the 6th most fatal industry (deaths per 100,000) in the U.S., just behind coal mining. 148

The fatality rate is closely related to the disturbing levels of assault and violence that drivers face. Surveys of drivers over many years consistently reveal high rates of passenger hostility. In one Los Angeles study, 25 percent of taxi drivers reported being assaulted or threatened on the job over a one-year period. 149 In Chicago, three out of five drivers reported some kind of aggression or violence from passengers, including “hostile racial comments,” “physical attacks” and “threats.” 150 A recent story in Seattle highlights these risks – according to the Seattle Times, a 27-year old sailor pled guilty to beating an immigrant taxi driver last December, causing him to lose consciousness and crash. 151

News reports of assaults on TNC drivers are also beginning to emerge, including: an Uber driver stabbed in the face and neck during a robbery, 152 a passenger who assaulted an Lyft driver after being asked not to smoke in the vehicle 153 a former police officer who attacked an Uber driver with racial slurs, 154 and a drunk executive assaulting a driver who asked for a destination, caught dramatically on video. 155 TNC drivers reportedly receive little training on how to deal with assaults and violent passengers. 156

Despite these physical workplace hazards, for-hire transportation companies are not required to follow Federal Occupational Safety and Health Administration workplace safety rules and standards, because the companies do not classify their drivers as employees. 157

**Illness**

Finally, public officials often overlook an important safety issue – the risk of airborne illness in for-hire vehicles. A recent scholarly study of taxi-cab vaccination rates showed that for-hire drivers in New York were much less likely to have gotten flu vaccinations (18 percent), than adults in the US (39 percent). 158
But the risk of flu transmission in an enclosed vehicle is relatively high – 59 to 99.9 percent for a 90-minute trip.\textsuperscript{159} Equally concerning, for-hire drivers making a living from driving have reported in many surveys that they do not have time in their onerous schedules to take care of themselves, and almost never take a sick day.\textsuperscript{160} Although the City of Seattle has a paid time off policy to encourage sick workers in the service sector, it does not cover drivers because they are classified by for-hire companies as independent contractors.

5. BENEFITS OF COLLECTIVE BARGAINING

To address problems with reliability and safety in the for-hire transportation system, the Seattle City Council has proposed policy requiring that for-hire companies and their drivers, as represented by a non-profit association, only operate with a mutual agreement on working conditions. The legislation finds that

"Leveling the bargaining power between for-hire drivers and the entities that control many aspects of their working conditions will enable more stable working conditions and better ensure that drivers can perform their services in a safe, reliable, stable, cost-effective, and economically viable manner, and thereby promote the welfare of the people who rely on safe and reliable for hire transportation to meet their transportation needs."

Collective bargaining agreements (CBAs) are typically associated with unions, as a mechanism created and protected by the National Labor Relations Act and the vast majority of collective bargaining agreements at work in the U.S. are negotiated by workers who are part of unions. However, the Act does not limit CBAs to unions.

As the draft Seattle legislation indicates, CBAs help create standards across a wide variety of working conditions, based on the needs and desires of the industry and the workforce. CBAs can include provisions for workplace safety, training, staffing minimums, and workload limits. As discussed below, these standards can improve both quality of service and outcomes for the public.

Collective bargaining may not address every challenge in the for-hire driver industry, but it can uniquely address many structural issues in a way that public policy cannot. Researchers have found that contracts often contain provisions directly related to the overall quality of life for specific workforces. In the case of nurses, a workforce predominantly made up of women and likely to have caregiving responsibilities outside of work, contracts have been shown to prioritize work-life balance.\textsuperscript{161} Many goals specific to the for-hire industry, including economic stability, lower turnover, industry-wide standards for training and public safety, and safe limits on workload, could be resolved through a collective bargaining mechanism.
With increased market share for TNCs, CBAs can also ensure that working conditions cannot be changed suddenly, arbitrarily or unilaterally by one or more companies.

**Worker Economic Security and Health**

Decades of research shows that collective bargaining agreements improve economic conditions for workers, including higher wages, higher likelihood of receiving benefits and higher quality benefits.\(^{162}\)

The Economic Policy Institute’s most recent *State of Working America*, a bi-annual analysis of government labor market data, concludes that workers covered by a CBA earn 13.6% more than workers not covered by a CBA.\(^{163}\) (Note that this finding controls for workers with similar characteristics, such as industry, occupation, education, region and marital status.) Of particular relevance to low-wage and predominantly immigrant for-hire drivers in Seattle, the benefits of collective bargaining are greater for low-wage workers than for middle-wage workers and greater for black, Asian, Hispanic, and immigrant workers relative to white workers.\(^{164}\)

Over a career, the cumulative union wage advantage is significant. The unionized wage premium that accrues to an otherwise average worker is estimated to amount to $551,000 over a lifetime.\(^{165}\) Higher income and economic security is associated with better health status including lower rates of cardiovascular disease, diabetes, high blood pressure, and other poor health outcomes.\(^{166}\)

Research has shown that increased compensation reduces accidents and increases safety for taxi drivers.\(^{167}\) (In a related industry, it has improved safety for truck drivers.\(^{168}\)) Workers across employment sectors increase the risk of having an accident when they work too many hours.\(^{169}\) This risk is especially high for drivers because long driving shifts, minimal breaks, and lack of sleep are all associated with higher rates of accidents.\(^{170}\) In the for-hire industry, decent wages reduce drivers’ incentives to drive extremely long hours without breaks.

Workers covered by collective bargaining agreements are also 28.2 percent more likely to have employer-provided health insurance and 53.9 percent more likely to have employer-provided pensions.\(^{171}\) Equally important, benefits provided to workers covered by collective bargaining agreements are considerably better than those provided to comparable workers who are not covered by such an agreement.\(^{172}\)

The health benefits associated with collective bargaining could also improve for-hire drivers’ poor health status, which is associated with higher rates of traffic accidents.\(^{173}\) For example, by reducing drowsiness from over the counter medications that taxi drivers use to control chronic illness and fatigue.\(^{174}\)
Time off is also key to driver well-being, the prevention of fatigue and quality service. A recent study using National Compensation Survey data found union employees received more paid time off for holidays, sick leave and personal leave than nonunion employees. Union employees in the private sector also received significantly more vacation pay than nonunion employees.\(^{175}\)

These benefits have implications for the health and safety for customers, too. A strong, well-studied example is collective bargaining by nurses, which has led to improved patient outcomes.\(^{176}\)

Finally, collective bargaining for drivers could address directly other economic issues in the for-hire industry, including stability of income for full-time drivers to pay vehicle loans and compensation for the costs of operating vehicles and using phones.

**Long-Term Tenure in the Industry**

In general, researchers have found that members of collective bargaining units are more likely to stay in their jobs than other workers. Several studies have shown that higher compensation, better benefits and satisfactory working conditions achieved through collective bargaining leads to lower workforce turnover and increased worker productivity.\(^{177}\) A recent survey of on-demand economy workers (including many TNC drivers) indicates that low pay is resulting in turnover, as the most common reason workers leave a contract job is insufficient pay.\(^{178}\) Also, negotiated health programs that focus on members\(^{179}\) and improved access to healthcare can serve as incentives to remain in a job.\(^{180}\)

Studies have also found that when compared to similarly situated workers, those covered by collective bargaining agreements have greater happiness and improved general wellbeing.\(^{181}\) Authors of a 2014 paper state it this way: “...we uncover evidence that union members are more satisfied with their lives than those who are not members and that the substantive effect of union membership on life satisfaction is large and rivals other common predictors of quality of life. Moreover, union membership boosts life satisfaction across demographic groups regardless if someone is rich or poor, male or female, young or old, or has a high or low level of education.” The authors argue that reasons for this substantive difference are linked to more satisfaction on the job, more job security, more social cohesion and deeper citizen involvement.

Other research supports this assessment, demonstrating that physiological and physical health is influenced by perceived job security and autonomy at work.\(^{182}\) Conversely, perceived job insecurity is associated with risk factors for poor health outcomes.\(^{183}\) Collective bargaining gives workers more job security and autonomy. For example, collective bargaining agreements often contain ‘just cause’ clauses that require employers have a reasonable and transparent basis for firing or disciplining workers.\(^{184}\)
The ability to collectively bargain could lead to better long-term health outcomes and overall life satisfaction for drivers in the for-hire industry. In turn, this will lead to drivers staying longer in the industry and a higher willingness to accept rapid and unpredictable changes. These are mutually reinforcing trends: increased safety has been associated with longer job tenure,\textsuperscript{185} and longer tenure will result in more experienced drivers on the road, increasing both safety and reliability for the whole for-hire system.

**Workplace & Road Safety Mechanisms**

Collective bargaining can also improve workplace and road safety, by setting safety standards and providing mechanisms for their enforcement. Collective bargaining has been found to significantly increase the safety of motor carrier operations.\textsuperscript{186} Workers with representation are much more likely to exercise their right to report safety lapses.\textsuperscript{187} This has two positive effects that work in tandem: first, employers have an incentive to invest in better safety practices, to avoid such reports and, second, where those investments fail, workers have a mechanism to correct the problem. Additionally, research shows that unions can ensure that employer-provided training is useful and that workers better understand safety standards.\textsuperscript{188}

In a striking example, collective bargaining by unions in South Korea resulted in a reduction of the rate of occupational injury and illness by nearly 50 percent.\textsuperscript{189} In the U.S., research has shown than collective bargaining improves safety by union members utilizing regulatory enforcement mechanisms better than non-union members.\textsuperscript{190}

Across agreements, unions often bargain for minimum training requirements, paid by the employer, especially in high-injury fields such as construction work.\textsuperscript{191}

As evidenced above, collective bargaining in the for-hire transportation sector could set explicit requirements for driver safety training and safe driving practices. For example, agreements could mutually determine the content of driver training, standards for driver breaks, and total hours worked in a day (currently set at 12 hours by the City of Seattle) or week, and even provide incentive pay for drivers to take pursue additional safety trainings.

**Reliable and Predictable Working Conditions**

Collective bargaining gives workers more control over their schedule and amount of hours, including protection from management making unilateral schedule changes. A study of 175 union contracts showed that most unions negotiate for worker’s to have more control over their work schedule and hours, including protection from management making unilateral schedule changes.\textsuperscript{192} Over one-third of these contracts provided for overtime pay, beyond state and federal requirements, when workers had
to work more than regularly scheduled hours. Other studies reinforce that union employees are able to control their schedule and amount of time worked more than nonunion employees. 193

Applied to a for-hire driver context, a CBA could help drivers manage onerous work schedules, better predict their schedules, and limit sudden, unilateral changes that increase hours required on the road.

Resolving Conflicts to Prevent Disruptions
As discussed above, for-hire drivers are widely reported to have asserted their rights to influence working conditions through the strikes, work stoppages and legal action. For example, in absence of a mechanism to bargain with their employer, Uber drivers have reportedly sued to invalidate contract clauses that limit their access to the court system for disputes with the company. 194 If these reports are accurate, then the tension they depict between for-hire drivers and companies such as Lyft and Uber represents a threat to the reliability of the for-hire transportation sector. Collective bargaining gives drivers an alternative form of dispute resolution.

Almost all collective bargaining agreements include clauses prohibiting workers from striking or otherwise disrupting company operations during the life of the agreement. 195 In fact, Congress granted collective bargaining rights to most private sector workers in the National Labor Relations Act of 1935 precisely to avoid the disruptions that occur when workers lack bargaining rights or sufficient bargaining power. Also, grievance mediation procedures typically found in such agreements are an effective way for workers to engage with companies and find collaborative solutions. 196

Just as important, the proposed legislation calls for binding arbitration in the case that for-hire drivers and their companies cannot reach an agreement. This mechanism ensures that even if a bargaining opportunity fails to achieve an agreement, the City is assured that a third-party mediator will help the two entities resolve their difference. The agreement will then be legally enforceable on both sides.

Finally, a collective bargaining process for drivers and companies could improve communications between drivers and their companies – a reported source of frustration especially for TNC drivers. Collective bargaining could result in greatly increased access to company representatives for drivers and focus their advocacy for improved conditions through a single representative.

Summary
Recent, dramatic changes in Seattle’s for-hire transportation system have created an urgent need to address both long-standing and new challenges. In this context, the Seattle City Council has proposed an innovative strategy: creating a mechanism for drivers to collectively bargain with their for-hire companies on a wide variety of issues that affect safety and reliability - for passengers, drivers,
bystanders, and all of Seattle. Giving drivers an ability to negotiate together allows for their collective insight and wisdom to simultaneously improve working conditions, the welfare of the public, and even the performance of their companies.

This approach accommodates the different business models present in the for-hire driver sector, making it an appropriately flexible solution for an industry in flux. It also addresses many of the challenges in the for-hire industry that public policy has not addressed.

Research into unions and collective bargaining has shown a proven track record for increasing the public good. Specifically, collective bargaining in the for-hire industry can increase:

- **Reliability:**
  - by providing reasonable economic standards for drivers that decrease turnover, and thus keep a stable supply of experienced drivers on the road;
  - by discouraging work stoppages by providing mechanisms for resolving disputes.

- **Safety:**
  - by reducing incentives for drivers to drive for extended periods without breaks, thereby reducing fatigue, or while sick, which threatens driver and public health.
  - by setting training standards for drivers and creating processes for them to systematically resolve safety concerns.
  - by lowering turnover to keep more experienced drivers on the road.
ENDNOTES

1 The City of Seattle, Regulatory Compliance and Consumer Protection Unit, Seattle Taxicab Industry Revenue and Operating Statistics 2005-2014. (With the rapid growth of downtown residents and high-tech jobs in South Lake Union, it is reasonable to assume that between taxis, flat rate cars, limos and TNC companies that total trips have increased substantially.


6 The City of Seattle, Regulatory Compliance and Consumer Protection Unit (2014).

7 For example, at a recent hearing, Seattle City Councilmember Sally Bagshaw explained “I would like to see data on safety and wages from the TNCs [Uber and Lyft]. And I would like that in a real form that we can put our arms around .... I am asking the Law Department ... to get what we actually authorized by a resolution a year ago .... We need to demand the information from the TNCs .... Honestly, what we have felt is that the TNCs because they are so protecting their work model that they have been unwilling to provide us with data about safety, reliability and wages and we have the authority to ask for that” Seattle City Councilmember Sally Bagshaw, Comments Before the Finance and Culture Committee (Seattle Channel, Oct 2, 2015, at 58...

8 The City of Seattle, Regulatory Compliance and Consumer Protection Unit (2014).

9 Data on the number of trips by TNC companies has been requested by the City of Seattle but TNCs have refused to provide them (see endnote 7). Available data for Seattle and King County taxis (see endnote 8) is from 2012. With the rapid growth of downtown residents and high-tech residents in South Lake Union, it is reasonable to assume that between taxis, flat rate cars, limos and TNC companies that total trips have increased substantially.


16 David Koffman, Ellen Oettinger, and Charles Johnson, "Local and State Partnerships with Taxicab Companies" (National Cooperative Highway Research Program, 2012), [http://www.nap.edu/read/14633/chapter/5](http://www.nap.edu/read/14633/chapter/5).


25 Teal and Berglund (1987); Schaller (2007).

26 See, for example, City of Portland Revenue Bureau, *Taxi Driver Labor Market Study: Long Hours, Low Wages* (Jan 2012), [https://www.portlandoregon.gov/transportation/article/397492](https://www.portlandoregon.gov/transportation/article/397492); Jacqueline Leavitt and Gary Blasi, “The Los Angeles Taxi Workers Alliance” (University of California Transportation Center Research, Fall 2009), [http://uctct.net/research/papers/893.pdf](http://uctct.net/research/papers/893.pdf).

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See studies of taxi drivers in Los Angeles, Portland, Chicago, Boston, Austin, and San Diego, cited in the “Reliability” section below.


It is beyond the scope of this brief to fully describe these relationships in the Seattle for-hire market. However, studies of other cities provide good examples of how the industry develops unique and intricate relationships, such as City of Portland Revenue Bureau, Taxi Driver Labor Market Study: Long Hours, Low Wages and Blasi, Gary and Jacqueline Leavitt, “Driving Poor: Taxi Drivers and the Regulation of the Taxi Industry in Los Angeles” (UCLA Law School, UCLA Institute of Industrial Relations and Department of Urban Planning, UCLA School of Public Affairs, 2006), http://www.taxi-library.org/driving-poor.pdf.

Rebecca Smith and Sarah Leberstein, “Rights on Demand: Ensuring Workplace Standards and Worker Security
33 City of Portland Revenue Bureau, Office of Management and Finance (January 2012).
36 The City of Seattle, Regulatory Compliance and Consumer Protection Unit (2014). Data on TNC trips and revenue are not available at this time so it is not possible to determine TNC driver share of the market - only estimate the inverse, e.g., how much taxis have lost.
40 City of Portland Revenue Bureau, Office of Management and Finance (2012).


65 Seth Sandronsky, “Uber drivers are running on empty” (Capital and Main, Sept. 23, 2014), [http://www.huffingtonpost.com/entry/uber-drivers-are-running-on-empty_56031619e4b00310edf9e8a7](http://www.huffingtonpost.com/entry/uber-drivers-are-running-on-empty_56031619e4b00310edf9e8a7).


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73 Ellen Huet (Sep 11, 2015)
76 Ibid.
77 Ellen Huet (Sept. 22, 2014)
79 Ibid.
93 Ibid.
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104 Ibid.


107 Unfortunately, no public agency collects accurate and consistent data on accidents and collisions involving for-hire vehicles across the U.S. As a result, analysts researching for-hire transportation often cite the lack of baseline data to compare over time or between cities. Even as municipalities change public oversight of the industry to respond to safety concerns, understanding the impacts of these changes remain elusive. In lieu of government collected (or privately released) data, much of the evidence on industry safety is either city-specific or an aggregation of single incidents.


109 Ibid.


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116 Ellen Huet, “Uber Skips On Driver Training, Then Charges Drivers $65 For Basic Driver Skills Course” (Forbes, Oct 8, 2014), http://www.forbes.com/sites/ellenhuet/2014/10/08/uber-skips-on-driver-training-then-charges-drivers-65-for-basic-driver-skills-course/. Geri Koeppel, “Safety Courses Not Required For Uber, Lyft, Others” (Hoodline, Apr 21, 2015). Also, several drivers or former drivers have started their own online training to make up for reportedly scarce information from the TNCs. One former driver said “Drivers are going to places like Google, YouTube, and Facebook groups to try and get answers to their questions. The huge gap of training has led to a wide-open opportunity”: see Kristen V Brown, “How a few drivers are turning Uber’s lagging driver training into a cottage industry” (Fusion, Jul 1, 2015), http://fusion.net/story/159993/how-a-few-drivers-are-turning-ubers-lagging-driver-training-into-a-cottage-industry/; One news story stated that “Uber’s safety training video is less than two minutes long”: Joe Fitzgerald Rodriguez, “Drivers for Uber, Lyft are not part of Vision Zero safety training in SF” (San Francisco Examiner, Mar 13, 2015), http://archives.sfexaminer.com/sanfrancisco/drivers-for-uber-lyft-are-not-part-of-vision-zero-safety-training-in-sf/Content?oid=2923408.
123 Safety and Enforcement Division, Transportation Enforcement Branch, California Public Utilities Commission, (Nov 2015).
124 Safety and Enforcement Division, Transportation Enforcement Branch, California Public Utilities Commission, (Nov 2015).
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144 Sandovi and Schwartz (2015).


Occupational Safety and Health Administration (Apr 2010); Kashmir Hill (2014).


See for example, City of Portland Revenue Bureau (Jan 2012); and Gary Blasi and Jacqueline Leavitt (2006).


ibid.


Lawrence Mishel, Josh Bivens, Elise Gould, and Heidi Shierholz (2012). Table 4.34.

Ibid. Table 4.35.


Ibid.


Alan Pyke, “Uber is Using the Fine Print to Control its Drivers. But They Might Not Get Away with It” (Think Progress, Sep 25, 2015), http://thinkprogress.org/economy/2015/09/25/3705930/uber-nlrb-arbitration/.
