The Regulation of Transportation Network Companies

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Deanna Dupuy is a second-year student in the Master of Urban Planning program at the University of Michigan, with a concentration in transportation planning. She hopes to be part of the transformation of the transportation profession by increasing community ownership of projects, reducing technical jargon, and selecting performance measures that capture effects on people rather than cars.

The debate over Transportation Network Companies (TNCs) like Uber and Lyft has become quite polarizing in recent years, leaving many municipalities unsure how to move forward regarding regulation. Municipalities can choose to enforce traditional regulations, applying the same safety standards and supply constraints to TNCs as taxi companies. Or, municipalities can view TNCs as entities different than taxi providers and allow TNCs to regulate themselves through regulatory organizations that operate outside the scope of government intervention. States and cities such as Massachusetts, Colorado, and Houston are pioneers in the regulation of TNCs. However, each city or state has implemented regulations that fall within the spectrum of complete governmental regulation and self-regulation. Ultimately, a moderate approach to regulation of both TNCs and taxi companies is a reasonable response to the TNC debate.

In recent years, businesses have emerged that allow consumers to share assets in a new way through innovations in technology. Service providers and consumers can now arrange for services on demand through a common software platform (e.g., Uber, Etsy, or Airbnb). The rise of this digitally enabled "sharing economy" has transformed the way that many Americans travel, shop, and vacation. Through a mobile application or website, platform operators provide information about the service provider's location and service history, facilitate online payment, and resolve disputes. The resulting "shared economy" offers alternatives—often with lower prices—to long established industries.

More specifically, advances in information and communication technologies, combined with location data from global positioning systems, has led to increased efficiencies in the provision of transportation services.3 Companies like Lyft and Uber seek to provide prearranged transportation services for compensation using online or mobile applications to connect drivers to passengers. The growth of companies like Uber and Lyft has been explosive.4 As of March 2015, within just four years of beginning operations, the number of Uber vehicles in New York City had overtaken the number of traditional taxis within the city.⁵ Consumers and other advocates praise Uber and Lyft for their ability to provide new economic efficiency compared to traditional ridesharing options like taxis and car services.

These online platforms eliminate the concept of calling a dispatcher, hailing a taxi on the street, or exchanging cash. Many argue that the advent of Uber and similar technologies has propelled the "ridesharing" concept into the 21st century.

However, these platforms tend to be in tension with existing regulatory frameworks that ensure safety, quality, and supply standards. Unlike a taxi company or limousine service, Uber and Lyft provide transportation service through individually owned vehicles rather than commercially owned vehicles.⁷ This difference allows Uber and Lyft to operate in a regulatory grey area where many state and local governments do not hold these companies to the same legal and regulatory standards as commercial vehicle services.⁸

For the purposes of this article, I will refer to software platforms, such as Uber and Lyft, as Transportation Network Companies (TNCs). I use this term because governments are starting to consider implementing broad regulations for TNCs with the expectation that new companies will emerge. I will also use the term "platform" to describe the tool created by TNCs to facilitate interaction between drivers and consumers. 10

Within the literature, there is debate about the correct way to regulate TNCs. Some argue

that traditional regulations, requiring extensive background checks, vehicle inspections, and taxi medallions to control supply, only protect taxis from competition and stifle innovation. 11, 12, 13 Instead, these scholars assert that governments must rethink and address decades-old rules and entrenched interests to continue to maintain the efficiencies of the new ridesharing movement.14 Scholars suggest that instead of strict government regulation, TNCs should self-regulate in order to mitigate safety and supply concerns while preventing government failures through overregulation. 15 Proponents of self-regulation do not intend to equate self-regulation with deregulation or the absence of regulation. Rather, self-regulation is the reallocation of regulatory responsibility to parties other than the government that can provide oversight and enforce standards.16

In contrast, other scholars argue that regulatory standards serve economic and social purposes and should apply to TNCs. These scholars do not view TNCs differently than commercial transportation services, and they argue that self-regulation would not be enough to maintain the safety, quality, and supply standards that the government should protect. 17, 18, 19, 20 Transportation services such as taxis, charter buses, and limousine services are all subject to specific regulations such as driver background checks, vehicle inspections, and limitations on the number of licenses issued. These regulations come at a cost to traditional transportation providers, and many scholars suggest that TNCs have been able to cut prices for consumers only because they have circumvented these regulations.21, 22

Ridesharing services such as Uber and Lyft are challenging the fundamental structures of the long-established regulatory framework for commercial ridesharing services. The question of how to regulate TNCs moving forward is important for municipalities as policy makers consider the future of transportation and strategies for integrating technology into municipal systems. Understanding the normative arguments for and against TNC regulation will allow municipalities to respond to the emergence of new technology and maintain public safety. In this article, I will examine the policy arguments surrounding the regulation of TNCs. I will then discuss how the regulatory debate has played out on the municipal level, highlighting various approaches that cities have taken to TNC regulation. Ultimately, I suggest that municipal and state transportation planners take a moderate approach to regulation by seeking to promote public safety without hindering innovation.²³

Self-Regulation

The debate over TNCs has become polarizing, leaving many municipalities unsure about how to move forward regarding regulation. At the core of the debate is the question: What type of company are software platforms like Uber and Lyft? Are they transportation providers or are they technology companies that facilitate transportation interactions? Those who view TNCs as the latter believe that traditional regulations limit the efficiencies caused by the facilitation of the interactions between a willing provider and a willing consumer. Instead of traditional regulations, these scholars argue for the creation of self-regulatory mechanisms that can correct externalities and protect consumers from potential harm without stifling innovation.²⁴, 25, 26

Self-regulation is not the absence of regulation, but it is the reorganization of the responsibility to maintain safety and quality standards to an industry-specific organization or company rather than to traditional government oversight.²⁷

This type of regulatory approach requires governments to envision software platforms—like Uber and Lyft—not as regulated entities but as key parts of the regulatory scheme in which the companies work as an industry to maintain standards.²⁸ Because of the platforms' role as facilitator, the platform can enforce quality and safety standards, balance asymmetrical information, and internalize externalities before and during the transaction, all without involving mandates from the government.

The existence of third-party software platforms and their ability to effectively verify and facilitate the correction of safety and information market failures show that self-regulation is not an impossible or ineffective policy approach. Scholars argue that TNC business models provide them with a strong enough financial incentive to ensure a high-quality exchange between service provider and consumer.

The most compelling evidence in support of self-regulation is the way that TNCs balance asymmetrical information to assure quality of service, and the incorporation of dynamic pricing to handle oversupply of services. The growth of information technology without the constraints of regulation can provide the possibility of better consumer welfare. Increased information expands the knowledge exchanged between producers and consumers, and it creates strong reputational incentives for firms to improve their level of service. Self-regulation policy forms part of a broader innovation-enhancing solution by providing guidelines for TNC regulation outside of the realm of government intervention. ³⁰

Modern online feedback mechanisms have made it easier for a balanced and honest exchange of information between parties during TNC transactions. In traditional commercial transportation services, the exchange of information does not affect the imbalance of information because it is difficult to give feedback to drivers and to disseminate that information to future consumers. 31, 32 Software platforms can now assure consumers of quality through easily accessible feedback systems. 33, 34 For example, a deficient vehicle is likely to receive a negative rating. The self-regulatory organization (SRO) will receive the rating and either remove the vehicle from the fleet or address it with the service provider. Research with TNC drivers show that in general TNC platforms respond to feedback effectively, and administrators follow-up with every negative comment.³⁵ These self-regulating mechanisms, through consumer feedback, help to mitigate the market failure, reduce asymmetrical information, and ensure quality of service.

TNCs have created a platform where reputation derived from consumer feedback is crucial to the success of the company. The ability to easily exchange this feedback information allows consumers to choose between TNCs and taxi companies based on reputation. Studies on regulating reputation show that competitive companies are more likely to point out substandard performance without the need for regulation. Fire Goldman refers to this as the "secondary invisible hand." The result is a self-regulating market that provides strong checks on improper behavior and leads to a self-policing community that seeks to weed out bad actors. The result is a self-policing community that seeks to weed out bad actors.

Another benefit of self-regulation is TNCs' ability to implement dynamic pricing. Through self-regulation, TNCs adjust their prices in real time to balance supply and demand, which proponents of traditional regulation often consider an externality of taxi deregulation.³⁸ The goal of dynamic pricing is to motivate drivers to begin work, relocate to areas with high demand, or to deter low-value trips for consumers.³⁹ For

example, because of the absence of geographic regulations for drivers, Uber was able to call on over 10,000 drivers in metropolitan Boston, Massachusetts when its transit system experienced delays. These drivers were motivated to work because Uber had implemented surge pricing and was charging three times the normal fare. ⁴⁰ This type of innovation allows TNCs to attract new drivers to areas in need.

Scholars in support of self-regulation suggest that the implementation of traditional regulation of TNCs is a result of entrenched political interests. TNCs challenge taxi services to modernize, and the desire to regulate that service does not arise from the need to protect public welfare but from a desire to protect the taxi industry. Scholars assert that subjecting TNCs to commercial service regulations would ultimately hurt consumers by maintaining the status quo, artificially lowering supply, and raising prices.

Self-regulation of TNCs is not the rejection of regulation, but instead seeks to correct market failures without leading to a government failure through over-regulation. Empirical studies show SROs often are effective if participants view them as a legitimate authority with the ability to enforce rules. ⁴² The incorporation of SROs fosters innovation while allowing TNCs to adjust to market forces with sophisticated software platforms.

Traditional Regulation

In contrast, many argue that Uber and Lyft are transportation services aided by technology, and therefore governments should hold them to the same regulatory standards as taxis, limousines, and other commercial ride services. These regulatory standards include extensive background checks, vehicle inspections,

licensing requirements, and the allocation of taxi medallions to control supply. Traditional transportation service regulations should apply to TNCs because each regulation seeks to internalize the externalities that TNCs currently produce. 43, 44, 45

The most obvious reason for taxi regulation is the mandate for safety standards and public protection. These regulations include provisions for driver, fleet, or vehicle background checks, vehicle insurance requirements, and safety inspections. ⁴⁶ Similarly, taxi regulations promote public safety by mandating that taxi drivers participate in additional driver training. Moreover, in most cities regulators set taxi fares to provide price predictability, eliminate price gouging, and ensure a reasonable return for owners and drivers. ⁴⁷

Unlike traditional regulations, feedback loops in self-regulation systems do not capture dangers that individuals cannot see and do not account for dishonest feedback. For example, a driver may receive a five-star rating for rides and car quality from passengers. Yet this five-star rating does not encompass a problem such as the vehicle's brakes being in poor condition.⁴⁸ Feedback systems do not protect against risk that consumers cannot see, unlike the approval of a regulated in-person car inspection. Furthermore, recent studies have called into question how well the rating system works. Uber indicated that in San Francisco, California only one percent of Uber drivers received one- or two-star ratings. 49 This may be perceived as an example of high quality, or as an indicator that customers hesitate to provide negative ratings because they recognize the significant penalties that drivers receive for them. Overall, the legitimacy of the ratings is questionable and should not be the only mechanism to ensure quality control.

Information technology cannot protect against equity-based externalities. While taxi drivers are notorious for racist practices, such as ignoring minority customers on the streets, TNCs are not much better.⁵⁰ Uber drivers are required to accept 90 percent of the rides sent their way. Because of this self-regulatory rule, studies have suggested that both Uber and Lyft drivers participate in "redlining" by not providing services to poor and minority neighborhoods.⁵¹ In addition, many argue that dynamic pricing disadvantages lower-income people and violates traditional regulations against price gouging. For example, during Hurricane Sandy, Uber implemented surge pricing. As a result, New York State officials criticized Uber and have implemented regulations to prevent surge pricing during states of emergency.52

In general, for every self-regulating mechanism that TNCs implement, there are still significant limitations. Traditional transportation service regulations provide a thorough vetting of practices that assure quality and equitable service.

TNC Regulation in Practice

States and municipalities are responding to the arrival of TNCs using a variety of tactics. Some cities have established themselves as "TNC-friendly," with light regulations. Other cities have taken a firmer approach and have insisted that TNCs play by their existing rules. In practice, regulation usually falls between complete self-regulation or TNC adherence to traditional regulation. Municipal and state planners considering the extent of statutory constraints imposed on TNCs must consider an array of scenarios, goals, and needs when deciding on a course of action.

Colorado's TNC regulations are considered some of the most flexible and least onerous in the United States. In June 2014, Colorado became the first state to authorize the use of mobile ridesharing apps.⁵³ Governor John Hickenlooper signed the "Transportation Network Company Act," which required either the driver to carry a personal insurance policy that acknowledges TNC activity, or for the rideshare company to provide primary insurance coverage.54 The law exempts TNC drivers from fingerprinting and criminal background checks, which are required of taxi drivers, in favor of the standard background checks performed by TNC companies. 55, 56 The TNC Act in Colorado represents "ride-share friendly regulation." Colorado promotes public safety by requiring insurance coverage, supports TNC self-regulation of background checks, and treats TNCs as separate entities from traditional taxi services.

Massachusetts took a different regulatory approach to prioritizing public safety and recognizing transportation innovation by providing flexibility to TNCs while compensating the taxi industry. After months of contentious debate, Massachusetts passed strong TNC regulations in August 2016 that both taxi unions and TNCs support.⁵⁷ The ride-for-hire bill gives the Massachusetts Department of Public Utilities regulatory authority over TNCs by establishing insurance minimums, reporting requirements for TNCs, and imposing the strongest background check system in the nation.58 Taxi and livery industries are compensated by collecting a 20cent per ride fee from TNCs.59 Massachusetts set constraints on TNCs by regulating public safety standards under the control of a government entity, and leveled the playing field between TNCs and traditional transportation services by imposing a fee on TNCs that goes towards aiding innovation in the taxi industry.

While both Colorado and Massachusetts have passed TNC legislation, Houston is still debating the extent to which it will allow TNCs to selfregulate. Houston's existing TNC legislation requires potential drivers to complete fingerprint background checks and to pay a licensing fee of \$200.60 Uber reported that since the passage of the legislation, 20,000 people (two-thirds of whom were minority and low-income people) completed Uber's screening process but failed to finish the City's licensing process.⁶¹ The company has threatened to leave the city, arguing that the extensive background checks discourage qualified drivers, which undermines the TNC business model. TNCs and Houston are still working to find legislation that promotes public safety goals without driving out potential jobs.

Colorado, Massachusetts, and Houston each demonstrate a unique way to approach TNC regulation. Governments can be involved in the regulation of TNCs at a minimal level, requiring that TNCs and/or their drivers meet basic insurance requirements, or governments may hold TNCs to the same standards as taxi services. The decisions municipalities and state governments are making do not fall neatly on either end of the self-regulation versus traditional regulation spectrum, but instead question how far they will regulate TNCs and/or deregulate the taxi industry.

Next Steps for States and Municipalities

Decisions concerning the regulation of TNCs should be considered within the context of the specific government agency under which their jurisdictions falls, and the needs of the community. However, there are several moderate regulatory approaches that states and municipalities can consider to protect public safety and promote innovation. I recommend that

states and municipalities consider the following regulatory approaches in the near term:

- Minimum insurance requirements to address the insurance "gap": Most states and municipalities that have implemented regulations for TNCs require minimum insurance requirements to protect against the insurance gap—the time that ridesharing drivers are not providing transportation services for hire but have the app open and are available to receive a trip request. 62 Regulations that address this gap require either the driver to carry personal insurance that covers the gap, or require TNCs to provide coverage during this period. Either regulation option is sufficient to protect public safety, but places the burden on different parties.
- Maintain consistent and reasonable requirements for background checks: There is significant variation in depth of background checks required for both TNC drivers and taxi drivers by government agencies. In some states and municipalities, taxi drivers undergo more extensive background checks than their TNC counterparts. 63 First, government agencies should seek to equalize the process for background checks for both taxi drivers and TNC drivers. Second, governments should establish consistent and reasonable background check requirements that successfully vet individuals without causing undue burden on potential low-income and minority drivers.
- Use data to monitor instances of discrimination: Governments should require TNCs to use their digital platform and the wealth of data it captures to prevent

discrimination. TNCs can hide the race, gender, disability, and home address of both drivers and passengers to prevent discriminatory feedback.⁶⁴ Similarly, TNCs can use the data to track instances of discrimination, and governments can create policies or incentives that deter drivers who avoid or reject trips in low-income or minority neighborhoods.⁶⁵

These moderate regulations seek to promote safety, correct for discrimination, and level the playing field between TNCs and taxis. However, any type of regulation will likely create winners and losers in the transportation service industry. Planners should carefully consider what is best for their specific community and balance the variety of tradeoffs associated with each regulation with the desire to protect the public interest.

Conclusion

Self-regulation and traditional regulation offer solutions for managing TNCs. Self-regulation operates on the premise that software platforms or third-party organizations sufficiently support innovation while dealing with externalities. In contrast, traditional regulation proponents argue that transportation service regulations serve a purpose, and that the government should hold TNCs to the same standard. Both arguments provide useful policy implications, but the acceptance of just one side of the debate leaves something to be desired. In practice, a moderate regulatory approach that balances the interests of TNCs, the taxi industry, and the community at large is the best way to promote transportation innovation while preserving public safety.

Endnotes

- 1. Christopher Koopman, Matthew D. Mitchell, and Adam D. Thierer. "The Sharing Economy and Consumer Protection Regulation: The Case for Policy Change." *The Journal of Business, Entrepreneurship & the Law* 8, no. 2 (2015): 530, http://digitalcommons.pepperdine.edu/cgi/viewcontent.cgi?article=1130&context=jbel.
- Benjamin G. Edelman and Damien Geradin. "Efficiencies and Regulatory Shortcuts: How Should We Regulate Companies Like Airbnb and Uber?" Stanford Technology Law Review 19 (2015), 293.
- Tom Slee. What's Yours is Mine: Against the Sharing Economy. (Or Books, 2016).
- 4. Transportation Research Board. Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services. The National Academies of Sciences, Engineering, Medicine, (2016), 21
- 5. Ibid., 21.
- Allison Schneider. "Uber Takes the Passing Lane: Disruptive Competition and Taxi-Livery Service Regulations." Elements: Boston College Undergraduate Research Journal 11, no. 2 (2015), 13.

- 7. Emily Dobson. "Transportation Network Companies: How Should South Carolina Adjust Its Regulatory Framework?" *South Carolina Law Review* 66 (2014), 701.
- 8. Ibid., 701.
- 9. Ibid., 701.
- 10. Molly Cohen and Arun Sundararajan. "Self-Regulation and Innovation in the Peer-to-Peer Sharing Economy." *University of Chicago Law Review Dialogue* 82 (2015): 116.
- 11. Cohen, "Self-Regulation and Innovation," 116.
- 12. Koopman, et al., "The Sharing Economy and Consumer Protection Regulation."
- 13. Schneider, "Uber Takes the Passing Lane"
- 14. Ibid.
- 15. Ibid.
- 16. Ibid., 16.
- 17. Slee, What's Yours is Mine.
- 18. Jordan M. Barry and Paul L. Caron. "Tax Regulation, Transportation Innovation, and the Sharing Economy." (2014).

- 19. Brishen Rogers, "The Social Costs of Uber." *University Chicago Law Review Dialogue* (2015): 82.
- 20. Murtaza Haider. "To Uber or Not to Uber: That is the Question." (2015).
- 21. Slee, What's Yours is Mine.
- 22. Rogers, "The Social Costs of Uber."
- 23. Edelman, "Efficiencies and Regulatory Shortcuts."
- 24. Cohen, "Self-Regulation and Innovation."
- 25. Koopman, et al., "The Sharing Economy and Consumer Protection Regulation."
- 26. Schneider, "Uber Takes the Passing Lane."
- 27. Cohen, "Self-Regulation and Innovation," 116.
- 28. Ibid., 116.
- 29. Koopman, et al., "The Sharing Economy and Consumer Protection Regulation," 539.
- 30. Cohen, "Self-Regulation and Innovation," 117.
- 31. Edelman, "Efficiencies and Regulatory Shortcuts," 22.
- 32. Koopman, et al., "The sharing economy and consumer protection regulation," 539.
- 33. Edelman, "Efficiencies and Regulatory Shortcuts," 22.
- 34. Koopman, et al., "The Sharing Economy and Consumer Protection Regulation," 540.
- 35. Edelman, "Efficiencies and Regulatory Shortcuts," 22.
- 36. Koopman, et al., "The Sharing Economy and Consumer Protection Regulation," 543.
- 37. Ibid., 543.
- 38. Transportation Research Board, Between Public and Private Mobility, 73.
- 39. Ibid., 73.
- 40. Ibid., 74.
- 41. Schneider, "Uber Takes the Passing Lane," 16.
- 42. Cohen, "Self-Regulation and Innovation," 122.
- 43. Slee, What's Yours is Mine, Chapter 4.
- 44. Barry, "Tax Regulation, Transportation Innovation, and the Sharing Economy."
- 45. Haider. "To Uber or Not to Uber"
- 46. Transportation Research Board, Between Public and Private Mobility, 15.
- 47. Ibid., 16.
- 48. Edelman, "Efficiencies and Regulatory Shortcuts," 22.
- 49. Ibid., 22.
- 50. Slee, What's Yours is Mine, Chapter 4.
- 51. Ibid.
- $52. \ Transportation \ Research \ Board, \textit{Between Public and Private Mobility}, \ 74.$

- Yanelys Crespo. "Uber v. Regulation: Ride-Sharing' Creates a Legal Gray Area." University of Miami Business Law Review 25 (2016): 79.
- 54. Catherine Lee Rassman. "Regulating Rideshare without Stifling Innovation: Examining the Drivers, the Insurance Gap, and Why Pennsylvania Should Get on Board." *Pittsburgh Journal Technology Law & Policy* 15 (2014): 81.
- 55. Ibid.
- 56. Patrick Hoge. "Colorado Becomes First State to Pass Law Embracing Uber, Lyft et al." San Francisco Business Times (June 5, 2014.), http://www.bizjournals.com/sanfrancisco/ morning_call/2014/06/colorado-uber-lyft.html?page=all.
- 57. Shira Schoenberg. "Gov. Charlie Baker signs law regulating Uber and Lyft in Massachusetts" (August 5, 2016). Accessed 12 Feb. 2017. http://www.masslive.com/politics/index.sf/2016/08/gov_charlie_baker_signs_law_regulating_uber_and_lyft_in_massachusetts.html.
- 58. Ibid.
- 59. Ibid.
- 60. Harriet Taylor. "Uber and Lyft are getting pushback from municipalities all over the US." (September 2, 2016). Accessed February 10, 2017. http://www.cnbc.com/2016/09/02/uber-and-lyft-are-getting-pushback-from-municipalities-all-over-the-us-html
- 61. Ibid.
- 62. Rogers, "The Social Costs of Uber."
- 63. "Uber and Lyft are Getting Pushback from Municipalities All Over the US."
- 64. Rogers, "The Social Costs of Uber."
- 65. Ibid.

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