WHEN APPS POLLUTE: REGULATING TRANSPORTATION NETWORK COMPANIES TO MAXIMIZE ENVIRONMENTAL BENEFITS

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"Ridesharing" has long been touted as a means to reduce the pollution and congestion caused by personal vehicles, but in practice has been relatively unpopular among Americans. That outlook may be changing, however, thanks to new "Transportation Network Companies" (TNCs) that toe the between ridesharing and for-hire passenger transportation services, such as taxis and limousines. UberX, Lyft, Sidecar, and other similar services have rapidly spread to cities throughout the United States, attracting the attention of investors and ire of incumbent transportation providers. Legal commentary has thus far focused on proposed regulations' implications for liability, public safety, and fairness, but this Comment seeks to broaden the conversation to assess their potential environmental implications. By scaling to a degree that ridesharing has been unable to do, TNCs may precipitate a shift away from personal vehicle ownership in urban areas; conversely, they may out-compete and threaten the viability of more sustainable transportation options. Through the lens of rulemakings in the California and Colorado Public Utilities Commissions and an ordinance implemented by the Seattle City Council, this Comment assesses which regulatory strategies and provisions are most likely to capture TNCs' potential benefits while mitigating environmental harms.

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INTRODUCTION

Driving a car is one of the most polluting decisions we can make in our day-to-day lives. Despite that fact, a majority of Americans feel they have no choice but to drive as much as they do. Thanks to new technology, that may be changing. In addition to accessing on-the-go bike and pedestrian mapping or

^{1.} OFFICE OF MOBILE SOURCES, U.S. ENVTL. PROT. AGENCY, EPA 400-F-92-007, AUTOMOBILE EMISSIONS: AN OVERVIEW 1 (1994), available at http://www.epa.gov/otaq/consumer/05-autos.pdf, $archived\ at\ http://perma.cc/NP6Z-L2C9.$

^{2.} A 2010 survey of 800 registered voters reported that 73 percent of voters agree—and 56 percent strongly agree—with the statement, "I have no choice but to drive as much as I do." The survey's margin of error was \pm 3.46 percent. LORI WEIGEL & DAVID METZ, TRANSP. FOR AM., FUTURE OF TRANSPORTATION NATIONAL SURVEY 6 (2010), available at http://t4america.org/wpcontent/uploads/2010/03/031010-Future-of-Transportation-Poll-Summary.pdf, archived at http://perma.cc/3WQS-LFVG.

real-time public transportation updates,³ would-be drivers can use their smartphones to connect with other drivers who have space available in their cars.⁴ By connecting individuals to a suite of transportation choices, it is easier than ever for smartphone-carrying urban residents to leave their own car at home

"Ridematching" services that connect drivers to passengers seeking rides have existed online since 1999,⁵ but the concept of "ridesharing" was popularized with the advent of smartphone applications (apps) and three services launched in San Francisco in 2012: UberX, Lyft, and Sidecar.⁶ Using the apps, passengers can electronically hail a ride with a non-commercial driver, track the vehicle's approach through the app's GPS feature, and pay a "suggested donation" upon arrival at their destination.⁷ While the experience closely resembles a taxi ride, these new players have upended the long-stagnant passenger transportation industry and have challenged policymakers to update decades-old regulations.

Taxi companies have historically faced a web of regulations that dictate a variety of operational decisions, including what fares they may charge and the number of taxis they may operate. On the other end of the spectrum lies ridesharing: a statutorily defined, not-for-profit arrangement to share a ride to a common destination, which is exempt from regulation. UberX, Lyft, Sidecar, and other similar services—deemed "Transportation Network Companies" (TNCs) by recent regulations —take advantage of the legal gray area between

^{3.} See, e.g., Google Maps, GOOGLE, http://maps.google.com (last visited Dec. 9, 2014), archived at http://perma.cc/YM99-MMAM (providing driving, transit, walking, and biking directions).

^{4.} See Tony Dutzik et al., U.S. PIRG Educ. Fund & Frontier Group, A New Way to Go: The Transportation Apps and Vehicle-Sharing Tools that are Giving More Americans the Freedom to Drive Less 24–30 (2013).

^{5.} Nelson D. Chan & Susan A. Shaheen, Ridesharing in North America: Past, Present, and Future, 32 Transp. Revs. 93, 104 (2012).

^{6.} See Lisa Rayle et al., App-Based, On-Demand Ride Services: Comparing Taxi and Ridesourcing Trips and User Characteristics in San Francisco 2–4 (Univ. of Cal. Transp. Ctr., Working Paper No. UCTC-FR-2014-08, 2014) (describing characteristics of services).

^{7.} See id at 2; Donald N. Anderson, "Not Just a Taxi"? For-Profit Ridesharing, Driver Strategies, and VMT, 41 TRANS. 1099, 1100 (2014) (describing characteristics of TNC services).

^{8.} See infra Part II.B.

^{9.} See infra Part I.A.

^{10.} TNC is the designation conferred on the companies by the California

the two. Neither TNC drivers nor their cars are commercially licensed, but by charging a fee that is comparable to or cheaper than taxi rates, TNCs compete directly with for-hire transportation services. ¹¹ As a result, many regulators and incumbent transportation providers fiercely opposed the arrival of TNCs in their cities, and continue to challenge ongoing operations by issuing cease and desist or temporary restraining orders, ¹² impounding TNC vehicles, ¹³ or pursuing litigation. ¹⁴

It is still uncertain what role TNCs will play in urban transport, and commentators offer opposing visions. According

Public Utilities Commission (PUC) and the Colorado legislature. Decision Adopting Rules and Regulations to Protect Public Safety while Allowing New Entrants to the Transportation Industry, R. 12-12-011, at 2 (Cal. P.U.C. Sept. 19, 2013) [hereinafter Cal. PUC Decision], available at http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M077/K112/77112285.pdf, archived at http://perma.cc/DZ7J-7WH7; Transportation Network Company Act, COLO. REV. STAT. § 40-10.1-602 (2014). As part of its rule, the California PUC distinguished two services provided by Uber Technologies: UberX, which connects passengers to non-professional drivers operating their personal vehicles, and Uber's "black car" service, which connects passengers to commercial limousine drivers. Cal. PUC Decision, supra, at 24. Pursuant to the rule, UberX is regulated as a TNC; the "black car" service is regulated like any other limousine company. Id. When this Comment refers to "Uber," it is referring to the company as a whole Uber Technologies, whereas "UberX" refers to just the TNC service.

- 11. See Anderson, supra note 7, at 1100.
- 12. See, e.g., Brad Tuttle, Rideshare Battle Shifts to L.A.: City Tells Uber, Lyft, Sidecar to Stop Picking Up Riders, TIME (June 27, 2013), http://business.time.com/2013/06/27/rideshare-battle-shifts-to-l-a-city-tells-uber-lyft-Sidecar-to-stop-picking-up-riders, archived at http://perma.cc/6UWH-6BU3 (discussing cease and desist orders issued by the Los Angeles Department of Transportation to Uber, Lyft, and Sidecar in 2013, threatening to impound vehicles and arrest drivers who failed to acquire the proper licenses); Rayle et al., supra note 6, at 5–6 (noting that cease and desist orders had been issued to TNCs in Ann Arbor, Michigan; Columbus, Ohio; Nebraska; New Mexico; St. Louis, Missouri; Texas; and Virginia; and that temporary restraining orders had been issued in Kansas City, Missouri and New York City, New York).
- 13. Joe Kloc, Rideshare Company Lyft Launches in NYC; City Questions its Legality, NEWSWEEK (July 9, 2014, 5:31 PM), http://www.newsweek.com/rideshare-company-lyft-launches-nyc-257916, archvied at http://perma.cc/65F5T833 (discussing impoundment of Sidecar drivers' vehicles in New York City by the Taxi and Limousine Commission).
- 14. Patrick Hoge, Taxis Raising Money Nationally to Fight UberX, Lyft, and Sidecar, S.F. Bus. Times (Nov. 13, 2013, 6:00 AM), http://www.bizjournals.com/sanfrancisco/blog/2013/11/uber-lyft-andreessen-Sidecar-uberx.html, archived at http://perma.cc/SAV7-Z2U3. See, e.g., Complaint, United Indep. Taxi Drivers, Inc. v. Uber Techs., Inc., No. BC513879, 2013 WL 3545872 (Cal. Super. Ct. July 2, 2013); Complaint, People v. Uber Techs., Inc., No. CGC-14-543120 (Cal. Super. Ct. Dec. 9, 2014), available at http://www.sfsuperiorcourt.org/online-services, archived at http://perma.cc/LWK6-CBRD (follow "Case Number Query" hyperlink; enter "CGC14543120" into case number search box).

to supporters, TNCs are a valuable addition to the range of transportation options already available to city residents, including driving, ridesharing, car-sharing, public transit, bicycling, and walking. 15 By offering "reliable, affordable ondemand access to a vehicle," TNCs may help ease a transition to "a 'car-free' or 'car-light' lifestyle." ¹⁶ Like taxis, TNCs may also reduce the total vehicle miles traveled (VMT) within a city by supplementing the area covered by existing transit networks and eliminating the need to hunt for parking.¹⁷ Finally, to the extent that TNC drivers offer rides incidental to their own destinations, TNCs may reduce the total number of cars making similar trips. 18 In the alternative, TNCs may exacerbate current congestion and pollution levels if the employment opportunity draws extra drivers into a city, if drivers are operating old and inefficient vehicles, or if TNC trips replace trips that otherwise would have been made by public transit. 19 This Comment argues that the type of regulations applied to TNCs may be an effective way to capture their benefits, or at least to mitigate their harms.

For those jurisdictions seeking to regulate TNCs, the first question comes down to definitions. Do TNCs simply provide technology platforms to independent drivers and passengers, but remain otherwise unengaged in transportation services?²⁰ Or are they re-fashioned taxi and limousine companies?²¹ Do TNC drivers accept donations to defray the costs of driving or do they earn a profit?²² Choosing how to define TNCs will determine which governmental entities have jurisdiction, whether TNCsare subject to existing transportation regulations, whether new regulations and would

^{15.} See Rayle et al., supra note 6, at 1.

^{16.} DUTZIK ET AL., supra note 4, at 31.

^{17.} See Anderson, supra note 7, at 1102.

^{18.} See id. Of the twenty TNC drivers Anderson interviewed, he classified three as "incidentals"—drivers who offer rides occasionally, such as while commuting to work. Id. at 1106, 1112.

^{19.} See id. at 1114; Rayle et al., supra note 6, at 1.

^{20.} See, e.g., Cal. PUC Decision, supra note 10, at 13.

^{21.} See, e.g., Taxicab, Limousine and Paratransit Assoc., Comments in Response to Exceptions of Uber Technologies, Inc. and Governor John W. Hickenlooper to Recommend Decision Amending Transportation Rules, Dec. R13-0943, 4–5 (Sept. 5, 2013) [hereinafter TLPA Comments], available at https://www.dora.state.co.us/pls/efi/EFI.Show_Filing?p_fil=G_187629&p_session_i d= (arguing that Uber is a transportation provider).

^{22.} See, e.g., Cal. PUC Decision, supra note 10, at 18.

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appropriate.

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Transportation regulations vary by city and state,²³ providing ample opportunities for regulators to experiment as they begin to address TNCs. Generally speaking, they have chosen one of two strategies: (1) apply existing taxi or "private carrier" regulations, which may require redefining those categories to clearly encompass TNCs; or (2) create a distinct set of rules that will apply to TNCs and distinguish them from existing services.²⁴ Despite the frequency with which Uber, Lyft, and Sidecar appear in the news, the legal community is just beginning to explore the implications of these regulatory choices. Furthermore, commentary thus far appears to focus on questions surrounding liability, public safety, and fairness.²⁵ Without discounting the importance of these issues, this Comment seeks to broaden the conversation. By disrupting the stagnant passenger transportation industry, TNCs have created a unique opportunity to re-think how passenger transportation services are regulated. This Comment argues that policymakers should respond by crafting pointed, TNCspecific regulations. Moreover, new regulations should carefully consider how TNCs could help reduce dependence on individual vehicles and incorporate mechanisms that will provide policymakers with the tools and information needed to respond to transportation needs.

Part I begins by outlining the specific characteristics of ridesharing, taxis and private carriers, and TNCs, as well as the regulations applicable to each. With this background, Part II addresses how policymakers can integrate TNCs into the regulatory framework, first by looking at the statutory

^{23.} See Matthew W. Daus, Ridesharing Applications: Illegal "Hitchhiking-for-Hire" or Sustainable Group Riding? 26–45 (2013), available at http://www.windelsmarx.com/resources/documents/Ridesharing %20%20Report.pdf, archived at http://perma.cc/EBG3-YZB7 (comparing passenger transportation regulations in California, New York City, Washington, D.C., Philadelphia, Boston, Seattle, Chicago, and Austin).

^{24.} See infra Part II.

^{25.} See generally, e.g., Stephanie Francis Ward, 'App' Me a Ride: Internet Car Companies Offer Convenience, but Lawyers See Caution Signs, A.B.A. J., 13 (Jan. 1, 2014, 10:00 AM), available at http://www.abajournal.com/magazine/article/internet_car_companies_offer_convenience_but_lawyers_see_caution_signs, archived at http://perma.cc/Q9VN-5WQS; Mark Wilson, It's Still Perilous to Catch a Lyft in San Francisco, GOLDEN GATE U. L. REV. BLOG (Jan. 22, 2014), http://digitalcommons.law.ggu.edu/ggu_law_review_blog/21, archived at http://perma.cc/XX8T-XH43; DAUS, supra note 23.

authority that city and state governments need to regulate TNCs and then by comparing approaches taken at the state level in California and Colorado, and at the city level in Seattle, Washington. Drawing on lessons learned, Part III puts forth three suggestions. First, the same level of government that is charged with regulating other passenger services should be charged with regulating TNCs, although legislative action may be necessary to clarify jurisdiction. Second, the creation of a new, TNC-specific category of regulation will most effectively help cities harness and maximize TNCs' environmental benefits. Finally, the third section offers examples of specific regulatory provisions that could reduce TNCs' negative impacts. Recognizing that more research is needed before actual impacts will be known, robust reporting requirements will be particularly important should policymakers need to adjust regulations moving forward.

I. PASSENGER TRANSPORTATION SERVICES

How people choose to move from place to place has a substantial impact on the environment and on individuals' daily lives. The transportation sector is responsible for 28 percent of greenhouse gas emissions in the United States,²⁶ with roughly two-thirds of that total coming from passenger vehicles and light trucks.²⁷ Vehicles emit less pollution than in previous decades thanks to technological advances and increasingly stringent vehicle standards,²⁸ but population growth and an increase in per capita VMT have offset progress towards actual pollution reductions.²⁹ Cars in the United States traveled 920 billion miles per year in 1970;³⁰ by 2009,

^{26.} U.S. DEP'T OF STATE, U.S. CLIMATE ACTION REPORT 2010 16 (2010), available at http://www.state.gov/documents/organization/140636.pdf, archived at http://perma.cc/E8TX-HDEW. Emissions from the United States transportation sector represent 5 percent of global greenhouse gas emissions. U.S. DEP'T OF TRANSP., 2010 STATUS OF THE NATION'S HIGHWAYS, BRIDGES, AND TRANSIT: CONDITIONS & PERFORMANCE 11-5 (2010), available at http://www.fhwa.dot.gov/policy/2010cpr/pdfs/chap11.pdf, archived at http://perma.cc/J927-E8AS.

^{27.} Transp. Research Bd., Policy Options for Reducing Energy Use and Greenhouse Gas Emissions from U.S. Transportation 3 (2011), available at http://onlinepubs.trb.org/onlinepubs/sr/sr307.pdf, archived at http://perma.cc/P576-4U9V.

^{28.} OFFICE OF MOBILE SOURCES, supra note 1, at 3-4.

^{29.} *Id*. at 4

^{30.} U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES 692

the total distance increased to more than two trillion miles.³¹ To reduce the transportation sector's pollution impact, gains in vehicle efficiency must be accompanied by a shift in individuals' behavior. In 2012, a nationwide survey found that over 70 percent of Americans drove as much as they did because they felt that no other transportation options were available.³² When considered alongside the transportation sector's emissions impact, this statistic appears particularly problematic. In the aggregate, common individual behaviors—such as driving alone to work each day—emit as much pollution as large industrial facilities.³³

The costs of personal vehicle use are particularly significant in urban areas. Cities and metropolitan areas that fail to comply with the Clean Air Act's (CAA) National Ambient Air Quality Standards risk losing major federal grants for infrastructure projects.³⁴ As cities seek to improve air quality, they must also accommodate new people and their cars as an ever-growing number of Americans move into metropolitan areas.³⁵ An effective way to work toward these otherwise conflicting goals may be to facilitate the development of new transportation options, and thus make it easier for city residents to leave their cars behind. Relatively simple shifts in behavior can help reduce urban pollution.³⁶

(2012).

31. *Id*.

^{32.} WEIGEL & METZ, supra note 2, at 6.

^{33.} Karina Fischer Kuh, Capturing Individual Harms, 35 HARV. ENVTL. L. REV. 155, 156–57 (2011); see also Michael P. Vandenbergh, Order Without Social Norms: How Personal Norm Activation Can Protect the Environment, 99 NW. U. L. REV. 1101, 1103 (2005). In 2007, 76 percent of American workers reported driving alone to work each day. U.S. DEP'T OF STATE, supra note 26, at 18.

^{34.} The CAA instructs the Environmental Protection Agency (EPA) to impose sanctions against states that fail to implement an approved State Implementation Plan. 42 U.S.C. § 7509(b) (2012). Sanctions may include a prohibition on Department of Transportation projects or grants for nonattainment areas. *Id.* In addition, if "one or more political subdivisions covered by the applicable implementation plan are principally responsible for such deficiency," sanctions may be applied to the subdivisions, rather than statewide. *Id.* § 7410(m).

^{35.} The percentage of United States residents living in metropolitan areas grew from 80.2 percent in 2000 to 83.5 percent in 2007. U.S. DEP'T OF STATE, supra note 26, at 10–11. In addition, the overall population is projected to continue growing by approximately 1 percent each year. Id. By 2020, an estimated 341 million people will live in the United States, up from 308 million in 2010. Id.

^{36.} For example, a household can reduce its total energy consumption by up to 20 percent by purchasing a more efficient car, 4 to 6 percent by carpooling, and 2 percent by changing driving habits. Kuh, *supra* note 33, at 172 n.77.

TNCs have taken advantage of general dissatisfaction with other transportation options, gaps in regulation, and new technology to shake up the for-hire passenger transportation sector.³⁷ The new services may help cities reduce personal vehicle use, but, if left unregulated, they may also have an adverse impact on existing transportation services and environmental initiatives. To assess where TNCs may fit within urban transportation systems, a more thorough understanding of existing transportation services is necessary. To begin, section A describes ridesharing, its statutory treatment, and its role in urban transport. Section B then describes the regulations and impacts of taxi and private carrier services. Finally, section C turns to TNCs, first demonstrating how they combine characteristics of each of the above-mentioned services and then discussing their potential impact on urban air quality, congestion, and other modes of transportation.

A. Ridesharing

Ridesharing is a not-for-profit arrangement in which driver and passenger share a common origin or destination.³⁸ More commonly referred to as carpooling or vanpooling, policymakers have long promoted ridesharing as a way to more efficiently use existing vehicles and infrastructure.³⁹ During World War II, the United States government asked neighborhood councils to encourage workers to rideshare to work in order to conserve rubber for the war.⁴⁰ More recently, employers have implemented ridesharing programs as a way to reduce the strain on office parking lots.⁴¹

^{37.} See Rafi Mohammed, Regulation is Hurting Cabs and Helping Uber, HARV. BUS. REV. (July 9, 2014), http://blogs.hbr.org/2014/07/regulation-is-hurting-cabs-and-helping-uber, archived at http://perma.cc/7TE3-EGJL.

^{38.} See Disruptive Innovations in Ridesharing: Overview of its History and Recent Trends in Real-Time Ridematching, NAT'L CTR. FOR TRANSIT RES. (Apr. 17, 2013), http://www.nctr.usf.edu/2013/04/disruptive-innovations-in-ridesharing-webinar, archived at http://perma.cc/RV2R-QM7K.

^{39.} See AMBER LEVOFSKY & ALLEN GREENBERG, ORGANIZED DYNAMIC RIDE SHARING: THE POTENTIAL ENVIRONMENTAL BENEFITS AND THE OPPORTUNITY FOR ADVANCING THE CONCEPT 2 (2011), available at http://ridesharechoices.scripts.mit.edu/home/wp-content/papers/GreenburgLevofsky-OrganizedDynamic Ridesharing.pdf, archived at http://perma.cc/TZ3M-DQDM.

^{40.} See Chan & Shaheen, supra note 5, at 96–97.

^{41.} See id. at 99.

Ridesharing provides significant individual and collective benefits. Individuals who rideshare reduce their transportation costs, cut commute time by using carpool lanes, and may experience reduced commute-related stress.⁴² On a societal level, ridesharing reduces vehicle pollution, traffic congestion, and demand for parking by decreasing the number of cars making similar trips.⁴³ One researcher has asserted that policies aimed at increasing ridesharing may be the most effective way to reduce energy consumption, apart from prohibiting driving altogether.⁴⁴ In capital-constrained cities struggling to reduce congestion and pollution levels, encouraging ridesharing may be a more feasible short-term alternative to expanding public transit infrastructure.⁴⁵ Ridesharing programs may also complement existing public transit services by providing passengers with a way to travel between their destination and the transit station.⁴⁶ This "last mile" challenge is a frequent problem for transit agencies trying to increase ridership.⁴⁷

Because of ridesharing's recognized benefits and typically informal nature, it is exempt from the regulations imposed on other passenger transportation services, so long as the trip meets the statutory definition.⁴⁸ Colorado's definition of a ridesharing arrangement, typical among state regulations, contains three basic requirements: (1) the driver and passenger must be traveling together between "places of business or work

^{42.} See id. at 96.

^{43.} See id. In central business districts, cars searching for parking can generate up to 30 percent of traffic, increasing congestion, emissions, and energy consumption. Donald Shoup, Gone Parkin', N.Y. TIMES (Mar. 29, 2007), http://www.nytimes.com/2007/03/29/opinion/29shoup.html, archived at http://perma.cc/T4PJ-JR3M.

^{44.} Chan & Shaheen, supra note 5, at 96.

^{45.} See DIANA M. DORINSON ET AL., UNIV. OF CAL. DAVIS, FLEXIBLE CARPOOLING: EXPLORATORY STUDY 8, 11 (Sept. 2009), available at http://eec.ucdavis.edu/files/2009flexiblecarpoolstudy.pdf, archived at http://perma.cc/T7AC-7AWU ("[T]he energy savings of flexible carpooling are similar to what could be achieved by an express bus service, but without the cost of providing the bus service.").

^{46.} See GAIL MURRAY ET AL., TRANSP. RESEARCH BD., RIDESHARING AS A COMPLEMENT TO TRANSIT 15 (2012), available at http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_syn_98.pdf, archived at http://perma.cc/CCB3-KEBE (noting that potential transit riders who lack a way to get to their final destination will instead drive the entire trip).

^{47.} *Id*.

^{48.} See, e.g., COLO. REV. STAT. § 40-10.1-105(1)(a) (2014) (exempting ridesharing from regulation); CAL. PUB. UTIL. CODE § 5353(h) (2014) (same).

or . . . on a regularly scheduled basis with a commonality of purposes"; (2) the vehicle used must not be "operated for profit by an entity primarily engaged in the transportation business"; and (3) if the driver charges the passenger for the ride, the amount is limited to what may be "reasonably calculated to recover the direct and indirect costs." In addition to regularly scheduled trips, ridesharing arguably includes other shared trips in which the passenger helps to defray the driver's costs. If an arrangement fits within the ridesharing definition, the driver is not required to hold a commercial driver's license, undergo background checks, register with the state, or comply with other requirements that apply to taxis and private carriers. In the state of th

Despite the benefits of ridesharing, policymakers have had limited success in encouraging its widespread adoption. Only 10 percent of American workers report that they carpool regularly,⁵² with would-be-carpoolers citing the lack of flexibility and personal safety concerns as the primary deterrents.⁵³ In addition, ridesharing services have historically

^{49.} Colo. Rev. Stat. § 39-22-509(1)(a)(II). See, e.g., Cal. Pub. Util. Code § 5353(h) (exempting from regulation ridesharing arrangements that involve the "[t]ransportation of persons between home and work locations or of persons having a common work-related trip purpose . . . when the ridesharing is incidental to another purpose of the driver," but excluding those in which the driver's "primary purpose for the transportation of those persons is to make a profit"); Wash. Rev. Code § 46.74.010(2) (2014) ("Flexible commuter ride sharing' means a car pool or van pool arrangement whereby a group of at least two but not exceeding fifteen persons including the driver is transported in a passenger motor vehicle . . . between their places of abode or termini near such places, and their places of employment or educational or other institutions, where the driver is also on the way to or from his or her place of employment or educational or other institution").

^{50.} See eRideShare Inc., Final Opening Comments of eRideshare Inc. on the Order Instituting Rulemaking on Regulations Relating to Passenger Carriers, Ride Sharing, and New Online-Enabled Transportation Services, R. 12-12-011, 3 (Cal. P.U.C. Aug. 19, 2013), available at http://sfcda.org/CPUC/eRideShare_Comments.pdf, archived at http://perma.cc/N7M6-HSHC (suggesting that exempt ridesharing services include "[c]ross-country travel boards, of the kind that have proliferated for decades on college campuses and are now offered by Craigslist, Zimride, and eRideShare, [that] commonly transport passengers for trips that may be somewhat out of the way for the driver, but defray the cost of the trip for the driver").

^{51.} Compare Colo. Rev. Stat. § 40-10.1-105 ("(1) The following types of transportation are not subject to regulation under this article: (a) A ridesharing arrangement") with Colo. Rev. Stat. §§ 40-10.1-110, -201 to -207.

^{52.} DORINSON ET AL., *supra* note 45, at 8.

^{53.} See Chan & Shaheen, supra note 5, at 96.

suffered from a "critical mass" barrier.⁵⁴ Because too few users participate, services struggle to consistently pair passengers and drivers in a successful ridesharing match.⁵⁵

Technological improvements and shifting demographics may help boost ridesharing's appeal. Recent studies show that young Americans are less eager to get behind the wheel than older generations, and the average VMT for sixteen- to twentyfour-year-olds fell 23 percent from 2001 to 2009.56 The high cost of vehicle ownership likely plays a role in this shift. According to AAA, the average personal vehicle sits unused for 90 percent of its lifetime and costs over \$8,000 a year to own and operate.⁵⁷ Access to a vehicle, then, may "trump[] ownership."58 In addition, technology may help increase the appeal of ridesharing by providing three important services. First, smartphone apps allow users to find alternative transportation options in real time, eliminating the need to plan ahead or establish a fixed schedule.⁵⁹ As one reporter commented, "[i]ndependence used to mean car keys. Now it's a smartphone."60 Second, ridesharing services can aggregate rides across a variety of databases, increasing the likelihood that a successful driver-passenger match will be found.⁶¹ Finally, technology may help to alleviate some of the personal security concerns associated with getting into a stranger's car, either because of a shared social media connection between the driver and passenger or because each individual has a way to

^{54.} *Id.* at 104.

^{55.} See id. at 104.

^{56.} DUTZIK ET AL., supra note 4, at 1.

^{57.} Daniel Sperling, Evolution of the Motor Car, 464 NATURE 163, 163 (Mar. 11, 2010).

^{58.} See Sonari Glinton, For Ridesharing Apps Like Lyft, Commerce Is a Community, NPR (Nov. 14, 2013, 4:56 PM), http://www.npr.org/blogs/alltechconsidered/2013/11/14/245242805/for-ridesharing-apps-like-lyft-commerce-is-a-community, archived at http://perma.cc/JAV7-U3SH (quoting Susan Shaheen, Co-Director of the Institute of Transportation Studies' Transportation Sustainability Research Center at the University of California, Berkeley).

^{59.} See Chan & Shaheen, supra note 5, at 106.

^{60.} Paul Goddin, Transportation Tech Bubble Makes D.C. "Ripe for Disruption", Mobility Lab (Sept. 27, 2013), http://mobilitylab.org/2013/09/27/transportation-tech-bubble-makes-d-c-ripe-for-disruption, archived at http://perma.cc/VT2D-JNPS; see also Hasan Dudar & Jeff Green, Gen Y Eschewing V-8 for 4G Threatens Auto Demand: Cars, BLOOMBERG (Aug. 6, 2012, 10:01 PM), http://www.bloomberg.com/news/2012-08-07/gen-y-eschewing-v-8-for-4g-threatens-auto-demand-cars.html, archived at http://perma.cc/72JP-6LZJ.

^{61.} See Chan & Shaheen, supra note 5, at 107.

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call for help should things go awry.⁶²

B. Taxi and Private Carrier Services

Unlike ridesharing, the taxi industry has a long history of regulatory oversight. Horse-drawn carriages for hire, the seventeenth century equivalent to a taxi, were regulated soon after their appearance on the streets of London when King Charles I sought to "restrain the multitude and promiscuous use of coaches" by requiring that they be issued licenses. Taxicab regulation first began in the United States in the late 1920s, as car prices dropped and growing numbers of unemployed workers flocked to the taxi industry. Intense competition caused taxi fares, occupancy rates, and revenues to decline, prompting established taxi and transit associations to campaign for restrictions on entry to the industry. Continued regulation is rationalized by the role that taxis have come to play in urban transportation infrastructure.

Taxis are both common carriers, which "hold themselves out to the public as engaged in the business of transporting persons... for compensation," 67 and public utilities, "required to serve every customer in their service area at reasonable rates and without unjust discrimination." 68 Because taxi

^{62.} See Glinton, supra note 58; Evelyn Blumenberg & Michael Smart, Brother Can You Spare a Ride? Carpooling in Immigrant Neighborhoods, 51 URBAN STUD. 1871, 1886 (2014) (discussing the increased incidence of carpool where the driver and passenger are part of a common community); Chan & Shaheen, supra note 5, at 104 (same).

^{63.} Paul Stephan Dempsey, Taxi Regulation, Deregulation & Reregulation: the Paradox of Market Failure, 24 TRANSP, L.J. 73, 76 (1996).

^{64.} See MARK FRANKENA & PAUL PAUTLER, FED. TRADE COMM'N, AN ECONOMIC ANALYSIS OF TAXICAB REGULATION 74–75 (1984), available at http://www.ftc.gov/sites/default/files/documents/reports/economic-analysis-taxicab-regulation/233832.pdf, archived at http://perma.cc/B8SB-NNXV; Edward C. Gallick & David E. Sisk, A Reconsideration of Taxi Regulation, 3 J.L. ECON. & ORG. 117, 122–23 (1987).

^{65.} See Gallick & Sisk, supra note 64, at 123; Robert Hardaway, Taxi and Limousines: The Last Bastion of Economic Regulation, 21 HAMLINE J. PUB. L. & POL'Y 319, 331 (2010).

^{66.} Dempsey, *supra* note 63, at 116 & n.250.

^{67. 13} AM. JUR. 2D CARRIERS § 2. Use of public streets and highways for business is a "legal privilege 'which may be granted or withheld by the State in its discretion without violating either the due process clause or the equal protection clause." Ross D. Eckert, *Los Angeles Taxi Monopoly: An Economic Inquiry*, 43 S. CAL. L. REV. 407, 408 n.3 (1970) (quoting Buck v. Kuykendall, 267 U.S. 307, 314 (1924)).

^{68.} Dempsey, *supra* note 63, at 116 n.250.

service is "essentially local" in character, Congress has left regulation of the industry to the states.⁶⁹ A state may exercise its police power by regulating the industry itself, as is done in Colorado, or—as is more typical—by delegating regulation to local municipalities.⁷⁰ California cities and counties, for example, are instructed to "protect the public health, safety, and welfare by adopting an ordinance or resolution in regard to taxicab transportation service[s]" provided within their jurisdiction.⁷¹

Local regulations imposed on taxi companies typically include: barriers to entry, including operating permits and, in some cities, a showing of public need for additional taxi services; regulated fares at "just, reasonable, and nondiscriminatory" rates; service standards; mandatory insurance levels; and the obligation to provide service to all potential passengers, regardless of neighborhood, time of day, or passenger disabilities.⁷² Limited entry is likely the most controversial of the regulations.⁷³ In 1984, the Federal Trade Commission (FTC) questioned the theoretical basis for limited entry, commenting that there appeared to be "no persuasive economic rationale" for restrictions on the number of taxi companies or vehicles, and that fare ceilings and safety and insurance regulations were likely sufficient to deal with potential market failures in the taxi industry. 74 Although a cap on the number of taxis operating may protect the public from the congestion and pollution caused by underutilized vehicles, 75 barriers are likely retained because they insulate incumbent

^{69.} Buck v. California, 343 U.S. 99, 102 (1952). Buck held that a San Diego ordinance requiring taxi operators to obtain a permit did not violate the Interstate Commerce Clause, even if passengers were transported across international boundaries. Id. at 102-03.

^{70.} See Dempsey, supra note 63, at 85.

^{71.} CAL. GOV. CODE § 53075.5(a) (2014). Washington political subdivisions are similarly delegated the authority to adopt taxi regulations, although the state's instruction is permissive, rather than mandatory. WASH. REV. CODE § 81.72.210 (2014) ("[C]ities, towns, counties, and port districts of the state *may* license, control, and regulate privately operated taxicab transportation services operating within their respective jurisdictions.") (emphasis added).

^{72.} Dempsey, *supra* note 63, at 78–87 (describing taxi regulations in New York, Los Angeles, Houston, Chicago, St. Louis, Boston, Minneapolis, and Denver).

^{73.} See Hardaway, supra note 65, at 332–33 (discussing Nevada's limited entry restrictions).

^{74.} Frankena & Pautler, supra note 64, at 155.

^{75.} See Dempsey, supra note 63, at 95–96.

companies from competition.⁷⁶

Other for-hire passenger transportation services, such as limousines and airport shuttle services, are regulated differently than taxi companies. These "private carriers" are not permitted to accept passengers via street hail,⁷⁷ and a waybill or trip report is generally required as proof that the ride was pre-arranged.⁷⁸ Whether a certain amount of time must elapse for a ride to be considered pre-arranged, and whether the private carrier must charge a minimum fare, varies between jurisdictions.⁷⁹ Because private carriers do not indiscriminately offer their services to the general public, they are not regulated as heavily as taxi services.⁸⁰ Requirements typically include operating permits and safety inspections, but do not cap the number of providers allowed to operate or the rates they can charge.⁸¹ Private carriers may be regulated at the state level, as in California and Colorado,⁸² or by city

^{76.} See Organisation for Econ. Co-operation & Dev., Taxi Services: Competition and Regulation 201 n.11 (2007), available at http://www.oecd.org/regreform/sectors/41472612.pdf, archived at http://perma.cc/6GYQ-KEFY. But see James Cooper et al., Taxi!: Urban Economies and the Social and Transport Impacts of the Taxicab 18–19 (2010) (describing protection from competition as part of the compact struck between regulators and the regulated industry, in exchange for acquiescing to regulated rates and other controls).

^{77.} See, e.g., Colo. Rev. Stat. § 40-10.1-301 (2014) (defining "luxury limousine service" as provided "on a prearranged, charter basis"); Cal. Pub. Util. Code § 5360.5 (2014) (requiring "charter-party carriers" to "operate on a prearranged basis"). For the purpose of this Comment, "private carriers" encompasses the limousine and charter-party carriers as defined by Colorado and California statutes, and other similar services.

^{78.} See, e.g., CAL. PUB. UTIL. CODE § 5381.5 (requiring every charter-party carrier trip to include waybill with the name of a passenger, the point of origin and destination, and information about how the trip was arranged).

^{79.} Compare Wash. Admin. Code § 308-83-200 (2014) (explaining that trips provided by limousine in Washington "must be prearranged at least fifteen minutes before the passenger is scheduled to be picked up unless dispatched from a limousine carrier's business office"), and Miami-Dade Code §§ 31-601(bb), 31-604 (2014) (defining "pre-arranged" as it applies to a for-hire limousine in Miami-Dade County, Florida as a "reservation made at least fifteen minutes in advance . . . for the provision of limousine service for a specified period of time" and calling on the county commissioners to set minimum limousine rates), with Colo. Rev. Stat. § 40-10.1-301, and Cal. Pub. Util. Code § 5360.5 (setting no minimum time or fare requirements for prearranged transportation services).

^{80.} See COOPER ET AL., supra note 76, at 26.

^{81.} See id. at 26–27; see also Katrina Miriam Wyman, Problematic Private Property: The Case of New York Taxicab Medallions, 30 YALE J. ON REG. 125, 132–34 (2013) (comparing for-hire vehicle and taxi regulations in New York City).

^{82.} Cal. Pub. Util. Code $\S\S$ 5360, 5381; Colo. Rev. Stat. $\S\S$ 40-10.1-101 to 103.

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governments, as in Seattle.83

Some cities have chosen to use their authority over the taxi industry to incentivize taxi companies to switch to loweremission vehicles. For example, Dallas, Chicago, San Francisco, and Boston offer drivers of hybrid and natural gas taxis "head-of-the-line" privileges in airport taxi queues.⁸⁴ In Association of Taxicab Operators, USA v. City of Dallas, the United States District Court for the Northern District of Texas rejected a challenge to Dallas's front-of-the-line ordinance, the purpose of which was to reduce "smog, haze, and health problems" and bring the region into compliance with air quality standards.85 Texas state law and the Dallas City Charter authorized the city government to enact the ordinance, and the CAA's prohibition on state and local emissions standards did not preempt the city from adopting incentives-based initiatives. 86 The City of San Francisco has also taken strides to reduce the impact of its taxi fleet. A 2008 initiative offered grants to taxi companies to purchase low-emissions vehicles⁸⁷ and increased the "gate fee" that companies could charge of drivers using those low-emissions vehicles.⁸⁸ As a result, by 2012, 92 percent of the taxis operating in San Francisco were hybrid or natural gas vehicles.⁸⁹ City officials estimated that the initiative resulted in 35,139 metric tons of greenhouse gases avoided each year—equivalent to taking 6,890 cars off the road. 90 To a lesser degree, economic and safety regulations

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^{83.} WASH. REV. CODE §§ 46.72.160, 46.72A.150.

^{84.} Christian H. Pederson, Ass'n of Taxicab Operators, USA v. City of Dallas: A Possible Green Light Ahead for "Head-of-the-Line" Policies Favoring Natural Gas, 36 VT. L. REV. 995, 995 (2012).

^{85.} Ass'n of Taxicab Operators, USA v. City of Dallas, 760 F. Supp. 2d 693, 695, 700 (N.D. Tex. 2010), *aff'd*, 720 F.3d 534 (5th Cir. 2013).

^{86.} See id. at 697–99. A clean taxi pilot program in Seattle similarly survived a preemption challenge because it "incentiviz[ed] the purchase or use of hybrid vehicles" and did "not compel or bind parties to a particular choice." Green Alliance Taxi Cab Ass'n v. King Cnty., No. C08–1048RAJ, 2010 WL 2643369, at *5 (W.D. Wash. June 29, 2010).

^{87.} See San Francisco Taxis Surpass Emissions Goal, CITY & CNTY. OF S.F., OFFICE OF THE MAYOR (Feb. 8, 2012), http://www.sfmayor.org/index.aspx? page=684, archived at http://perma.cc/B8VK-3NMD.

^{88.} S.F., Cal., Ordinance 26-08 (Feb. 4, 2008), available at http://www.sfbos.org/ftp/uploadedfiles/bdsupvrs/ordinances08/00026-08.pdf, archived at http://perma.cc/4FFU-6KFG. A "gate fee" is the fee that a taxi driver pays to the permitholder—typically a taxi company—to rent the taxicab and operating permit for a period of time. *Id.*

^{89.} San Francisco Taxis Surpass Emissions Goal, supra note 87.

^{90.} *Id*

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also help limit the taxi industry's contribution to city pollution and congestion levels. 91 Barriers to entry establish a ceiling on the number of vehicles operating, 92 while vehicle inspections and the forced retirement of older models ensure that the least fuel-efficient vehicles are retired.⁹³

Although cities may incentivize taxi companies to switch to cleaner vehicles, federal law limits cities' ability to require it. The Energy Policy Conservation Act (EPCA) prohibits states and their political subdivisions from "adopt[ing] or enforc[ing] a law or regulation related to fuel economy standards,"94 while the CAA precludes adoption or enforcement of "any standard relating to the control of emissions from new motor vehicles."95 Taxi companies have successfully challenged clean taxi ordinances as being preempted by both the EPCA and the CAA. 96 In Metropolitan Taxicab I, the United States District Court for the Southern District of New York enjoined New York City's attempt to reduce the pollution impact of its taxi fleet by setting minimum mileage-per-gallon requirements for new vehicles.⁹⁷ Because the ordinance "related to fuel economy standards," the court held that plaintiffs were likely to succeed on the merits of their EPCA preemption claim.98 New York City's next attempt fared no better. The revised ordinance increased the gate fee that taxi companies could charge for hybrid or clean-diesel engine vehicles and decreased the fee for

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^{91.} See Dempsey, supra note 63, at 94.

^{92.} Id. (noting that barriers to entry may "increase efficiency by reducing the street congestion and air pollution caused by an excessive number of vehicles").

^{93.} See, e.g., S.F., CAL., TRANSP. CODE § 1113(s)(1) (2013) (subjecting San Francisco taxis to semi-annual or annual inspections by SFMTA personnel, and forbidding the use of vehicles older than eight model-years); 4 COLO. CODE REGS. § 723-6:6255(b) (2014) (forbidding taxicabs older than eight model-years from operating in Arapahoe, Adams, Boulder, Broomfield, Denver, Douglas, El Paso, and Jefferson Counties).

^{94. 49} U.S.C. § 32919(a) (2012).

^{95. 42} U.S.C. § 7543(a) (2012). Notably, the CAA's sayings clause provides that it does not "preclude or deny [] any State or political subdivision thereof the right otherwise to control, regulate, or restrict the use, operation, or movement of registered or licensed motor vehicles." Id. § 7543(d).

^{96.} For a discussion of why a finding that city clean taxi programs are preempted is out of step with the Supreme Court's recent preemption jurisprudence, see Christina Ma, Hybridizing Federal and State Regulation of Clean Taxis Introduction, 42 ENVTL. L. REP. NEWS & ANALYSIS 10840 (2012).

^{97.} See Metro. Taxicab Bd. of Trade v. City of New York (Metro. Taxicab I), No. 08 Civ. 7837(PAC), 2008 WL 4866021, at *1 (S.D.N.Y. June 29, 2008).

^{98.} Id. at *9. The CAA did not preempt the ordinance, which was "silent as to emissions." Id. at *14.

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lower efficiency vehicles.⁹⁹ The Southern District of New York again enjoined the ordinance, finding that its disincentive

created a de-facto mandate that fleet owners purchase hybrids—"an offer which can not, in practical effect, be refused."¹⁰⁰ The United States Court of Appeals for the Second Circuit affirmed that the EPCA preempted the ordinance and declined to rule on the effect of the CAA. 101 Relying on Metropolitan Taxicab I and II, the United States District Court for the District of Massachusetts found that a Boston ordinance requiring taxi companies to switch to hybrid vehicles was preempted by the EPCA. 102

In addition to limitations imposed by federal law, cities may be restricted by state delegations of authority. For example, California and Washington each authorize their cities to adopt additional taxi regulations beyond those specifically required by state statute, but Washington's delegation specifies that any additional regulations must be "adopted to ensure safe and reliable taxicab service." 103 Thus, if a state determined that its cities should not attempt to reduce the impact of their taxi fleet by incentivizing cleaner vehicles, the legislature could limit the delegation of authority accordingly.

Given the long history of regulating taxis and other forhire transportation services, it is no surprise that transportation regulators are stymied by the rise of new providers that do not fit into previously well-defined categories. San Francisco's transportation agency, for example, is concerned that if TNC trips replace those that would otherwise have been made in its "clean" taxi fleet, the local taxi industry will collapse—eroding progress the city has made towards

^{99.} See Metro. Taxicab Bd. of Trade v. City of New York (Metro. Taxicab II), 633 F. Supp. 2d 83, 85 (S.D.N.Y. 2009), aff'd on other grounds, 615 F.3d 152 (2d Cir. 2010), cert. denied, 131 S. Ct. 1569 (2011).

^{100.} Id. at 99, 102. Notably, plaintiff taxicab owners did not challenge the incentive portion of the ordinance.

^{101.} See Metro. Taxicab Bd. of Trade v. City of New York, 615 F.3d 152, 159 (2d Cir. 2010).

^{102.} See Ophir v. City of Boston, 647 F. Supp. 2d 86, 87 (D. Mass. 2009) ("My ten year old grandson came to watch the motion session . . . When it was over, he said, 'Why can't Boston do what it wants with its taxis? It's for the environment'.... The answer, Cam, is that the Congress of the United States, pursuing national goals it considers important, has forbidden Boston from taking this initiative.").

^{103.} CAL. GOV. CODE § 53075.5(a) (2014); WASH. REV. CODE § 81.72.210(6) (2014).

reducing vehicle-related pollution.¹⁰⁴ "Unlike [San Francisco]'s taxi fleets, these electronically-hailed personal vehicles need not be low emission vehicles."¹⁰⁵ Interestingly, it was San Francisco's limits on entry into the taxi industry that spawned the creation of TNCs in the first place.

C. Transportation Network Companies

Limited entry and other protections for taxi companies may be theoretically justifiable as "quid pro quo" for complying with regulations. ¹⁰⁶ However, insulation from competition also allowed the industry to ignore its widely held reputation for poor and unreliable service. ¹⁰⁷ Responding in part to discontent with taxi services in San Francisco, where neighborhoods outside of downtown were chronically undersupplied, UberX, Lyft, and Sidecar launched as alternatives in 2012. ¹⁰⁸ Their

^{104.} S.F. Mun. Transp. Agency, Reply Comments to Order Instituting Rulemaking Filed on Behalf of the San Francisco Municipal Transportation Agency, R. 12-12-011, 1–2, 4 (Cal. P.U.C. Feb. 11, 2013) [hereinafter SFMTA Comments], available at http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M042/K156/42156522.pdf, archived at http://perma.cc/L44E-SE4M (advocating for a solution that "ensure[s] that unregulated services do not drive regulated providers out of business and, in so doing, undermine our state and local goals for reducing greenhouse gas emissions and ensuring access to safe and reliable transportation," and noting that "[u]nlike the City's taxi fleets, these electronically-hailed personal vehicles need not be low emission vehicles").

^{105.} Id. at 4.

^{106.} Rayle et al., supra note 6, at 1.

^{107.} See, e.g., HARA ASSOCS. INC. & COREY, CANAPARAY & GALANIS, BEST PRACTICES STUDIES OF TAXI REGULATION: MANAGING TAXI SUPPLY (DRAFT) ii (Apr. 3, 2013), available at http://www.sfmta.com/sites/default/files/Draft%20 ManagingTaxi%20Supply%2045%20WEBversion04042043.pdf, archived at http:// perma.cc/R4T2-SHS8 (finding that neighborhoods outside of downtown San Francisco are systemically undersupplied and residents report a high degree of taxi unreliability); Emily Badger, Taxi Medallions Have Been the Best Investment in America for Years. Now Uber May Be Changing That, WASH. POST (June 20, 2014). http://www.washingtonpost.com/blogs/wonkblog/wp/2014/06/20/taximedallions-have-been-the-best-investment-in-america-for-years-now-uber-maybe-changing-that, archived at http://perma.cc/ZZ3S-K7RZ (reporting that between January 1, 2012, and mid-April, 2014, 1,688 complaints were filed in Chicago about taxi drivers refusing to accept a passenger whose trip was too short, too long, or went to the wrong part of town, despite the requirement that taxi drivers provide universal service).

^{108.} See Katrina Schwartz, S.F. Street Fight: Ride-Share Startups Battling Taxis, Regulators, KQED (Nov. 8, 2012, 7:44 AM), http://www.kqed.org/news/story/2012/11/08/110777/sf_street_fight_rideshare_startups_battling_taxis_regula tors?category=economy, archived at http://perma.cc/8PY2-P6UC; Anderson, supra note 7, at 1101.

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apps leverage smartphone technology to match passengers with non-commercial drivers, blending characteristics of ridesharing with taxi and limousine services. ¹⁰⁹ With help from Silicon Valley venture capital firms, ¹¹⁰ all three companies quickly expanded beyond San Francisco. ¹¹¹ Their growth has dramatically impacted taxi companies. ¹¹²

While each company has a slightly different model, the key characteristics shared by UberX, Lyft, and Sidecar include: (1) drivers do not hold commercial licenses or commercial insurance policies and do not have a set schedule of hours they are required to work; (2) prospective passengers "hail" a ride using their smartphone and are able to track the driver via GPS as they approach; (3) drivers and passengers may accept or deny a ridematch; (4) at the end of the ride, the app prompts the passenger to pay the driver a minimum fare or suggested donation; and (5) drivers and passengers are asked to provide feedback by rating the other on a scale from one to five stars. 113 None of these features are completely unique to TNCs. Flywheel, for example, is a smartphone app used by taxi

^{109.} See Rayle et al., supra note 6, at 1.

^{110.} See Andrew Ross Sorkin, Why Uber Might Well be Worth \$18 Billion, N.Y. TIMES (June 9, 2014), http://dealbook.nytimes.com/2014/06/09/how-uber-pulls-in-billions-all-via-iphone, archived at http://perma.cc/FCQ6-HSPN; Douglas MacMillan & Evelyn M. Rusli, Ride-Sharing App Lyft Is Valued at More than \$700 Million, WALL ST. J. (Mar. 8, 2014, 4:11 PM), http://blogs.wsj.com/digits/2014/03/08/ride-sharing-app-lyft-is-valued-at-more-than-700-million, archived at http://perma.cc/LR5B-CS6F; Yuliya Chernova, Facing Big Ride-Sharing Competitors, Sidecar Enlists Richard Branson, WALL ST. J. (Sept. 15, 2014, 7:33 PM), http://blogs.wsj.com/venturecapital/2014/09/15/facing-big-ride-sharing-competitors-sidecar-enlists-richard-branson, archived at http:// perma.cc/5GR5-DN9W.

^{111.} As of January 2015, Uber operated in more than one hundred cities across fifty-three countries, Lyft in approximately sixty-five United States cities and metropolitan areas, and Sidecar in ten United States cities. *Uber Cities*, UBER, https://www.uber.com/cities (last visited Jan. 18, 2015), *archived at* https://perma.cc/AF7J-YDFG; *Cities We're In*, LYFT, https://www.lyft.com/cities (last visited Jan. 18, 2015), *archived at* https://perma.cc/S7YC-GVCL; SIDECAR, http://www.side.cr (last visited Jan. 18, 2015), *archived at* http://perma.cc/6RMK-PAKT.

^{112.} Although the San Francisco Municipal Transportation Agency reported that taxi ridership declined by 65 percent between 2012 and 2014, San Francisco taxi companies reported a less dramatic decline, between 20 percent and 30 percent. Jessica Kwong, *SF Taxi Decline Debunked by Cab Companies*, S.F. EXAM'R (Nov. 17, 2014), http://www.sfexaminer.com/sanfrancisco/sf-taxi-decline-debunked-by-cab-companies/Content?oid=2912179, archived at http://perma.cc/L6GU-MQJ6.

^{113.} See generally DAUS, supra note 23.

companies through which passengers hail a taxi, track their driver, and pay at the end of the ride. 114 Carma, a ridesharing company, uses an app to match non-commercial drivers and passengers with similar commutes in ridesharing arrangements. 115 As with TNCs, app users rate each other at the end of the ride. 116 Unlike TNCs, however, Carma restricts compensation to the driver to the approximate cost of the trip to ensure that the ride fits squarely within the ridesharing exemption. 117

TNCs are colloquially termed "ridesharing" companies, ¹¹⁸ but their services differ from ridesharing as it is statutorily defined. Unlike the drivers in ridesharing arrangements, TNC drivers earn a profit with each ride they provide—up to forty dollars per hour, according to one driver who has provided rides through both Lyft and UberX. ¹¹⁹ Thus, TNC drivers are incentivized to make additional vehicle trips, rather than

^{114.} Flywheel first launched in 2009 under the name Cabulous. See How We Got Rolling, FLYWHEEL, http://www.flywheel.com/about (last visited Dec. 14, 2014), archived at http://perma.cc/CK5B-2U9S. Passengers in Los Angeles, San Francisco, and Seattle can use the app to connect to commercially insured, professional taxi drivers. Frequently Asked Questions, FLYWHEEL, http://www.flywheel.com/rider-faqs (last visited Dec. 14, 2014), archived at http://perma.cc/234X-689F; see also Alexa Vaughn, Taxis Developing Own Apps To Compete with Rideshares, SEATTLE TIMES (Feb. 13, 2014, 8:52 PM), http://seattletimes.com/html/localnews/2022905833_taxiappsxml.html, archived at http://perma.cc/K5HR-DTXA.

^{115.} See Your Questions Answered, CARMA, https://carmacarpool.com/sfbay (last visited Oct. 22, 2014), archived at https://perma.cc/DQ8F-N4DP.

^{116.} See id.

^{117.} See id.; Jessica Kwong, Carma App Offers Rebate for Carpoolers on Bay Bridge, S.F. EXAM'R (Sept. 23, 2014), http://www.sfexaminer.com/sanfrancisco/carma-app-offers-rebate-for-carpoolers-on-bay-bridge/Content?oid=2905831, archived at http://perma.cc/2Z9E-5GNA. Another company, Tickengo, takes a slightly different approach by capping the total dollar amount that drivers can make in a year to AAA's annual cost of owning and operating a vehicle. See JAIME B. LAURENT & ANDY KATZ, JOINT WORKSHOP REPORT FOR WORKSHOP HELD ON APRIL 10–11, 2013, R. 12-12-011, at 5 (Cal. P.U.C. May 17, 2013).

^{118.} See, e.g., Tomio Geron, California Becomes First State to Regulate Ridesharing Services Lyft, Sidecar, UberX, FORBES (Sept. 19, 2013, 3:40 PM), http://www.forbes.com/sites/tomiogeron/2013/09/19/california-becomes-first-state-to-regulate-ridesharing-services-lyft-sidecar-uberx, archived at http://perma.cc/Y9T8-F9XL ("California regulators have made technology-based ride sharing services legal in the state") (emphasis added).

^{119.} See Anderson, supra note 7, at 1100; Liz Gannes, Lyft and Uber Price Wars Leave Some Drivers Feeling Crunched, RE/CODE (Apr. 30, 2014, 5:00 AM), http://recode.net/2014/04/30/lyft-and-uber-price-wars-leave-some-drivers-feeling-crunched, archived at http://perma.cc/U78Y-XGHP (noting that the forty dollars per hour does not account for the costs the driver bears for wear and tear on his or her vehicle).

simply provide rides that are "incidental" to a pre-existing purpose. Pased on observations and interviews, Don Anderson, a researcher at the University of Arizona, found that TNC drivers could be described as employing three basic strategies: incidental, part-time, and full-time. Part- and full-time drivers who view driving with a TNC as a job are more likely to commute long distances and provide rides to passengers without sharing a common destination. 122

While there is not yet conclusive evidence demonstrating whether TNCs will have a positive or negative environmental impact, ¹²³ Anderson observed that their impact will largely depend on which driver strategy dominates. ¹²⁴ If drivers use the income earned from providing TNC-enabled rides to purchase a car, for example, TNCs may actually promote vehicle ownership. ¹²⁵ Perhaps a more likely outcome is that passengers will choose to travel by TNC rather than in newer, more fuel-efficient taxis, or by public transit, walking, or biking. ¹²⁶ If TNCs out-compete taxis and public transit services, city VMT, congestion, and pollution may increase—undermining clean taxi ordinances and other sustainable transportation initiatives. ¹²⁷

^{120.} Anderson, supra note 7, at 1113; SFMTA Comments, supra note 104, at 6.

^{121.} Anderson, *supra* note 7, at 1106–07.

^{122.} Id. at 1112.

^{123.} See Letter from Susan Shaheen to the California PUC (June 14, 2013), San Francisco Municipal Transportation Agency & San Francisco International Airport Reply Comments Regarding Proposed Decision Adopting Rules and Regulations to Protect Public Safety While Allowing New Entrants to the Transportation Industry, Order Instituting Rulemaking on Regulations Relating to Passenger Carriers, Ridesharing, and New Online-Enabled Transportation Services, R. 12-12-011, at Exhibit 1 (Cal. P.U.C. Aug. 26, 2013), available at http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M076/K281/76281296.PDF, archived at http://perma.cc/QXX9-HY4U.

^{124.} Anderson, supra note 7, at 1112.

^{125.} Anderson, *supra* note 7, at 1114 ("[T]o the extent that drivers use the ridesharing income to support their own use of a private vehicle—or even to purchase a vehicle, as some do—for-profit ridesharing can serve as a prop for private automobility rather than a substitute for it."); *see, e.g.*, Carolyn Said, *Lyft Plus Changes Upset Some Drivers*, SFGATE (Sept. 19, 2014, 7:07 PM), http://www.sfgate.com/business/article/Lyft-Plus-changes-upset-some-drivers-5768364.php, *archived at* http://perma.cc/7SW9-CJ56 (noting that each driver who joined "Lyft Plus," Lyft's higher-capacity ride service, "purchased a \$34,000 white Ford Explorer SUV to participate").

^{126.} See Rayle et al., supra note 6, at 13 (reporting that if a TNC ride had not been available, 39 percent of TNC passengers would have traveled by taxi, 24 percent by bus, 9 percent by rail, 8 percent by walking, and 2 percent by bike).

^{127.} See Anderson, supra note 7, at 1114-15; see also SFMTA Comments,

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TNCs Alternatively, may help further cities' environmental goals. To begin, TNC passengers become comfortable with using apps to find rides in the cars of strangers. 128 As Sidecar's CEO observed, "[o]ne of the big reasons it's possible to create [TNCs] is we now have an infrastructure of trust with social media You absolutely couldn't do this without the smartphone, GPS and the sharingtrust infrastructure." ¹²⁹ TNCs' success, in turn, may spread to ridesharing. In fact, the distinction between the two services continues to blur: in August 2014, Uber and Lyft each launched new carpooling features to their apps, through which passengers traveling along similar routes can choose to share a discounted ride. 130 By increasing the number of people sharing each ride, Lyft Line and UberPool look more like ridesharing than taxi services, and may come with the same benefits. 131 As discussed above in Part I.A, an increase in ridesharing can reduce vehicle pollution, traffic congestion, and demand for parking. 132 In addition, TNCs—unlike taxis—make use of vehicles that drivers already own, encouraging a more efficient use of existing vehicles. 133 TNC drivers, in turn, increase the overall access to reliable on-demand transportation services in urban areas. Passengers are able to use their own cars less, or even forgo ownership altogether. 134 Because TNC passengers

supra note 104, at 4.

^{128.} See Glinton, supra note 58.

^{129.} Tomio Geron, Will Ride-Sharing Apps Replace Car Ownership?, FORBES (July 9, 2012, 8:55 PM), http://www.forbes.com/sites/tomiogeron/2012/07/09/will-ride-sharing-apps-replace-car-ownership, archived at http://perma.cc/3CT7-B37V.

^{130.} See Farhad Manjoo, Lyft Hopes to Coax Commuters to Leave Their Cars, N.Y. TIMES (Aug. 6, 2014), http://www.nytimes.com/2014/08/07/technology/personaltech/lyft-tries-to-coax-commuters-to-leave-their-cars.html, archived at http://perma.cc/9YJ6-5HVQ.

^{131.} See Lyft Expands Lyft Line to Los Angeles, LYFT BLOG (Sept. 16, 2014), http://blog.lyft.com/posts/2014/9/16/lyft-expands-lyft-line-to-los-angeles, archived at http://perma.cc/UA26-YGUT ("If more Southern Californians regularly engaged in shared rides like Lyft Line, we could see a reduction in rush hour traffic congestion and petroleum use. In fact, if ridesharing in California increased by only three percent, fuel use could be reduced by 713 million gallons a year." (quoting Juan Matute, Associate Director at UCLA's Lewis Center for Regional Policy Studies)).

^{132.} See supra Part I.A.

^{133.} Cars sit unused 90 percent of the time. Daniel Sperling, *Evolution of the Motor Car*, 464 NATURE 163, 163 (2010). Allowing a car-owner to earn a profit by driving it for a few extra hours each week, if it helps a second person to avoid owning a car altogether, may be a more efficient overall use of resources. *See* Rayle et al., *supra* note 6, at 2.

^{134.} See Rayle et al., supra note 6, at 13 (finding that 40 percent of TNC

are likely to use the services in conjunction with public transit, TNCs may also help increase transit ridership, further reducing the congestion and pollution impacts of individual vehicles. ¹³⁵

It may be years before the actual impacts of TNCs are evident. However, the ongoing development of new regulations provides policymakers an opportunity to proactively put in place safeguards to enhance cities' abilities to integrate TNCs into their transportation and sustainability plans. As new jurisdictions take on the challenge of regulating TNCs, an examination of recent rulemaking procedures can provide helpful guidance.

II. REGULATING TRANSPORTATION NETWORK COMPANIES

Thanks to TNCs and other transportation innovations, policymakers have a unique opportunity to rethink existing transportation regulations. How they choose to regulate TNCs will affect not only TNCs and their competition, but also the extent to which new transportation options can aid or hinder local efforts to reduce the pollution and congestion costs associated with driving alone. This Part begins by looking at the sources of federal, state, and local governments' authority over TNCs and assessing which level of government may be best suited to implement new regulations. Section B then examines two opposing regulatory approaches, using state

passengers in San Francisco who owned cars reported that they drove less than they did before the services were available). Rayle et al. did not find that TNCs have had an impact on car ownership, but this "is not surprising given the newness of these services." *Id.* at 17.

135. Farhad Manjoo, With Uber, Less Reason to Own a Car, N.Y. TIMES (June 11, 2014), http://www.nytimes.com/2014/06/12/technology/personaltech/withubers-cars-maybe-we-dont-need-our-own.html, archived at http://perma.cc/K9AWXAVP; see also Rayle et al., supra note 6, at 17 (discussing how TNCs complement and compete with public transit).

136. See Don Jergler, Uber, Lyft, Sidecar Toe-to-Toe with Insurers State-by-State, INS. J. (June 27, 2014), http://www.insurancejournal.com/news/national/2014/06/27/332942.htm, archived at http://perma.cc/4PUY-JPGL ("While it may seem like many of the [TNC] battles have already unfolded, [a senior director for an insurance association working on TNC issues] believes the topic is only now just scratching the surface around the nation. 'Tll have to say there's more than 80 percent of this to go At best case, at the end of this year we could have three states with laws on the books in regards to [TNCs].").

137. See Rayle et al., supra note 6, at 18 ("[F]indings...indicate [that TNCs] enrich[] mobility options for city dwellers.... Thus, outright bans on [TNCs] would negate these mobility gains.").

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rulemakings in California and Colorado, and a local ordinance in Seattle, Washington, as case studies to demonstrate their benefits and pitfalls at the state and local level.

A. Legal Authority to Regulate TNCs

1. Federal Authority

Despite the long history of city and state regulation of local transportation services, the federal government almost certainly has the power to step in to regulate TNCs through the Commerce Clause. 138 As explained by the Federal Trade Commission (FTC) in *In re City of Minneapolis*, a case in which the FTC challenged a local taxi ordinance, taxi companies affect interstate commerce by providing transportation to interstate travelers, using equipment manufactured out-of-state, and employing drivers who hail from other states. 139 The same can easily be said for Uber, Lyft, and Sidecar; each company is based in California but operates in multiple states. 140 Congress has the authority, therefore, to preempt state and local TNC regulations and instead adopt a set of uniform national rules. 141

constitutional Despite its authority. the federal government should refrain from taking action to regulate TNCs. Local agencies are best positioned to transportation needs, which vary widely from state-to-state and city-to-city. Rather than adopt a one-size-fits-all approach through federal legislation, local governments should be allowed to debate and enact TNC regulations that are tailored to local circumstances. If some regulations appear to protect incumbent transportation providers at the expense of TNCs, the federal government may intervene on a case-by-case basis through the FTC. 142 The agency is well versed in passenger

^{138.} See Marvin Ammori, Can the FTC Save Uber?, SLATE (Mar. 12, 2013, 12:15 PM), http://www.slate.com/articles/technology/future_tense/2013/03/uber_lyft_sidecar_can_the_ftc_fight_local_taxi_commissions.html, archived at http://perma.cc/D89D-TECS.

^{139.} In re City of Minneapolis, 105 F.T.C. 304, 305–06 (1985).

^{140.} See supra note 111.

^{141.} See Ammori, supra note 138 (comparing possible Congressional regulation of TNCs to the Telecommunications Act of 1996, 47 U.S.C. § 332, which was passed pursuant to Congress's Commerce Clause powers).

^{142.} The Federal Trade Commission Act authorizes the FTC to "investigate from time to time the organization, business, conduct, practices, and management

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vehicle regulations and has demonstrated a willingness to intervene in local taxi markets to disrupt anti-competitive behavior. With regard to TNCs, the FTC appears to be actively monitoring local TNC regulations as they arise, and has issued letters to regulatory authorities in Washington, D.C.; Anchorage, Alaska; Colorado; and Chicago, Illinois. 144

2. State Authority

The Supreme Court observed in *Buck v. California* that taxi services are local in nature and that Congress left regulation of the industry to the states. ¹⁴⁵ Regulation of other private carrier services, in the absence of federal legislation, similarly falls within the purview of a state's police powers. ¹⁴⁶ State regulation is justified because of the "distinct public interest in the transportation of persons," and the "peculiar importance" of for-hire transportation services in "provid[ing a state's] communities with resources both of employment and of recreation." ¹⁴⁷ It follows that TNCs, as new players within

of any person, partnership, or corporation engaged in or whose business affects commerce." 15 U.S.C. § 46(a) (2012).

143. The FTC published a comprehensive economic report assessing the state of the United States taxi industry in 1984. See FRANKENA & PAUTLER, supra note 64. In addition, FTC staff advocated for pro-competitive regulations in Colorado, Alaska, Washington, and the District of Columbia and filed complaints against the cities of Minneapolis and New Orleans, alleging that the cities were eliminating competition through agreements to raise taxicab fares and increase barriers to entry. FED. TRADE COMM'N, 1985 ANNUAL REPORT 5, 71 (1985), available at http://www.ftc.gov/sites/default/files/documents/reports_annual/annual-report-1985/ar1985_0.pdf, archived at http://perma.cc/9B49-DPYH.

144. See Letter from the FTC to Brendan Reilly, Alderman, Chi. City Council, Re: Proposed Ordinance O2014-1367, at 2 (Apr. 15, 2014), available at http://www.ftc.gov/system/files/documents/advocacy_documents/ftc-staff-comment-honorable-brendan-reilly-concerning-chicago-proposed-ordinance-o2014-

1367/140421chicagoridesharing.pdf, archived at http://perma.cc/Q7WN-UA3S.

145. Buck v. California, 343 U.S. 99, 102 (1952).

146. See Nat'l Fed'n of Indep. Bus. v. Sebelius, 132 S. Ct. 2566, 2578 (2012) ("The States thus can and do perform many of the vital functions of modern government—punishing street crime, running public schools, and zoning property for development, to name but a few.... Our cases refer to this general power of governing, possessed by the States but not by the Federal Government, as the 'police power.").

147. Sproles v. Binford, 286 U.S. 374, 396 (1932) (discussing a state's rationale for regulating freight and passenger transportation services differently); see also S.C. State Highway Dep't v. Barnwell Bros., 303 U.S. 177, 189 (1938) (listing state transportation regulations upheld by the Court, despite some burden on interstate commerce, as "the exercise of a legislative authority, which, under the Constitution, has been left to the states").

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state transportation systems, may also be subjected to state regulation.

Although a state likely has the authority to regulate TNCs, its jurisdiction may be unclear. For example, if local governments are charged with regulating the taxi industry, as is true in many states, ¹⁴⁸ local and state officials may each have a claim to jurisdiction over TNCs. In the summer of 2013, shortly before the California PUC issued its TNC rule, the Los Angeles Department of Transportation's taxi regulator ordered Uber, Lyft, and Sidecar to cease operations in the city in the absence of city permits. ¹⁴⁹ In such a situation, the state may need to legislatively withdraw authority as it relates to TNCs, or otherwise clarify the limits of the delegation. ¹⁵⁰ California chose to pursue the latter route when the state PUC issued a rule classifying TNCs as "charter-party" carriers, services that are regulated by the state, and not taxis, which are regulated by local governments. ¹⁵¹

As with the federal government, the fact that a state has the power to regulate TNCs does not mean that it is the entity best equipped to do so. Two related inquiries appear particularly important: first, whether local jurisdictions may be better suited to regulate new for-hire services offered on their roads; and second, where regulatory authority lies with respect to other, similar services. States likely contain cities and counties facing very different transportation challenges. A onesize-fits-all approach, even scaled down to the state level, may not adequately address local needs. In addition, dividing jurisdiction over passenger transportation services between state and local agencies may undermine the ability of any agency to regulate effectively. Backlash against California's TNC regulations may be attributable in part to a failure to adequately address each of these considerations. Because the California PUC asserted jurisdiction, the state now regulates both private carriers and TNCs while taxis continue to be regulated by local governments. 152 The jurisdictional split,

^{148.} See Dempsey, supra note 63, at 77.

^{149.} Tuttle, *supra* note 12.

^{150.} See 9A EUGENE MCQUILLIN, THE LAW OF MUNICIPAL CORPORATIONS § 26:177, 83–85 (Thomson/West ed., 3d ed. 2007) (noting that municipal power to regulate taxis rests on a grant of authority from the state, which may be restricted or withdrawn with the passage of state regulations).

^{151.} Cal. PUC Decision, *supra* note 10, at 11, 20–23.

^{152.} *Id*.

which hinges on the determination that TNC rides are "prearranged," has proven problematic for local transportation officials struggling to manage an influx of TNC drivers and their impact on existing transportation services. 154

To avoid California's current jurisdictional tangle, a more effective approach, and one taken by many cities and states, is to retain regulatory authority over TNCs, taxis, and limousines within the same entities. In Colorado, for example, that authority remains with the state. ¹⁵⁵ Alternatively, Washington, as well as many other states, has delegated regulatory authority over all for-hire transportation services to local governments. ¹⁵⁶

3. Local Authority

Whether a city can regulate TNCs turns on whether it has been granted the authority to do so by the state. Although the California PUC's claim of jurisdiction limits the ability of California cities to regulate TNCs, 157 other cities have been more successful in asserting authority over the services, either in the absence of action at the state level or due to their state's specific regulatory framework. For example, cities in Washington are authorized to regulate both the taxi industry and "all vehicles used for the transportation of passengers for

^{153.} Id. at 20-21.

^{154.} See Joshua Sabatini, SF Exploring Ways to Regulate Ride Services Like Uber, Lyft, S.F. Exam'r (Mar. 7, 2014), http://www.sfexaminer.com/sanfrancisco/sf-exploring-ways-to-regulate-ride-services-like-uber-lyft/Content?oid=2724033, archived at http://perma.cc/Q4AN-FR7B (discussing San Francisco officials' search for regulatory authority over TNCs, given local impacts on revenue, safety, and disability services); Elizabeth Hsing-Huei Chou, L.A. Council Vote to Challenge Smartphone-Enabled Rideshare Services Fails, L.A. DAILY NEWS (Oct. 23, 2013, 6:06 PM), http://www.dailynews.com/government-and-politics/20131023/lacouncil-vote-to-challenge-smartphone-enabled-rideshare-services-fails, archived at http://perma.cc/5HH9-56RZ (quoting the chair of the City Council Transportation Committee as advocating for "more clarity to the tangle of regulations" that split transportation jurisdiction between state and local agencies).

^{155.} COLO. REV. STAT. §§ 40-10.1-101 to -103 (2014).

^{156.} See infra note 158 and accompanying text.

^{157.} California law delegates the authority to regulate taxis, which are not classified as charter-party carriers, to cities and counties. CAL. PUB. UTIL. CODE \S 5353(g). Authority over charter-party carriers is delegated to the PUC by the Passenger Charter-Party Carriers' Act, CAL. PUB. UTIL. CODE \S 5351–5363. By classifying TNCs as charter-party carriers, Cal. PUC Decision, supra note 10, at 23, the California PUC appears to have denied California cities and counties any regulatory authority.

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compensation" that operate within their jurisdiction. The Seattle City Council cited its delegated authority to regulate for-hire vehicles in passing an ordinance regulating TNCs in the spring of 2014. Sea of August 2014, cities and counties in Illinois, Tennessee, Louisiana, North Carolina, Ohio, Minnesota, Wisconsin, and Texas had similarly proposed or passed laws to address TNCs. Sea of August 2014.

As with state or federal regulation, there are benefits and drawbacks to regulating TNCs at the local level. Although local regulators are likely to be more familiar with local transportation and environmental needs, ¹⁶¹ they may also be biased in favor of incumbent taxi companies. ¹⁶² A patchwork of local regulations is also likely to present a greater challenge to TNCs, potentially discouraging growth or further innovation. ¹⁶³

B. Divergent Regulatory Strategies

TNCs combine qualities of ridesharing with those of forhire passenger transportation services, serving the demand for "fast, flexible, and convenient mobility" that was previously unmet by taxi companies. ¹⁶⁴ Once a state or locality has claimed jurisdiction to regulate TNCs, the question of how to

^{158.} WASH. REV. CODE \S 46.72.160 (2014) ("Cities, counties, and port districts may license, control and regulate all for hire vehicles operating within their respective jurisdictions."); $id.\$ 46.72A.150 (providing that cities with populations exceeding 500,000 authorized to enter into cooperative agreements with the Department of Transportation to regulate limousines); $id.\$ 46.04.190 (defining "for hire vehicles").

^{159.} See Seattle, Wash., Ordinance 124,441 (Mar. 17, 2014), available at http://clerk.seattle.gov/~archives/Ordinances/Ord_124441.pdf, archived at http://perma.cc/KYQ6-ZSBS. The City Council found that "unlicensed drivers using application dispatch technology are providing trips as for-hire drivers via a new type of for-hire vehicle," and that, because TNCs are for-hire vehicles, it had authority to regulate the services under "Article 11, Section 11 of the Washington State Constitution and RCW 46.72.160." Id. at 2, 4.

^{160.} See Rayle et al., supra note 6, at 4–5; Jergler, supra note 136.

^{161.} See Sabatini, supra note 154 (discussing San Francisco supervisors' concerns about the health of the taxi industry, insurance gaps, background checks, vehicle inspections, and the number of new cars on the road following the passage of TNC regulation at the state level).

^{162.} See Ammori, supra note 138 (advocating for state or federal regulation of TNCs because city-by-city regulations force TNCs to "battle[] incumbent taxi companies" and "fac[e] off against city taxi commissions that are biased against them").

^{163.} *See id*.

^{164.} Rayle et al., supra note 6, at 1.

incorporate TNCs into the regulatory framework remains. Surveying the jurisdictions that have proposed or implemented regulations to address TNCs, it appears that two dominant strategies have emerged. Under the first policymakers subject TNCs to the same regulations that apply to taxis or private carriers, often by amending existing for-hire transportation regulations to encompass the new services. 165 Taxi companies in particular advocate for this approach, arguing that TNC services are nothing new and should play by the same rules. 166 TNC proponents disagree and note that TNCs are unique in terms of their services, business model, and innovative technology. 167 The second approach attempts to account for these differences by creating a new set of rules that address TNCs as a distinct type of service. 168

A closer examination of the rulemaking processes that have accompanied each approach is useful to highlight the benefits and drawbacks of each. The subsections that follow will attempt to do just that, using Colorado, California, and Seattle, Washington as case studies. The Colorado PUC initiated a rulemaking procedure in January 2013, in which it attempted to regulate TNCs by amending the state's private carrier regulations. ¹⁶⁹ If implemented as proposed, the rule

^{165.} See, e.g., Recommended Decision of Administrative Law Judge G. Harris Adams Amending Rules, In re the Proposed Rules of Practice and Procedure, 4 Code of Colorado Regulations 723-1, Decision No. R13-0943, Docket No. 13R-0009TR (Colo. P.U.C. Aug. 2, 2013) [hereinafter Recommended Decision of ALJ Adams], available at https://www.dora.state.co.us/pls/efi/EFI_Search_UI .Show_Decision?p_session_id=&p_dec=18968; Rayle et al., supra note 6, at 4–5 (citing a Nashville, Tennessee ordinance and a proposed Columbus, Ohio ordinance which amend local for-hire transportation regulations to encompass TNCs); Brian Heaton, Sharing Economy Advisory Network Seeks to Develop Best Practices, GOV'T TECH. (Aug. 15, 2014), http://www.govtech.com/internet/Cities-Form-Sharing-Economy-Network.html, archived at http://perma.cc/ZYL5-6GP4 (observing that Annapolis, Maryland requires TNCs to register as taxi companies).

^{166.} See TLPA Comments, supra note 21, at 2.

^{167.} See, e.g., Siona Listokin, Uber Rules: How to Loosen the Chokehold of Taxi Commissions, SLATE (Jan. 9, 2014, 10:47 AM), http://www.slate.com/articles/news_and_politics/jurisprudence/2014/01/regulating_uber_data_collection_is_the_key.html, archived at http://perma.cc/7R6D-LGF3 ("Uber can accurately and seamlessly measure safety, pricing, and equity of service—the goals at the heart of taxi regulation. This means that the company is right that it shouldn't be subject to the chokehold of the taxi commissions.").

^{168.} See, e.g., Cal. PUC Decision, supra note 10, at 23–24; Rayle et al., supra note 6, at 4–5 (describing regulations enacted by states, cities, and counties that specifically address TNCs, including California, Colorado, and Seattle).

^{169.} See In re the Proposed Rules Regulating Transportation by Motor Vehicle,

would have forced TNCs to change their operating model or kept them from operating in the state. ¹⁷⁰ In contrast, both California's state government and Seattle's city government chose to regulate TNCs as a distinct category of transportation service. ¹⁷¹ California's regulations, adopted by the PUC in September 2013, were the first in the country to legalize the services. ¹⁷² Seattle became the first city to regulate TNCs in the spring of 2014, and its ordinance exemplifies how the regulatory process can play out at the local level. ¹⁷³

1. Colorado

Colorado was the first state to legislatively address TNCs, but before the issue was taken up by the state legislature, the Colorado PUC attempted to regulate the services. Its rulemaking highlights how regulators may adjust existing

4 Code of Colorado Regulations 723-6, Decision No. C13-0054, Docket No. 13R-0009TR (Colo. P.U.C. Jan. 3, 2013) [hereinafter Notice of Proposed Rulemaking], available at https://www.dora.state.co.us/pls/efi/EFI_Search_UI.Show_Decision?p_dec=18066&p_session_id=.

170. See Letter from the FTC to the Colo. Pub. Utils. Comm'n Re: R13-0009TR, at 1, 3 (Mar. 6, 2013) [hereinafter FTC Letter], available at http://www.ftc.gov/ os/2013/03/130703coloradopublicutilities.pdf, archived at http://perma.cc/W4BG-QBEG (warning the Colorado PUC that three of the proposed changes within its Notice of Proposed Rulemaking "may significantly impair competition in passenger vehicle transportation services, including innovative methods of competition enabled by new software applications"). Ultimately, the Colorado PUC rejected the proposed rule. See Andy Vuong, Colorado Regulators Give the Green Light to E-Hailing Startup Uber, DENV. Post (Sept. 17, 2013, 4:14 PM), http://www.denverpost.com/breakingnews/ci_24116352/colorado-regulators-givegreen-light-e-hailing-startup, archived at http://perma.cc/74N2-92A9. Instead, in June 2014 Colorado became the first state in the country to enact legislation authorizing TNCs. Andy Vuong, Colorado First to Authorize Lyft and Uber's Ridesharing Services, DENV. Post (June 5, 2014, http://www.denverpost.com/business/ci_25907057/colorado-first-authorize-lyfthttp://perma.cc/CU5D-S2V5. archivedatand-ubers-ridesharing-services, Nevertheless, the initial rulemaking process in the Colorado PUC provides valuable insight into the benefits and drawbacks of the approach.

- 171. See Cal. PUC Decision, supra note 10; Seattle, Wash., Ordinance 124,441 (Mar. 17, 2014).
- 172. Tomio Geron, California Becomes First State to Regulate Ridesharing Services Lyft, Sidecar, UberX, FORBES (Sept. 19, 2013, 3:40 PM), http://www.forbes.com/sites/tomiogeron/2013/09/19/california-becomes-first-state-to-regulate-ridesharing-services-lyft-sidecar-uberx, archived at http://perma.cc/K5KB-39EF.
- 173. Alexa Vaughn, Council Places Limits on Number of Rideshare Drivers, SEATTLE TIMES (Mar. 17, 2014, 9:46 PM), http://seattletimes.com/html/localnews/2023156937_rideservicevote1xml.html, archived at http://perma.cc/8WX9-STDY.

transportation rules to address, and effectively ban, TNCs. The PUC undertook rulemaking in January 2013 to "enhance public safety, protect consumers of regulated transportation utilities, serve the public interest, and make the [existing passenger transportation] rules more effective and efficient." ¹⁷⁴ The agency has jurisdiction over taxis and all other for-hire passenger transportation services, ¹⁷⁵ and sought to clarify both the distinctions between taxis and private carriers in the Colorado Code of Regulations and the rules applicable to TNCs. ¹⁷⁶

Although the Notice of Proposed Rulemaking made no mention of TNCs, an implicit purpose of the rule was to address taxi-company complaints about Uber's smartphonebased black car service and to clarify that the company was subject to the same regulations as other for-hire transportation providers. 177 Two provisions were particularly problematic for TNCs. First, "motor carrier"—previously defined as an operator who "own[ed], controll[ed], operat[ed], or manag[ed]" a vehicle providing "transportation in intrastate commerce"—was expanded to include any party who "advertis[ed] or otherwise offer[ed] to provide transportation."178 Because TNCs advertise transportation services, they would be required to obtain operating permits from the PUC, or else face civil penalties. 179 Second, the proposed rules clarified that any transportation provider operating on a prearranged, charter basis would be required to provide service "for a specific fixed price." 180 The

^{174.} Notice of Proposed Rulemaking, *supra* note 169, at 2. A memorandum written by the city transportation director for Austin, Texas, articulated similar reasoning in a proposal to redefine its for-hire transportation regulations: "Staff recommends that additional clarification be added to City Code, Chapter 13-2, to improve citizen understanding of ridesharing and to reduce confusion between car/vanpool activities and vehicle-for-hire services." Memorandum from Robert Spillar, Director, Austin Transp. Dep't, to Mayor and Council 3 (May 31, 2013), *available at* http://www.taxi-library.org/austin-rideshare-report-may-2013.pdf, *archived at* http://perma.cc/855L-NQ9W.

^{175.} COLO. REV. STAT. §§ 40-10.1-101 to -103 (2014).

^{176.} See Notice of Proposed Rulemaking, supra note 169, at 2.

^{177.} See Andy Vuong, Denver Cabbies vs. Uber: The Lowdown on Monday's Hearing at the Colorado PUC, DENV. POST (Mar. 10, 2013, 6:05 PM), http://blogs.denverpost.com/techknowbytes/2013/03/10/cabbies-vs-uber-the-lowdown-on-mondays-hearing-at-the-puc/8849, archived at http://perma.cc/F6J6-YXCR.

^{178.} Notice of Proposed Rulemaking, *supra* note 169, at Attachment A at 8.

^{179.} Id. at Attachment A at 9, 21.

^{180.} Id. at Attachment A at 55.

variable, GPS-based pricing scheme built into TNC apps would be prohibited. 181

The Taxicab, Limousine & Paratransit Association (TLPA) argued that the changes would "legitimately maintain the distinction between taxicab and luxury limousine service[s]" to the benefit of consumers, Coloradocities. environment. 182 defining Clearly which services permitted to provide rides "on demand" and which were required to provide prearranged rides would help to account for on-demand transportation's "far greater impact on the resources of cities (traffic, parking, mass transit systems, law enforcement, etc.) and on the environment (consumption, air pollution, effects of vehicle maintenance and recycling)."183 Furthermore, the fixed price requirement was important to protect consumers from "unpredictable and possibly inaccurate fares," calculated by "untested" and "unapproved" smartphone systems. 184 Unsurprisingly, TLPA also opposed Uber's proposed TNC exceptions. 185 Because taxi companies are prohibited from refusing service to any potential passenger, even if the ride is less profitable, TLPA argued that competition with unregulated TNCs would ultimately lead to "the elimination of wheelchair accessible [taxi] service, the end of most 24 hour/7 days week/365 days a year [taxi] service, the end of uniformly low cost [taxi] fares, [and] the end or very reduction serious of[taxi] service to low neighborhoods."186

In a letter to the Colorado PUC, the FTC urged the agency to adopt a regulatory framework that "allow[ed] for flexibility... and adaptation in response to new and innovative methods of competition," and to "proceed with caution in responding to calls for change that may have the effect of impairing new forms or methods of competition." Nevertheless, at the end of the rulemaking process an

^{181.} *Id.*; Andy Vuong, *Judge's Proposed Rules Would Probably Drive Uber Out of Colorado*, DENV. POST (Aug. 5, 2013, 6:29 PM), http://www.denverpost.com/breakingnews/ci_23801122/judges-proposed-rules-would-probably-drive-uber-out, *archived at* http://perma.cc/KTC8-PT2Q.

^{182.} TLPA Comments, supra note 21, at 3, 6–8.

^{183.} Id. at 6.

^{184.} *Id.* at 3.

^{185.} *Id.* at 4–10.

^{186.} *Id.* at 7.

^{187.} FTC Letter, supra note 170, at 3.

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Administrative Law Judge's recommended decision would have implemented many of the proposed changes. ¹⁸⁸ Had it been adopted, the decision would have required TNCs to change their business model or withdraw from Colorado. ¹⁸⁹

Ultimately, the PUC abandoned the redefinition of motor carrier and the requirement that prearranged services offer fixed-price fares.¹⁹⁰ Not long after the PUC issued its final decision, the Colorado legislature took over, again shifting the state's regulatory approach; Senate Bill 125 became law in June 2014 and created a TNC-specific regulatory structure under the general jurisdiction of the Colorado PUC.¹⁹¹ Nevertheless, Colorado's rulemaking process highlights one way that regulators may adjust existing rules to address, and effectively ban, TNCs.

2. California

Regulation of TNCs in California also began with the state's PUC, but the agency took a different approach than its Colorado counterpart. Over nine months beginning in December 2012, twenty-one parties—including taxi companies, government agencies, TNCs, and non-profit organizations—participated in the PUC's public comment period, hearings, and workshops in order to debate how TNCs should be regulated. ¹⁹² When the final rule was issued, it declined to place TNCs within the categories established for taxis and charter-party carriers, instead applying a new set of rules to the new

^{188.} See Recommended Decision of ALJ Adams, supra note 165, at 5 ("[O]ffering to provide [transportation] service is equally prohibited as providing service without first obtaining the required authority or permit."); id. at 12-13 ("[F]ares for taxi service are a public filed rate applied by a meter. . . [L]uxury limousine service cannot be a metered service."); id. at 17 ("[T]he Commission cannot ignore the plain language of statute and allow limited regulated carriers to provide service pursuant to a spot charter, rather than a time charter. Charters must be for a specific period of time.").

^{189.} See Vuong, supra note 181.

^{190.} See Decision Addressing Exceptions and Modifications upon Commission Motion: Attachment A, Decision No. C13-1259, Docket No. 13R-0009TR (Colo. P.U.C. Sept. 17, 2013) at 23, 68, available at https://www.dora.state.co.us/pls/efi/EFI_Search_UI.Show_Decision?p_session_id=&p_dec=19288.

^{191.} TNCs are required to obtain permits from the Colorado PUC and meet minimum liability insurance requirements, but are exempt from the PUC's rate, entry, operational, and common-carrier regulations. COLO. REV. STAT. §§ 40-10.1-603, -604, -606 (2014).

^{192.} See Cal. PUC Decision, supra note 10, at 4–7.

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The first issue the final rule resolved was whether the PUC had jurisdiction to regulate TNCs at all. 194 Three findings were critical. First, the PUC found that TNCs are more than mere providers of internet-enabled services, as had been argued by the TNCs. 195 Describing the assertion to be "factually and legally flawed," the PUC noted that "the method by which information is communicated, or the transportation service arranged, [does not] change[] the underlying nature of the transportation service being offered." 196 Second, TNCs provide transportation services for compensation, placing them outside the ridesharing exemption. 197 Third, TNCs provide prearranged transportation services. 198 Pursuant to the California Constitution and the Public Utilities Code, the PUC is authorized to "supervise and regulate every charter-party carrier of passengers in the State," which includes "every person engaged in the transportation of persons by motor vehicle for compensation . . . over any public highway in this state" 199 that operates on a prearranged basis. 200 The code requires no minimum time to elapse for a ride to qualify as "prearranged,"²⁰¹ but grants cities and counties the authority to regulate taxi rides requested on-demand.²⁰² Because passengers must download an app, sign a service agreement, and input information prior to requesting a ride, sufficient information is exchanged pre-ride to satisfy the statute.²⁰³

Once jurisdiction was established, the PUC exercised its authority under the California Constitution and Public Utilities Code to "create the category of [TNC]" and establish twenty-eight new requirements for TNCs to meet before they could operate legally in the state.²⁰⁴ These are primarily safety-

^{193.} See id.

^{194.} *Id.* at 7–23.

^{195.} Id. at 12–13.

^{196.} *Id.* at 13.

^{197.} *Id.* at 18–19.

^{198.} Id. at 20-21.

^{199.} *Id.* at 22 (quoting CAL. PUB. UTIL. CODE §§ 5381, 5360 (2014)).

^{200.} CAL. PUB. UTIL. CODE § 5360.5.

^{201.} Cal. PUC Decision, *supra* note 10, at 20 ("PU Code § 5360.5 does not define 'prearranged,' and we are reluctant to impose a minimum time requirement as some other jurisdictions have done.").

^{202.} CAL. PUB. UTIL. CODE § 5353(g).

^{203.} Cal. PUC Decision, supra note 10, at 20–21.

^{204.} Id. at 23-24, 26-33.

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based, and include requirements to obtain a license from the PUC; conduct criminal background checks for each driver; establish a driver-training program; put in place a zerotolerance policy regarding drugs and alcohol; and show proof of commercial liability insurance, with a minimum of \$1 million in coverage per incident.²⁰⁵ Just two provisions address the requirements for vehicles used by TNC drivers: the vehicles must pass a nineteen-point inspection, and they must be "street-legal coupes, sedans, or light-duty vehicles including vans, minivans, sport utility vehicles (SUVs) and pickup trucks."206 Only one provision acknowledges TNCs' potential environmental consequences, calling on the California PUC to convene a stakeholders' workshop, one year from the date the rule was issued, to examine TNCs' impact on "safety, competition. innovation, accessibility. congestion,

By addressing TNCs directly, the PUC rule established a legal framework within which TNCs may operate, reducing the regulatory uncertainty for drivers, passengers, and the TNCs themselves. Within one year of the rule's issuance, five companies successfully met the PUC requirements and were granted TNC licenses, including Lyft and Sidecar. 208 Noticably absent, however, was a thorough consideration of how TNCs might be integrated into city transportation planning.²⁰⁹

California Environmental Quality Act, and other pollution-

Seattle 3.

related issues."207

While the California PUC addressed statewide TNC regulations through its rulemaking process, the Seattle City Council held hearings to assess how TNCs could be regulated at the city level.²¹⁰ The state of Washington delegates the

^{205.} Id. at 26-27, 72-73.

^{206.} Id. at 28.

^{207.} Id. at 74.

^{208.} See TNC Licenses Issued, CAL. PUB. UTIL. COMM'N, http://www.cpuc. ca.gov/PUC/Enforcement/TNC/TNC Licenses Issued.htm (last visited Nov. 9, 2014), archived at http://perma.cc/E9YC-KLMD.

^{209.} In the wake of the PUC rule, San Francisco officials are grappling with whether they retain any authority to regulate TNCs as well, and how to deal with the impact TNCs are having on other city transportation services. See Sabatini, supra note 154.

^{210.} See Vaughn, supra note 173.

authority to regulate taxis²¹¹ and other for-hire transportation providers²¹² to its local governments. For-hire vehicles are statutorily defined to include "all vehicles used for the transportation of passengers for compensation," except vehicles used for ridesharing and a handful of other carriers licensed under separate sections of the code.²¹³ Pursuant to Seattle's Municipal Code, it was prohibited to "own, lease, drive or otherwise operate" a for-hire vehicle without a regulatory license issued by the city.²¹⁴ By transporting passengers for compensation without a license, TNCs and their drivers fell squarely within the definition of for-hire vehicles and were in violation of Seattle's licensing requirement.²¹⁵

Following a year of debate, the Seattle City Council approved an ordinance to legalize and regulate TNCs in March 2014, becoming the second government entity after California to do so.²¹⁶ Citing its delegated authority under the Revised Code of Washington,²¹⁷ the City Council sought to "strik[e] a balance between safety and innovation" with its regulations, which included minimum operating requirements, vehicle inspections, a drug-use policy, insurance requirements, and other rules for TNCs and affiliated drivers.²¹⁸ Two key ordinance differences between the and regulations implemented in California, Colorado, and elsewhere were the framing of regulations as a "pilot program," and a provision that capped the total number of TNC drivers allowed to operate in the city at any given time at 150.219 Pursuant to the ordinance, the City Council would review the pilot program within a year to assess whether the cap and other regulations had achieved the intended benefits or had resulted in

^{211.} Wash. Rev. Code § 81.72.210 (2014).

^{212.} Id. § 46.72.160.

^{213.} Id. § 46.72.010.

^{214.} SEATTLE, WASH., MUN. CODE § 6.310.130 (2014).

^{215.} Seattle, Wash., Ordinance 124,441 (Mar. 17, 2014).

^{216.} See Vaughn, supra note 173.

^{217.} Seattle, Wash., Ordinance 124,441 ("The Council finds that unlicensed drivers using application dispatch technology are providing trips as for-hire drivers via a new type of for-hire vehicle.... The Council finds that it has the authority to establish code to regulate for-hire vehicles as granted by Article 11, Section 11 of the Washington State Constitution and RCW 46.72.160.").

^{218.} *Id*.

^{219.} *Id.* (providing that TNCs must "[e]nsure that only 150 TNC endorsed drivers [are] active on the TNC dispatch system at any given time").

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unintended, negative consequences.²²⁰

Ultimately, the cap lasted just a few months.²²¹ A referendum campaign—funded primarily by Uber, Lyft, and Sidecar²²²—gathered over 36,000 signatures to block the regulation from taking effect, prompting the mayor to reach a compromise with representatives from TNCs, taxis, and other private-carrier companies.²²³ The City Council approved the proposal, lifting the cap.²²⁴

Although the ordinance did not survive in its original form, the public process surrounding the development of Seattle's regulation is notable. Taxi companies, TNCs, and other stakeholders were actively involved in debates in the California and Colorado PUCs, but Seattle residents had the opportunity to attend hearings, send letters to their elected officials, and participate in a referendum.²²⁵ The local political process may have allowed the City Council to hear from and consider a broader coalition of interests regarding the effects of TNCs on the city. In addition, the Seattle City Council may have been able to respond to public sentiment more quickly than a state or federal body; the City Council approved the compromise proposal in July, just a few months after the original ordinance was passed.²²⁶ Finally, because Seattle retains jurisdiction over both TNCs and taxi companies, the City Council was also able to use the ordinance to ease unnecessary constraints on taxi companies and more fully address unmet demand for transportation services.²²⁷

^{220.} Id.; Vaughn, supra note 173.

^{221.} Lynn Thompson, Seattle Council Gives Nod to Compromise Rules for Ride Services, SEATTLE TIMES (July 14, 2014, 8:08 PM), http://seattletimes.com/html/localnews/2024071072_tncscouncilxml.html, archived at http://perma.cc/PBE7-8PJW.

^{222.} Contributions to Seattle Citizens to Repeal Ordinance 124441, 2014 Election Cycle, SEATTLE ETHICS & ELECTIONS, http://web6.seattle.gov/ethics/elections/ poplist.aspx?cid=374&listtype=contributors (last visited Dec. 14, 2014), archived at http://perma.cc/PBF4-CNEZ.

^{223.} Emily Parkhurst, Ride-Share Caps Suspended; Issue is Heading to Ballot, PUGET SOUND BUS. J. (Apr. 18, 2014, 9:32 AM), http://www.bizjournals.com/seattle/blog/techflash/2014/04/ride-share-caps-suspended-issue-is-heading-to.html, archived at http://perma.cc/2832-P222.

^{224.} See Thompson, supra note 221.

^{225.} See id.; Vaughn, supra note 173.

^{226.} See Thompson, supra note 221.

^{227.} See, e.g., Seattle, Wash., Ordinance 124,441 (Mar. 17, 2014) (issuing one hundred new taxicab licenses in 2014 and 2015); Thompson, supra note 221 (discussing compromise brokered between TNCs and taxi companies).

While Seattle's experience highlights some of the benefits of local regulation, it also exemplifies an important drawback. In response to Seattle's cap on the number of TNC drivers, the CEO of Sidecar labeled the provision as "a knee-jerk reaction prompted by the taxi lobby." Whether or not that is true for Seattle, entrenched taxi interests likely hold more sway over local government officials than they do at the state or federal level. Of course, Uber, Lyft, and Sidecar do not lack political clout, either—the three companies were largely responsible for the referendum campaign that mobilized soon after the driver cap was approved. 229

III. A SUGGESTED PATH FORWARD

As policymakers decide how to proceed, they must consider the source and extent of their authority over the TNCs, and how to best integrate the new services into existing regulations. Liability, public safety, and fairness considerations should play a prominent part in that debate.²³⁰ However, this Part attempts to provide additional guidance by focusing on how decisions regarding jurisdiction, regulatory strategies, and specific rules may affect local sustainability policies and transportation systems.

A. Taxis, Private Carriers, and TNCs Should Be Regulated by the Same Body

As discussed in Part II.A, in the absence of federal legislation or regulation, TNCs and other for-hire passenger transportation services are matters of state and local concern.²³¹ The three case studies examined in Part II.B describe different ways states may exercise that jurisdiction: by regulating all services at the state level, as in Colorado;²³² by dividing jurisdiction between the state and local governments, as in California;²³³ or by delegating jurisdiction to regulate all

^{228.} Carolyn Said, Seattle Clamps Down on UberX, Lyft, Sidecar, SFGATE (Feb. 27, 2014, 6:56 PM), http://blog.sfgate.com/techchron/2014/02/27/seattle-clamps-down-on-uberx-lyft-sidecar, $archived\ at\ http://perma.cc/439Z-AXS9$.

^{229.} See Thompson, supra note 221.

^{230.} See supra note 25 and accompanying text.

^{231.} See supra Part II.A.

^{232.} See supra Part II.B.1.

^{233.} See supra Part II.B.2.

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services at the local level, as in Seattle.²³⁴

The increasingly blurry distinctions between different passenger transportation services suggest that the authority to regulate all for-hire passenger transportation services, including taxis, private carriers, and TNCs, should be delegated to one administrative body, at a single level of government. A single body that is empowered to regulate each type of service should be able to more effectively account for the impact of the services on transportation systems as a whole. For example, the Seattle City Council has been able to debate how TNCs will impact the city and experiment with different rules to address the city's needs. 235 Seattle's ordinance not only addressed TNCs but also amended local taxi regulations²³⁶—a strategy that the Colorado PUC could also carry out, but that is foreclosed to the California PUC and California cities.²³⁷ California, as well as other states where jurisdiction is divided amongst state and local regulators, should consider whether that structure hampers effective regulation of increasingly similar passenger transportation services.

B. Policymakers Should Create a Set of Rules Unique to TNCs

Whether regulation is carried out at the state or local level, policymakers should seize this opportunity to re-examine how for-hire passenger transportation services are regulated. Despite the similarities between TNCs and other for-hire transportation services, the use of smartphones and non-commercial drivers is a new business model that does not quite "fit into the old boxes." ²³⁸

As has been done with other transportation services, establishing a baseline level of regulation will help to ensure that TNC services benefit, rather than harm, the cities in which they operate. As one commentator observed, "[g]iving my friend a ride somewhere in my car has different economic and social implications for a city than picking up a stranger and

^{234.} See supra Part II.B.3.

^{235.} See supra Part II.B.3.

^{236.} See id.

^{237.} See supra Part II.B.2.

^{238.} Tuttle, *supra* note 12 (quoting Arun Sundararajan, professor at New York University's Stern School of Business).

driving her someplace for a fee."²³⁹ However, rules that would force TNCs to act like taxis or private carriers—such as Colorado's proposal to prohibit variable pricing for charter carriers²⁴⁰—lack a compelling public safety justification.²⁴¹ Moreover, taxi and private carrier regulations were not designed with TNCs in mind, and their imposition is likely to undermine TNCs' operating models. Overly burdensome licensing requirements, caps on the number of TNC drivers permitted at any given time, or caps on driver income may discourage would-be drivers, thus impeding driver recruitment and decreasing the likelihood that the services will reach the "critical mass" of participants that allows them to reliably match drivers to prospective passengers.²⁴²

Attempts to include TNCs within existing passenger transportation regulations also run the risk of threatening other services. Responding to the Colorado PUC's proposed rule, the FTC observed that the redefinition of a motor carrier "equate[d] the mere advertisement or offering of providing transportation with being a motor carrier that provides transportation in intrastate commerce." Such an "expansive definition" of motor carrier is over-inclusive, and could inadvertently subject ridesharing to regulation for the first time or, at a minimum, create confusion as to which services are truly exempt. 245

Rather than "force a business to admit it's a taxi company when it's not,"²⁴⁶ regulators should "update their rules and regulations in order to keep pace with time and technology."²⁴⁷

^{239.} Listokin, supra note 167.

^{240.} See Notice of Proposed Rulemaking, supra note 169, at Attachment A at 55; FTC Letter, supra note 170, at 4.

^{241.} See FTC Letter, supra note 170, at 5; see also Letter from Jack Finlaw, Chief Legal Counsel, Off. of the Governor, to Pub. Utils. Comm'n, State of Colo. (Aug. 22, 2013), available at https://www.dora.state.co.us/pls/efi/efi_p2_v2_demo.show_document?p_dms_document_id=232131&p_session_id=.

^{242.} Anderson, supra note 7, at 1100; $see\ also$ Chan & Shaheen, supra note 5, at 107.

^{243.} FTC Letter, supra note 170, at 4.

^{244.} Id.

^{245.} See Plaintiff's Original Petition ¶ 33–37, Side.Cr, LLC v. City of Austin, No. D-1-GN-13-000838, 2013 WL 878303 (Tex. Dist. Mar. 8, 2013) (arguing that the City of Austin has interpreted its code too broadly, subjecting "every informal carpool arrangement" to the threat of ticketing).

^{246.} Tuttle, *supra* note 12 (quoting Arun Sundararajan, professor at New York University's Stern School of Business).

^{247.} Cal. PUC Decision, *supra* note 10, at 62.

A classification that specifically addresses TNCs appears to be the most effective way to establish a baseline of regulation, integrating the new services into the existing transportation system, while leaving room for further innovation in the industry. In addition, the implementation of TNC-specific regulations should make it easier for regulators to make adjustments in the future.²⁴⁸ This agility may be particularly important as officials gather information regarding TNCs' impact on local congestion and pollution levels, as well as any other social and economic costs or benefits.

C. Regulations to Address Environmental Impacts Should Be Considered

To avoid the pitfalls of over-restrictive or over-inclusive regulation, policymakers should create a new set of TNC-specific rules within existing passenger transportation regulations. The regulations currently in place in Colorado, California, and Seattle all create specific rules. However, the integration of TNCs into local transportation systems and the realization of their potential environmental benefits may require a more explicit focus.

If policymakers are concerned that TNC drivers will use emissions-intensive vehicles, thus increasing the emissions impact of passenger transportation services, model- or engine-year restrictions on vehicles eligible for TNC use may be appropriate. Under the current California regulations, for example, a TNC driver may operate any vehicle that passes a nineteen-point inspection and is a coupe, sedan, van, minivan, SUV, or pickup truck.²⁴⁹ A requirement that all TNC drivers operate a hybrid or natural gas vehicle appears unduly restrictive, but the age restrictions imposed on taxis are a useful model. Taxi companies may not operate vehicles older than eight model-years in either San Francisco or Denver.²⁵⁰ Requiring a year-2000 model or newer would provide both emissions and safety benefits, and is a standard that is already

^{248.} See, e.g., Seattle, Wash., Ordinance 124,441 (Mar. 17, 2014) (framing TNC regulations as a "pilot program," "the benefits and any negative unintended consequences of" which will be assessed within a year).

^{249.} Cal. PUC Decision, supra note 10, at 28–29.

^{250.} S.F., CAL., TRANSP. CODE § 1113(r) (2013); COLO. CODE REGS. § 723-6-6255(b) (2014).

incorporated into Sidecar and Lyft driver qualifications.²⁵¹ Alternatively, policymakers could set a minimum fuel efficiency to be achieved by TNC vehicles.²⁵² While it is possible that either requirement could face a preemption challenge under the EPCA and CAA,²⁵³ if successfully implemented they would lessen the gap between TNC vehicles and those used by other for-hire passenger transportation providers and directly address TNCs' impact on urban environments.

Given the novelty of TNCs and the infancy of research regarding their impact, more information is critical to the regulatory effort. TNCs almost certainly collect data on their drivers, passengers, routes, and payment²⁵⁴—information that is critical to assessing TNCs' impacts and whether more stringent controls may be necessary. In crafting TNC regulations, therefore, policymakers should consider including robust information reporting and sharing requirements. California's TNC regulations demonstrate how existing regulations may be lacking in this regard.

Although the California PUC requires TNCs to file reports detailing the service provided within each zip code, as well as the number of hours and miles logged by each TNC driver, 255 notably missing is information regarding the model-years and fuel efficiencies of the vehicles used and the actual routes driven. The California PUC was to convene a stakeholder meeting within one year of its rule's issuance to discuss, among

^{251.} See Transform, Transform Opening Comments On the Order Instituting Rulemaking on Regulations Relating to Passenger Carriers, Ridesharing, and New Online-Enabled Transportation Services, R. 12-12-011 (Cal. P.U.C. Jan. 28, 2013), available at http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M042/K157/42157915.PDF, archived at http://perma.cc/3JLQ-FMF2; Safety, SIDECAR, http://www.side.cr/safety (last visited Nov. 9, 2014), archived at http://perma.cc/X89M-TEK8; Standards for Lyft Vehicles, LYFT, https://www.lyft.com/drive/help/article/1709415 (last visited Nov. 9, 2014), archived at https://perma.cc/6MKS-JVM7.

^{252.} See S.F. Mun. Transp. Agency, Comments to the Proposed Decision Adopting Rules and Regulations to Protect Public Safety While Allowing New Entrants to the Transportation Industry, R. 12-12-011, at 9 (Cal. P.U.C. Aug. 19, 2013), available at http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M075/K768/75768649.PDF, archived at http://perma.cc/D9LX-6JNM.

^{253.} See *supra* notes 94–102 and accompanying text.

^{254.} See Listokin, supra note 167.

^{255.} Cal. PUC Decision, supra note 10, at 31–33; Required Reports TNCs Must Provide the CPUC, CAL. PUB. UTILS. COMM'N (Feb. 2, 2014), http://www.cpuc.ca.gov/PUC/Enforcement/TNC/TNC+Required+Reports.htm, archived at http://perma.cc/S969-NRKM.

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other topics, "pollution related issues." 256 Without more specific data, it appears unlikely that the agency was able to determine whether TNCs were increasing or decreasing congestion and pollution levels where they operate. Similarly, without concrete route information, it is unclear whether TNCs are helping to ease the "last mile" challenge of public transit agencies, the extent to which they are replacing trips that could have been made entirely by transit, and where there may be opportunities TNCs to work with transit agencies to promote complementary programs. The PUC's reporting requirement is further weakened by the fact that reports detailing the miles and hours logged by TNC drivers are kept confidential.²⁵⁷ Although the data is shared with state regulators, researchers who attempt to assess TNCs' impacts, or local officials who must plan for shifts in transportation demand, are unlikely to have access.

While the reporting component of California's TNC regulations could be strengthened, the TNC legislation and rules enacted in Colorado appear to forgo such a requirement altogether.²⁵⁸ By failing to include reporting requirements in new TNC rules, policymakers deprive themselves of an important tool to improve regulations moving forward, and deny transportation planners information that could be critical to adjusting for TNCs' impacts on other services.

CONCLUSION

TNCs blur the formerly well-defined lines between taxis, private carriers, and ridesharing services. With their success, TNCs have brought the notion of "ridesharing" into the mainstream and may, at least in areas that boast a variety of transportation options, help individuals to choose a car-free or car-light lifestyle. For cities forced to counteract the pollution impact of their growing populations, encouraging TNCs could present a low-cost opportunity to reduce VMT, congestion, and pollution. However, to maximize those benefits, new TNC regulations must be carefully considered.

Twentieth century regulations are poorly suited to address

^{256.} Cal. PUC Decision, supra note 10, at 33-34.

^{257.} Id. at 33 n.42.

^{258.} See S. 14-125, 69th Gen. Assemb., 2d Reg. Sess. (Colo. 2014); 4 COLO. CODE REGS. §§ 723-6-6700 to -6703 (2014).

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the current challenges posed by TNCs. Rather than force TNCs into a regulatory box that does not fit, regulators can best balance public protection with the need for innovation and flexibility in the passenger transportation sector by crafting regulations that specifically address TNCs. Rulemaking processes from early-acting jurisdictions, including Colorado, California, and Seattle, provide valuable guidance. As new rules are developed and implemented, however, additional vehicle standards and robust reporting requirements are worthy of consideration. By proactively addressing the potential negative impacts that TNCs could have on local congestion and pollution levels, regulators have an opportunity to harness the services' environmental benefits and turn TNCs into key partners in creating a more sustainable passenger transportation system.