

Regional Regulation of Transportation Network Companies

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INTRODUCTION

Transportation Network Companies (TNCs)¹ provide millions of dollars' worth of on-demand ride-for-hire services in the United States every year.² Their services—which were unavailable less than a decade ago—have changed the way transportation services work in American cities. As a result, regulators and policymakers at all levels of American government must decide how to regulate TNCs so that these companies can effectively integrate into local private and public transportation systems. TNCs' ever-changing business model and commercial operations, however, will inevitably complicate these regulatory decisions.

Preliminary evidence suggests that one way in which TNCs might challenge regulators is by providing longer-distance, more regional services to a broader geographical area of some metropolitan areas than taxis currently do. Certain TNCs may serve outer-borough areas of New York City that taxis have not served, thereby extending the reach of for-hire services further out from Manhattan; specialized TNCs are providing regional bus service across municipal boundaries and may soon rival public transportation systems.³ The introduction of automated cars into TNC fleets could eliminate driver wages, driving down prices and making regional trips even more feasible and common.

This paper argues that if this trend in TNC operations continues, state regulators should consider regulating TNCs and other for-hire transportation

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¹ In this article, I adopt the term “transportation network company” for purposes of communicative efficacy. I do so without commenting on the most appropriate way to legally define this business model or activity, which is a matter of legal significance that this article does not intend to address.

² See, e.g., Noam Scheiber, *Growth in the “Gig Economy” Fuels Work Force Anxieties*, N.Y. TIMES, July 13, 2015, at A1.

³ See Carl Bialik et al., *Uber Is Serving New York's Outer Boroughs More Than Taxis Are*, FIVETHIRTYEIGHT (Aug. 10, 2015), <https://fivethirtyeight.com/features/uber-is-serving-new-yorks-outer-boroughs-more-than-taxis-are> [<https://perma.cc/H4N4-LCZ3>]. Bridj is an example of a smartphone-based service seeking to provide a new model of TNC that relies on app-based mechanisms and other recent technologies to provide regional, as opposed to local, transportation. See BRIDJ, <http://www.bridj.com> [<https://perma.cc/NZ9F-HYGX>].

services through regional authorities or special purpose governments. Compared to a smaller municipal regulator or a larger statewide regulator, a regional for-hire transportation authority could have more appropriate jurisdictional boundaries. Such an authority could also take advantage of regional expertise to ensure that TNCs benefit the idiosyncratic private and public transportation systems of each metropolitan area in which they operate. In other words, if TNCs continue to increasingly provide a regional service, a regional governance mechanism may be the best approach to regulating them.⁴

This paper proceeds as follows. Part I describes the technical and commercial changes in for-hire transportation that have occurred between 2010 and 2015, paying special attention to the ways in which these trends have regionalized for-hire transportation. Part II describes two states' regulatory frameworks regarding for-hire transportation: Pennsylvania and California. Part III argues that current regulatory institutions charged with regulating for-hire transportation services like taxis and TNCs—and the geographic boundaries they operate in—will soon be inappropriate and that regional for-hire transportation authorities should be created, designed, and empowered to take up this task.

I. BACKGROUND

A. *Technological Change and For-Hire Transportation*

For-hire transportation services have existed for centuries in the form of taxis, jitneys, and other services.⁵ These services have been closely regulated,⁶ and as a general matter this regulation has occurred locally in the United States.⁷ This setup has been in existence for almost a century.⁸ Although the subject matter of these regulations varies and depends on the state or municipality at issue, some aspects of for-hire transportation regula-

⁴ This process is already occurring, with cities across the country ineffectively regulating TNCs. In Philadelphia, TNCs have been operating for years without explicit regulatory approval, and the city has been able to do little about it. See Jason Laughlin, *UberX Marks a Year Operating Illegally in Philadelphia*, PHILA. INQUIRER (Oct. 24, 2015), http://www.philly.com/philly/hp/news_update/20151024_UberX_marks_a_year_operating_illegally_in_Philadelphia.html [<https://perma.cc/NGK7-296Y>].

⁵ See, e.g., Paul Stephen Dempsey, *Taxi Industry Regulation, Deregulation & Reregulation: The Paradox of Market Failure*, 24 TRANSP. L.J. 73, 76–77 (1996) (describing the “historical origins of taxicab regulation” stretching back to hackneys, which were horse drawn coaches available for hire, and were regulated in some European cities by the beginning of the seventeenth century).

⁶ See MARK W. FRANKENA & PAUL A. PAUTLER, FED. TRADE COMM'N, AN ECONOMIC ANALYSIS OF TAXICAB REGULATION 67–80 (1984).

⁷ Dempsey, *supra* note 5, at 78 (“Typically, taxis are regulated at the local level, with city or county boards restricting the number of firms and number of taxis (with the issuance of medallions), and setting prices (usually on a mileage basis), safety, insurance and service standards. Their decisions are given extreme deference by reviewing courts.”).

⁸ New York City, for instance, has limited entry into the taxi market in the city since the 1930s. See FRANKENA & PAUTLER, *supra* note 6, at 16–17.

tion are quite common across the country: regulators oversee market entry, fare regulation, service restrictions and requirements, quality regulations, and other things.⁹ In 2010, ride-for-hire markets in the United States were dominated by taxis, limousines, and related commercial services that used specially-fitted automobiles to transport customers who either hailed a cab on the street or contacted a licensed company by phone or other means of communication.¹⁰ The system had been in place for quite a while and was in an apparent state of equilibrium where taxi services had been producing similar services under a consistent regulatory regime over time.

However, since 2010, the for-hire transportation market has undergone a swift and significant technological change. The rise of TNCs has thrown the taxi industry into crisis.¹¹ Perhaps the best-known firm in this new market is Uber, which was founded in 2009.¹² Uber operates by collecting information from customers so that the customers may request a ride through a smartphone application that transmits the customer's location and payment data to drivers in the area. The driver brings the customer to his or her location and charges a fee that is determined by the company. In only a few years, Uber has become hugely successful: its market value is estimated at \$62.5 billion¹³ and it completed its billionth ride in late 2015.¹⁴ Competitors like Lyft and others populate the rest of this growing market.

A series of independent technological innovations has created the possibility for this transformation. Three technological advances in particular led to the entrance of TNCs into most metropolitan area ride-for-hire markets.¹⁵ First, global positioning system (GPS) technologies have allowed consumers and businesses to find and monitor the location of individual customers.¹⁶ Second, mobile phone technologies with GPS-capable hardware and software have become significantly more popular among the population, creating the possibility for a large consumer base from which companies could anticipate enough demand to invest in large application development initia-

⁹ See, e.g., *id.* at 15–28.

¹⁰ For information on the traditional taxi model, see generally *id.*; GORMAN GILBERT & ROBERT E. SAMUELS, *THE TAXICAB* (1982).

¹¹ See, e.g., Laura J. Nelson, *Uber and Lyft Have Devastated L.A.'s Taxi Industry*, *City Records Show*, L.A. TIMES (Apr. 14, 2016), <http://www.latimes.com/local/lanow/la-me-ln-uber-lyft-taxis-la-20160413-story.html> [<https://perma.cc/R9YR-RGDY>] (documenting the steeply declining revenues of traditional taxis in Los Angeles in 2015).

¹² Press Release, Uber, *Uber's Founding* (Dec. 22, 2010), <https://newsroom.uber.com/ubers-founding> [<https://perma.cc/6GYF-AKMQ>].

¹³ See Mike Isaac & Leslie Picker, *Uber Valuation Put at \$62.5 Billion After a New Investment Round*, N.Y. TIMES: DEALBOOK (Dec. 3, 2015), http://www.nytimes.com/2015/12/04/business/dealbook/uber-nears-investment-at-a-62-5-billion-valuation.html?_r=0 [<https://perma.cc/2HW2-MZTZ>].

¹⁴ Press Release, Uber, *One in a Billion* (Dec. 30, 2015), <https://newsroom.uber.com/one-in-a-billion/> [<https://perma.cc/Z6DY-TVA8>].

¹⁵ For a review of the technological underpinning of TNCs, see, for example, LISA RAYLE ET AL., *APP-BASED, ON-DEMAND RIDE SERVICES: COMPARING TAXI AND RIDESOURCING TRIPS AND USER CHARACTERISTICS IN SAN FRANCISCO 1–2* (2014), <http://www.uctc.net/research/papers/UCTC-FR-2014-08.pdf> [<https://perma.cc/A7KA-XD6W>].

¹⁶ *Id.*

tives.¹⁷ Third, the existence and feasibility of mobile internet connectivity on those smartphones has further facilitated the interaction between large numbers of urban consumers and internet- and phone-based ride-for-hire applications.¹⁸ With these technologies in existence and widely available, hailing a ride over the internet to your exact GPS-identified location through your high-powered smartphone hardware became a possibility.

Importantly, other changes in technology will likely impact the way that for-hire transportation works in the near future. A likely candidate is the impending proliferation of self-driving vehicles.¹⁹ Corporate think tanks, academics, and other commentators have predicted that automated driving technologies will soon be available and perhaps common.²⁰ Others have seriously begun to anticipate the effects of “automated mobility-on-demand systems,” which are similar to most TNCs with the added feature of relying almost entirely on self-driving vehicles.²¹ Although there are a number of obstacles to this technology taking hold, governments are taking this anticipated technological change seriously.²² Whatever happens in the near future, the for-hire transportation market is no longer in equilibrium: new transportation technologies have had and will continue to have drastic and transformative effects on the way that this type of service is provided.

B. *The Potential Regionalization of For-Hire Transportation*

One innovative aspect of TNCs is that they lower the costs of traditional for-hire transportation like taxis, allowing for cheaper, more routine, and longer rides by customers. This article focuses on the third aspect: longer rides. Some early evidence suggests that TNCs better serve larger swaths of metropolitan areas.²³ Further, data about trip distances are proprie-

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ Future work will need to incorporate the effects of automated cars. Uber has already started to partially automatize its fleet in Pittsburgh, but the development of fully autonomous cars is too far away to treat with depth in this article. It is possible (if not likely) that automation will drive down the costs of for-hire services and would only accelerate the regionalization of for-hire transportation.

²⁰ See, e.g., Bryant Walker Smith, *Automated Vehicles Are Probably Legal in the United States*, 1 TEX. A&M L. REV. 411, 412–13 (2014); Marco Claudel & Carlo Ratti, *Full Speed Ahead: How the Driverless Car Could Transform Cities*, MCKINSEY & CO. (Aug. 2015), http://www.mckinsey.com/insights/sustainability/full_speed_ahead_how_the_driverless_car_could_transform_cities?p=1 [<https://perma.cc/3XW6-QSTE>]; Adrienne LaFrance, *The High-Stakes Race to Rid the World of Human Drivers*, THE ATLANTIC (Dec. 1, 2015), <http://www.theatlantic.com/technology/archive/2015/12/driverless-cars-are-this-century-s-space-race/417672/> [<https://perma.cc/3PK5-HE69>].

²¹ Kevin Spieser et al., *Toward a Systemic Approach to the Design and Evaluation of Automated Mobility-on-Demand Systems: A Case Study in Singapore*, in ROAD VEHICLE AUTOMATION 229 (Spieser et al. eds., 2014).

²² See, e.g., Alex Davies, *The Feds Will Have Rules for Self-Driving Cars in the Next 6 Months*, WIRED (Jan. 14, 2016), <https://www.wired.com/2016/01/the-feds-want-rules-for-self-driving-cars-in-the-next-6-months> [<https://perma.cc/RTN3-GWD2>].

²³ See Bialik et al., *supra* note 3 (showing that Uber better serves the outer boroughs of the City of New York).

tary, but some analysts have estimated TNC ride distances are increasing by as much as twelve percent overall and thirty percent per year in places like Dallas.²⁴ Although evidence has sometimes been mixed, longer trips in TNCs (which resemble traditional taxis) and new business models (providing on-demand buses) may soon combine to regionalize for-hire transportation.²⁵

New competitors are hastening this regionalizing trend. Bridj is an app-based for-hire transportation service that offers regional, commuter-focused ride sharing that more closely mimics traditional regional mass transit.²⁶ Bridj's marketing materials describe the service as "your everyday transportation system that adapts in real time to where you live, work and play."²⁷ The company operates a for-hire transportation service that provides shared regional transportation in a fourteen-seat van driven by a single driver that can be accessed for a daily fee slightly more than that of public transportation.²⁸ Bridj vans operate between geographically delimited²⁹ suburban areas across city lines, like, for instance, from the Kendall Square area of Cambridge, Massachusetts, to the Allston-Brighton neighborhood of Boston.³⁰ The company operates similar routes in Washington, D.C., but does not yet transverse the boundaries of the District of Columbia.³¹ Unlike a traditional bus though, Bridj adapts pick-up and drop-off locations to be closer to the customer's geographic location and preferred schedule.³² Seats are guaranteed and free wireless internet is provided on the bus.³³

These two trends—longer and more regionally distributed taxi-like trips and mass-transit-like regional transportation via TNCs like Bridj—threaten to blur the lines between traditional taxi service, personal commuting activities, and mass transit. Part III argues that these changes warrant new, innovate regulatory institutions to better ensure that TNCs are appropriately held

²⁴ *Uber Trips are Becoming Longer and Faster, But Are They More Profitable?*, SHERPA SHAREBLOG.COM (Feb. 2, 2016), <http://www.sherpashareblog.com/2016/02/uber-trips-are-becoming-longer-and-faster-but-are-they-more-profitable/> [<https://perma.cc/MZ7G-ZPNG>].

²⁵ One study indicated that Uber trips were shorter; however, this study had a small sample of only 380 trips in San Francisco, was conducted in 2014, and, crucially, did not include information about the distribution of trip distances, only averages. See RAYLE ET AL., *supra* note 15, at 1–7.

²⁶ See BRIDJ, <http://www.bridj.com/welcome#connect> [<https://perma.cc/LH89-GTKF>]. The company describes their service as follows: "Drop two pins, select the trip that meets your needs, purchase in-app and walk to your tailored Bridj pick-up location. We optimize pick-ups, drop-offs, and routing based on demand . . ." *Id.*

²⁷ *Id.*

²⁸ *Id.*

²⁹ In other words, the application only serves certain parts of the metropolitan area. Pick-ups and drop-offs must take place in these areas, which are defined on their website.

³⁰ See *Greater Boston Service Area*, BRIDJ, <http://www.bridj.com/greater-boston-service-area> [<https://perma.cc/BJ7J-5TVE>].

³¹ See Lori Aratani, *Bridj Pop-up Bus Service Arrives in D.C.*, WASH. POST (Apr. 28, 2015), <https://www.washingtonpost.com/news/dr-gridlock/wp/2015/04/28/bridj-pop-up-bus-service-arrives-in-d-c> [<https://perma.cc/FE5J-FJNT>].

³² See BRIDJ, *supra* note 3.

³³ *Id.*

to account for the increasingly important role they play in metropolitan transportation systems.

C. Early Legal Concerns and Calls for More Effective Regulation

TNCs' operations have raised legal concerns over the first several years of their operation in U.S. cities. In 2016, for instance, Lyft settled a lawsuit brought by the company's drivers for twenty-seven million dollars.³⁴ Other commentators have objected to the legal repercussions of TNCs' legal relationships with their drivers and customers. Specifically, some authors have objected that TNCs do not appropriately take responsibility for the liabilities that they incur operating their business.³⁵ On this view, TNCs often shirk appropriate standards for vehicle maintenance and compensation of victims in accidents, among other things.³⁶

Therefore, as with all new and innovative business operations, TNCs have attracted litigation and scholarly criticism for their activities. Although it is outside the scope of this article to discuss the full panoply of objections to TNC operations, the fact that they have drawn wide-ranging legal criticism is important because it demonstrates that these companies' activities call for regulation, even if that regulation differs from the regimes in place to regulate taxis and other for-hire services in American cities today. As TNCs continue to change, the litigation and governance mechanisms currently in place may become less effective and states will need to consider regional governance mechanisms and entities to best ensure that TNCs operate legally and effectively.

II. CURRENT REGULATORY FRAMEWORKS FOR FOR-HIRE TRANSPORTATION

Ride-for-hire operations like taxis are currently regulated primarily at the state or municipal level in the United States. This system allows for significant variation in regulatory content and structure across the country. To illustrate this variety and better demonstrate the emerging need for regional regulation, this part details two states' systems for taxi regulation: Pennsylvania and California. This part also highlights each state's efforts to promote regional planning and its fledgling legal interactions with TNCs. Pennsylvania combines statewide regulation in the form of a state Public Utilities Commission with a Philadelphia-specific authority with regulatory

³⁴ See Tracey Lien, *Judge Approves Lyft's \$27-million Class-Action Settlement with Drivers*, L.A. TIMES (June 23, 2016), <http://www.latimes.com/business/technology/la-fi-tn-lyft-settlement-approval-20160623-snap-story.html> [<https://perma.cc/DF2G-APZJ>].

³⁵ See, e.g., Alexi Pfeffer-Gillett, *When "Disruption" Collides with Accountability: Holding Ridesharing Companies Liable for Acts of Their Drivers*, 104 CAL. L. REV. 233, 238–39 (2016).

³⁶ See *id.* at 257.

control over taxis in that jurisdiction.³⁷ California simply regulates at the municipal level, although California law allows municipalities to join together to regulate taxis collectively.³⁸

A. Pennsylvania

Pennsylvania's system of ride-for-hire regulation illustrates two ways that states may choose to go about regulating for-hire transportation services. In Pennsylvania, there are two major legal entities for the regulation of ride-for-hire services. In 2004, the Pennsylvania legislature gave the Philadelphia Parking Authority (PPA) the power to regulate taxis and limousines.³⁹ Under Pennsylvania law, the PPA is a "Commonwealth agency" and is therefore subject to "statutory rulemaking procedures and requirements generally applicable to other Commonwealth agencies."⁴⁰ The PPA has issued rules regulating the market entry and vehicle marking of taxicab vehicles in the city,⁴¹ safety camera requirements,⁴² and driver certification requirements.⁴³ Elsewhere in the state, including in other urban areas like Pittsburgh, the Public Utilities Commission regulates taxis and other for-hire transportation services.⁴⁴

However, the PPA's name is misleading in two respects. First, although the Philadelphia Parking Authority's name and jurisdiction indicate that it is a municipal entity, it is not controlled by the City of Philadelphia. In 2001, three years before the PPA was endowed with authority over taxis, the Pennsylvania General Assembly (the state legislature) gave the Pennsylvania governor authority to appoint members of this governing body.⁴⁵ This power had previously been given to the Philadelphia mayor.⁴⁶ Second, the PPA has adopted a complicated operator-classification scheme to better navigate its jurisdictional limitations. Generally, taxicabs that are licensed to provide services within the city of Philadelphia are known as "medallion taxicabs" and are subject to a specific set of operating requirements.⁴⁷ Other taxi firms, which are called "partial-rights, non-medallion taxicab companies," receive

³⁷ See *infra* Section II.A.

³⁸ See *infra* Part II.B.

³⁹ A piece of state legislation, referred to as Act 94, transferred jurisdiction over taxicab service within the city from the Public Utilities Commission to the PPA. See 53 Pa. Cons. Stat. § 5701 *et seq.* (West, Westlaw through 2016 Reg. Sess. Acts 1 to 109).

⁴⁰ *Germantown Cab Co. v. Philadelphia Parking Auth.*, 36 A.3d 105, 106 (Pa. 2012).

⁴¹ See 52 Pa. Code § 1017.11 (West, Westlaw through Pa. Bulletin, vol 46, No. 44, dated Oct. 29, 2016).

⁴² See *id.* § 1017.71 (Westlaw).

⁴³ See *id.* §§ 1021.1–1021.17 (Westlaw).

⁴⁴ See *Germantown Cab*, 36 A.3d. at 107.

⁴⁵ See *id.* at 106.

⁴⁶ *Id.*

⁴⁷ See 52 Pa. Code §§ 1013.1–1013.4 (Westlaw). Medallions are a form of market-entry regulation that effectively limit the number of taxis in the regulated area by creating marketable licenses. See, e.g., Emily Badger, *Taxi Medallions Have Been the Best Investment in America for Years. Now Uber May Be Changing That.*, WASH. POST (June 20, 2014), <https://www.washingtonpost.com/news/wonk/wp/2014/06/20/taxi-medallions-have-been-the-best-in->

permission from the PPA authorizing them to provide taxicab services in certain designated areas of the city of Philadelphia.⁴⁸ Firms in the third group of taxis called “non-medallion cabs” are only-authorized to operate in designated areas within Philadelphia on a non-citywide basis.⁴⁹ Regardless of a cab’s medallion status, its trips to and from Philadelphia are regulated by the PPA.⁵⁰

Notably, the PPA has unsuccessfully attempted to claim legitimate and effective regulatory power over TNCs that operate within its jurisdiction. Although the Authority claims that Uber provides more than one million rides in Philadelphia, and is continuing to operate illegally, the Authority has had to enforce its regulations against the company in court.⁵¹ The PPA recently sued Uber in state court seeking \$300,000 in fines and an injunction against the company’s operation in Philadelphia.⁵² At the state level, administrative law judges for the Pennsylvania Public Utilities Commission have issued several opinions regarding the company’s operation.⁵³ State-level legislation is currently being considered, and the question of how transportation network companies will be regulated is up in the air.⁵⁴

In contrast, public mass transit in Pennsylvania, which will potentially be affected by an increase in regional ride-sharing, is currently regulated at the regional level. The South Eastern Pennsylvania Transportation Authority (SEPTA) operates mass transit in the metropolitan area of Philadelphia.⁵⁵ In addition, there is at least one official source of regional transportation planning in the Philadelphia metropolitan area (which is sometimes referred to as the Delaware Valley): the Delaware Valley Regional Planning Commission (DVRPC).⁵⁶ This organization was created by state statutes and provides

vestment-in-america-for-years-now-uber-may-be-changing-that [https://perma.cc/WF5F-H7NM].

⁴⁸ See 52 Pa. Code §§ 1015.1–1015.2 (Westlaw).

⁴⁹ See *Philadelphia Taxis & Limos*, PA. PUB. UTIL. COMM’N, http://www.puc.state.pa.us/consumer_info/transportation/motor_carrier/philadelphia_taxi_limos.aspx [https://perma.cc/GL6C-92BH].

⁵⁰ See 35 Pa. Bull. 1737 (Mar. 12, 2005) (“The Commission and the PPA agree that service provided to/from Philadelphia to/from all points outside Philadelphia, regardless of whether those points outside Philadelphia are within the carrier’s extra-Philadelphia operating authority, will be regulated by the PPA.”).

⁵¹ See, e.g., Bob Fernandez, *PPA Seeks \$300,000 in Fines from UberX*, PHILA. INQUIRER (Aug. 29, 2015), http://www.philly.com/philly/news/breaking/20150829_PPA_seeks_300_000_a_day_in_fines_from_UberX.html [https://perma.cc/9Q6F-4XSK].

⁵² *Id.*

⁵³ See, e.g., Application of Raiser-PA, LLC, No. A-2014-2424608, at 32 (Pa. P.U.C. Sept. 19, 2014) (recommended decision).

⁵⁴ See Claire Sasko, *Bill to Legalize UberX and Lyft Nears a Final Vote*, PHILA. MAG. (Oct. 17, 2016), <http://www.phillymag.com/news/2016/10/17/uberx-lyft-legal-bill/#PVHySHYu2mvF6Awz.99> [https://perma.cc/U9JK-6GT2].

⁵⁵ See, e.g., *Goldman v. Southeast Pa. Transp. Auth.*, 57 A.3d 1154, 1160 (Pa. 2012) (“SEPTA, which was created in 1963 . . . is a regional transportation authority tasked with establishing, developing, and maintaining an integrated mass transit system for the greater Philadelphia metropolitan area.”).

⁵⁶ The Delaware Valley Regional Planning Commission states that its mission is “uniting the region’s elected officials, planning professionals and the public with a common vision of making a great region even greater. . . . DVRPC builds consensus on improving transportation,

services to the relevant state agencies that have actual legal authority over the varying urban planning issues with which it deals. Ideally, the DVRPC would be able to play some sort of non-binding, high-level coordination role in the governance of TNCs.⁵⁷

Unfortunately, neither SEPTA nor the DVRPC is in the position currently to appropriately regulate TNCs at the regional level. SEPTA does not currently have regulatory authority over non-public transportation entities. The DVRPC has yet to publish information about what they plan to do about the emerging activities of for-hire transportation services and their soon-to-be-automated counterparts. And even if the DVRPC were to turn its attention to app-based for-hire transit, the DVRPC lacks the regulatory or other legal authority to have any independent, significant effect on the governance of app-based for-hire transportation services.

Regional for-hire regulators in Pennsylvania would allow large metropolitan areas like Philadelphia and its suburbs, Pittsburgh and its suburbs, and the municipalities in the Lehigh Valley (a metropolitan area in northeastern Pennsylvania that includes Allentown, Bethlehem, Easton, and others) to regulate regional for-hire transportation systems like Bridj and Lyft more effectively. Each region could regulate as it sees fit given its public transportation system, population, and regional transportation dynamics, perhaps in addition to a statewide legal regime setting legislative minimums and outlining the scope of the regional authority's regulatory power.

B. California

California regulates taxis differently than Pennsylvania. Generally, there is little to no state-level regulation of for-hire transportation operators; in fact, the California Public Utilities Code exempts taxicabs from state regulation when they are regulated instead by municipal or county authorities.⁵⁸ Instead, driver regulation and approval is conducted at the local level by either municipalities or counties. The Los Angeles Department of Transport-

promoting smart growth, protecting the environment and enhancing the economy. We serve a diverse region of nine counties: Bucks, Chester, Delaware, Montgomery and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester and Mercer in New Jersey." DEL. VALLEY REG'L PLANNING COMM'N, <http://www.dvrpc.org> [https://perma.cc/KNX7-SJ4J].

⁵⁷ The DVRPC has existed for over forty years and was created by acts of the Pennsylvania, Delaware, and New Jersey Legislatures. DEL. VALLEY REG'L PLANNING COMM'N, <http://www.dvrpc.org/about> [https://perma.cc/B6AF-JLWH] ("DVRPC was formed by an Interstate Compact through legislation passed by the Pennsylvania Legislature in 1965, as reenacted and amended in 1967, and by the New Jersey Legislature in a series of conforming acts passed between 1966 and 1974. . . . DVRPC provides services to member governments and others through planning analysis, data collection, and mapping services. Aerial photographs, maps and a variety of publications are available to the public and private sector.").

⁵⁸ See Cal. Pub. Util. Code § 5353(g) (West, Westlaw through Ch. 893 of 2016 Reg. Sess., Ch. 8 of 2015–2016 2nd Ex. Sess., and all propositions on 2016 ballot) (excluding from the Public Utilities Code "[t]axicab transportation service licensed and regulated by a city or county, by ordinance or resolution.").

tation (LADOT), for instance, regulates taxis in the city of Los Angeles.⁵⁹ That agency issues regulations regarding licensing, rates, and insurance, among other things.⁶⁰

Importantly, some California municipalities have come together to regulate taxis regionally at the county level, incorporating their individual regulatory authorities into a single entity with powers to regulate for-hire transportation. One example is the Orange County Taxi Administration Program, “a voluntary association of Orange County Agencies created to coordinate taxicab service permitting and other administrative functions with the Orange County Transportation Authority (OCTA) in compliance with California Government Code § 53075.5 as authorized by participating Agencies.”⁶¹ The program’s website touts the importance of regional coordination: “Having a single, consistent source for standards, requirements, and permitting helps all of Orange County, and contributes to a safer taxi travel experience for Orange County residents and visitors.”⁶² In other words, even though the taxi regulation system in California is predominantly comprised of municipal regulators, there are regional alternatives that dot the landscape as well.

Despite this setup, the State of California has threatened to regulate TNCs at the state level. In January 2016, a California Public Utilities Commission administrative law judge issued a set of proposed regulations that would subject TNCs to similar regulations to those currently applied to taxis.⁶³ One regulation would require vehicle markings; another would subject TNCs to transparency requirements regarding their fare calculations.⁶⁴ This process is still unfolding, and the California legislature may take action to overturn the Public Utilities Commission’s decisions.

California’s system is similar to that in a number of other states. In Texas, there is no statewide regulation of taxis. Instead, the state requires municipalities to regulate taxis in a variety of ways.⁶⁵ The Texas system allows TNCs to boycott individual municipalities that regulate them more

⁵⁹ *Taxicabs*, L.A. DEP’T TRANSP., <http://ladot.lacity.org/what-we-do/taxicabs-vehicle-hire-pipelines/taxicabs> [https://perma.cc/QC4P-5DEV].

⁶⁰ *See id.* (“[LADOT’s authority] includes confirming that drivers are licensed and vehicles insured, testing drivers, and performing safety inspections on vehicles. LADOT and the Board of Taxicab Commissioners also establish taxi rates paid by customers.”).

⁶¹ REGULATIONS OF THE ORANGE COUNTY TAXI ADMINISTRATION PROGRAM, ORANGE CNTY. TAXI ADMIN. PROGRAM 1, <http://www.octap.net/regulations.pdf> [https://perma.cc/L8YS-P4MD].

⁶² *About OCTAP*, OCTAP, <http://octap.net/0614site/> [https://perma.cc/TG2M-73KA].

⁶³ *See* Joe Fitzgerald Rodriguez, *Sweeping New Regulations Proposed for Uber, Lyft May Level Playing Field for Taxis*, S.F. EXAMINER (Jan. 25, 2016), <http://www.sfexaminer.com/more-inspections-criminal-checks-in-sweeping-new-ca-regulations-for-uber-lyft> [https://perma.cc/DU3Y-WDGJ].

⁶⁴ *See id.*

⁶⁵ *See* Tex. Loc. Gov’t Code § 215.004(a)(1) (West, Westlaw through the end of the 2015 Reg. Sess. of the 84th Legislature) (“To protect the public health, safety, and welfare, a municipality by ordinance: (1) shall license, control, and otherwise regulate each private passenger vehicle, regardless of how it is propelled, that provides passenger taxicab transportation services for compensation and is designed for carrying no more than eight passengers . . .”).

severely.⁶⁶ This situation creates an environment in which interlocal competition may create a race to the bottom in terms of regulatory standards. In this way, regulating TNCs at the municipal level as do California or Texas may create an incentive environment that does not allow for effective regulation of the companies. Although the problems of TNC boycotts might not be fixed by regional regulation, it may be easier for a regional authority to avoid the types of interlocal competition that might make a boycott more effective.

III. MOVING FORWARD: EMPOWERING AND DESIGNING REGIONAL REGULATORS

The municipal-level and state-level boundaries that define the jurisdictions of taxicab regulators in the United States today were often appropriate for the regulation of traditional taxicabs. Where these boundaries are inappropriate, states' municipal-level regimes have adapted to being functionally regional in some circumstances. In California, there are instances of county-level governance like with OCTAP in Orange County; in Pennsylvania, jurisdictional agreements allow the PPA to regulate taxis that come into and leave the city, expanding its reach slightly beyond the city limits.⁶⁷ However, as the for-hire transportation economy changes, and TNCs like Lyft and Bridj grow, authorities' primarily municipal boundaries may cease to allow for effective regulation.

More formal regional governance of TNCs and other for-hire transportation services should be considered as a solution to the problems that may face municipal regulators moving forward. Although there are several options for structuring this regional governance, including interlocal agreements and multi-purpose regional legislatures,⁶⁸ this article argues that states should adopt special purpose governments to regulate for-hire transportation. Specifically, a special purpose government in the form of a "regional for-hire transportation authority" could offer the individual citizens of a metropolitan area, as well as its constituent municipalities, a way to coordinate their cooperation with TNCs and other for-hire transportation services, as well as their defensive responses to companies' operations in their area.

Ultimately, the most effective regional special purpose government for the regulation of for-hire transportation in the future must be empowered to do at least three things. First, it must be able to regulate the services being offered as current municipal and state taxi authorities do. Second, this institution must be in a position to develop and operate a public form of

⁶⁶ See Douglas MacMillan & Rachel Emma Silverman, *Uber, Lyft Shut Down in Austin Over Fingerprint Vote*, WALL ST. J. (May 9, 2016), <http://www.wsj.com/articles/texas-capital-city-votes-to-keep-fingerprinting-for-uber-lyft-drivers-1462796972>.

⁶⁷ See *supra* Part II.

⁶⁸ See, e.g., Gerald E. Frug, *Beyond Regional Government*, 115 HARV. L. REV. 1763, 1788–1830 (2002) (describing the varying options for creating regional government).

smartphone-based for-hire transportation or to coordinate subsidies for use of TNCs. Third, it must be able to coordinate infrastructural changes to roads and signage that will accompany technological changes like automation.

A. *Designing and Establishing a Regional Taxi Authority*

Although special purpose or special district governments have been defined differently in different states, these governmental entities are most generally defined as “autonomous local governments that provide a single or limited services.”⁶⁹ Special purpose governments can also be given the power to make legal rules, enforce them, tax, spend, and more.⁷⁰

The process of establishing a special purpose government to regulate TNCs and other for-hire transportation will depend on the requirements imposed by state law. Some states allow for the creation of a regional special purpose government through the actions of the constituent municipalities or other local government units within the territory of the new entity; in other states, the constituent citizens can create these entities; yet others are the product of state law.⁷¹ Generally, though, special purpose governments are created by acts of the state legislature.⁷²

In addition to creating the regional for-hire transportation authority, institutional designers must appropriately draw the lines that will delimit the authority’s jurisdiction.⁷³ This line drawing will be highly dependent on the facts of each metropolitan area. It will depend on the existing municipal boundaries, the characteristics of the for-hire transportation market in the region, and the extent to which things like automated cars have been adopted or statewide for-hire legislation passed. Legislatures may further consider adopting setups like the PPA, whose jurisdiction includes rides that begin and end in its boundaries. This would allow for some amount of porous flexibility to accommodate unanticipated expansion in the scope of TNCs and other forms of for-hire transportation in the future.⁷⁴

Designers will also need to determine which individuals and what level of government will be ultimately responsible for the decision-making at the

⁶⁹ KATHRYN A. FOSTER, *THE POLITICAL ECONOMY OF SPECIAL-PURPOSE GOVERNMENT* 2 (1997).

⁷⁰ See Laurie Reynolds, *Local Governments and Regional Governance*, 39 *URB. LAW* 483, 504 (2007) (describing the range of regulatory powers given to special purpose governments as “broad”).

⁷¹ See *id.* at 503–04 (collecting materials in support of each type of arrangement).

⁷² See Frug, *supra* note 68, at 1831 (“A majority vote by the state legislature . . . is the way that special purpose governments are now created.”).

⁷³ See *id.* at 1782 (“Special purpose governments can also be empowered to operate within whatever definition of the metropolitan area the authorizing act specifies. Their jurisdiction can therefore extend to the entire area affected by the problem to be addressed, even if the problem crosses state lines.”).

⁷⁴ This flexibility will be particularly important because a criticism of this form of government is that it is geographically inflexible. See *id.* at 1783 (“The fact that each special purpose government operates within its own geographical area—an area that is often functionally inappropriate because the region’s growth regularly outpaces the government’s jurisdictional boundaries—only exacerbates [their ineffectiveness].”).

regional for-hire transportation authority. Currently, special purpose governments vary quite a bit in this respect:

Some special districts are governed by commissioners who are elected, either proportionately on a one person, one vote basis or according to some other formula, such as allocating votes on the basis of land ownership. Others are governed by individuals appointed by elected officials themselves or by vote of another governmental body or bodies, including perhaps the governor, the state legislature, or local government officials. In still other cases, elected officials are themselves designated as commissioners, creating a direct connection between the underlying constituent units of government and the regional district.⁷⁵

On the one hand, TNC regulators at the regional level must, like their municipal and state counterparts in the current scheme, have the technical expertise required to make difficult decisions about how and when to regulate TNCs and other for-hire transportation systems in their jurisdiction. In order to effectively exercise their expertise, they may need protection from the political process. On the other hand, regulators must be responsive to the needs of the population they serve, especially with respect to issues of access and fairness that might come to the fore in near-future regulation of TNCs. Decisions that implicate socioeconomic equality, like those involved in public-private partnerships with TNCs, must be made by decision-makers who are accountable to the people whose lives their decisions will affect.

One related objection to this type of institutional structure relates to the question of who ultimately decides the actions of the regional transportation authority. One might suggest that a special purpose government, without the democratic checks of a state or local elected government, would be insufficiently responsive to the concerns of the population over which it has power. Ultimately, a convincing response to this objection will turn on the facts of the state and region in which a given authority is established. An ideally designed regional authority would effectively represent the interests of all the stakeholders in the region, including (and perhaps especially) those individual citizens who are most disadvantaged by the current system of fragmented regional governance that characterized local government in the United States. For this reason, states should consider building democratic representation into the regional taxi authority structure. One way to do this, for example, would be to allow for popular elections of some number of the representatives or decision-makers on the board.⁷⁶

The regional for-hire transportation authority envisioned by this paper will be tasked with ensuring that all citizens who need to use for-hire transportation services have access to those services, in spite of the technological, monetary, and physical obstacles that could prevent such access. Two

⁷⁵ Reynolds, *supra* note 70, at 504–05 (citation omitted).

⁷⁶ *See id.* at 504.

examples are particularly illustrative of these concerns: socioeconomic equity and disability access. Socioeconomic access concerns may stem from the means by which app-based for-hire transportation transactions take place. Customers need a functioning credit or debit card, a working smartphone with GPS and mobile data capabilities, and access to a network providing both of these services. Many Americans do not meet these conditions, especially seniors and low-income individuals.⁷⁷

The second concern about disability access is important too: if TNCs become more important to the regional public transportation system, individuals with disabilities' access to TNC services will be imperative. Although this is an important equity concern, it will likely be settled by federal or state law rather than local or regional law. Lyft, for instance, has already been subject to suit under the Americans with Disabilities Act of 1990.⁷⁸ If TNCs' services threaten to undermine public transportation by cutting away at the base of regular riders that allow for collective transportation, thereby making regional public transit more difficult to fund through ridership fees, then lack of access to TNCs could be particularly troubling.

Another criticism concerns the structure of American local government generally. Several commentators have criticized legal entities like regional authorities and special purpose governments. One objection is that there are already too many regional special-district governments in the United States. Professor Reynolds, for instance, characterizes local government in the United States as follows: "Though the rationale may be hard to pin down, the reality is clear: metropolitan areas are peppered with a dizzying combination of small multi-purpose governments in a sea of overlapping limited purpose government units."⁷⁹ Critics could certainly argue that a regional for-hire transportation authority would do more harm than good, adding regulatory and institutional complexity to metropolitan areas that are already fragmented geographically and legally.

B. Empowering a Regional Taxi Authority

In addition to establishing the existence, geographic borders, decision-making authority and democratic accountability of this regional for-hire transportation authority, institutional designers will be charged with determining the entity's legal authorities. This section argues that an effective regional for-hire transportation authority must be able to do three things: (1)

⁷⁷ See AARON SMITH ET AL., U.S. SMARTPHONE USE IN 2015, PEW RES. CTR. 13 (2015), http://www.pewinternet.org/files/2015/03/PI_Smartphones_0401151.pdf [<https://perma.cc/AH6F-REVX>] (noting that while eighty-five percent of young adults aged eighteen to twenty-nine have smartphones, only twenty-seven percent of individuals over sixty-five own a smartphone; income and education are also positively correlated, with lower-income and less educated Americans being less likely to own smartphones).

⁷⁸ Laura J. Nelson, *Uber and Lyft Must Improve Access for Disabled Riders*, *Advocates Say*, L.A. TIMES (Sept. 9, 2015), <http://www.latimes.com/local/cityhall/la-me-uber-disabled-20150909-story.html> [<https://perma.cc/6HB4-L9Q4>].

⁷⁹ Reynolds, *supra* note 70, at 485.

regulate app-based for-hire transportation services; (2) operate or regulate app-based for-hire transportation's integration into the public transportation system; and (3) coordinate municipal and regional infrastructure changes.

1. *Regional For-Hire Transportation Authorities Should Regulate TNCs and Other Forms of For-Hire Transportation*

In some instances, special purpose governments are given regulatory authority to make rules concerning the behavior of regulated entities.⁸⁰ Some regional authorities are able to tax and borrow; others may impose charges such as user fees.⁸¹ Any effective regional for-hire transportation authority should be given power to regulate fares, licensing requirements, background checks, insurance minimums, and other subjects traditionally overseen by municipal and state taxi regulators. Depending on the situation, it may also be appropriate to give the authority revenue raising and spending power in some way, especially if TNCs have been integrated into the public transportation system.

Currently, taxi authorities perform a variety of regulatory functions: depending on the state, as noted above, taxi authorities regulate market entry, licensing, and fares, among other things.⁸² A regional for-hire authority should engage in the same types of regulatory activities: it would ensure that TNCs have enough liability insurance, pay their drivers appropriately, keep the cars in their fleet up to reasonable standards, and, perhaps, ensure that fares and other pricing mechanisms are appropriate. The regional jurisdiction and subject matter expertise of the agency will potentially allow it to do so more effectively than municipal or state agencies.

There is an important objection to the argument that regional authorities should continue to regulate app-based for-hire transportation services as taxis are currently regulated. Although Pennsylvania, California, and Texas continue to regulate taxis in some way (mostly at the municipal or state levels), one might argue that app-based for-hire transportation services should be regulated more like other commercial enterprises than like taxis. Traditionally, the economic argument for heavy regulation of the taxi market is based on the premise that, without regulations, high search costs for individual taxis and taxi firms would not allow a well-functioning market, and that an unregulated market for taxis would fail.⁸³ Others argue that informational problems and inelastic demand among customers make it so that quality taxi services are not provided under normal market conditions.⁸⁴

⁸⁰ See *id.* at 504 (giving an expansive account of the authority given to special-purpose governments).

⁸¹ See *id.*

⁸² See *supra* Part II.

⁸³ See, e.g., Robert D. Cairns & Catherine Liston-Heyes, *Competition and Regulation in the Taxi Industry*, 59 J. PUB. ECON. 1, 6 (1996).

⁸⁴ See, e.g., Sara Thornton, *The Transportation Monopoly Game: Why Taxicabs Are Losing and Why Texas Should Let Transportation Network Company Tokens Play*, 47 TEX. TECH L. REV. 893, 903–04 (2015).

However, one of the benefits of TNCs is that they lower search costs for drivers by making the calling system more effective and efficient by allowing customers remote access to a system-level calling scheme for each ride, as compared to the predominantly on-street hailing model for traditional taxi customers and corresponding roving search of taxis. Therefore, TNCs with a nationwide market of urban areas and new technology that minimizes the search costs that used to plague for-hire transportation companies can create economies of scale for licensing drivers and other costs of business, thereby alleviating the need for regulation.⁸⁵

This article assumes that, like taxis, the norm of heavy regulation of the ride-for-hire market will continue into the future as the general needs for licensing and sensitive regulation of fares continues. This assumption stems from recent regulations at the state level: for instance, California regulations now require car marking and rate transparency, much like traditional taxis.⁸⁶

2. *Regional For-Hire Transportation Authorities Should Be Empowered to Facilitate the Integration of TNCs into the Public Transit System*

As TNCs become more important, and as automated cars are rolled out in conjunction with these services, it may become more feasible for public entities to either subsidize the operation of private services or to operate their own on-demand, app-based for-hire transportation.⁸⁷ As the services become cheaper to provide and more technologically efficient (and as more of the population gains access to the required phone hardware and mobile internet access⁸⁸), publicly subsidized or operated options could become more feasible. Two instances of this phenomenon have already occurred, illustrating the need for regional authorities to regulate *and* operate for-hire transportation: Kansas City has partnered with Bridj to provide on-demand bus services across municipal and state lines;⁸⁹ and Altamonte Springs, Florida, has begun to subsidize Uber, with special incentives for rides that end at public transportation nodes.⁹⁰

⁸⁵ See, e.g., Julian Sanchez, *How Tech Can Tender Regulations Uber Obsolete*, CATO INST.: CATO AT LIBERTY BLOG (Apr. 17, 2012), <http://www.cato.org/blog/how-tech-can-render-regulations-uber-obsolete> [https://perma.cc/4ALR-QLMZ].

⁸⁶ See Rodriguez, *supra* note 63.

⁸⁷ See, e.g., Yonah Freemark, *Will Autonomous Cars Change the Role and Value of Public Transportation?*, TRANSPORT POLITIC (June 23, 2015), <http://www.thetransportpolitic.com/2015/06/23/will-autonomous-cars-change-the-role-and-value-of-public-transportation> [https://perma.cc/6SL2-HH3G].

⁸⁸ Cf. AARON SMITH ET AL., *supra* note 77, at 2 (stating that “nearly two-thirds of Americans own a smartphone”).

⁸⁹ See Press Release, Kan. City Area Transp. Auth., Ride KC: Bridj Begins Service March 7 (Mar. 3, 2016) [hereinafter KCATA Press Release], http://www.kcata.org/news/ride_kc_bridj_begins_service_march_7 [https://perma.cc/DCT8-6MZZ].

⁹⁰ See Press Release, Uber, Uber and Altamonte Springs Launch Pilot Program to Improve Transportation Access, UBER: UBER NEWSROOM (Mar. 21, 2016) [hereinafter Uber and Altamonte Springs], <https://newsroom.uber.com/us-florida/altamonte-springs> [https://perma.cc/4EX2-3P4W].

Bridj, described above, provides a service that is aimed at competing with traditional forms of mass transportation like buses in Washington, D.C., and Boston. In Boston, the service acts regionally, crossing municipal lines from Boston into Cambridge.⁹¹ In a perhaps more important development, Kansas City has now partnered with Bridj to provide subsidized on-demand, smartphone-based for-hire transportation as part of the public transportation system.⁹² The service promises a number of improvements on traditional public bus service: it “will be available for morning and afternoon rush hour trips The introductory fare for the pilot program will be only \$1.50, the same as a fare for the local RideKC bus service Ride KC: Bridj will feature free Wi-Fi, a guaranteed seat, no transfers and fewer stops along the way.”⁹³ Importantly, according to maps on the KCATA website, the service areas span several municipalities, with one area around the University of Kansas Medical Center in the state of Kansas, and the other, in Downtown Kansas City, in Missouri.⁹⁴ In this example, a regional authority is already incorporating TNC services from a private firm into the public transportation system through public-private partnership.

Similarly, one municipality in the United States has partnered with Uber to provide subsidized for-hire transportation.⁹⁵ Originally, Altamonte Springs, Florida, had planned to build a “brand new, technologically advanced, on-demand mass transit system” but could not follow through on its plan because of the anticipated costs.⁹⁶ The town has now initiated a pilot program in which it subsidizes twenty percent of the costs of any trip beginning and ending within the city limits.⁹⁷ Further, users who take Uber to the public transportation system in the city get an additional discount.⁹⁸ The town promotes the policy as having several important benefits, including alleviating traffic congestion and offering a new flexible transportation option.⁹⁹ The city manager has also highlighted that, by eliminating the infrastructure costs of mass transit provision in the city, the pilot program will cost Altamonte Springs about a third of what was the projected expense for operating FlexBus (the municipality’s failed attempt to coordinate with other Florida municipalities to provide public bussing in the city).¹⁰⁰

A specialized regional entity will need to be introduced in order to deal effectively with a public or private system of mass transit. For the same

⁹¹ See *Greater Boston Service Area*, BRIDJ, <http://www.bridj.com/greater-boston-service-area> [https://perma.cc/GV8N-R4DD].

⁹² See KCATA Press Release, *supra* note 89.

⁹³ *Id.*

⁹⁴ See *id.*

⁹⁵ See Uber and Altamonte Springs, *supra* note 90.

⁹⁶ See Molly Wood, *A City in Central Florida Is Subsidizing Uber*, MARKETPLACE (Mar. 25, 2016), <http://www.marketplace.org/2016/03/25/economy/florida-city-subsidizes-uber> [https://perma.cc/L5R3-E27Z].

⁹⁷ See Uber and Altamonte Springs, *supra* note 90.

⁹⁸ See *Uber*, ALTAMONTE SPRINGS, <http://www.altamonte.org/index.aspx?NID=736> [https://perma.cc/G8A2-PG2G].

⁹⁹ See Wood, *supra* note 96.

¹⁰⁰ See *id.*

reasons that special purpose governments operate many public transportation systems in the United States, a special purpose government may be necessary to integrate TNCs into traditional bus and rail public mass transit options. Especially since the early adopters of this type of program—including Altamonte Springs above—are displacing their attempts at local mass transit in order to subsidize TNCs, fairness concerns will be front-and-center in debates about incorporating TNCs into public transit. Therefore, a special-district government could serve to coordinate any potential changes to mass and public transit that would occur as TNCs gain popularity and size.

Coupling regulatory and operational authority will be increasingly important with respect to privacy concerns. Public transit riders in Altamonte Springs and Kansas City will be surrendering more of their personal data—their credit card numbers, their smartphone information, their locations, transportation patterns, and other aspects of their personal data—to private entities as part of their interaction with the public transit system. A regional authority with appropriate technical expertise could ostensibly better ensure that this interaction takes place with the consumers' privacy interests in mind.

3. *Regional For-Hire Transportation Authorities Should Be Empowered to Execute or Coordinate Relevant Infrastructure Projects*

Depending on the format in which TNC services proliferate, certain infrastructural changes might be required for effective operation. For instance, although Bridj currently stops at designated bus loading areas, if the market for Bridj-like services grows, more infrastructure for stops could be needed. A regional authority granted not only regulatory power, but also some power of revenue collection and spending power (even if the revenue collection is limited to fees on customers or firms and the spending limited to grants to municipalities) could best address these issues as they arise.

Further, as noted above, the availability of automated cars could be an important factor in the near-future development of TNC operations. Self-driving cars will likely require design or redesign of the road and signage infrastructure. For instance, installation of rumble strips¹⁰¹ is an important aspect of making automated cars safer and more widely available.¹⁰² Another important infrastructural change is the potential for standardized signs, which will make mapping and real-time route-alteration more readily

¹⁰¹ Rumble strips are currently available as a safety feature for inattentive drivers. See, e.g., *Rumble Strips and Rumble Stripes: Frequently Asked Questions*, U.S. DEP'T TRANSP., FED. HIGHWAY ADMIN., http://safety.fhwa.dot.gov/roadway_dept/pavement/rumble_strips/faqs.cfm [<https://perma.cc/RK42-D8ZT>] (defining rumble strip as “longitudinal safety feature [on a paved roadway] . . . made of a series of milled or raised elements intended to alert inattentive drivers (through vibration and sound) that their vehicles have left the travel lane”).

¹⁰² See Daniel C. Vock, *7 Ways Self-Driving Cars Could Impact States and Localities*, GOVERNING (Jan. 15, 2015), <http://www.governing.com/topics/transportation-infrastructure/gov-driverless-cars-impact-states-localities.html> [<https://perma.cc/9ETM-EA2V>].

available.¹⁰³ Currently, for many secondary and tertiary roads, installation of rumble strips and responsibility for signage is controlled at the state or local level.¹⁰⁴ If municipalities are to standardize the road infrastructure effectively and continue to adapt to changing technological needs, then regionalization of infrastructure may be an important step forward. A regional regulator and operator would at least present an opportunity to better coordinate and execute regional initiatives in this regard, especially if given robust legal authority to execute these changes in their jurisdiction.

C. *Alternatives to Regional For-Hire Transportation Authorities*

One straightforward alternative to regional TNC and for-hire transportation regulation is statewide regulation. Massachusetts, which regulates taxis and other traditional for-hire transportation services at the municipal level, approved a State House bill in March 2016 that would impose minimum requirements on businesses that operate as TNCs.¹⁰⁵ If the bill becomes law, Massachusetts will have effectively set a number of minimum regulations for these transportation network companies.¹⁰⁶ The bill would require firms to run background checks on drivers, display markers on the outside of cars, and disallow firms from charging surge prices in emergencies.¹⁰⁷ California's Public Utilities Commission has taken similar steps to set minimum requirements for TNCs operating in the state.¹⁰⁸

State-level regulations like this will likely play an important role in the expanding regulatory framework for TNCs.¹⁰⁹ Yet, even if statewide legislation takes hold, complementary city- or regional-level regulation may still be necessary. A similar argument could be made with respect to federal legislation: although minimum standards at the federal level might be appropriate, especially given the national scope of the companies that operate TNC services, complementary state, local, and regional regulation will be

¹⁰³ *See id.*

¹⁰⁴ For instance, responsibility for road sign installation in Pennsylvania is split between municipalities and the Commonwealth of Pennsylvania Department of Transportation. *See generally* BUREAU HIGHWAY SAFETY & TRAFFIC ENG'G, PA. DEP'T TRANSP., PUB. NO. 212: OFFICIAL TRAFFIC CONTROL DEVICES, <http://www.dot.state.pa.us/public/PubsForms/Publications/PUB%20212.pdf> [<https://perma.cc/2F5A-MZPY>].

¹⁰⁵ *See* Nicole Dungca, *Massachusetts House Passes Bill Regulating Uber, Lyft*, BOS. GLOBE (Mar. 10, 2016), <https://www.bostonglobe.com/metro/2016/03/09/massachusetts-house-passes-bill-that-would-regulate-uber-lyft/CEvRShkYIhhCyTdN2LQETM/story.html> [<https://perma.cc/Y6DT-KJGK>].

¹⁰⁶ *Id.*

¹⁰⁷ *See id.*

¹⁰⁸ *See* Rodriguez, *supra* note 63.

¹⁰⁹ Regulation of TNCs has been litigated frequently, including in Massachusetts. *See* Jack Sullivan, *Judge Says Uber, Lyft Should Be Treated Like Taxis*, COMMONWEALTH (Mar. 31, 2016), <http://commonwealthmagazine.org/transportation/fed-judge-says-uber-lyft-no-different-than-taxis/> [<https://perma.cc/NMG7-YHV3>].

important as well.¹¹⁰

Interlocal agreements are another way in which TNCs could be regulated at the regional level, as opposed to a special purpose government.¹¹¹ This option would provide a hybrid form in which municipalities willfully combine to address the regulation and operation of app-based for-hire transportation services. An example of an interlocal agreement in the realm of taxi regulation is given above in the case of the Orange County Taxi Administration Program, which is based on an agreement among a number of constituent municipalities.¹¹² The city manager of Altamonte Springs has also hinted that his city's Uber subsidization scheme could grow into a partnership with surrounding municipalities.¹¹³

Although interlocal agreement is a feasible alternative, it is likely to be less effective than a special purpose government that has responsibility for regulating these services. As an immediate concern, Lyft, for instance, has threatened not to operate in cities that are considering regulating the entity in ways with which it disagrees.¹¹⁴ This type of behavior may incent municipalities to back out of interlocal agreements that would potentially bring retribution from large TNCs. If appropriately designed, a regional special purpose government could have more inclusive geographic boundaries than an interlocal agreement, could reflect and embody a greater concern for the members of disenfranchised communities (through appropriate democratic accountability), and could provide citizens and municipalities more leverage against TNCs who may look to use interlocal competition to drive down regulatory costs.

Finally, informal regional planning organizations could take on a complementary role in this sphere, allowing for better coordination of municipal attempts to regulate TNCs and other for-hire transportation services. However, without legal authority, regional planning organizations will be unable to step in effectively to coordinate regulation. For instance, as noted above, the Delaware Valley Regional Planning Organization could focus on coordi-

¹¹⁰ This paper does not consider the problems of preemption that state and federal regulations might create, as those questions would likely depend on the scope and language of the legislation that would be passed.

¹¹¹ One foundational text defined intergovernmental agreements as "arrangements under which a local community conducts an activity jointly or cooperatively with one or more other governmental units, or contracts for its performance by another governmental unit. The agreements may be permanent or temporary; pursuant to special act or general law; effective with or without voter approval; and may be formal or informal in character." BERNARD J. FRIEDEN, ADVISORY COMM'N ON INTERGOVERNMENTAL RELATIONS, METROPOLITAN AMERICA: CHALLENGE TO FEDERALISM 87 (1966).

¹¹² California is known for the prevalence of interlocal agreements, although not necessarily for taxi regulation purposes. *See id.* (describing the Lakewood plan); *see also* ORANGE COUNTY TAXI ADMIN. PROGRAM, *supra* note 61.

¹¹³ *See* Wood, *supra* note 96.

¹¹⁴ Lyft and other TNCs have threatened to leave Austin in response to a rule requiring fingerprint-based checks on drivers. *See* Dan Solomon, *Lyft and Uber Continue to Battle with the City of Austin*, TEX. MONTHLY: THE DAILY POST (Jan. 29, 2016), <http://www.texasmonthly.com/the-daily-post/lyft-has-strong-feelings-about-how-austin-should-structure-its-city-government-apparently> [https://perma.cc/8YWA-3L3X].

nating the efforts of the metropolitan Philadelphia municipal and state governments to better plan for and react to changes in technology like automated cars and smartphone-based ride-for-hire services. However, because these organizations lack independent regulatory authority, they may better be seen as a complement to, rather than a replacement for, an actual, state-backed regulatory authority or other entity. A special purpose government will be able to more appropriately effectuate the planning decisions that will need to be made to effectively bring TNCs into the public and private transportation systems of American cities.

CONCLUSION

As with any new dynamic commercial activity, it is difficult if not impossible to predict what the TNC market will be like in the near-term and long-term future. But preliminary evidence suggests that TNCs have begun to—and will continue to, perhaps at an accelerated speed—regionalize for-hire transportation, making regional commutes and for-hire group transportation more feasible. If this trend continues, it should weigh heavily on the minds of regulators at the federal, state, and local levels. This article has argued that regulators, depending on the idiosyncrasies of the states and metropolitan areas they are regulating, should consider regional governance in addition to statewide or municipal-level regulation. Combining regional jurisdiction with subject matter expertise, a special purpose government dedicated to regulating TNCs and their traditional counterparts may be, in certain circumstances, the best option for ensuring that TNCs integrate equitably and efficiently into the United States' metropolitan transportation systems.

