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Data Deficits in Municipal Rideshare Collaborations

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DATA DEFICITS IN MUNICIPAL RIDESHARE COLLABORATIONS

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INTRODUCTION

Less than ten years have passed since rideshare companies began offering peer-to-peer services.[1] In that time, the concerns triggered by rideshare labor have shifted dramatically, going from consumer protection to the conditions of work in this new industry.[2] This Article sketches the contours of what will, or should, be the *next* area of focus for observers of rideshare labor: public services

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1. Sidecar, which was founded in 2011 and closed in 2015, was the first peer-to-peer, on-demand rideshare service. Uber and Lyft both began offering peer-to-peer services in 2012. Carolyn Said, *Ride-Sharing Pioneer Sidecar to Shut Down Ride, Delivery Service*, SFGATE (Dec. 29, 2015, 3:02 PM), https://www.sfgate.com/business/article/Ride-sharing-pioneer-Sidecar-to-shut-down-ride-6726144.php [https://perma.cc/4NRP-23HT].

2. On consumer protection concerns see, e.g., Olivia Nuzzi, *Uber's Biggest Problem Isn't Surge Pricing. What If It's Sexual Harassment by Drivers?*, THE DAILY BEAST (Mar. 28, 2014, 1:19 PM), https://www.thedailybeast.com/ubers-biggest-problem-isnt-surge-pricing-what-if-its-sexual-harassment-by-drivers [https://perma.cc/2L8N-3PTJ]; Ellen Huet, *Uber Rider Might Lose an Eye from Driver's Hammer Attack. Could Uber Be Held Liable?*, FORBES (Sept. 30, 2014, 9:37 PM), https://www.forbes.com/sites/ellenhuet/2014/09/30/uber-driver-hammer-attack-liability/#597c9fa759ca [https://perma.cc/TTS4-TRBJ]. On working conditions, consider the fact that entire conferences addressing labor and employment issues in the sharing economy were held at the Wharton School of the University of Pennsylvania (Nov. 2015), The University of Chicago Law School (Nov. 2016); Rutgers School of Management and Labor Relations (Nov. 2016); the Marco Biagi Foundation (Mar. 2017); the University of Amsterdam (Oct. 2017); and St. Louis University School of Law (Mar. 2018), among others. The Economic Policy Institute (the "EPI") and the National Employment Law Project both began analyzing work issues arising out of the sharing economy in 2015. Benjamin Kreider, *Risk Shift and the Gig Economy*, ECON. POL'Y INST.: WORKING ECON. BLOG (Aug. 4, 2015, 2:00 PM), https://www.epi.org/blog/risk-shift-and-the-gig-economy/ [https://perma.cc/6N7L-8B5G] (reflecting EPI's earliest commentary on gig work, based on a search of its website); Rebecca Smith, *Rights on Demand: Ensuring Workplace Standards and Worker Security in the On-Demand Economy*, NAT'L EMP. L. PROJECT (Sept. 9, 2015), https://www.nelp.org/publication/rights-on-demand/ [https://perma.cc/T255-GG68] (reflecting the National Employment Law Project's earliest commentary on gig work, based on a search of its website).

contracts for transportation provision. In particular, I argue that municipalities[3] contracting with Uber and Lyft need to appreciate the importance of the data that is generated by rideshare transportation and need to do a better job of negotiating and constructing contracts that incorporate data-sharing protocols. Otherwise, municipal actors will create data deficits today that promise regulatory and infrastructural problems tomorrow.

Rideshare data—the mass of information regarding transit patterns and user demographics that drivers and passengers automatically produce whenever they participate in an Uber or Lyft ride—is one of the things that makes app-based transportation possible, appealing, and powerful. When aggregated, it provides an astounding sky view of how a city moves during a specific period of time. Despite this, existing public-private contracts mostly do not reflect the importance of rideshare data.

This Article speaks to two admittedly distinct audiences. On the one hand, it paints the landscape of public-private collaborations for legal scholars who may be interested in the contracts, labor and employment, and local government law challenges (among others) that these collaborations present. While this descriptive work may also be useful for policy analysts and government actors, it is largely directed toward scholars—many of whom may be familiar with the consumer protection or work law concerns triggered by gig labor but unaware of the growing and rapidly changing area of activity I describe here.

On the other hand, the Article speaks to policy analysts and, especially, to municipal actors by articulating why data deficits matter, why they occur, and what might be done to mitigate or avoid them. My goal here is explicitly in the tradition of "engaged anthropology"[4]—namely, to give back to the interlocutors who have shared their experiences with me. In this Article I do so by describing the potential costs associated with data deficits (so that local officials can share these concerns with their superiors and their constituencies) and by offering some model contract language (so that officials have a baseline to reference when they open negotiations with rideshare companies).

This is a tall order for a short Article and consequently what follows is naturally abbreviated and dense, although I have tried to be as little of either as possible. Part I(A) describes four types of public-private collaborations involving rideshare providers: first/last mile, safe ride, blanket subsidy, and

3. I use the term "municipality" in this Article because the entity contracting with Uber is not always a city—sometimes, as with the Pinellas Suncoast Transit Authority discussed in I(B), it is a county actor.

4. Setha M. Low and Sally Engle Merry, *Engaged Anthropology: Diversity and Dilemmas, An Introduction to Supplement 2*, 51 CURRENT ANTHROPOLOGY, S203, S204 (2010) (observing that "sharing knowledge production and power with community members" is one of the "many paths toward public engagement on social issues" that Anthropology as a discipline has pursued). To this end, and insofar as it is possible to do so, the Article is being directly shared with all of the interlocutors cited in it.

para-transit or non-emergency medical transportation. Part I(B) offers an in-depth exploration of one such collaboration, the "Direct Connect" program developed by Uber and the Pinellas Suncoast Transit Authority (the "PSTA") in Florida, which was likely the first public transit contract to involve a rideshare platform. Part II explains why the data generated by rideshare companies in the course of providing public transportation services is useful to municipalities. It also identifies various reasons why municipalities are not getting the data they need out of these collaborations. Part III first suggests some broad approaches to fixing the problem of data deficits before taking up one particular suggestion—better contracts—and offering some model contract language as well as a discussion of that language.

Throughout, I draw on conversations with transit experts and municipal actors, as well as on media coverage and policy analysis.[5] Some of my conversations took place during fieldwork conducted in 2016–17 while I was studying worker classification in the gig economy.[6] Others occurred more recently, after I was able to return to the problem of public-private collaborations with rideshare companies. There is relatively little information to be had right now but these conversations reflect the experiences of some of the first-movers in this field, and I present them here in the hopes that they will be useful to scholars and public actors going forward.

I. THE SCOPE OF PUBLIC/PRIVATE CONTRACTS WITH RIDESHARE PLATFORMS

Around 2015, rideshare platforms began entering into public service contracts with municipalities around the United States.[7] Municipalities that contract with rideshare companies do so because they are captivated by the chance to improve existing services, to offer some wholly new services and, especially, to offer existing services at lower costs.[8] This section outlines four

5. My thanks to the many individuals who generously shared their time and expertise with me, including but not limited to: Jeremy Mohler, Ben Davis (In the Public Interest); Kirk Hovenkotter, Zak Accuardi, Mel Plaut (TransitCenter); Todd Brogan, Michael McCall-Delgado (Amalgamated Transit Union); Bonnie Epstein (Pinellas Suncoast Transit Authority); Paul Mackie (Mobility Lab); Diogo Lousa, James Paci (Massachusetts Bay Transportation Authority); Harry Campbell (TheRideshareGuy).

6. The primary project to come out of that fieldwork is Deepa Das Acevedo, *Unbundling Freedom in the Sharing Economy*, 91 S. CAL. L. REV. 793 (2018).

7. I use 2015 as a start date for these partnerships because it is when the PSTA began conceptualizing its Direct Connect pilot program in collaboration with Uber. Direct Connect is generally acknowledged to be the earliest public transit contract with a rideshare platform; the first phase of the pilot program went into effect in February 2016. E-mail from Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority, to Deepa Das Acevedo, Sharswood Fellow, U. Pa. L. Sch. (Jan. 25, 2018, 16:39 EST) (on file with author); Telephone Interview with Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority (Jan. 19, 2018).

8. My thanks to Zak Accuardi for pointing out the full range of motivations behind public actors' engagement with rideshare companies. Accuardi notes that on-demand carpooling to fixed-

types of transportation programs that were described to me by municipal actors and transit experts before turning to a case study of one particular program.[9] All of these types of programs are not equally common or successful, but they each model a way of engaging with rideshare companies that is either currently being pursued by municipalities or may once again be pursued by them.

A. Relevant Programs and Providers

To date, most public contracts with rideshare companies have aimed to extend the reach of available mass transit networks through the provision of "first/last mile" transportation. In a first/last mile program, a municipal actor subsidizes the cost of getting to and from fixed-route transit hubs (like bus or light rail stations) and residential areas that are not quite within walking distance of a hub.[10] Most first/last mile programs have relied on taxicabs to provide this service: for every taxi ride that begins or ends at a transportation hub and occurs within a designated zone, users receive a subsidy on the fare. The subsidy is often but not always in the form of a percentage discount up to predetermined ceiling—for example, fifty percent off up to a maximum of three dollars.

Second, at least one municipal agency has created a "safe ride" program with Uber.[11] Safe ride programs offer subsidized on-demand transportation to and from approved locations for eligible users during hours when mass transit is unavailable. They may function in ways that are similar to first/last mile programs—that is, using a percentage subsidy up to a flat cap—but unlike first/last mile programs, safe ride services may not emphasize travel to or from fixed-route hubs.

A third type of rideshare collaboration involves contracts for paratransit services and non-emergency medical transportation services.[12] The

route transit hubs are a wholly new service facilitated by rideshare technology, while on-demand paratransit is an improvement on an existing service. E-mail from Zak Accuardi, Senior Program Analyst, TransitCenter to Deepa Das Acevedo, Sharswood Fellow, U. Pa. L. Sch. (Feb. 2, 2018, 11:33 EST) (on file with author).

9. I do not include a fifth and closely related type of program, "microtransit," in my analysis because these collaborations may or may not rely on rideshare platforms as vendors. However, microtransit likely presents many of the same data-sharing concerns I discuss here.

10. Telephone Interview with Jeremy Mohler and Benjamin Davis, Communications Specialist and Research & Policy Analyst, In the Public Interest (Aug. 12, 2016).

11. The PSTA's "Transportation Disadvantaged Late Shift" program is an example of a safe ride service. *See Transportation Disadvantaged Program*, PINELLAS SUNCOAST TRANSIT AUTH., https://psta.net/programs/td-transportation-disadvantaged/ [https://perma.cc/P964-9VYW] (last visited Aug. 25, 2018).

12. Fact Sheet, *Let Medicaid Give You a Ride*, CTRS. FOR MEDICARE & MEDICAID SERVS. (Apr. 2016), https://www.cms.gov/medicare-medicaid-coordination/fraud-prevention/medicaid-integrity-education/downloads/nemt-factsheet.pdf [https://perma.cc/FJX2-4CY7] (describing as follows: "Medicaid covers rides for eligible individuals to and from the doctor's office, the hospital, or another medical office for Medicaid-approved care.").

Massachusetts Bay Transportation Authority (the "MBTA") is currently conducting a paratransit pilot using Uber and Lyft that is expected to continue until July 1, 2019.[13] The MBTA's program is likely the first paratransit pilot in the country to use rideshare platforms as providers. Washington, D.C., has also considered partnering with Uber for both paratransit and non-emergency medical transportation, although so far it appears that neither program has materialized.[14]

Fourth, "blanket subsidies" also use platform companies to offer on-demand public transit but they usually carry significantly fewer restrictions on points of origin or destination than do first/last mile programs—they are essentially whole public transit systems run through rideshare subsidies. For instance, the Canadian town of Innisfil, Ontario, now subsidizes *all* Uber rides within its boundaries because it has chosen to contract with Uber in lieu of running a traditional bus service.[15] Likewise, Altamonte Springs, Florida, is part of a five-city consortium that subsidizes all inter-city Uber rides.[16]

Each type of program raises different concerns and the newness and relative fluidity of the collaborations makes it difficult to speak with confidence across genres. Data-sharing, however, is important for all these programs for the reasons I discuss in Part II(A)—what varies is the *type* of data that matters. In the following subsection I use the experience of the earliest first/last mile collaboration as a case study to demonstrate both the conditions under which rideshare partnerships develop and the costs of data deficits.

B. The PSTA's "Direct Connect" Program[17]

The PSTA primarily oversees public transportation for the Pinellas County portion of the Tampa Bay metropolitan statistical area (the "Tampa MSA"). The

13. *On-Demand Paratransit Pilot Program*, MASS. BAY TRANSP. AUTH., https://www.mbta.com/accessibility/the-ride/on-demand-pilot [https://perma.cc/EC5J-HDVA] (last visited Jan. 3, 2019).

14. Martin Di Caro, *Metro Rejects Ride-Hailing Apps in Move to Outsource Paratransit in Maryland*, WAMU.ORG (Sept. 6, 2017), https://wamu.org/story/17/09/06/metro-rejects-ride-hailing-apps-move-outsource-paratransit-maryland/ [https://perma.cc/5EHF-2AJW]; Mark Segraves & Andrea Swalec, *DC EMS Department Considering Uber for Transporting Some 911 Callers*, NBCWASHINGTON.COM (July 11, 2016, 3:47 PM), https://www.nbcwashington.com/news/local/DC-EMS-Department-Considering-Uber-for-Transporting-Some-911-Callers-386342771.html [https://perma.cc/34WW-5SYW].

15. Lauren Pelley, *Innisfil, Ont., Partners with Uber to Create Substitute for Public Transit*, CBC.CA (May 15, 2017, 5:00 AM), https://www.cbc.ca/news/canada/toronto/innisfil-uber-partnership-launching-1.4114816 [https://perma.cc/7RJT-ZK7F].

16. *Five Central Florida Cities Wrap Up Unique Uber Pilot*, CITY OF ALTAMONTE SPRINGS, http://www.altamonte.org/736/Uber [https://perma.cc/G3GY-5Q2V] (last visited Jan. 3, 2019).

17. Much of the information in this section came from *both* TransitCenter's report and from my exchanges with a member of the PSTA staff, Bonnie Epstein. Wherever a specific piece of

Tampa MSA is one of the twenty largest in the United States by population but for several reasons it is difficult to organize efficient public transit for the area.[18] To begin with, its population is high volume but low density: its three major cities (Tampa, St. Petersburg, and Clearwater) are spread out over two counties and together account for only one quarter of the region's total population.[19] It spends less, both absolutely and per capita, on public transit than many of its peers like San Diego, Minneapolis-St. Paul, and Denver-Aurora.[20] And transit within the Tampa MSA is coordinated by county-based agencies like the PSTA despite the fact that the region's cities cut across county lines.[21]

Beyond these structural challenges to maintaining adequate public transit, the PSTA has also faced financial shortfalls due to depressed property tax revenues.[22] In 2012, the agency began working on an expansion plan, "Greenlight Pinellas," that would address both cost and coverage issues.[23] However, in November 2014, Greenlight Pinellas was defeated in a referendum.[24] The following year, PSTA's board began brainstorming new ways to maximize services provision in a revenue-neutral way and to find

information came from only one of these sources, or from a third source, I have indicated as much in the footnotes.

18. *American FactFinder*, U.S. CENSUS BUREAU (Mar. 2018), https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk [https://perma.cc/7QYS-HV3W] (ranking the Tampa MSA as the eighteenth largest in the United States by population).

19. 2017 census estimates for the combined population of Tampa city, St. Petersburg, and Clearwater are 764,198, roughly twenty-five percent of the the overall population of the Tampa MSA of 3,091,399. *Quick Facts: St Petersburg city, FL*, U.S. CENSUS BUREAU, https://www.census.gov/quickfacts/fact/table/stpetersburgcityflorida [https://perma.cc/5D44-DB6F] (last visited Jan. 3, 2019); *Quick Facts: Clearwater city, FL*, U.S. CENSUS BUREAU, https://www.census.gov/quickfacts/fact/table/clearwatercityflorida/PST045218 [https://perma.cc/A2Q7-KXAK] (last visited Jan. 3, 2019); *Quick Facts: Tampa city, FL*, U.S. CENSUS BUREAU, https://www.census.gov/quickfacts/fact/table/tampacityflorida/PST045218 [https://perma.cc/72Q8-NYJR] (last visited Jan. 3, 2019); *Tampa-St. Petersburg-Clearwater, FL Metro Area*, CENSUS REPORTER, https://censusreporter.org/profiles/31000US45300-tampa-st-petersburg-clearwater-fl-metro-area/ [https://perma.cc/YTC6-WSGB] (last visited Jan. 3, 2019).

20. TRANSITCENTER, FIRST OF THE FIRST-LAST MILES, (forthcoming) (on file with author) (hereinafter FIRST OF THE FIRST-LAST MILES).

21. *Id.* The TransitCenter report states that there are three counties in the Tampa MSA. This is likely a reference to Pinellas County, Hillsborough County, and Pasco County, which the Office of Management and Budget describes as "central" counties, although the Office also includes Hernando County within the Tampa MSA. OFFICE OF MGMT. & BUDGET, OMB BULLETIN No. 10-02, *Update of Statistical Area Definitions and Guidance on Their Uses* 51 (Dec. 1, 2009), https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/bulletins/b10-02.pdf [https://perma.cc/5Y8J-GFKH].

22. PSTA, ANNUAL FINANCIAL REPORT 2, 10, (Sept. 30, 2010) (on file with author).

23. *Id.*

24. *Id.* at 5.

alternatives for fixed-route services.[25] It also signaled an interest in incorporating rideshare companies into the agency's programming that was inspired by a subsidized "safe ride" program operated by the University of Florida Student's Association.[26] By late-2015, the PSTA had identified two bus routes for discontinuation; these would become the basis for a new pilot program that would eventually be branded "Direct Connect."[27]

Local political squabbles ensured that Uber would only be part of the replacement strategy for one of the two bus routes, but otherwise the two pilot zones operated similarly.[28] Trips had to start or end at one of two designated Direct Connect locations and would be subsidized at a rate of fifty percent up to $3 per ride.[29] In Pinellas Park, the zone where Uber operated as a Direct Connect provider, the approved locations were a Walmart that had been the lone commercial stop for the old bus route and the Pinellas Park Transit Center.[30]

The growth and maturation of the Direct Connect program is a worthwhile study in its own right and transit experts and agencies alike are beginning to seek out lessons from the PSTA's experience.[31] Representatives from Chattanooga, TN; St. Louis, MO; Westchester County, NY; and Broward County, FL have spoken to the PSTA about its experiences operating the first direct government subsidy program involving Uber.[32] Moreover, the lessons from Direct Connect cut across a number of areas, including the need to ensure accessibility in new services, the importance of local "champions" for public experiments, and the

25. *Id.*; Telephone Interview with Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority (Jan. 19, 2018).

26. Telephone Interview with Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority (Jan. 19, 2018).

27. FIRST OF THE FIRST-LAST MILES, *supra* note 20, at 8.

28. The two routes were the Pinellas Park Circulator (Route 444) and the East Lake Circulator (Route 811); Uber eventually became a provider for Route 444. The politician who objected to Uber being a service provider in East Lake was then-State Senator Latvala. FIRST OF THE FIRST-LAST MILES, *supra* note 20, at 5–6, 8.

29. Telephone Interview with Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority (Jan. 19, 2018).

30. A ride counts as starting or ending in a Direct Connect location if it is within 800 feet of the designated stop. Originally, the eligibility circle was a much narrower 400 feet, but user feedback prompted the agency to widen the area. E-mail from Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority, to Deepa Das Acevedo, Sharswood Fellow, U. Pa. L. Sch. (Jan. 30, 2018, 17:31 EST) (on file with author).

31. Most prominent among these studies of the Direct Connect program is, of course, the TransitCenter study cited in this Article.

32. E-mail from Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority, to Deepa Das Acevedo, Sharswood Fellow, U. Pa. L. Sch. (Jan. 26, 2018, 09:54 EST) (on file with author).

value of designing contracts with multiple providers in mind while nonetheless vetting each potential provider before incorporating it into the program.[33]

For the purposes of this Article, however, there is one aspect of the PSTA's experience that is especially important. From the very beginning of its interaction with Uber, the PSTA has struggled to access basic information about its own pilot program. In Phase 1 of the program, the agency received invoices from Uber "sporadically"—rather than monthly, as agreed upon—with a total dollar figure rather than cost per ride.[34] The invoices were irregular enough that the agency felt the program was partly free.[35] Moreover, since the invoices the PSTA *did* receive were not itemized, there was no information regarding the rides themselves—for instance, their origin, destination, or duration.[36] In Phase 2, the PSTA received slightly more regular (although still not monthly) invoices with the number of rides per month expressed as a range: "200–300 rides for the month of May" or "0–10 rides."[37] For the most part, this information was for the entire area covered by Direct Connect rather than being zone-specific.[38]

What this meant was that the PSTA did not know exactly how many unique users took advantage of the Direct Connect Uber subsidy, how often they used it, or when and where they used it most.[39] It could not easily judge the success

33. FIRST OF THE FIRST-LAST MILES, *supra* note 20, at 7 (noting that the PSTA brought in Care Ride to provide wheelchair accessible as part of Direct Connect since the two other providers, Uber and United Taxi, could not guarantee accessible vehicles); Telephone Interview with Zak Accuardi, Senior Program Analyst, TransitCenter (Jan. 25, 2018) (observing that the PSTA effort was led by one person, Chris Cochran, and that an early data-sharing venture between Uber and the City of Boston—discussed in another TransitCenter report, note 65, *infra*—was led by Chris English). Although PSTA intended to design a program using Uber that could later be expanded to include Lyft, the agency appears to have taken "Lyft at their word" that the company had the necessary technological capability, only to be told the evening before Phase 2 was to be launched that Lyft would not be participating. FIRST OF THE FIRST-LAST MILES, *supra* note 20, at 6, 10.

34. Telephone Interview with Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority (Jan. 19, 2018).

35. *Id.*

36. E-mail from Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority, to Deepa Das Acevedo, Sharswood Fellow, U. Pa. L. Sch. (Sept. 5, 2018, 16:22 CDT) (on file with author) ("really like to see trip level data from Uber – time of request, time of pick up, pick up address, drop off address, trip length in miles, trip cost to the passenger, name of the passenger, and their email address. The passenger contact information is important because we'd like to email/ survey program riders to see if the program is working for them, how they use it, and what they think would make it better.").

37. Telephone Interview with Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority (Jan. 19, 2018).

38. *Id.*

39. FIRST OF THE FIRST-LAST MILES, *supra* note 20, at 8 (noting that PSTA only received "monthly totals for eligible trips taken through Uber"—which, as Part II(A) notes, does not accurately indicate the number of eligible trips *actually* taken). Note that TransitCenter's report is based on data that was not made available to the PSTA. *Id.* at 17, n. 25 ("After providing data to support this case study, Uber provided the same data to PSTA—but as of this writing, Uber does

of the program across different zones or within a zone over time. It also could not determine whether Uber usage in the Pinellas Park zone was spread across a wide population or concentrated among a few users, and (in either case) whether these users previously used the bus route. In other words it was and continues to be difficult for the PSTA to decide if the subsidized Uber service is functionally equivalent to the circulator bus route that it replaces.

This state of affairs is apparently not a consequence of PSTA's lack of interest in accessing the data generated by the pilot. The agency would like to measure a variety of metrics, including number of individual users, patterns of usage (both geographic and temporal), zone-specific performance month over month and, ideally, the number of rides that begin or end at each Direct Connect location.[40] Likewise, the data shortage does not exist because the PSTA is unwilling to think creatively about how to address its information needs while respecting Uber's privacy concerns. Since it believed that Uber was deeply concerned about the privacy of its consumers, the agency proposed implementing either a waiver or a pop-up notification that would appear when a user selected a subsidized ride in order to inform her that data from the transaction, scrubbed of individual identifiers, would be shared with the agency.[41] According to the PSTA, Uber rejected the proposal.[42]

Why did the PSTA agree to such an unsatisfactory deal in the first place? To begin with, it's possible that this was not the deal that the PSTA understood itself to be making. This explanation was offered by TransitCenter, a third party transit reform organization[43] that has conducted an in-depth study of the PSTA's experience.[44] According to TransitCenter, the PSTA's initial contact at Uber suggested that data sharing would not be a problem but the actual agreement was negotiated by a different set of company officials more influenced by Uber's fear of exposing its data to public records requests.[45] Second, it appears that the

not have plans to share more data with PSTA as the pilot progresses beyond what is necessary to invoice the agency.").

40. FIRST OF THE FIRST-LAST MILES, *supra* note 20, at 17 & n. 25; Telephone Interview with Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority (Jan. 19, 2018).

41. Telephone Interview with Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority (Jan. 19, 2018).

42. *Id.*

43. TRANSITCENTER, https://transitcenter.org (last visited Jan. 3, 2019).

44. Throughout this Article I cite a draft of TransitCenter's case study on the PSTA, FIRST OF THE FIRST-LAST MILES, *supra* note 20, that was shared with me privately. TransitCenter has also published an earlier, more general report on public-private collaboration titled PRIVATE MOBILITY, PUBLIC INTEREST: HOW PUBLIC AGENCIES CAN WORK WITH EMERGING MOBILITY PROVIDERS (2016), http://transitcenter.org/wp-content/uploads/2016/10/TC-Private-Mobility-Public-Interest-20160909.pdf [https://perma.cc/3KTZ-X8WL].

45. Telephone Interview with Zak Accuardi, Senior Program Analyst, TransitCenter (Jan. 25, 2018) ("Uber said that they would share [with the PSTA] . . . and then they didn't once it came time to sign an agreement. . . . There's an institutional disconnect . . . between the public face of

agency understood itself to be at a disadvantage in its negotiations with Uber: a current PSTA employee with significant knowledge of the program observed that "Uber doesn't really need these partnerships."[46] (This view strongly contrasts with the way some transit experts understand the power dynamic between municipalities and rideshare platforms.[47]) Finally, and despite the fact that PSTA appears to have known both that data-sharing was important and that it would be difficult with respect to Uber, the agency may not have understood either the magnitude of the information deficit they would face or the impact it would have on program operations.[48] The next Part explores these issues.

II. DATA, AND DATA DEFICITS

As the PSTA's experience suggests, municipalities are often very interested in getting data from their collaborations with rideshare platforms—but why? And if rideshare data is so important, why do municipal actors seem to enter into contracts with inadequate data-sharing protocols? What kinds of interventions might help? The following subsections tackle the first and second questions, while Part III offers both general and specific responses to the third.

A. Public Uses of Rideshare Data

Municipalities as well as the individuals studying and advocating for them are hungry for data regarding *all* aspects of gig work. A National League of Cities representative remarked that several of its member cities were "freaking out" (notwithstanding their general enthusiasm about the gig economy) because

Uber . . . and the actual people in Uber who have the power to negotiate."). Accuardi also noted that he had seen this kind of disconnect between individuals and attitudes toward data-sharing in a few instances involving municipal contracts with Uber. James Paci describes a similar situation involving the MBTA's interactions with rideshare platforms, albeit with less negative results: the MBTA deals on a weekly basis with company representatives who are significantly more accommodating than the attorneys who actually handle the negotiations. Telephone Interview with James Paci, Manager of Innovation and Analysis, MBTA (Aug. 29, 2018).

46. Telephone Interview with Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority (Jan. 19, 2018). *See also* Telephone Interview with Michael McCall-Delgado, Field Organizer, Amalgamated Transit Union (Sept. 1, 2016) ("One of the big differences is just the vulnerability that they [municipalities] have . . . that companies just decide to leave.").

47. Telephone Interview with Kirk Hovenkotter, National Network Coordinator, TransitCenter (Aug. 30, 2016) ("I really don't think that cities understand the leverage they have over these companies so that they can get data from them."); Telephone Interview with Paul Mackie, Communications Director, Mobility Lab (Feb. 8, 2018) ("Cities do have some leverage over the Ubers and Lyfts of the world.").

48. Telephone Interview with Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority (Jan. 19, 2018) ("maybe we didn't know [data-sharing] was going to be *this* difficult but yeah we did know.").

they lacked a basis on which to formulate any policy regarding gig companies.[49] Setting aside the fact that reviews and time logs can reveal details about the working conditions of resident-drivers, there are two important reasons why municipalities should care about data collection in their collaborations with rideshare companies.

First, and most immediately, data collected as part of a new collaboration with rideshare platforms can offer valuable information about the pilot program itself. There are a handful of data points that are almost universally useful for municipal actors. How many rides are completed under the program subsidy in a given period (most often, one month)? Where do these rides originate and what are their destination points? Which days of the week and times of day do the rides occur? And what are the pre- and post-subsidy costs of trips taken?[50] Data sharing that in some fashion addresses basic questions related to volume, geography, timing, and cost are the closest thing to a minimal checklist for municipalities eager to conduct their due diligence with respect to platform vendors because they convey what is being paid for with reasonable precision. Without that knowledge, local officials cannot compare the pilot's performance relative to either the expectations that were set for it or to previously existing services. Consequently, these metrics are considered "Tier 1 factors" in Part III's model contract language.

A slightly more generous data-sharing agreement might include more detailed information regarding pricing and usage patterns. How does surge pricing affect program users? How satisfied is the average consumer of a subsidized trip? Are most passengers repeat consumers or do individuals only use the service sporadically when other options are unavailable? If there *are* high frequency users, who are they?[51] These metrics are included among "Tier 2" factors in Part III.

49. Telephone Interview with Nicole DuPuis, National League of Cities (July 26, 2016). *See also* Telephone Interview with Jamie Dunphy, Policy Advisor to Commissioner Nick Fish on Portland City Council (Oct. 28, 2016) ("we had very minimal information because it was a new thing . . . we've actually struggled with that a lot . . . you don't want to strangulate a new market either . . . [but] we went in blind . . . we had some data . . . some anecdotes from other jurisdictions.").

50. Since first/last mile programs and their analogs in safe ride and para-transit contexts often operate on a percentage subsidy up to a flat ceiling—say, fifty percent of the fare up to a maximum of five dollars per ride—government actors can in theory estimate the minimum number of riders using the program by dividing their monthly bill by the maximum subsidy. But this approach is imperfect since riders need not use the maximum on each trip. The percentage/maximum listed is taken from the PSTA's program, as is the practice of roughly estimating riders per month (or per billing cycle, since bills do not always arrive on a monthly basis). Telephone Interview with Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority (Jan. 19, 2018).

51. As one of my interlocutors told me, government actors would likely benefit from knowing who these repeat players are in order to conduct focus groups as part of their assessment processes. Telephone Interview with Zak Accuardi, Senior Program Analyst, TransitCenter (Jan. 25, 2018).

Second, and beyond the life cycle of any individual pilot program, rideshare data can also offer insights about urban infrastructure demands. Should a bus route be redirected? Does a train line need to be extended? Are so many people being dropped by personal vehicle on the north side of Main Street at a particular cross road at certain times that the city government should designate that patch of road a no-parking zone?[52] These are quintessentially local matters, unlike many of the other concerns that also grow out of gig work but that are subject to federal regulation or preemption.[53] If municipal actors do not take it upon themselves to collect the information they need they will have nowhere to turn to when it comes time to assess their long term public transit needs.

B. Feeding Data Deficits

What contributes to circumstances like that of the PSTA, where municipal actors who contract with rideshare platforms lack the data they need to measure the success of the relationship? My conversations with transit experts and public employees suggest that there are four categories of factors feeding data deficits, namely: circumstantial limitations, public agency shortcomings, poor information channels, and platform preferences.

To begin with, municipalities are hamstrung by broadly circumstantial factors unrelated to their own actions or anyone else's. The very newness of the gig economy as well as its rapid pace of transformation make it difficult for anyone who is not constantly observing rideshare companies to understand their evolving technology and industry dynamics. The peculiar mechanics and challenges of gig work are still unfamiliar to most Americans: as recently as mid-2016, a Pew Research Center study found that just twenty-seven percent of Americans had even heard of the term "sharing economy."[54] Municipal actors may be somewhat more conversant with basic terms and company names but many of them lack the time and resources to meaningfully understand rideshare platforms; indeed, those very limitations are one of the main reasons why rideshare vendors appeal to municipalities in the first place.

See also FIRST OF THE FIRST-LAST MILES, *supra* note 20, at 13 (observing that "much of the pilot's ridership during [Phase 2] came from a core group of users who integrated the service into their regular routine").

52. Like the earlier examples involving bus routes and train lines, this last question regarding no-parking zones was an actual example of the kind of information urban planners (not limited to city officials) might find useful. Telephone Interview with Zak Accuardi, Senior Program Analyst, TransitCenter (Jan. 25, 2018) (speaking with respect to Massachusetts Avenue in Boston).

53. *See, e.g.*, U.S. Chamber of Commerce v. Seattle, 890 F.3d 769 (9th Cir. 2018) (finding that Seattle's ordinance enabling rideshare drivers to bargain collectively with platforms violates the Sherman Act).

54. AARON SMITH, *How Americans Define the Sharing Economy*, PEW RESEARCH CTR. (May 20, 2016), http://www.pewresearch.org/fact-tank/2016/05/20/how-americans-define-the-sharing-economy/ [https://perma.cc/JVT8-ANQJ].

The newness of rideshare technology also likely exacerbates the sense of powerlessness that many municipalities already feel in their interactions with platforms. Platform exchanges are inherently difficult to see and to police because of their private, disaggregated nature; local governments may wish to regulate aspects of platform work without ever feeling like they realistically can.[55] Even if they feel it is possible to act, they may hesitate to do so because of the ease with which platforms can exit a market.[56] Uber need not move factories or even sell off vehicles in order to leave a recalcitrant city, and few cities can survive the logistical and reputational costs of losing Uber and Lyft altogether.[57] This aspect of platform exchanges and the nervousness it engenders do not easily dissipate even though municipalities may feel it is within their rights, as consumers of a platform's services, to request greater data sharing.[58]

Second, municipal actors often contribute to the creation of data deficits by failing to articulate clear goals as well as metrics for measuring those goals at the beginning of a pilot program.[59] Many pilots aim to provide a lower cost service that is at least equivalent to their existing programs, but it can be surprisingly difficult to articulate what counts as equivalency. The MBTA, for example, realized that rideshare paratransit would never be identical to shuttle-based paratransit because rideshare provides a curb-to-curb service while shuttles operate door-to-door.[60] That is to say, because of their lack of training, irregular participation in paratransit programs, and independent contractor status (among other factors) rideshare drivers would never help passengers negotiate the distance from their front doors to the vehicles the way a traditional shuttle

55. Telephone Interview with Jamie Dunphy, Policy Advisor to Commissioner Nick Fish on Portland City Council (Oct. 28, 2016) (Noting that Portland's push to create Accessory Short-Term Rental regulations "was a bit reactionary" and that the City Council recognized that homeshare platforms "were already here and it was almost impossible for us to stop it . . . they sort of forced our hand.").

56. Telephone Interview with Michael McCall-Delgado, Field Organizer, Amalgamated Transit Union (Sept. 1, 2016) (noting that "One of the big differences is just the vulnerability that [cities] have . . . that companies just decide to leave . . . . These companies have a history of just deciding to leave cities [but] a municipal transit agency just doesn't have that option.").

57. Austin, TX is one of the few to have done so. Patrick Sisson, *Uber, Lyft, and the Future of Transportation in Austin*, CURBED.COM (Dec. 7, 2016, 9:40 AM), https://www.curbed.com/2016/12/7/13828514/uber-lyft-ride-austin-rideshare-get-me [https://perma.cc/U7E7-AJ8Z].

58. Telephone Interview with Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority (Jan. 19, 2018) ("[I]n my mind that [benefiting from public subsidy] makes them [Uber] more *our* client.").

59. Telephone Interview with Zak Accuardi, Senior Program Analyst, TransitCenter (Jan. 25, 2018) (noting that "there's this very basic first principles problem," namely, municipal failure to appreciate the "potentially profound long term implications" of collecting inadequate data from rideshare pilots).

60. Telephone Interview with Diogo Lousa, Transportation Innovation Manager, Massachusetts Bay Transportation Authority (Feb. 9, 2018).

driver would do.[61] This difference might make the MBTA's new curb-to-curb service more appealing to some users yet less useful to others. The question for the agency, then, is whether a rideshare service that reaches different segments of the same target population should be considered *equivalent*.

That municipalities may not fully anticipate and articulate positions on these issues is understandable even if it carries serious consequences. Municipal agencies are cash-strapped and time poor which can make it difficult to take preparatory steps that scholars and analysts might view as bare necessities.[62] Agencies must often prioritize short-term financials, which can lead them to devalue other interests for the sake of quickly launching a new service.[63] They can feel vulnerable in the face of their own need, the enormous financial and social capital of major rideshare platforms, and the knowledge that platforms are relatively indifferent to threats of regulatory intervention. Nonetheless, agency behavior is an important and obvious reason why data deficits occur.

Third, the search for data is hampered by poor information channels within and between municipalities, as well as between municipal actors and regional or national organizations. Within a single locality, there may be little communication between a mayor's office, a transit agency, other agencies or councils, and specialized clusters within any of these bodies like para-transit administrators.[64] Sometimes this lack of connectivity is driven by legal restrictions: in 2015, Uber signed a voluntary data-sharing agreement (unrelated to any public service provision) with the City of Boston.[65] Uber agreed to provide information about all trips that began or ended within City limits, aggregated at the zip code level, on a quarterly basis. Unfortunately, the information went to the City of Boston rather than to the MBTA or even to the Metropolitan Area Planning Council that coordinates transit planning for each

61. *Id.*

62. Telephone Interview with Jamie Dunphy, Policy Advisor to Commissioner Nick Fish on Portland City Council (Oct. 28, 2016) (noting, with respect to Portland's efforts to regulate homesharing, that "the city is trying to do some of its own research . . . but we just don't have the staff or the capacity.").

63. Telephone Interview with Paul Mackie, Communications Director, Mobility Lab (Feb. 8, 2018) ("Transit agencies . . . they're just really concerned with the day to day . . . 'how are we going to keep these systems running?,' not 'how are we going to make these systems amazing?'").

64. Telephone Interview with James Paci, Manager of Innovation and Analysis, MBTA (Aug. 29, 2018) (observing that, with respect to other subgroups within the MBTA or officials working for the City of Boston, the paratransit pilot is "pretty silo-ed").

65. SHIN-PEI TSAY & ZAK ACCUARDI, TRANSITCENTER, PRIVATE MOBILITY, PUBLIC INTEREST: HOW PUBLIC AGENCIES CAN WORK WITH EMERGING MOBILITY PROVIDERS 38, (2016), http://transitcenter.org/wp-content/uploads/2016/10/TC-Private-Mobility-Public-Interest-20160909.pdf [https://perma.cc/K59C-ZZ73].

of the cities and towns in the Boston metro area.[66] The wrong public actor received the information and could not share it with the right public actor.[67]

Inadequate information channels are not just a local or governmental failing. One of the reasons first-movers like the MBTA and PSTA report speaking so frequently with their analogs elsewhere—sometimes at the rate of two to three per week—is because there is relatively little information trickling down from regional and national umbrella organizations.[68] Admittedly, entities like the American Public Transportation Association (the "APTA") and the Community Transportation Association of America (the "CTAA") are beginning to collect information about pilot programs.[69] Nevertheless, it remains to be seen whether they can effectively disseminate that information and educate member-agencies.[70] Umbrella organizations have an especially important role to play in

66. *Id*.; *About Us*, METROPOLITAN AREA PLANNING COUNCIL, https://www.mapc.org/aboutus/ [https://perma.cc/UH2Z-52H3] (last visited Jan. 3, 2019).

67. My understanding is that the City was contractually prohibited from sharing the data it received with regional agencies like the MBTA. *See* TSAY & ACCUARDI, *supra* note 65, at 38 (also noting that the agreement's "confidentiality provisions are so strong that the city has been wary of analyzing the data using internet-based (cloud) computing because of concerns that doing so could be a breach of contract").

68. Lousa named Los Angeles, New York, San Francisco, Seattle, Toronto, and Philadelphia as among the cities whose transit officials had reached out to him and noted that several universities had also been in contact. Telephone Interview with Diogo Lousa, Transportation Innovation Manager, Massachusetts Bay Transportation Authority (Feb. 9, 2018). Bonnie Epstein, at the PSTA, named Chattanooga, St Louis, Broward County (FL), and Westchester County (NY) as among the localities that had contacted her. E-mail from Bonnie Epstein, Transit Planner, Pinellas Suncoast Transit Authority, to Deepa Das Acevedo, Sharswood Fellow, U. Pa. L. Sch. (Jan. 26, 2018, 09:54 EST) (on file with author).

69. The APTA's website lists some public-private rideshare collaborations along with summary descriptions—in one case (Pierce County, WA) it includes a partial agreement with the data sharing section redacted—but most of the information appears to be in the form of PowerPoint presentations on individual agency experiences. *See* General Services Agreement between Lyft, Inc., and Pierce County Public Transportation Benefit Area Corporation, AM. PUB. TRANSP. ASS'N, https://www.apta.com/resources/mobility/Lists/Mobility%20Management/Attachments/41/Lyft%20Agreement-ToShare.pdf [https://perma.cc/J6GF-XFKX] (last visited Jan. 2, 2019) (hereinafter Pierce County General Services Agreement). *See also, e.g.*, Will Rodman, *How Transit Agencies Are Using Emerging Mobility Services to Improve Access and Mobility and Solve Problems*, Presentation at the APTA Bus and Paratransit Conference (Reno, NV, May 10, 2017) (on file with author); Christy Wegener, *Lessons Learned in Implementing a Pilot TNC Project*, Presentation at the APTA Sustainability & Multimodal Planning Workshop (Minneapolis, MN, Aug. 6, 2017) (on file with author). One exception is a report created especially for the APTA, although the report itself does little more than gesture at the likely growth and potential benefits of public-private collaborations with rideshare platforms. SHARED-USE MOBILITY CTR. (SUMC), AM. PUB. TRANSP. ASS'N, SHARED MOBILITY AND THE TRANSFORMATION OF PUBLIC TRANSIT, (Mar. 2016) (on file with author).

70. Telephone Interview with Paul Mackie, Communications Director, Mobility Lab (Feb. 8, 2018) (discussing APTA and the CTAA and observing "I really think there's a lack of leadership at both the national and often at the local level in terms of transit.").

drawing generalizable lessons from first movers since direct agency-to-agency conversations may lead to the unnecessary duplication of early mistakes.[71]

Finally, data-sharing would be a non-issue if platforms were not so resistant to it. In fact, platforms are not *uniformly* resistant to sharing data: TransitCenter has received information regarding trips starting and ending in each of the census block groups participating in the PSTA's Direct Connect program—which is considerably more information than the PSTA itself has received.[72] Similarly, the MBTA receives cost-sharing information for each individual trip, although perhaps not points of origin and destination below the zip code level.[73] A representative from TransitCenter ventured a "strongly educated guess" that the biggest obstacle to information transfers between public actors and platform vendors is the specter of public records requests.[74] It is not entirely clear why public records requests are so terrifying: aggregate numbers reported at the census tract level are unlikely to be useful for potential competitors, and indeed the higher information-sharing requirements faced by Uber and Lyft in New York City do not seem to have adversely affected them.[75]

71. I should note that public actors—both early movers and those they speak with—likely *do* recognize the potential risks in duplicating contracts or regulations established elsewhere. Lousa, for instance, notes that the MBTA tries "to give the message: try to design the program . . . based on what is the situation in your area . . . your copy and paste of this program might not work somewhere else." Telephone Interview with Diogo Lousa, Transportation Innovation Manager, Massachusetts Bay Transportation Authority (Feb. 9, 2018). Likewise, although Dunphy acknowledged that Portland's data on homesharing elsewhere largely consisted of "some anecdotes from other jurisdictions" but he also observed that "we had very minimal information because it was a new thing . . . we've actually struggled with that a lot . . . we went in blind." Telephone Interview with Jamie Dunphy, Policy Advisor to Commissioner Nick Fish on Portland City Council (Oct. 28, 2016).

72. Telephone Interview with Zak Accuardi, Senior Program Analyst, TransitCenter (Jan. 25, 2018).

73. Telephone Interview with Diogo Lousa, Transportation Innovation Manager, Massachusetts Bay Transportation Authority (Feb. 9, 2018). Lousa stated that the MBTA received "a good level of information," which he described as being both at the "zip code" level and at the "individual trip" level. My later conversation with James Paci revealed that the MBTA receives pick-up and drop-off information at the address-level from Lyft but only at the zip code level from Uber. Telephone Interview with James Paci, Manager of Innovation and Analysis, MBTA (Aug. 29, 2018).

74. Telephone Interview with Zak Accuardi, Senior Program Analyst, TransitCenter (Jan. 25, 2018). One of the few agreements I have been able to locate does explicitly address the issue of public records requests and imposes a fifteen-day waiting period before the government actor may fulfill the request. It also states that the rideshare platform (in this case, Lyft) "will bear responsibility for all legal costs associated with Lyft seeking a court order to prevent any such disclosure." Pierce County General Services Agreement, *supra* note 69, §5.3.

75. Telephone Interview with Zak Accuardi, Senior Program Analyst, TransitCenter (Jan. 25, 2018) (noting that he has "asked Lyft very explicitly what if any other negative fallout has there been from New York City" and also that he has "never gotten a good answer" to the question of why Freedom of Information Act requests are so nerve-wracking for rideshare platforms).

A different explanation may be that for platforms—as indeed for public actors—rideshare data is valuable for reasons only partly having to do with rideshare itself. For platforms, the data that drivers and passengers generate is their "most prized possession" because it "is a major underlying structure" for the maintenance of market share as well as in the development of autonomous vehicles.[76] For local governments, that same data can not only give them information about expensive and effort-intensive pilot programs, but it can also speak to broader trends in public transit that ought to inform their long term infrastructure needs. While public actors might not be as lopsided as platforms in their valuation of data over rides, current practices do not reflect the actual importance of rideshare data for public transit administration. In the following section, I outline some ways in which municipal actors and their supporters among national organizations (like the APTA) and policy analysts (like TransitCenter) may be able to improve data-collection and data-sharing with rideshare vendors.

III. FIXING DATA DEFICITS

Three approaches, potentially undertaken by three different sets of actors, can significantly improve the situation currently facing municipalities. This section quickly outlines those approaches before turning to one specific suggestion—better contract language—in greater detail and with examples.

A. Broad Efforts and Attitudinal Shifts

First and most importantly, municipal actors can adequately acknowledge the value of data collection at both the planning and contract negotiation stages. During initial planning, officials must structure their pilots around specific, pre-articulated goals and definitions, and also be clear eyed about the internal hierarchy of those goals. For instance, if passengers in the paratransit pilot run by the MBTA had only used the rideshare service at the same frequency that they had previously used shuttles, the pilot would have already met its goal of cutting the agency's paratransit expenses.[77] In fact, though, rideshare passengers use the subsidy *more* (while also reporting a *higher* degree of satisfaction) so that the pilot is now no longer cheaper to run than the shuttle.[78] Is this

76. Telephone Interview with Kirk Hovenkotter, National Network Coordinator, TransitCenter (Aug. 30, 2016). *See also* Alex Rosenblat & Luke Stark, *Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers*, 10 INT'L J. COMMC'N 3758 (2016) (generally discussing the way Uber incorporates information collected by its drivers into a system of "algorithmic management").

77. Telephone Interview with Diogo Lousa, Transportation Innovation Manager, Massachusetts Bay Transportation Authority (Feb. 9, 2018).

78. *Id.* James Paci observed that if, for example, the average customer completed ten subsidized trips on the MBTA's conventional paratransit service before the rideshare pilot, they now probably complete ten trips on the rideshare pilot *and* five trips on the conventional service,

equivalency, improvement, or failure? The answer depends on how the MBTA prioritizes cost-cutting relative to user satisfaction.

Once they have identified goals and metrics, municipalities must determine which pieces of information will allow them to measure their progress toward those goals and then do their best to ensure that adequate data protocols are included in any contracts they negotiate with rideshare providers. This task is only partially within their control: Uber and Lyft have been known to draw firm lines and to exit markets when those lines are rejected by local officials or their constituencies.[79] However, to the extent that contract language is negotiable—or that it is useful to have a template in hand during negotiations—municipal actors may want to consider the model language offered in subsection (B) below.

Second, regional and national organizations like the APTA and the CTAA can cull information from first-movers like the PSTA and MBTA in order to develop baseline best practices for other municipalities. What are bare minimum metrics that every vendor contract should provide for? What might a vendor contract with rideshare platforms even look like? To be sure, the information requests that municipal actors make of platform providers will have to vary according to the goals of their pilot projects. Still, umbrella organizations are ideally situated to inform municipalities that, say, an offer of zip code data is virtually meaningless and that they should negotiate using geographic units like the census tract or the "traffic analysis zone."[80] Ideally, umbrella organizations could go further and develop more exhaustive versions of the model language given in Part III(B).

Finally, third parties—perhaps non-profit analysts like TransitCenter and Mobility Lab, or perhaps specially designed entities from the private market—can help develop strategies to alleviate platforms' fears regarding public records requests. Uber itself has taken a step in this direction by creating Movement, an online system that provides "anonymized data from over two billion trips to help urban planning around the world."[81] TransitCenter and Mobility Lab are not yet certain whether the information Uber makes available via Movement is likely to be useful to municipalities in either substance or presentation, but they agree that

which remains in use during the pilot. The cost of fifteen trips now is roughly equivalent to ten trips earlier, but the challenge is in how to interpret the change in use patterns. Telephone Interview with James Paci, Manager of Innovation and Analysis, MBTA (Aug. 29, 2018).

79. Austin, Texas discovered the rigidity of some rideshare policies in 2016. Uber and Lyft strongly resisted calls to have their drivers undergo finger-printing and criminal background checks like other for-hire transportation providers. Ultimately, the companies forced a referendum on the issue and left Austin immediately after it became clear they had lost the vote. *See* Sisson, *supra* note 57.

80. Telephone Interview with Zak Accuardi, Senior Program Analyst, TransitCenter (Jan. 25, 2018).

81. UBER MOVEMENT, https://movement.uber.com/cities?lang=en-US [https://perma.cc/CCS6-QY9Q] (last visited Jan. 3, 2019).

the underlying concept—a records request-immune holder of rideshare data—has potential.[82] Third parties might also be able to guide municipal actors in the implementation of anonymization or randomization techniques like those discussed in Part III(C) below.

B. Model Contract Language[83]

One of the few things a municipal actor can do to avoid data deficits is to fight for the best possible contract language—but this can be a challenging task. What follows is intended as a starting point for municipalities that are considering partnerships with rideshare companies; it is in no way exemplary or exhaustive. The metrics that are most useful to a given municipal actor will depend on the particular service it is trying to construct, while the information it is ultimately able to acquire will depend on the skill of its negotiators and the desirability of its market. However, in the absence of generic resources or guidelines, this subsection offers language that municipalities can begin to think with.

Tier 1 requirements reflect basic standards of public contracting and are necessary if a municipality is to ascertain that the rideshare vendor is charging the right amounts for services rendered. As a result these requirements should be:

1. Non-negotiable;
2. Part of the contractual provisions that deal with payments from the public purse to the vendor;
3. Provided on on-going basis, as a condition of payment;
4. Accurate (to a mutually agreeable degree, so as to protect legitimate trade secrets) and subject to audit.

Tier 1 requirements include:

1. Number of completed rides;
2. Date and times of rides;
3. Origin and destination (ideally using the Traffic Analysis Zone unit mentioned in Part III(A));
4. Total cost of the ride;
5. Requested payment from the public actor.

Tier 2 information requirements could appear in a separate part of the contract (e.g., *Information Sharing*), may be presented on a periodical basis, and are negotiable.

82. Telephone Interview with Zak Accuardi, Senior Program Analyst, TransitCenter (Jan. 25, 2018).

83. Thanks to Yonathan Arbel for the clarity and structure of the language contained here; all errors remain mine.

Tier 2 requirements may include:

1. Whether surge pricing was used and if so, the multiplier;
2. Passenger's rating for the ride;
3. Average driver rating;
4. Passenger demographics (gender, race, overall passenger rating, et cetera).[84]

Given rideshare companies' reluctance to share data with parties vulnerable to public records requests, municipal actors would do well to place all these requests within the context of a system that grants each passenger a program-specific identification number or that allows rideshare vendors to scramble data in a limited way or to a limited degree. Both of these options are discussed in Part III(C).

Example (based on a private contract used by Uber for similar purposes).[85]

Tier 1 Provisions:

> *Service Fee.* In consideration of Uber's provision of the Uber Services, City agrees to pay Uber a service fee on a per Transportation Services transaction basis calculated as a percentage of the Fare, as provided to City via email or otherwise made available electronically by Uber ("Service Fee"). Payments by City will be made conditional on production of receipts that include, at a minimum, ride date and time (accurate to 10 minutes); ride origin and ride destination (accurate to 5 meters, using UTM coordinates); fare total; and, service fee charged to the City. Uber represents the accuracy and veracity of the receipts, which will be subject to audit by City. Receipts must be in a Comma Separated Value file format (i.e., CSV).

Tier 2 Provisions:

> *Information Sharing.* For purposes of project assessment, quality assurance, and research, Uber will provide City with the following types of information on a 3-month basis in electronic format using a Comma Separated Value file format (i.e., CSV): applicability of surge pricing and the surge multiplier per ride; passenger satisfaction rating; driver rating; passenger demographics, including at a minimum, gender and race. The information provided is City's property.

84. Most rideshare companies do not explicitly collect information regarding the race and gender of their passengers but Uber's website suggests that it is able to gather or guess much of this information. *See Privacy Policy*, UBER, https://privacy.uber.com/policy [https://perma.cc/8VFD-SFJK] ("We collect information when you create or update your Uber account. This may include your name . . . government identification numbers . . . birth date, photo. . . . We may collect demographic information about you, including through user surveys. In some countries, we may also receive demographic information about you from third parties.").

85. Services Agreement, https://s3.amazonaws.com/uber-regulatory-documents/country/united_kingdom/Uber+BV+Driver+Terms+-+UK+Preview.pdf [https://perma.cc/P82B-QLAF] (last visited Jan. 3, 2019).

Breach of information requirements shall constitute a material breach of the agreement.

C. Beyond the Model Contract Language

It is one thing to say that each municipality will value different pieces of information and must consequently construct unique contract language, and another thing to actually adjust a template. How might the model language above be tailored to suit a specific agency's constraints or a specific program's goals? Consider the following imagined and actual examples.

If the PSTA decided that one of their goals was to increase bus and train use, the agency would need to know whether Direct Connect was really making transportation hubs more accessible.[86] In order to judge the program's impact on hub accessibility, the PSTA would want to measure the number of transfers between Direct Connect rides and fixed-route hubs. Measuring transfers would in turn require either a somewhat technically demanding "fare integration" feature on the Uber app or a system whereby bus drivers and train ticket agents manually log transfer requests. Regardless of the mechanism, the PSTA would not be able to measure Direct Connect's success in improving access to fixed-route transportation without an understanding of the "number of transfers" metric.

Transfer measurement is not included within the versions of Tier 1 or Tier 2 provisions presented above. If the PSTA were to negotiate the development of a fare integration feature on Uber's app, the submission of transfer information ought to be included under Tier 1. As I understand it, the feature would be complicated and thus expensive to develop and the PSTA's willingness to insist on its inclusion in the overall Direct Connect program would reflect the agency's prioritization of greater hub accessibility. That importance should be signaled in the contract by making transfer data a Tier 1 metric tied to the Service Fee.

A second, actual, example involving the MBTA shows how tailoring information requests to program goals and infrastructures can have significant benefits. Parts I(A) and II(B) discussed the paratransit pilot initiated by the MBTA in 2016.[87] The agency's goal was to develop a lower cost, on-demand alternative to (and potential replacement for) its existing door-to-door shuttle service.[88] Potential users of the new pilot—like users of the MBTA's established

86. This was an example mentioned by Accuardi. FIRST OF THE FIRST-LAST MILES, *supra* note 20, at 15 ("While participants can still present their Direct Connect receipt for a free bus transfer, there is no systematic means of validating whether customers do in fact use the bus service in connection with a subsidized TNC or taxi trip.").

87. *On-Demand Paratransit Pilot Program*, MASS. BAY TRANSP. AUTH. https://www.mbta.com/accessibility/the-ride/on-demand-pilot [https://perma.cc/C5VL-HGFG] (last visited Jan. 3, 2019). *See also* Telephone Interview with Diogo Lousa, Transportation Innovation Manager, Massachusetts Bay Transportation Authority (Feb. 9, 2018).

88. *See supra* Part II(B).

paratransit service—had to register with the agency, and as part of that registration they received unique identification numbers to use when requesting a ride.[89] In other words, the integration of MBTA identification numbers and the rideshare pilot was treated as a Tier 1 requirement.

Because the rideshare subsidy was made accessible to individuals through their MBTA identification numbers, Uber and Lyft were willing to share some of the key metrics listed under Tier 1 above.[90] This is not to say that the MBTA found it easy to negotiate data sharing with its rideshare vendors—on the contrary, it was both an important and challenging part of the process.[91] But the MBTA set out to measure performance in predetermined ways and it set data sharing expectations for the new service that were as similar as possible to existing services.[92] At least partly due to this approach, the agency's battle for information was markedly different from the struggle experienced by the PSTA.

The MBTA itself acknowledges that it may have had an easier time negotiating with rideshare vendors because of a difference in baseline expectations: public paratransit operators habitually collect more information about users in order to determine eligibility and accessibility than do public mass transit operators.[93] Consequently, mass transit agencies may have to be more creative in their efforts to assuage a rideshare vendor's fears regarding records requests. If a mass transit agency finds that it cannot negotiate an identification number system to use as a buffer, it may consider allowing rideshare providers to use a type of Randomized Response Technique when submitting data.[94] There are several variations of the Randomized Response Technique, but in one classic version a randomly chosen subset of survey participants answers a question in a predetermined way—for instance, by rolling a die and answering "yes" *or* "no" *or* truthfully depending on the outcome of the die.[95]

89. *Id.*

90. For instance, the MBTA receives pre- and post-subsidy trip costs on an individual trip basis. Telephone Interview with Diogo Lousa, Massachusetts Bay Transportation Authority (Feb. 9, 2018).

91. *Id.* (observing that "[data sharing] was one of the hard issues of the negotiation, and the negotiations went long with each of the companies individually").

92. *Id.* Indeed, Lousa noted that one of the four main goals of the pilot was that it had to be constructed in such a way that it could be subjected to periodic feasibility tests (the other three goals were to increase customer mobility, provide on-demand paratransit service, and cut agency costs). Lousa also noted that the MBTA wanted to have "the same level of information" from its rideshare providers as from its conventional providers.

93. *Id.* Lousa acknowledged that the MBTA's situation was different from those of agencies like the PSTA that were running first/last mile programs because paratransit services frequently incorporate eligibility requirements.

94. Frey A. V. St. John et al, *Testing Novel Methods for Assessing Rule Breaking in Conservation*, 143 BIO. CONSERVATION 1025, 1026 (2010).

95. *Id.* (noting that there "are a number of RRT designs described in the literature"). In this variation, respondents would be given instructions along the following lines: if the die lands on one

Randomized response may not translate directly to the rideshare context, but it should be easy enough to develop a similar scrambling method to protect passengers' identities and reassure rideshare vendors. For instance, municipalities might allow rideshare vendors to adjust the information for a predetermined percentage of passengers along one metric—say duration of trip, or date and time. In that case, however, the contract should clearly state which metrics may be scrambled, the percentage of total data points that may be scrambled, and an explanation of what exactly was done to the affected data.

CONCLUSION

That municipalities *would* eventually contract with platforms has been evident for some time.[96] How they should go about constructing those relationships, however, very much remains an open question. When they seek out rideshare platforms as vendors, municipalities are understandably concerned with providing much-needed transit services and with reducing the strain on their already overburdened budgets. Nevertheless, they must begin to appreciate that rideshare labor is at least as important for the data it generates as for the transportation it provides, and they must start to restructure their agreements with platforms to reflect this invisible, but very real, value of the labor they contract for. Otherwise, whether it happens at the end of a six-month pilot or halfway through a five-year revitalization plan, municipal actors will find themselves confronted by multiple, pressing data deficits.

through four, please answer truthfully; if the die lands on five, please answer YES (regardless of the truth); if the die lands on six, please answer NO (regardless of the truth).

96. Daniel E. Rauch & David Schleicher, *Like Uber, but for Local Government Law: The Future of Local Regulation of the Sharing Economy*, 76 OHIO ST. L. J. 901, 959–63 (2015). However, Rauch and Schleicher's optimism regarding the ease of data-sharing has not quite been borne out. *Id*. at 961.