



2-1-2015

An App for That: Local Governments and the Rise of the Sharing Economy

Andrew T. Bond

Follow this and additional works at: http://scholarship.law.nd.edu/ndlr_online

 Part of the [Land Use Planning Commons](#), [Law and Economics Commons](#), and the [Transportation Law Commons](#)

Recommended Citation

Andrew T. Bond, Essay, *An App for That: Local Governments and the Rise of the Sharing Economy*, 90 Notre Dame L. Rev. Online 77 (2015).

Available at: http://scholarship.law.nd.edu/ndlr_online/vol90/iss2/3

This Essay is brought to you for free and open access by the Notre Dame Law Review at NDLScholarship. It has been accepted for inclusion in Notre Dame Law Review Online by an authorized administrator of NDLScholarship. For more information, please contact lawdr@nd.edu.

ESSAYS

AN APP FOR THAT: LOCAL GOVERNMENTS AND THE RISE OF THE SHARING ECONOMY

*Andrew T. Bond**

The revolution of the Internet in the late 1990s brought consumers together in unique and unprecedented ways. The evolution of the sharing economy in the early twenty-first century builds upon the Internet's revolution by connecting consumers and unused resources in a readily accessible and efficient manner.

At the same time, the sharing economy puts new pressures on local governments in choosing how to respond to this evolution. One method of evaluating local government responses is through a paradigmatic example. In this Essay, that case study is Uber: a novel and unabashedly antagonistic transportation service that offers on-demand taxi access through a cell phone application. Uber is no stranger to starting fights—and winning. Uber has simultaneously fought the taxi industry, regulators, its rivals, and even its customers.¹ Local governments should not be on the losing side of that laundry list. This Essay focuses on local government responses to Uber and the new sharing economy. Both Uber's impact on the taxi industry and municipal reactions provide insight into the larger question of how local governments respond to rapid advances in technology.

* J.D. Candidate, University of Notre Dame Law School, 2015; B.B.A., University of Wisconsin, 2011. I thank Professor Nicole Stelle Garnett for her guidance and instruction. I also thank my family, members of the Legal Scholarship Seminar, and the staff of Volume 90 of the *Notre Dame Law Review* for their support and dedication. All errors are my own.

¹ See Kara Swisher, *Man and Uber Man*, VANITY FAIR, Dec. 2014, <http://www.vanityfair.com/news/2014/12/uber-travis-kalanick-controversy> (detailing Uber's willingness to engage its foes, and even its friends, to gain competitive advantage).

I. THE SHARING ECONOMY

The sharing economy is a microeconomic system built around the utilization of unused human and physical resources.² This collaborative economic model attempts to make full utilization of available resources, as opposed to the traditional singular focus on the initial buying and selling of goods and human resources.³ For example, an off-duty sales associate at Walmart may utilize the same car that she drives to and from work as an “Uber” vehicle, taking passengers to and from destinations in her hometown.⁴ Alternatively, a large family with a vacant bedroom for the weekend may rent out that room to a visiting couple that cannot afford a local hotel of comparable quality.⁵ The sharing economy connects unused resources with consumers via technology.⁶ Although the sharing economy certainly predates the Internet, the Internet is responsible for substantially reducing information costs, resulting in the sharing economy’s transformation and dramatic expansion.

The genesis of the sharing economy comes from the contention that the traditional linear production and distribution scheme is misguided in a

² See Dave Roos, *How the Sharing Economy Works*, HOWSTUFFWORKS, <http://money.howstuffworks.com/sharing-economy.htm> (last visited Feb. 6, 2015) (discussing how the sharing economy functions); see also Sophie Curtis, *Sharing Economy to Create a Nation of ‘Microentrepreneurs’*, TELEGRAPH, Nov. 26, 2014, <http://www.telegraph.co.uk/technology/news/11253016/Sharing-economy-to-create-a-nation-of-microentrepreneurs.html> (commenting on the sharing economy’s ability to create a new culture of entrepreneurship).

³ See Roos, *supra* note 2.

⁴ See Carys Mills, *Tale of the Taxi Tape: Uber vs. Traditional Cabs*, OTTAWA CITIZEN, (Oct. 14, 2014, 10:50 AM), <http://ottawacitizen.com/news/local-news/tale-of-the-taxi-tape-uber-vs-traditional-cabs> (explaining how Uber compares and contrasts with traditional taxis).

⁵ See Thomas L. Friedman, *Welcome to the ‘Sharing Economy’*, N.Y. TIMES, July 20, 2013, <http://www.nytimes.com/2013/07/21/opinion/sunday/friedman-welcome-to-the-sharing-economy.html> (“In a world where . . . the skills required for any good job keep rising—a lot of people who might not be able to acquire those skills can still earn a good living now by building their own branded reputations, whether it is to rent their kids’ rooms [or something else].”); see also *Peer-to-Peer Rental: The Rise of the Sharing Economy*, ECONOMIST, Mar. 9, 2013, <http://www.economist.com/news/leaders/21573104-internet-everything-hire-rise-sharing-economy> (discussing how nearly any commodity can form a marketplace through the Internet).

⁶ The Internet is the predominate communication resource on which the sharing economy relies. See Roos, *supra* note 2. But see Noam Scheiber, *Corporate America Is Using the Sharing Economy to Turn Us into Temps*, NEW REPUBLIC (Nov. 23, 2014), <http://www.newrepublic.com/article/120378/wonolo-temp-worker-app-shows-scary-future-sharing-economy> (critiquing the sharing economy for leading to a perpetual state of temporary employment).

world of finite resources.⁷ The realization that we often use natural and human resources inefficiently, and in a manner that frequently leads to environmental harm, in part led to the sharing economy's effort to maintain full utilization of available resources.⁸ The traditional "cradle to grave" (from creation to disposal) production model contains significant unused value in terms of the time that products, services, and talents lay idle.⁹ Allowing human and physical resources to lay idle is value wasted. For example, the average car is only used eight percent of the time.¹⁰ This untapped value creates a significant resource for the sharing economy.¹¹ With the rise of the Internet and the ability to quickly communicate through mobile phone applications and peer-to-peer programs, owners of these unused resources now have the means to connect them with consumers.

II. THE TAXI INDUSTRY AND THE RISE OF UBER

The advent of Uber provides a ripe example for exploration of the benefits derived from the sharing economy and the detriments imposed on preexisting, traditional economic models competing in the same industry. This Part begins with a brief overview of the history of the taxi industry, from horse-drawn carriages to modern-day yellow taxicabs, before turning to the introduction of Uber and its effects on the traditional taxi paradigm. It concludes with three different case studies of Uber's effect on major cities—San Francisco, New York, and the District of Columbia—in order to estimate and evaluate Uber's current and future impact.

7 See Susan Fournier, *Understanding Consumption in the New Sharing Economy*, BOSTON UNIV. SCH. OF MGMT. (Sept. 22, 2014), <http://management.bu.edu/blog/2014/09/22/understanding-consumption-in-the-new-sharing-economy/> (explaining resource allocation within the shared economy model).

8 *Id.*

9 *Id.*

10 See Marcus Wohlsen, *Make Your Car Pay for Itself by Renting It to Someone Else*, WIRED (Mar. 4, 2013, 6:30 AM), <http://www.wired.com/2013/03/relayrides-now-in-fifty-states/> ("As with other digitally driven sharing-economy services, such as Uber for taxis or Airbnb for lodging, RelayRides runs on the realization that there's money to be made in idleness. According to the company, most cars sit unused about 92 percent of the time.")

11 See Michael Petricone, *Gains in the 'Sharing Economy'*, N.Y. TIMES, Nov. 16, 2014, <http://www.nytimes.com/2014/11/17/opinion/gains-in-the-sharing-economy.html> ("Sharing economy' platforms enable New Yorkers to offer unused resources like a spare bedroom or a car for sale or rent. These micro-entrepreneurs create jobs and consumer choice. In 2013, Airbnb contributed \$632 million to the city's economy. The median income of an UberX driver in New York is more than \$90,000.")

A. *The Taxi Industry*

The end of the nineteenth century saw the beginning of automobiles appearing on American city streets;¹² soon thereafter, taxicabs began competing with horse-drawn carriages.¹³ Initially, electric-powered taxicabs did not present a tremendous threat to carriages, mostly due to the impractical weight of their batteries.¹⁴ Even still, by 1899 there were over one hundred taxicabs meandering the dusty and dirty streets of New York City.¹⁵ Part of the appeal of electric taxicabs was their promise of a cleaner, safer, and faster alternative to carriages. Although this promise largely came true, progress is never without costs. Henry H. Bliss, a thirty-five year New Yorker—who was hit by a taxicab while (ironically) helping his friend exit *another* streetcar—earned the dubious distinction as the first American killed by a taxi on September 13, 1899.¹⁶

At the start of the new century, the New York Taxicab Company began importing gasoline-powered taxicabs from France.¹⁷ Even though the Company imported six hundred cars, taxicabs still made up a small portion of New York City traffic in the first decade of the twentieth century.¹⁸ The second decade saw the introduction of the taximeter, which is used to gauge the miles traveled and time elapsed.¹⁹ This invention

12 See Martin V. Melosi, *The Automobile Shapes the City*, AUTO. IN AM. LIFE & SOC'Y, http://www.autolife.umd.umich.edu/Environment/E_Casestudy/E_casestudy3.htm (last visited Feb. 14, 2015) (recounting the evolution of walking cities to automobile cities in America).

13 *Id.*

14 See Daniel Yergin, *Back to an Electric Future for Cars*, L.A. TIMES, Dec. 11, 2011, <http://articles.latimes.com/2011/dec/11/opinion/la-oe-yergin-smog-20111211> (“In 1900, more battery-powered electric cars ran on the streets of New York City than cars with internal combustion engines But the arrival in 1908 of Henry Ford’s Model T . . . made the electric car a historical curiosity.”).

15 *Id.*

16 See *Automobile Victim Dead*, N.Y. TIMES, Sep. 15, 1899, <http://query.nytimes.com/mem/archive-free/pdf?res=9A00E7DE133DE633A25756C1A96F9C94689ED7CF> (discussing Mr. Bliss’s untimely demise at the hands of a rogue taxicab).

17 See Graham Russell Gao Hodges, *Taxi!': The Creation of the Taxi Man: 1907-1920*, N.Y. TIMES, June 17, 2007, <http://www.nytimes.com/2007/06/17/books/chapters/0617-1st-hodg.html> (detailing Harry N. Allen’s importation of French taxicabs due to his frustration with American cars).

18 See *Taxi Dreams: Taxi History*, PBS, <http://www.pbs.org/wnet/taxidreams/history/index.html> (last visited Feb. 14, 2015) (chronicling the history of taxis in America).

19 See Megan McArdle, *Why You Can't Get a Taxi*, ATLANTIC (Apr. 2, 2012, 3:39 PM), <http://www.theatlantic.com/magazine/archive/2012/05/why-you-cant-get-a-taxi/308942/#> (“In 1907, an innovation hit the streets of New York: 65 gasoline-powered vehicles were equipped with taximeters. Invented by Wilhelm Bruhn in 1891, the taximeter could record time spent on a journey and distance traveled in order to calculate fares.”).

enabled the taxi industry to flourish, although at fifty cents per mile traveled, taxis proved accessible to only the relatively wealthy.²⁰ Ten years later, during the “Roaring Twenties,” yellow-and-black-checked cabs appeared, which would become synonymous with taxis in New York City. The Checkered Cab Manufacturing Company produced these iconic cabs in Kalamazoo, Michigan and saw expansive growth into the thirties.²¹ This decade also witnessed the downsides of the largely unregulated taxi industry: cab drivers often suffered from unfair labor practices and passengers became the victims of price gouging.²² Tensions came to a head in 1934, when two thousand taxi drivers went on strike and took over Times Square in protest.²³

Mayor Fiorello H. La Guardia signed the Haas Act of 1937 in response to years of taxi unrest.²⁴ The Haas Act was revolutionary for its time and still forms the basis of New York City’s taxi regulation scheme today.²⁵ It set forth the official administration of taxi licenses and the medallion system.²⁶ Medallions are small plates that affix to the exterior of cabs, certifying a car’s legal authority to pick up passengers for a fee. The medallion system gave New York City’s government the ability to keep a closer eye on the quality and quantity of taxi drivers. Legislators intended the Haas Act to provide better working conditions for the largely immigrant population that drove New York taxis.²⁷ Like nearly all regulations, however, the Haas Act had an unintended consequence: narrowing the control of the taxi industry to a handful of large fleet owners.

By mid-century, taxis were an integral part of New York’s transportation scheme. They became so important, in fact, that in 1960

20 See *Taxi Dreams: Taxi History*, *supra* note 18 (chronicling the history of taxis in America).

21 “For the next sixty years production swelled. At the company’s peak over one hundred vehicles a day and five thousand a year rolled off of the line.” See *Checker Motors: Taxicab Makers*, KALAMAZOO PUB. LIBRARY, <http://www.kpl.gov/local-history/business/checker.aspx> (last visited Feb. 14, 2015).

22 See *The Early Years: 1907–1935*, NYC TAXI & LIMOUSINE COMM’N, http://www.nyc.gov/html/media/totweb/taxioftomorrow_history_earlyyears.html (last visited Feb. 14, 2015).

23 *Id.* (“In one of the largest strikes of the taxicab industry’s early days, the Taxi Strike of 1934, taxi drivers went from peaceful protesters to angry rioters. They shut down the City and injured dozens of people.”); see also *Taxi Dreams: Facts & Figures*, PBS, <http://www.pbs.org/wnet/taxidreams/data/index.html> (last visited Feb. 14, 2015).

24 See Lawrence Van Gelder, *Medallion Limits Stem From the 30’s*, N.Y. TIMES, May 11, 1996, <http://www.nytimes.com/1996/05/11/nyregion/medallion-limits-stem-from-the-30-s.html> (“That law [the Haas Act] limited the number of hack licenses—medallions—that made it legal for taxis to transport passengers who hailed them on the street.”).

25 See *id.*

26 See *id.*

27 See *id.*

New York City ordered all taxis be painted yellow in order to distinguish officially licensed taxi drivers from unofficial drivers, who, although illegal, proved increasingly more common.²⁸ Unofficial drivers saw much of their business in neighborhoods dominated by racial minorities, which were underserved by official drivers.²⁹

In 1971, the City founded the Taxi and Limousine Commission to address the growing number of taxi drivers and the issues they confronted.³⁰ Although New York's economy and population grew rapidly into the 1980s, the Commission kept the number of officially licensed cabs steady, creating an artificial cap. This synthetic limit on the number of cabs saw the price of medallions skyrocket to more than \$125,000 per medallion.³¹

Since its introduction at the end of the nineteenth century, the taxi industry has seen tremendous growth and success in America. Today, in New York City alone, there are 12,187 taxis and more than 40,000 drivers.³² Those taxis take more than 200 million passengers almost 800 million miles per year.³³ The New York City taxi industry boasts more than one billion dollars in annual revenue and operates twenty-four hours per day.³⁴ This expansive taxi industry, and its regulatory state, remained unchallenged until 2009, when two entrepreneurs from San Francisco rejected the conventional wisdom of the status quo.

28 See *A History of the New York Cab*, TELEGRAPH, May 4, 2011, <http://www.telegraph.co.uk/news/worldnews/northamerica/usa/8491507/A-history-of-the-New-York-cab.html> (detailing the history of the New York taxicab).

29 This phenomenon is not unlike the modern-day jitneys, or share taxis, which predominately cater to inner-city immigrants. See Nicole Stelle Garnett, *The Road from Welfare to Work: Informal Transportation and the Urban Poor*, 38 HARV. J. ON LEGIS. 173, 228 (2001) ("The experience of Miami and New York suggests that, if permitted to operate, jitneys can contribute invaluable and permanently to efforts to improve the economic prospects of America's inner-city residents."); see also Ron Grossman, *Before Uber There Was Jitney*, CHI. TRIB., Mar. 9, 2014, http://articles.chicagotribune.com/2014-03-09/site/ct-jitney-cab-flashback-0309-20140309_1_jitney-cabs-taxi ("The current battle between cabbies who pull a meter and upstarts who book fares via a smartphone app is evocative of an action-packed taxi drama that long ran on Chicago streets. Decades before Uber and Lyft, taxis that operated outside municipal regulations were called jitneys, named from a slang expression for a nickel, the original fare.").

30 See *About TLC*, NYC TAXI & LIMOUSINE COMM'N, <http://www.nyc.gov/html/tlc/html/about/about.shtml> (last visited Feb. 14, 2015) (explaining the founding of the NYC Taxi & Limousine Commission).

31 *Taxi Dreams: Taxi History*, *supra* note 18.

32 *Taxi Dreams: Facts & Figures*, *supra* note 23.

33 *Taxi Dreams: Taxi History*, *supra* note 18.

34 *Id.*

B. *The Introduction of Uber*

Technology entrepreneurs Garrett Camp and Travis Kalanick first approached the concept of Uber while at a web conference in Paris.³⁵ Mr. Camp had just sold “StumbleUpon” to eBay,³⁶ and Mr. Kalanick had just sold “Red Swoosh” to Akamai.³⁷ Both were hungry for the next big startup idea. As natives of San Francisco, California, both were frustrated with the unavailability and unreliability of taxis in the Bay Area. Mr. Camp pitched the idea of a “limo timeshare service” to Mr. Kalanick, which peaked his interest.³⁸

By March 2009, work on Uber’s iPhone application began in earnest. Mr. Camp hired Mr. Kalanick to be Uber’s “Chief Incubator,” which essentially entailed getting the startup off the ground. In January 2010, Uber had its first test run in New York, using just three cars.³⁹ The company launched in San Francisco in late May 2010.⁴⁰ Since then, the company has expanded to 45 countries and more than 200 cities.⁴¹ On June

35 See Travis Kalanick, *Uber’s Founding*, UBER (Dec. 22, 2010), <http://blog.uber.com/2010/12/22/ubers-founding/> (chronicling the founding and evolution of Uber); see also *About*, LEWEB, <http://leweb.co/about/> (last visited Feb. 14, 2015) (“Founded in 2004 by French entrepreneurs Loic and Geraldine Le Meur, LeWeb is an internationally-renowned conference for digital innovation where visionaries, startups, tech companies, brands and leading media converge to explore today’s hottest trends and define the future of internet-driven business.”). But see Farhad Manjoo, *Uber, a Start-Up Going So Fast It Could Miss a Turn*, N.Y. TIMES, Nov. 18, 2014, <http://www.nytimes.com/2014/11/19/technology/uber-a-start-up-going-so-fast-it-could-miss-a-turn.html> (“The hot start-up [Uber] is facing its toughest challenge yet—curbing its ugliest, most aggressive impulses before its win-at-all-cost culture begins to turn off investors, potential employees and the ride-hailing public at large.”); Adam Komarnicki, *Why Uber’s International Expansion Will Fail*, LINKEDIN (Nov. 22, 2014), <https://www.linkedin.com/pulse/20141122143519-2804924-why-uber-s-international-expansion-will-fail> (“Uber’s success is very US-specific and not easily transferrable to other countries. In most markets Uber will fail to reach enough scale to bring into life its vision of becoming THE urban logistics grid for on-demand economy. However, it will spend a lot of investors’ money to find that out.”).

36 Kalanick, *supra* note 35.

37 *Id.*

38 *Id.*

39 *Id.*

40 *Id.*

41 See Patrick Hoge, *Uber Doubles Reach to 200 Cities in Four Months*, SACRAMENTO BUS. J. (Sept. 2, 2014, 11:43 AM), <http://www.bizjournals.com/sacramento/blog/morning-roundup/2014/09/uber-doubles-reach-200-cities.html> (“Just over four months after launching service in its 100th city, Uber Technologies is now operating in 205 metropolitan regions worldwide, with two dozen U.S. locations added on Thursday alone and 43 markets launched in August.”); see also Chris O’Brien, *New Job Map Details Staggering Scope of Uber’s Global Expansion*, VENTUREBEAT (Nov. 26, 2014, 3:31 AM), <http://venturebeat.com/2014/11/26/new-job-map->

6, 2014, Uber raised \$1.2 billion in funding from a group of investors led by Fidelity Investments, who valued Uber at \$18.2 billion.⁴² Later that year, Bloomberg reported Uber's valuation at between \$35 and \$40 billion.⁴³

The launch of "UberX" in 2012 contributed substantially to Uber's rapid growth and mammoth valuation.⁴⁴ UberX expanded the Uber universe—originally restricted to only luxury "black cars"—to any qualified driver with a vehicle meeting Uber's safety standards.⁴⁵ The introduction of UberX, coupled with the company's success at raising money, allowed Uber to decrease the price of UberX rides across several major cities, including San Francisco, Los Angeles, San Diego, and the District of Columbia.⁴⁶ This aggressive pricing scheme is not without its detractors, mostly compromised of taxi commissions and drivers.⁴⁷

details-staggering-scope-of-ubers-global-expansion/ (discussing Uber's rapid international expansion).

42 See Evelyn M. Rusli & Douglas Macmillan, *Uber Gets an Uber-Valuation*, WALL ST. J., June 6, 2014, <http://online.wsj.com/articles/uber-gets-uber-valuation-of-18-2-billion-1402073876> ("At \$18.2 billion, Uber is worth about the same as Hertz Global Holdings Inc. and Avis Budget Group Inc. combined."). Uber's \$18.2 billion valuation is greater than "regional bank Fifth Third Bancorp, retailer Gap and supermarket chain Whole Foods." See Adam Samson, *If Uber Scores Valuation North of \$17B, It Will Trump These Firms*, ADAM'S ANGLE (Nov. 7, 2014, 6:01 PM), <http://adamtsamson.tumblr.com/post/102042672843/if-uber-scores-valuation-north-of-17b-it-will> (charting the valuation of several publicly traded companies).

43 See Serena Saitto, *Uber at \$40 Billion Valuation Would Eclipse Twitter and Hertz*, WASH. POST, Nov. 26, 2014, <http://washpost.bloomberg.com/Story?docId=1376-NFMB006KLV601-7DE3B9ATPFMU65ICCCSTSOOS0B> ("The startup is close to raising a round of financing that would value it between \$35 billion and \$40 billion, according to people familiar with the situation, who asked not to be identified because the details are private.").

44 See Brian Feldt, *One Month in, Uber Ready to Launch UberX in St. Louis*, ST. LOUIS BUS. J. (Nov. 12, 2014, 10:40 AM), <http://www.bizjournals.com/stlouis/blog/biznext/2014/11/one-month-in-uber-ready-to-launch-uberx-in-st.html> (discussing the introduction of UberX into the St. Louis market only one month after Uber's own introduction in the city).

45 *Id.*

46 See Alex Wilhelm & Ryan Lawler, *In Another Strike Against the Competition, Uber Lowers UberX Prices in San Diego, LA, and DC*, TECHCRUNCH (Oct. 3, 2013), <http://techcrunch.com/2013/10/03/in-another-strike-against-the-competition-uber-lowers-uberx-prices-in-san-diego-la-and-dc/> (citing Uber's ability to cut the price of UberX due to its recent success at raising money).

47 See Alexis Kleinman, *President of Taxi Association Compares UberX to ISIS*, HUFFINGTON POST (Oct. 30, 2014, 2:59 PM), http://www.huffingtonpost.com/2014/10/29/uberx-isis_n_6070472.html ("The President of the Pennsylvania Taxi Association . . . compared one arm of the car service Uber to the terrorist group ISIS. 'I try to equate this illegal operation of UberX as a terroristic act like ISIS invading the Middle East,' Alex Friedman said. 'It is exactly the same menace.'"); see

Uber's pricing system is similar to metered taxis, but all payment is handled exclusively through Uber rather than the driver personally.⁴⁸ Uber calculates the price of each ride based on either distance or time, depending upon the city. The company automatically bills the fare, which includes a tip, to the customer's credit card.⁴⁹ During times of high demand—such as major holidays or inclement weather—Uber increases its prices to “surge” levels.⁵⁰ Surge pricing often leads to consumer backlash and anger, but does not appear to make a tangible dent in Uber's growth.⁵¹ Mr. Kalanick

also Peter Terlato, *A For-Hire Car Driver is Making Citizen's Arrests Against Uber Drivers*, BUS. INSIDER (Nov. 24, 2014, 6:52 AM), <http://www.businessinsider.com/sydney-hire-car-owner-making-citizens-arrests-against-uberx-drivers-2014-11> (“As popular ride-sharing business Uber continues to grow rapidly throughout Australia, one Sydney hire car owner has decided to fight back, taking the law into his own hands by making legal citizen's arrests against UberX drivers.”). Uber encountered some of its most significant resistance to date from taxi drivers in Germany. See Ulrike Dauer, *German Taxi Drivers to Appeal Lifting of Uber Ban*, WALL ST. J. (Sept. 16, 2014, 10:51 AM) <http://online.wsj.com/articles/court-overturms-ban-on-uberpop-in-germany-1410872575> (“German taxi drivers will appeal a decision by a Frankfurt court removing a nationwide ban on Uber Inc.'s UberPop service, the drivers' association said Tuesday.”); Mark Thompson, *Is it Over for Uber in Germany?*, CNN MONEY (Sept. 2, 2014, 8:28 AM), <http://money.cnn.com/2014/09/02/technology/mobile/uber-germany/> (“How many blows can Uber take? The latest is a potential ban in Germany after a regional court issued a temporary injunction against the taxi company.”); see also Raphael Minder & Mark Scott, *Sharing Economy Faces Patchwork of Guidelines in European Countries*, N.Y. TIMES, Sept. 21, 2014, <http://www.nytimes.com/2014/09/22/technology/sharing-economy-faces-patchwork-of-guidelines-in-european-countries.html> (discussing the uneven regulatory environment faced by Uber and Airbnb in Europe).

48 See Joshua Brustein, *The Smartphone Way to Beckon a Car*, N.Y. TIMES, May 16, 2011, <http://www.nytimes.com/2011/05/15/nyregion/uber-and-weeels-offer-car-services-by-phone-app.html> (recounting a New York Uber ride from start to finish).

49 *Id.*

50 See Joe Nocera, *Uber's Rough Ride*, N.Y. TIMES, Nov. 21, 2014, <http://www.nytimes.com/2014/11/22/opinion/joe-nocera-ubers-rough-ride.html> (“If you want a ride during a heavy commuter time, it will charge you more—surge pricing, as they call it at Uber—but you'll know in advance how much extra, and you'll be given a chance to decide whether to accept or not.”); Eric Randall, *Uber's Surge Pricing Once Again Makes People Mad*, BOSTON MAGAZINE (Nov. 7, 2014, 9:16 AM), <http://www.bostonmagazine.com/news/blog/2014/11/07/ubers-surge-pricing-makes-people-mad/> (“Uber is priced where the market wants it, no matter why the market is seeking it out. When that uptick comes for unhappy reasons, it accentuates just how mechanical Uber's plan can be. But it doesn't reveal something we didn't already know.”); see also Jen, *A Walk Through Surge Pricing, 2010–2012*, UBER (Jan. 1, 2012), <http://blog.uber.com/2012/01/01/take-a-walk-through-surge-pricing/> (explaining Uber's surge pricing methodology).

51 Randall, *supra* note 50; see also James Surowiecki, *In Praise of Efficient Price Gouging*, MIT TECH. REV. (Aug. 19, 2014), <http://www.technologyreview.com/review/529961/in-praise-of-efficient-price-gouging/> (“When Uber jacked up prices during a snowstorm in New York last December, for

responded to surge pricing complaints: “Sure it’s about the regularity, but someone who is driving a car on a regular occurrence deals with dynamic pricing all the time: it’s called gas prices.”⁵² Mr. Kalanick added, “Because this is so new, it’s going to take some time for folks to accept it. There’s 70 years of conditioning around the fixed price of taxis.”⁵³ If Uber’s past success is any indication, it will rewrite that seventy years of conditioning sooner than later.

C. *Uber’s Impact*

Uber’s expanse is impressive, but only from looking to specific case studies can we determine the company’s current and future impact on localities generally. This Section chronicles Uber’s impact on three major American cities: San Francisco (the birthplace of Uber), New York City (the American birthplace of taxis and the medallion system), and the District of Columbia (America’s capital and regulatory hub).

1. San Francisco

As the birthplace of Uber, San Francisco is (perhaps unsurprisingly) the city that the company most affected with its arrival more than four years ago.⁵⁴ Two recent presentations, one from the San Francisco Municipal Transportation Agency, and the other from Uber itself,

instance, there was an eruption of complaints, the general mood being summed up by a tweet calling Uber ‘price-gouging assholes.’”).

52 Nick Bilton, *Disruptions: Taxi Supply and Demand, Priced by the Mile*, N.Y. TIMES BITS (Jan. 8, 2012, 3:05 PM) (internal quotation marks omitted), <http://bits.blogs.nytimes.com/2012/01/08/disruptions-taxi-supply-and-demand-priced-by-the-mile/> (detailing Uber’s dynamic pricing model); see also Erika Morphy, *Dynamic Pricing in a Post-Uber World*, FORBES (Aug. 31, 2014, 5:40 PM), <http://www.forbes.com/sites/erikamorphy/2014/08/31/dynamic-pricing-in-a-post-uber-world/> (“Here is one more thing we can thank (or blame depending on your perspective) Uber for: the widespread acceptance of dynamic pricing in the retail and consumer service sector.”).

53 Bilton, *supra* note 52 (internal quotation marks omitted); see also Rafi Mohammed, *Uber’s “Price Gouging” Is the Future of Business*, HARVARD BUS. REV. (Dec. 16, 2013), <https://hbr.org/2013/12/ubers-price-gouging-is-the-future-of-business> (“Uber instead lets the market rule and drops prices. This discounting steals customers from taxis and, just as importantly, attracts new customers. This walk down the demand curve entices customers who otherwise might not have used a taxi or car service.”). *But see* Kevin Roose, *Here’s How Uber Should Fix Its Surge Pricing Problem*, N.Y. MAG. (Dec. 16, 2013, 1:02 PM), <http://nymag.com/daily/intelligencer/2013/12/ubers-surge-pricing-problem.html> (“[Uber] should cap the amount riders pay at two or three times the normal rates . . . [i]f a surge ride would normally cost \$200, with \$160 going to the driver, Uber should still pay that driver \$160, but keep the costs for riders contained to, say, \$80, and eat the other \$80.”).

54 Kalanick, *supra* note 35.

substantiate media outlets' claims that Uber dramatically impacted San Francisco's taxi industry.⁵⁵

At a meeting in September 2014, the San Francisco Municipal Transportation Agency (SFMTA) discussed the substantial threat Uber poses to the taxi industry in San Francisco.⁵⁶ The SFMTA carefully prefaced its presentation with a statement of its substantial interest in promoting taxi regulation.⁵⁷ Indeed, the SFMTA's mission is to "promote a vibrant taxi industry through intelligent regulation, enforcement and partnership."⁵⁸ The SFMTA links the importance of regulation to "maintaining a strong taxi industry."⁵⁹ The SFMTA's presentation transitioned into a graphical showcase of Uber's impact on the taxi industry from January 2012 (approximately 1,400 trips per taxi) to July 2014 (approximately 500 trips per taxi).⁶⁰ Within eighteen months of Uber's introduction, San Francisco witnessed a sixty-five percent decline in taxicab use.

55 The media portrayal of Uber's effect on San Francisco's taxi industry is nearly apocalyptic in tone. See Tero Kuittinen, *Mobile Apps are Absolutely Murdering San Francisco's Taxi Industry*, BGR (Sept. 19, 2014, 6:30 PM), <http://bgr.com/2014/09/19/uber-vs-lyft-vs-taxis/> ("According to the new SFMTA director Kate Toran, the number of average trips per taxicab in San Francisco has plunged to 504 in this past July from 1,424 in March of 2012. This drop came despite the fact that rides from the airport remain a taxi industry monopoly."); Emily Badger, *This Chart Bodes Very Badly for the Taxi Industry in Its Battle Against Uber*, WASH. POST. WONKBLOG (Sept. 17, 2014), <http://www.washingtonpost.com/blogs/wonkblog/wp/2014/09/17/this-chart-bodes-very-badly-for-the-taxi-industry-in-its-battle-against-uber/> ("This week . . . the Taxis and Accessible Services Division of the San Francisco Municipal Transportation Agency pulled out some pretty dramatic numbers: The office, which manages regulation of the local industry, reported that taxi trips taken in the city have fallen by 65 percent in the last year and a half . . ."); Michael Cabanatuan, *Ride Services Decimate S.F. Taxi Industry's Business*, S.F. CHRON., (Sept. 16, 2014, 6:42 PM), <http://www.sfgate.com/bayarea/article/Taxi-use-plummets-in-San-Francisco-65-percent-in-5760251.php> ("The fall of the taxi industry in San Francisco, as less-regulated ride services haven taken hold, has been both steep and sharp. . . . It's been evident that the booming popularity of app-dispatched ride services like Lyft and Uber have dramatically eaten into the taxi industry's business.").

56 See *Taxis and Accessible Services Division: Status of Taxi Industry*, S.F. MUN. TRANSP. AGENCY (2014), <http://www.sfmta.com/sites/default/files/agendaitems/9-16-14%20Item%2011%20Presentation%20-%20Taxicab%20Industry.pdf> (showcasing the slide deck presented to the San Francisco Municipal Transportation Board Meeting on September 16, 2014).

57 *Id.*

58 *Id.*

59 *Id.*

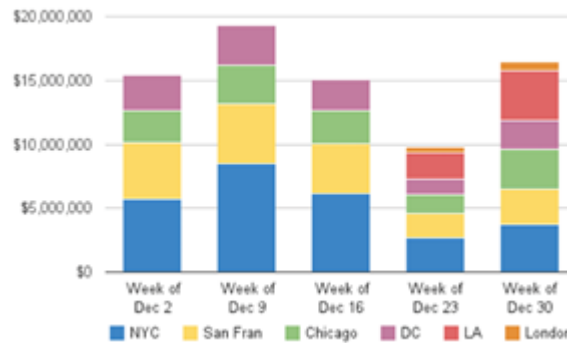
60 *Id.*

FIGURE 1: IMPACT OF UBER AND LIKE SERVICES ON SAN FRANCISCO TAXI INDUSTRY (AVERAGE TRIPS PER TAXI)⁶¹



A leaked Uber presentation reflecting astounding revenue and tremendous growth corroborates the SFMTA's data.⁶² Uber's presence in San Francisco alone generated nearly eighteen million dollars of revenue in December 2013.⁶³ A year of revenue at that monthly rate would make the San Francisco market a \$212 million business, assuming no growth.

FIGURE 2: UBER REVENUE IN TOP MARKETS—DECEMBER 2013⁶⁴



San Francisco has not altered its regulatory scheme of the taxi industry or imposed any new regulations on Uber. However, the SFMTA is active in its recommendations regarding how it would like to see San Francisco respond to Uber. Although perhaps in a somewhat paradoxical manner, given its emphasis on promoting regulations, SFMTA wants to see the taxi

⁶¹ *Id.*

⁶² See Alyson Shontell, *LEAKED: Internal Uber Deck Reveals Staggering Revenue and Growth Metrics*, BUS. INSIDER (Nov. 20, 2014, 5:58 PM), <http://www.businessinsider.com/uber-revenue-rides-drivers-and-fares-2014-11> (“Business Insider obtained an internal Uber presentation that’s nearly 60 pages long last week that was produced in early 2014. In it, there’s city-by-city data in terms of revenue, active drivers, average fares, active users, trips per week, and more.”).

⁶³ *Id.*

⁶⁴ *Id.*

industry *less* regulated.⁶⁵ The SFTMA recommends that San Francisco reduce the medallion retransfer fee by twenty percent, waive the five-hundred dollar ramp taxi medallion use fee, and lower the medallion renewal fees for transferable medallion holders.⁶⁶ Perhaps Uber's lasting impact on San Francisco was convincing the very agency designed to advocate *for* the taxi industry that its regulations were actually a hindrance.

2. New York City

Uber's arrival in New York City produced marginally fewer alarmist reactions than in San Francisco.⁶⁷ Uber's biggest impact in the Empire State, however, may be its effect on the system the City pioneered: taxi medallions. In the year the New York Taxi Commission introduced taxi medallions, it issued 11,787 medallions in the City.⁶⁸ That number remained constant until 2004, when it increased to 13,150.⁶⁹ The scarcity in the number of medallions available led to a rapid rise in their price. As of 2010, a taxi medallion cost more than one million dollars.⁷⁰

65 *Taxis and Accessible Services Division, supra* note 56.

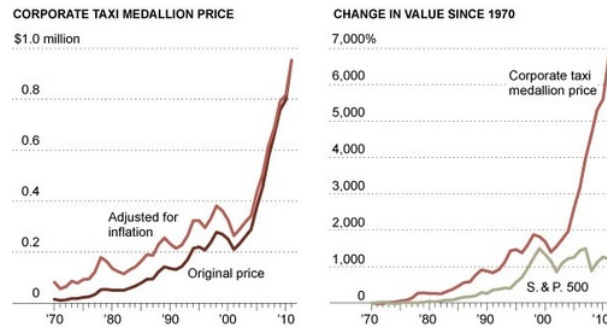
66 *Id.*

67 See Tero Kuittinen, *Uber and Lyft Appear Poised to Destroy New York's Iconic Taxi Industry*, BGR (July 9, 2014, 2:20 PM), <http://bgr.com/2014/07/09/uber-vs-lyft-new-york/> ("Are there more empty taxis than usual rolling around Manhattan today? It seems that way . . . because the New York transportation system is going through its biggest upheaval since 1900. And as you may have guessed, one of the world's hottest mobile apps is the new omen of turmoil in 2014.").

68 Rohin Dhar, *The Tyranny of the Taxi Medallions*, PRICEONOMICS (Apr. 10, 2013), <http://blog.priceonomics.com/post/47636506327/the-tyranny-of-the-taxi-medallions> (discussing the unintended consequences of New York's medallion system).

69 *Id.*

70 *Id.*

FIGURE 3: DRAMATIC RISE IN NEW YORK TAXI MEDALLION PRICE⁷¹

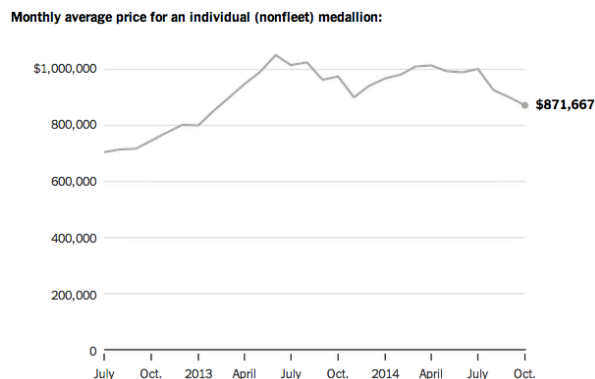
The great cost of taxi medallions almost necessitates that corporations buy the medallions and “lease” them to drivers. Under this popular scheme, when a taxi driver starts her shift she incurs approximately one hundred dollars in debt to her taxi company for the use of its medallion, or the legal right to drive a taxi.⁷² In a short amount of time, Uber changed this paradigm dramatically. Now, taxi medallion prices are falling.⁷³ The average price of an individual New York City taxi medallion fell to \$872,000 in October 2014, down seventeen percent from its peak in 2013.⁷⁴

71 *Id.*

72 *Id.*

73 See Josh Barro, *Under Pressure from Uber, Taxi Medallion Prices are Plummeting*, N.Y. TIMES UPSHOT (Nov. 27, 2014), <http://www.nytimes.com/2014/11/28/upshot/under-pressure-from-uber-taxi-medallion-prices-are-plummeting.html> (analyzing the fall of New York taxi medallion prices due to competition from Uber); see also David Morrison, *Uber, Lyft Challenge Taxi Medallion Value*, CREDIT UNION TIMES (Oct. 27, 2014), <http://www.cutimes.com/2014/10/27/uber-lyft-challenge-taxi-medallion-value> (“App based transportation services such as Uber and Lyft have brought increased competition to New York City’s taxicab industry and have introduced an element of uncertainty into the value of New York City’s taxicab medallions.”).

74 Barro, *supra* note 73.

FIGURE 4: DECLINE IN NEW YORK MEDALLION PRICE POST-UBER⁷⁵

Whether taxi medallion prices will continue to fall remains unclear, but the relevant damage to their reputation may already be done. Medallion owners exert their power over taxi drivers by maintaining control over the exorbitantly expensive medallions. Once taxi drivers begin to recognize that this monopolization artificially inflates the medallion's price in response to the limited supply, and that an alternate avenue to pursue their occupation exists—Uber—it will likely be too late to salvage the medallion system.⁷⁶

3. District of Columbia

Although the District of Columbia is the regulatory hub of the United States, it arguably took the most free-market approach toward Uber's introduction.⁷⁷ This is not necessarily a surprise, as Washington, D.C., does not regulate traditional taxi drivers in the same manner as San Francisco and New York City. Indeed, the nation's capital has no

⁷⁵ *Id.*

⁷⁶ See Emily Badger, *Taxi Medallions Have Been the Best Investment in America for Years. Now Uber May Be Changing That.*, WASH. POST WONKBLOG (Nov. 27, 2014), <http://www.washingtonpost.com/blogs/wonkblog/wp/2014/11/27/as-uber-fights-new-battles-over-privacy-an-older-war-simmers-with-the-cab-industry/> (“Now, however, a market built on restricted supply is showing cracks with the arrival of start-ups that turn anyone with a car into a driver for hire. In Chicago, those cracks have triggered fears that medallion values are tottering.”).

⁷⁷ See Emily Badger, *Free Market Advocates Say D.C. is the Uber-friendliest City in the Nation*, WASH. POST WONKBLOG (Nov. 12, 2014), <http://www.washingtonpost.com/blogs/wonkblog/wp/2014/11/12/free-market-advocates-say-d-c-is-the-uber-friendliest-city-in-the-nation/> (“By R Street's counting, Washington, D.C., has the freest transportation market in the country. The city just passed regulation legalizing ‘transportation network companies’ that allow people with their private cars to operate like quasi-cab drivers.”).

medallion system, thereby freeing D.C. taxi drivers of the significant cost of doing business in other cities.⁷⁸

The D.C. Council passed the Vehicle-for-Hire Innovation Act of 2014 in response to Uber's arrival.⁷⁹ Uber praised the bill, while taxi drivers widely criticized it as too lenient on the new company.⁸⁰ Specifically, the bill requires Uber drivers to submit to background checks going back seven years, undergo annual safety inspections, and hold one million dollars in liability insurance.⁸¹ The bill essentially legalizes Uber in Washington, D.C., while simultaneously requiring Uber to observe safety and insurance requirements the company *already mandated*.⁸²

The D.C. Taxi Operators Association and Teamsters Local 992 lashed out at the new bill. The Association said in a statement: "The illegal private sedan services currently do not follow the same rules and regulations that taxi drivers must follow, and the bill in its current form falls far too short in providing fairness."⁸³ Both organizations added complaints that "D.C. taxi drivers are losing work and are struggling to make ends meet."⁸⁴ Uber hopes the D.C. Council's bill will serve as a model for other cities as they look to respond to Uber in a regulatory fashion.⁸⁵

78 *Id.*

79 See Jacob Fischler, *DC Just Passed a Law that Uber Says Could Serve as a "Model for the Rest of the Country"*, BUZZFEED NEWS (Oct. 28, 2014, 2:28 PM), <http://www.buzzfeed.com/jacobfischler/dc-just-passed-a-law-that-uber-says-could-serve-as-a-model-f> (discussing the District of Columbia's regulatory response to Uber).

80 See Debra Alfarone, *DC Council Passes Bill to Clear Way for Uber, Lyft*, WUSA9 (Oct. 28, 2014, 6:20 PM), <http://www.wusa9.com/story/news/2014/10/28/dc-taxi-drivers-protest-uber-vote/18044889/> ("Taxi drivers argue that the app-based services have an unfair competitive advantage because they don't have to follow the same rules and regulations as cabs, and therefore can afford to charge cheaper fares."); see also Sam Ford, *D.C. Cab Drivers Rally Downtown Against Uber, but Council Ignores Protest*, ABC 7 NEWS (Oct. 28, 2014, 7:12 PM), <http://www.wjla.com/articles/2014/10/cab-drivers-rally-against-uber-in-downtown-d-c--108499.html> ("Hundreds of taxi drivers in the District of Columbia descended on Freedom Plaza Tuesday to draw attention to the D.C. Council's embrace of car services like Uber and Lyft.").

81 Fischler, *supra* note 79.

82 *Id.*

83 *Id.*

84 *Id.*

85 See Darinka, *DC Leads the Nation with Passage of Innovative Ridesharing Bill*, UBER (Oct. 27, 2014), http://blog.uber.com/dc_clears_path_for_uberX ("Councilmembers Cheh and Grosso have displayed tremendous leadership in pushing through this bill, and we are proud that Uber's safety standards have set the bar for ridesharing in DC, and throughout the country.").

III. HOW SHOULD LOCAL GOVERNMENTS RESPOND?

The sharing economy—and specifically Uber—presents a unique challenge to local governments. Sharing economy companies, unlike traditional blue chip corporations, threaten to upset the status quo of local regulatory frameworks. When confronted with a novel paradigm like sharing economy companies, local governments have two options: embrace the new economic model or attempt to regulate it.

A. Generational Shift: Millennial Expectations and the Rise of the Sharing Economy

As the Millennial generation begins to take over both the American workforce and the bulk of consumer spending, the Baby Boomer generation and its influence will begin to retire.⁸⁶ With the Millennials' rise come changes in the way consumers wish to conduct business.⁸⁷ The Baby Boomer generation places a large degree of its trust in established institutions, such as political parties, organized religions, and blue chip corporations.⁸⁸ The Millennials, largely in response to significant distrust

⁸⁶ See *The "Millennials" are Coming*, CBS, (May 23, 2008), <http://www.cbsnews.com/news/the-millennials-are-coming/> (discussing the rise of the millennial generation as the Baby Boomer generation heads into retirement); see also Alastair Mitchell, *The Rise of the Millennial Workforce*, WIRED (Aug. 15, 2013, 2:13 PM), <http://www.wired.com/2013/08/the-rise-of-the-millennial-workforce/> (“[A]re businesses truly prepared for the rise of millennials in the workplace? The U.S. Bureau of Labor Statistics predicts that by 2015 millennials will overtake the majority representation of the workforce and by 2030 this hyper-connected, tech savvy generation will make up 75% of the workforce.”).

⁸⁷ See *Talking to Strangers: Millennials Trust People over Brands*, BAZAAR VOICE 4 (2012), http://resources.bazaarvoice.com/rs/bazaarvoice/images/201202_Millennials_whitepaper.pdf (“Eighty-four percent of Millennials report that UGC [user-generated content] on company websites has at least some influence on what they buy, compared to 70% of Boomers. In fact, there are many purchase decisions—big and small—that Millennials won’t make without UGC.”).

⁸⁸ See *Millennials in Adulthood*, PEW RESEARCH CENTER (Mar. 7, 2014), <http://www.pewsocialtrends.org/2014/03/07/millennials-in-adulthood/> (noting the Baby Boomer generation’s attachment to, and the Millennials’ disassociation from, established institutions).

of big corporations after the financial crisis,⁸⁹ place trust in individuals rather than businesses.⁹⁰

Uber, although a “corporation” in the traditional sense, is an organic outgrowth in response to the Millennials’ shifting desires.⁹¹ As the Baby Boomer generation enters retirement, so too will companies that solely cater to their desires.⁹² With the rise of the Millennials will come companies uniquely suited to meet the new generation’s needs and desires, and challenges for those older companies unable to adapt.

Local governments should embrace Uber because it is primed to benefit from the Baby Boomer to Millennial shift due to its peer-reviewed model of service.⁹³ This feedback loop of instant reviews not only best serves the rising tax base of local governments, but also gives localities a window into what Millennials will expect and demand of them in the future. Although Uber may one day overpower legacy taxi companies, it is just as likely that its less-than-subtle influence will force the taxi industry to adapt.⁹⁴

B. Inherent Difficulty of Local Attempts to Regulate the Sharing Economy

With the rise of Millennial expectations and the twilight of the Baby Boomer generation, the sharing economy is here to stay. As such, municipalities must recognize inherent limitations in attempting to regulate that economy. Uber unlocked the power of the Internet when it comes to capitalizing unused resources. Local governments restricting the use of

⁸⁹ See Bourree Lam, *Quantifying Americans’ Distrust of Corporations*, ATLANTIC (Sept. 25, 2014, 7:50 AM), <http://www.theatlantic.com/business/archive/2014/09/quantifying-americans-distrust-of-corporations/380713/> (“Only 36 percent of Americans feel corporations are a ‘source of hope’ for their economy, compared with 84 percent of people in China.”).

⁹⁰ See Laurie Sullivan, *Millennials Trust People, Not Brands, When Buying*, MEDIAPOST (Jan. 26, 2012, 3:14 PM), <http://www.mediapost.com/publications/article/166630/millennials-trust-people-not-brands-when-buying.html> (“This generation trusts people rather than brands, and values the opinions of like-minded strangers as much as people they know, according to a new study . . .”).

⁹¹ *Id.*

⁹² See *Millennials in Adulthood*, *supra* note 88.

⁹³ See Julie Weed, *For Uber, Airbnb and Other Companies, Customer Ratings Go Both Ways*, N.Y. TIMES, Dec. 1, 2014, <http://www.nytimes.com/2014/12/02/business/for-uber-airbnb-and-other-companies-customer-ratings-go-both-ways.html> (discussing Uber’s peer-reviewed model).

⁹⁴ See Nick Jayson, *Chicago and New York Could Soon Compete with Uber and Lyft*, BIO & TECH INSIGHTS (Dec. 13, 2014), <http://biotechinsights.com/chicago-and-new-york-could-soon-compete-with-uber-and-lyft/14615/> (“According to news reports, New York and Chicago Cities could soon become rivals of Uber and Lyft, after they launch their own smartphone apps for e-hailing taxis, similar to Uber and Lyft.”).

social media—in whatever form—appears unlikely. To be sure, powerful interest groups, such as the taxicab lobby, may be able to assert some influence over municipalities. The sharing economy, however, is only growing in political power and influence. Given these difficulties and the inherent geographic limitations of municipalities, it is better to join the sharing economy than to fight it.⁹⁵

Municipalities might be skeptical of doing nothing in response to the rise of large, dynamic, sharing economy companies. Yet, as the deregulation of the telecommunications industry in the 1990s demonstrates, freeing local markets to compete can provide substantial benefits to consumers while simultaneously ensuring better services.⁹⁶ Likewise, to the extent municipalities are concerned about ensuring high-quality services and consumer safety, these issues can be addressed through disclosure laws for the former and tort and criminal laws for the latter.⁹⁷

C. *Uber is an Organic Response to Regulatory Market Failures*

Instead of attempting to regulate aspects of the sharing economy out of existence or subordinating them to unwieldy rules, local governments should concentrate on ways to embrace these innovations. One possible approach is to provide transitional relief for industries transformed by the sharing economy.⁹⁸ For instance, given the competitive state of Uber, municipalities that rely on a taxicab medallion system might consider expanding the accessibility of medallions to lower the costs of competing with Uber and like companies. Some might argue this simply will result in a “race to the bottom” in terms of regulation, but municipalities should

95 Indeed, some municipalities already are joining the sharing economy in the context of Uber. *See supra* subsection II.C.3.

96 Jeffery A. Eisenach & Kevin W. Caves, *What Happens When Local Phone Service is Deregulated?*, 35 REGULATION 34, 35–36 (2012) (noting the substantial benefits to consumers obtained when the federal government deregulated local telephone markets); *id.* at 36 (“The course taken by the FCC in implementing the act was highly controversial, but the end result is not in dispute: the market today is far more competitive than when the act was passed. Indeed, state regulators from coast to coast have concluded that competition from cable, wireless, CLECs, and internet ‘VoIP’ providers effectively disciplines prices in most areas and for most products.”).

97 For example, in the tragic instance of the rape of an Uber customer, criminal prosecution and tort law provide avenues of relief for the victim, while the crime simultaneously incentivizes Uber to further improve its verification procedures. *Cf.* Mike Isaac, *Uber Driver in Boston Area Charged with Rape*, N.Y. TIMES BITS (Dec. 18, 2014, 1:13 PM), <http://bits.blogs.nytimes.com/2014/12/18/uber-driver-in-boston-area-charged-with-rape> (noting that prosecutors criminal rape charges against an Uber driver and that “the incident comes as Uber reexamines its safety and driver screening policies” amidst a series of alleged assaults in multiple cities around the world).

98 San Francisco might do this with regard to its regulation of taxis in light of the rise of Uber. *See supra* notes 65–66 and accompanying text.

instead view it as an opportunity to further blend established industries with the sharing economy—thus creating value for all parties involved.

Given the pervasive power of the Internet and the inability of municipalities currently to control sharing companies, the best approach for municipalities is to embrace innovation. Local governments should work to achieve collaborative agreements with sharing economy companies while also making locally regulated industries more competitive through deregulation.

CONCLUSION

The sharing economy presents new challenges and opportunities to municipalities. On one hand, through unlocking previously underutilized resources, the sharing economy offers new avenues of wealth creation, particularly for those disadvantaged by the status quo. On the other hand, the sharing economy challenges existing structures of municipal regulation. Rather than attempting to impose prior regulatory structures, municipalities should embrace shifts in consumer preferences—especially those of Millennials. It is through collaboration, rather than regulation, that municipalities can best achieve benefits for both enterprising individuals and communities as a whole.