

# Post-TNC Transportation Policy & Planning:

Who and What Should be Regulated & How to

“Level the Playing Field”  
with **Taxicabs** and **For-Hire** Services



*By Matthew W. Daus, Esq.  
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# **Post-TNC Transportation Policy & Planning: Who and What Should be Regulated & How to “Level the Playing Field” with Taxicabs and For-Hire Services**

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## **ABSTRACT**

This report provides an analysis and evaluation of developments to transportation policy and planning since the proliferation of Transportation Network Companies (“TNCs”), and how to effectively approach “leveling the playing field” between taxis, FHV’s, and TNCs.

Methods of analysis include: a look at the past and current regulatory structures and the climate of new legislation and regulations, as well as whether the federal, state, or local government could best regulate the developing industry; an overview of each of the critical issues which must be addressed in order to most effectively level the playing field, including: criminal background checks, insurance, licensing fees, data security and privacy protections, sustainable growth of shared mobility, ensuring equity in rates and accessibility, universal taxicab applications, and regulatory models; followed by a description of the recommended solutions and next steps for the industry.

This report is a colloquy on the adverse impacts that TNCs have had on overall transportation policy and planning, and will demonstrate that with more funding, collaboration, and a more thorough and comprehensive approach, there are solutions to ensure a stable, efficient, and sustainable transportation future.

A sidebar expressing some of the ideas in this report appears in the American Planning Association’s book entitled “Planning for Shared Mobility.” Also, an edited and condensed version of this report is scheduled for publication in the November-December 2016 edition of “The Municipal Lawyer” of the International Municipal Lawyers Association.

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## About the Author

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## Introduction

Since the advent of disruptive for-hire ground transportation smartphone Application (“app”) based Transportation Network Companies (“TNCs”), such as Uber and Lyft, many laws have been enacted throughout the United States, Canada, and elsewhere to permit market entry of TNCs through partial deregulation and self-regulation of these services; mostly at a State level after running into opposition in many localities.<sup>1</sup> Essentially, TNCs are a hybrid form of “on-demand” taxi service with a taximeter-like fare calculator inside the app, whose transportation genes were crossed with limousine, livery or black car sedans, and – in many instances – operate with unlicensed vehicles, drivers, and with inadequate or no insurance coverage. These new cookie-cutter laws define a TNC by describing the same exact activity or service performed by taxicabs and limousines (i.e. transporting a paying passenger from point A to point B), but specifically exempt incumbent operators who could benefit economically from these relaxed regulatory burdens.<sup>2</sup>

There is no question that the competition and disruption created by TNCs, whether legal, ethical or policy-challenged, has set the stage for a paradigm shift for transportation policy planners on a much broader basis. Decades of transportation planning and policy, which sought to minimize and deter personal motor vehicle (“PMV”) usage, is now facing a collision course with hundreds of thousands of additional vehicles that continue to be added to congested roads – many operated by less experienced and part-time drivers. TNC vehicles are encouraged by so-called “surge pricing” to work during peak demand times – or rush hour – when traffic and environmental conditions may be at their worst.<sup>3</sup> Also, TNC drivers may be encouraged now, by recent significant fare reductions, to work longer hours to achieve the same prior economic benefits, possibly contributing to greater driver fatigue and unsafe working conditions.

With every cloud, there is hope for a silver lining. With TNCs, the solution could be an awakening of high-level transportation policy planning that re-imagines the transportation ecosystem for our sustainable future, with all modes and technology in mind. Whether it be regional and metropolitan planning organizations; local for-hire or taxicab transportation regulators; or local or regional departments of transportation and/or traffic agencies, all sectors of the transportation industry must work together now to plan the

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<sup>1</sup> As of August 8, 2016, 38 states (Arizona, Arkansas, California, Colorado, District of Columbia, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin and Washington) have enacted TNC legislation. See <http://viewer.zmags.com/publication/60841263#/60841263/1>

<sup>2</sup> For example, although many taxicab and limousine companies utilize a digital platform, such as a website or App allowing passengers to book trips, Tennessee defines a TNC as “a business entity operating in this state that uses a digital network to connect riders to TNC services by TNC drivers” and explicitly distinguishes a TNC “from a taxi service, limousine service, shuttle service, or any other private passenger transportation services that are regulated pursuant to present law.” See <https://trackbill.com/bill/tn-hb992-transportation-dept-of-as-enacted-enacts-the-transportation-network-company-services-act-amends-tca-title-7-title-54-title-55-title-56-and-title-65/1135990/>.

<sup>3</sup> <http://time.com/3633469/uber-surge-pricing/>.

future role of taxicabs, for-hire vehicles, TNCs, and all other forms of transit. Further, governmental bodies must work with the private transportation and technology sectors, as well as academics, to quickly envision comprehensive multi-modal transportation plans, as the future is quickly passing us by. Allowing disruptive profit-motivated companies to make their own laws and policies while violating established laws that, inconveniently, “do not conform to their business models,” leaves decades of transportation planning to discourage car growth and mobility management at the curb. The goal should be to strategically fit these new modes – and other public and private modes - into a broader plan that would encourage equitable, safer, and more environmentally sustainable transportation solutions, while preserving or redirecting the roles of existing incumbent stakeholders.

In the aftermath of TNC disruption, governments are, in fact, now beginning to think about this planning process as not just about road and mobility management, but involving concepts such as shared mobility,<sup>4</sup> connected<sup>5</sup> and autonomous vehicle technology,<sup>6</sup> smartphone technology, and data sharing platforms. All of these new technologies can increase inter-modal and intra-modal connections and services among and between public and private transit, including airports. To this end, seminal questions that must be addressed include: Who regulates? What should they regulate? How far should they go to regulate? Should federal, state and/or local governments regulate, and should there be street enforcement, automated enforcement, and/or self-regulation?

## **I. Who Should Regulate? – Federal, State and/or Local Roles**

Taxicab service (on-demand street hails, taxicab stands, and pre-booked service) has traditionally been regulated locally, although the authority to do so is found mostly on the state level and not the federal level (unless engaging in interstate commerce or trips by and between states). For-hire services, which include liveries, black cars, sedans, and limousine services that are pre-arranged or pre-booked in advance (not street hails) have been regulated more loosely than taxicabs at the state and local levels, or a combination thereof. Federal regulation is unlikely to work logistically or legally, given the parameters set by the United States Constitution, which only permits for-hire regulation for vehicles

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<sup>4</sup>“Shared mobility” is defined as “the shared use of a vehicle, bicycle, or other mode...that enables users to gain short-term access to transportation modes on an ‘as-needed’ basis...include(ing) various forms of carsharing, bikesharing, ridesharing (carpooling and vanpooling) and on-demand ride services.

Shaheen, Susan; Chan, Nelson; Bansal, Apaar; and Cohen, Adam. *Shared Mobility: Definitions, Industry Developments and Early Understanding*. Published November 3, 2015.

See: [http://innovativemobility.org/wp-content/uploads/2015/11/SharedMobility\\_WhitePaper\\_FINAL.pdf](http://innovativemobility.org/wp-content/uploads/2015/11/SharedMobility_WhitePaper_FINAL.pdf).

<sup>5</sup> “Connected vehicle technology” is defined as a “multimodal initiative that aims to enable safe, interoperable networked wireless communications among vehicles, the infrastructure, and passengers’ personal communications devices.”

See: [http://www.its.dot.gov/connected\\_vehicle/connected\\_vehicles\\_FAQs.htm](http://www.its.dot.gov/connected_vehicle/connected_vehicles_FAQs.htm).

<sup>6</sup> “Autonomous, or self-driving, vehicles” are defined as “those in which operation of the vehicle occurs without direct driver input to control the steering, acceleration, and braking and are designed so that the driver is not expected to constantly monitor the roadway while operating in self-driving mode.”

See: <http://www.nhtsa.gov/About+NHTSA/Press+Releases/U.S.+Department+of+Transportation+Releases+Policy+on+Automated+Vehicle+Development>.

engaged in interstate commerce. However, federal laws and appropriations for state funding to provide research, incentives, disincentives, and technology pilot programs could help guide more uniform state and local policy. TNCs have, for the most part, pushed for statewide regulation and laws that semi-legitimize their business model, because doing so at the state level involves conceivably less lobbying, legal, and media-related resources than engagement in a much larger number of municipalities, counties and/or villages.

TNCs have recognized that states typically lack the same enforcement capabilities as localities, and it is no mistake that state regulation has been sought. A state is a large geographical terrain, and transportation by for-hire vehicles is mostly local and point-to-point. While it is difficult for police to enforce safety standards at a state level, some safety standards could be uniform with regard to basic safety and licensing of professional drivers. The standards set for TNC laws are simply too thin, and require more than what is currently applied. For all private for-hire ground transportation, minimum requirements should include: (i) uniform insurance coverage available 24/7 (whether on or off-duty, or, alternatively, should a new insurance coverage model cover injuries and is affordable and available to all); (ii) biometric (fingerprint-based) background checks for all drivers;<sup>7</sup> (iii) reasonable and affordable licensing fees that cover the cost of issuing licenses; driving record licensing restrictions; (iv) and uniform rules of conduct for driving and TNC driver misbehavior. Although states could set licensing criteria or even issue licenses, the enforcement should always be either local or regional for all for-hire modes, as long as statewide licensing standards are clarified and made uniform for TNCs, taxicabs and all other for-hire modes.

Even airports have more stringent and diverse regulations, and, in many instances, have set higher standards than regulators of other transportation industries (i.e. requiring ownership of permits and franchises for those operating on their premises). While airports should retain their power to set higher standards for their contractors or for-hire permit holders, the baseline should be raised at the state level and should apply so that an airport cannot reduce - but can only enhance - safety and customer service criteria.

In terms of local regulation, the dynamics of for-hire regulation are best reserved for localities. However, should there be stringent and uniform safety and licensing standards at a state level, coupled with real local enforcement, such a system could work. Unfortunately, the current TNC laws do not allow for either. On a local level, under most circumstances, it is best for municipalities to: (i) set taxicab fares (providing consumer uniformity and transparent expectations); (ii) regulate for consistency and transparency, when necessary, for for-hire vehicles or pre-arranged fares; (iii) set entry limitations on the number of permits; (iv) and assess supply and demand expectations. Such complex matters

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<sup>7</sup> See Daus, Matthew W. and Russo, Pasqualino. One Standard For All: Criminal Background Checks for Taxicab, For-Hire and Transportation Network Company (TNC) Drivers. Published May 2015, MPA Newsletter of John Jay College of Criminal Justice, City University of New York. ([http://www.whosdrivingyou.org/wp-content/uploads/2015/06/background\\_check\\_report.pdf](http://www.whosdrivingyou.org/wp-content/uploads/2015/06/background_check_report.pdf).)

are best reserved for local regulators due to the unique geography of cities and suburbs, as well as local economic variables in terms of transit options and overall fare affordability.

Limitations on the number of permits, along with economic or fare regulation, must and should be local or regional, as standard of living and wage considerations, as well as demand for myriad types of services, differ from locality to region to neighborhood.<sup>8</sup> As urbanization continues to increase as a trend, sustainable initiatives are, and should continue to be, implemented at a local level, as street grids and systems for public and private transport, population density, and road configurations widely vary from locality to locality. Limiting or managing the growth of the number of TNCs and vehicles is a worthwhile endeavor which would both economically benefit drivers and help reduce traffic congestion. Because local factors will still be of significant importance to the analysis, it is simply better performed at a municipal, local, or regional level. For example, the issue of whether to use taxicab or for-hire vehicle stands, as well as the utilization of urban and airport curb space, is unique to the locality and provides for specific - and not general - planning and standards.

Despite the foregoing challenges, states can, in theory, effectively and broadly regulate consumer protection and set overall “baseline” licensing standards for professional drivers, including the safety and accountability of the vehicle, driver and transportation business. These universal protections should apply to every community and passenger in the state. These standards could include penalties for overcharging passengers and having improper levels of insurance based on risk and vehicle capacity, as well as mandating vehicle inspections, emissions and licensing standards for obtaining and maintaining a commercial motor vehicle license for-hire – all to be enforced at a local level.

Current TNC laws are inadequate, but new and more stringent laws that provide “equal protection” for all sub-modes could cure these deficiencies, as long as localities can apply higher standards, enforce laws, and set economic regulations. Also, the eradication of multiple permits and redundant local licensing fee revenue by regulating at a state or regional level, would represent a positive industry development. As currently, many car services must display several village, county, town and other municipal permits on their vehicles to transport passengers between adjoining intra-state geographical subdivisions.

## **II. How to Most Effectively “Level the Playing Field” Between Transportation Network Companies (TNCs) and Taxicabs/For-Hire Vehicles**

The term “Leveling the Playing Field” (between TNCs and taxi companies) was coined in early 2015 at a conference of regulators. The concept stuck and is now common parlance among the incumbent industry stakeholders, elected and appointed officials, the media, and academics. This new term of art seeks to address the competitive regulatory and financial resource competitive advantages that TNCs have over small businesses (i.e. the incumbent taxicab, for-hire vehicle and limousine industries), all of which are engaging in virtually the same exact regulated activity, albeit with different standards. There are

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<sup>8</sup> <http://furmancenter.org/files/publications/FurmanCenterBIDsBrief.pdf>.

many ways a “level playing field” can be accomplished, and the bigger question is: do policymakers apply a “band-aid” approach with cosmetic surgical transportation enhancements that do not narrow the equity gap, or do they engage in radical, but necessary, reconstructive surgery to permanently fix the underlying conditions directly?

The same basic public safety and fiscal responsibility standards should apply for all vehicles and drivers - whether TNCs, taxicabs, liveries or limousines - when it comes to basic safety and accountability standards. The activity that is the subject of regulation involves a very simple premise: passengers reserving or hailing a vehicle for hire to go from one point to another. Ensuring that drivers meet basic safety standards, including subjecting them to accurate criminal background checks and obeying driver and vehicle safety standards to guard against misconduct (such as driving while impaired or assaulting passengers), is a universal truth, and the process should be exactly the same for any drivers, vehicles or businesses engaging in for-hire transportation. Irrespective of the preliminary ruling in the various constitutional challenges in the courts, there is an ethical and fair competition issue regulators and policy-makers must address.<sup>9</sup> The question is not how TNCs and incumbent industry players are different – because, in terms of safety concerns, they are not. The use of a smartphone app to increase safety may be a plus, but TNC laws are inconsistent because they exclude taxicabs and limousines by definition, even if they are using their own apps that also utilize credit cards, driver identification, and vehicle tracking.

It may be just a matter of time before TNC laws are vacated or revised as a result of either “equal protection” challenges, or upon the realization that such disparate standards without a sound rational basis is bad policy. Either way, legislators may find themselves back at the proverbial drawing board as a result of mounting media attention resulting from TNC driver criminal behavior and/or rulings that current TNC laws are unconstitutional. The question then becomes not whether the playing field is leveled or not, but whether the field is adjusted evenly below sea level, or at the height of Mile High Stadium in the Rocky Mountains. The answer is, politically and realistically, probably somewhere in between. There will be higher standards than what the TNC laws provide, but some partial or slight deregulation for all modes (TNC and incumbent industry) may occur as well.

The TNCs have decisively won the first round, as time allowed them to grow under the current structure and lack of enforcement. As a result, TNCs were able to buy time to accumulate market share while knowing that, at some point, the courts and/or public opinion would catch-up or turn. While this may come at a point of exhaustion after years of legal, media, lobbying, and philosophical battles, there lies an opportunity, if proper planning is conducted, to re-craft the entire system in a manner that benefits the public and all stakeholders. The key TNC issues will be: (A) Driver Criminal Background Checks and Vetting; (B) Automobile Liability and Related Insurance Coverage; (C) Licensing Fees, Limits and Market-Entry; (D) Data Security and Privacy; (E) Sustainability; (F) Equity and Underserved Community Service; (G) Wheelchair Accessibility; (H) Universal Taxi Apps; and (I) Self-regulation.

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<sup>9</sup> See, e.g., *Illinois Transportation Trade Association et al., v. City of Chicago*, Case No. 1:14-cv-00827.



### ***A. Criminal Background Checks- Names Checks or Biometric Fingerprints***

The issue is not to have different types of background checks for TNCs, but to have consistency in the type of checks, and who performs them. State laws should not only require TNCs and all drivers of vehicles for-hire to undergo pre-licensure biometric fingerprinting performed by the government (or a government contractor), but every state should authorize federal access and rap-back service for localities to be notified of new convictions of active licensed drivers.

In a study released in May 2015 that I co-authored, a blue ribbon panel of academics, criminologists, law enforcement officials, and security experts, provided comments and, ultimately, provided their approval for the conclusions reached from the research.<sup>10</sup> In sum, the use of biometrics – fingerprints – by transportation regulators in the driver vetting process provides efficient, cost-effective, and comprehensive results for those regulators to determine which drivers meet the standards for licensure. Further, equal standards should be required, regardless of the class or type of license being sought by the driver-applicant. The following are our findings and recommended best practices:

1. Biometric criminal background checks are more accurate than self-regulated name checks. Biometric background checks are more accurate than name checks or social security checks since the latter type of checks are prone to data entry errors, rely on potentially erroneous information provided by the applicant, and do not automatically include “hits” for aliases. Fingerprint background checks have a potential error rate of less than 1%,<sup>11</sup> while a name-based background check can have a potential error rate of 43%,<sup>12</sup> according to statistics developed by the Terrorist Screening Center.
2. Government regulatory agencies – not private companies – should apply uniform licensing standards to TNCs, taxicabs, and limousines, and make the decisions on whether drivers pose a public safety risk before they start driving. A uniform licensing standard and review procedure for prior driver criminal conviction histories provides for more accountability when the licensing decisions are made by the government. This is because the government is a neutral party that has more secure and thorough background information, and which provides safeguards to ensure that TNC companies are promptly removing unsafe drivers from the road.
3. Having a different set of criminal background checks for TNCs than for taxicabs and limousines is likely an unconstitutional and unfair legislative act, which is not only bad policy, but which also endangers the public and fosters unfair competition.

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<sup>10</sup> [http://www.whosdrivingyou.org/wp-content/uploads/2015/06/background\\_check\\_report.pdf](http://www.whosdrivingyou.org/wp-content/uploads/2015/06/background_check_report.pdf).

<sup>11</sup> The FBI has reported that the Advanced Fingerprint Identification Technology (“AFIT”), completed February 25, 2011, has replaced the Automated Fingerprint Identification System AFIS segment of the IAFIS. With advanced matching algorithms, the AFIT increased identification performance and machine matching accuracy from 92 percent to more than 99 percent. <http://www.fbi.gov/about-us/cjis/cjis-link/october%202014/ngi-officially-replacesiafis-yields-more-search-options-and-investigative-leads-and-increased-identification-accuracy>.

<sup>12</sup> See also, Report of the National Task Force to the U.S Attorney General (July 1999).

There are two standards for the same riding public – biometric checks by the government for taxicabs and limousines, and the name checks for TNC drivers – which may result in an adverse report being placed in personnel files unseen by any government regulator. These double standards are legally deficient and possibly unconstitutional in that there is no rational basis for having different licensing standards and processes for drivers engaged by transportation apps and dispatch systems being operated by taxicabs, limousines, and TNCs, which are all performing the same service to the public, in transporting passengers for hire, regardless of the number of hours per week that the driver is providing service or the means by which the trip is procured.<sup>13</sup>

### ***B. Insurance – 24/7 Commercial or Supplemental App On/Off Coverage***

Insurance underwriting is typically regulated on a state-wide level and is based upon risks associated with the types of licensed vehicles and the size or seating capacity. Thus, a uniform licensing standard law that is strict and provides for data sharing and accountability to help rate approval should lead to limits based upon vehicle capacity, risk, and performance, and not based simply upon the type of license alone. The same product should be offered and afforded to all who fit into certain underwriting categories, including workers' compensation coverage and supplemental policies, as long as the new model proves to make sense over time and provides realistic coverage.

What simply does not make sense is using a personal motor vehicle (“PMV”) policy, which contains commercial or for-hire exclusion provisions, to provide for-hire TNC service. A new hybrid insurance model for all can be created, and should be explored, but the current supplemental insurance for PMVs creates an unfair playing field. This lopsided insurance field allows TNCs to entice taxicab and black car vehicle owners/drivers to turn in their more expensive commercial policies to obtain cheaper and minimum coverage level personal primary auto insurance policies that are required of every vehicle owner, and have the extra insurance costs paid for by a multi-billion dollar company to subsidize driver costs; this is a model that small and mid-size taxicab and limousine businesses simply cannot afford to do. This is another scenario where massive financing provides a market share advantage through the insurance structure, which was intended to compensate injured pedestrians, drivers and passengers who are victims of crashes, and not to crush an incumbent industry economically.

### ***C. High TNC License Fees = Another Medallion System?***

Another issue that has been overlooked in the TNC debate is the high licensing fees that may serve as a barrier to entry for small businesses or the incumbent ground transportation industry, which not only hinders them from becoming TNCs, but also may create a new TNC quasi-medallion system. For example, in Virginia, there is an initial TNC license fee of \$100,000 and an initial fee of \$60,000 each year to renew.<sup>14</sup> For all the

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<sup>13</sup> <http://www.utrc2.org/sites/default/files/pubs/Background%20Check%20Report.pdf>.

<sup>14</sup> [http://mercatus.org/expert\\_commentary/expensive-licensing-can-drive-away-entrepreneurs](http://mercatus.org/expert_commentary/expensive-licensing-can-drive-away-entrepreneurs).

criticism levied by TNCs against entry limitations and the taxi medallion system, they have created a unique category wherein only well-financed companies can operate. These high licensing fees, which are upwards of a half million dollars or more in some jurisdictions, serve as a barrier to entry and create an even more uneven playing field.

Licensing fees in most jurisdictions need to bear a rational relationship to the government's expenditure of time and resources on the issuance and policing of licenses. Current TNC laws classify the license permit costs as fees, but they really are "revenue-raising" mechanisms, or taxes. In a self-regulation model, where TNCs insist on regulating themselves by the "honor system," the naked revenue-raising nature of these fees, as well as their anti-competitive impact, are blatant and obvious. There should be reasonable licensing fees associated with for-hire ground transportation driver, vehicle and business licenses, and government agencies that allow for self-regulation (or regulate through automated data review or audit) should base those reduced or reasonable fees on the work to be performed by staff, and apply these fees equally across the board, irrespective of whether the business is a taxicab, limousine or TNC. TNCs claim to do all of the regulation themselves, so in theory, the government would be doing less work to issue the permits while receiving more fee revenue.

The long-term concern is that the TNCs, which are attempting to decimate the taxicab medallions values, will, at some point - after completely controlling the market or being forced to cap or limit the number of vehicles due to environmental concerns - acquiesce to a property right-based TNC medallion system. This would be a move that would be the ultimate in hypocrisy, but would nevertheless add real legal and substantive value to these billion dollar paper tiger companies to justify moving forward with an Initial Public Offering ("IPO"); or, alternatively, to offset IPO-related criticisms of their alleged valuation once made public and scrutinized by financial research companies.

#### ***D. Data Security and Privacy Protections***

In terms of data privacy and security, standards are in place for taxicabs and limousines to ensure that the use of credit and debit cards is secure, and that passengers' personal and private data is not hacked or breached. There have been incidents of TNC data being hacked and accessed, and the same security measures that apply for data security standards (such as Payment Card Industry - or PCI compliance – standards) should be put in place for TNCs as well.<sup>15</sup> A good compliance standard model for smartphone apps and payment standards to protect passenger personal information would be the standards put into place for the NYC Taxicab Passenger Enhancement Program (T-PEP). For example, under TPEP rules<sup>16</sup>, providers must develop an information security policy that includes,

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<sup>15</sup> See *Antman v. Uber*, Case No. 3:15-cv-01175-JCS (N.D. Ca) Where Plaintiff, Sasha Antman, filed a lawsuit against Uber alleging that the company failed to secure and safeguard its drivers' personally identifiable information. The class action allege that in violation of several California state laws, unknown persons utilized an Uber "security key" to download files from Uber's computer system containing its drivers' personal information, including names, drivers licenses numbers and other personal information, and failed to provide timely and adequate notice to Plaintiff and other class members that their private information had been stolen.

<sup>16</sup> [http://www.nyc.gov/html/tlc/downloads/pdf/rule\\_book\\_current\\_chapter\\_76.pdf](http://www.nyc.gov/html/tlc/downloads/pdf/rule_book_current_chapter_76.pdf).

among other things: usage policies; security awareness training; incident response plans; restricting physical access; establishing firewalls; implementing hardware safeguards; providing encryption protocols; and instituting a password policy. PCI standards include building and maintaining a secure network; policies for protecting cardholder data; maintaining vulnerability management programs, such as antivirus programs; implementing strong access controls; regular system monitoring and maintaining an information security policy.<sup>17</sup>

### *E. Ensuring Sustainable & Shared Mobility Growth*

The bottom line is that unbridled and unprecedented growth is not good for the environment and driver economics, and could lead to market failures as well as increased traffic congestion and externalities. The reasons for the creation of the taxicab medallion system following the Great Depression were an oversupply of taxicabs, the inability for passengers to afford taxicabs, and for taxicab drivers to earn a livable wage.<sup>18</sup> The best way to level the playing field is to monitor TNC growth and restrict it under certain circumstances.

Due to the lack of either appropriate TNC standards or any commitment to enforcement at the local level, TNCs, in order to level the playing field, should be required to provide data in an anonymized format or lockbox via an approved third party administrator hired by the government. The law can create an exemption from Freedom of Information Laws (“FOIL”)<sup>19</sup> - which could otherwise be an open platform for public use of the data –and allow access exclusively to government regulators for specific investigatory or data collection purposes that are clearly defined (i.e. for fare increases; traffic or environmental studies; to investigate crimes and complaints; or to return lost property). There is a precedent where some states have made FOIL exemptions for information received from financial firms that manage the state’s pension funds, finding that such information is proprietary.<sup>20</sup>

TNC growth could be capped, or it could be monitored and managed, with incentives for vehicles and services that promote environmental sustainability, mitigate against emissions and congestion, and promote equity via underserved areas and wheelchair accessible service. Localities could tap into data and manage the number of vehicles by limiting growth of traditional point-to-point TNC service, while allowing for the addition of clean air vehicles, wheelchair accessible vehicles, and shared ride services. Road, traffic planning, and mobility management should be factored into the incentive plan, which can include dedicated airport areas and stands, and dedicated lanes used exclusively for those services that assist in overall public policy goals. A variety of different methods could be employed, including requiring that TNCs utilizing a certain

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<sup>17</sup> <http://searchcompliance.techtarget.com/definition/PCI-compliance>.

<sup>18</sup> <http://www.nytimes.com/1996/05/11/nyregion/medallion-limits-stem-from-the-30-s.html>

<sup>19</sup> FOIL laws usually have provisions for information determined to be exempt to disclosure for public policy reasons. For instance, New York State’s FOIL Law contains exemptions for certain information including proprietary information received from a commercial enterprise. NYS Public Officers Law §87(2)(d).

<sup>20</sup> <http://www.pionline.com/article/20040405/PRINT/404050728/disclosure-exemption>.

number of vehicles commit to equitable and sustainable growth measures, or be subject to a limitation on growth that would only be allowed following Environmental Impact Studies that are completed by independent and objective consulting firms authorized and hired by the government, but paid for by TNCs.

The future of urban transportation will rely, in part, on micro-transit and shared mobility. Long before autonomous and semi-autonomous or connected vehicles will be commonplace, passengers will need to share common destinations and rides, to not only help the environment, but also to address economic inequality and to plug public transit gaps. The TNC model, through services such as Lyftline and Uberpool, as well as the first such service, Via in NYC, are true ridesharing models that should be encouraged as a mitigation measure if TNCs are allowed to exist and continue to grow at their current explosive rate. Taxicabs and for-hire vehicles can be subsidized to provide this type of service at airports and nightlife hubs, where there are peak demand opportunities that would encourage revelers to leave their cars at home and avoid driving while intoxicated.

#### ***F. Ensuring Equity - Affordable Rides and Fair Competition for All Passengers***

A primary concern raised over and over again is the impact of so-called “surge” or demand pricing. There are serious issues as to price transparency for consumers, as well as the pressure on drivers to work during peak demand times that may include rush hour in dense urban environments and central business districts. To level the playing field, there are two possible solutions: (1) eliminate double and triple demand pricing for TNCs; or (2) allow taxicabs to engage in demand pricing on a similar scale. If “surge pricing” is allowed, it should be limited in some way during certain hours and locations throughout the community (i.e. central business districts during rush hour; or prohibited during emergencies like storms, blizzards or other catastrophes). Another topic for state or local regulation and enforcement would be how and when the surge is in place to ensure the system is not being manipulated or gamed by TNCs or their drivers. Further, TNCs should supply their data to the government so regulators can ensure that underserved communities are not surge priced, or that a certain number of vehicles can be dedicated to operate in underserved areas.

#### ***G. Wheelchair Accessibility & Public Paratransit Reforms***

One area where TNC laws fall short is an equal obligation, shared with taxicabs and for-hire vehicles, to provide equivalent service to passengers with disabilities.<sup>21</sup> The United States federal government enacted laws such as Section 504 of the Rehabilitation

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<sup>21</sup> For example, all of New York City’s for-hire vehicle bases, including black car and luxury limousine bases, must have the capability to dispatch a wheelchair-accessible vehicle. See, [http://www.nyc.gov/html/tlc/html/faq/faq\\_access\\_veh.shtml](http://www.nyc.gov/html/tlc/html/faq/faq_access_veh.shtml).

Act of 1973,<sup>22</sup> and the Americans With Disabilities Act (“ADA”), which prohibit discrimination on the basis of disability in, among other areas, transportation, and which require government-sponsored/subsidized transportation to provide accessible transportation for all U.S. residents, including for individuals with disabilities. The ADA specifically addresses the issue of private entities that provide taxicab service. In this case, a passenger cannot be discriminated against due to his or her disability and must be provided this service at the same cost and without any refusal by the driver to stow mobility devices.<sup>23</sup> This is also true for private entities that provide other transportation services, such as limousine companies and car services.<sup>24</sup>

Progress in transportation accessibility that has been exhibited at both the federal and state level for taxicabs<sup>25</sup> and the for-hire vehicle industry<sup>26</sup> has slowed due to the proliferation of TNCs. Further, an inherent problem with the TNC business model, as per the issue of providing accessible transportation for people with disabilities (especially those who use motorized wheelchairs or are otherwise unable to be separated from their wheelchair) rests with the portion involving “drivers who use their own vehicles.” Unfortunately, there are little to no TNC drivers that operate a wheelchair-accessible vehicle, and even those who do may not be properly trained to deal with the needs of passengers with disabilities, including, but not limited to: proper safety precautions with loading, unloading and securing of the passenger; maintenance of the equipment within the vehicle; and disability etiquette. Indeed, in a post on its own website entitled “Greater accessibility for riders and drivers,” Uber, while making the general claim that “all drivers on the Uber platform are able to accommodate folding wheelchairs,” makes no further promise regarding those who use motorized wheelchairs or who otherwise cannot be removed from the wheelchair itself.<sup>27</sup>

All TNCs should maintain a ratio of wheelchair accessible vehicles to the percentage of the population, in accordance with demand. Public paratransit subsidies, which are being uniformly wasted on multi-passenger vans that operate on non-fixed routes without efficient or maximized usage,<sup>28</sup> could be directed to wheelchair accessible taxicabs, liveries and/or black cars. This is already being done in various jurisdictions such as New York City, as well as through a private contractor brokerage model, through which for-hire vehicle and taxicab companies and public transit agencies agree to deliver

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<sup>22</sup> Section 504, Rehabilitation Act of 1973. United States Department of Labor. See, <http://www.dol.gov/oasam/regs/statutes/sec504.htm>.

<sup>23</sup> *Id.*

<sup>24</sup> 42 U.S.C. §12184: US Code – Section 12184: Prohibition of discrimination in specified public transportation services provided by private entities. <http://codes.lp.findlaw.com/uscode/42/126/III/12184>.

<sup>25</sup> See, e.g., New York City’s commitment to providing a 50% wheelchair-accessible taxicab fleet. *Notice of Promulgation of Rules*. New York City Taxi and Limousine Commission. [http://www.nyc.gov/html/tlc/downloads/pdf/newly\\_passed\\_rule\\_accessibility\\_and\\_surcharge.pdf](http://www.nyc.gov/html/tlc/downloads/pdf/newly_passed_rule_accessibility_and_surcharge.pdf).

<sup>26</sup> See, e.g., New York City’s commitment to providing a 50% wheelchair-accessible fleet of green outer borough livery vehicles that can be utilized for street hails or for dispatched pre-arranged trips. <http://www.nydailynews.com/new-york/nyc-taxis-accessible-tlc-plan-article-1.1817161>.

<sup>27</sup> <https://newsroom.uber.com/greater-accessibility/>.

<sup>28</sup> <http://nuridetransportationgroup.com/wp-content/uploads/2015/04/Accessible-Transportation-Reform-Study-Daus-Mischel-7.30.14-2.pdf>.

subsidized paratransit services under the ADA.<sup>29</sup> Allowing this model to be utilized only for taxicabs and for-hire vehicles would be a way to level the playing field with TNCs, and TNCs should be compelled to purchase vehicles that are operated through taxicab and for-hire vehicle brokerage companies as subcontractors. This would provide more affordable point-to-point service for all via on-demand taxicabs or pre-arranged service, at less than the cost on the open market, and serve as a form of reparations for the lack of accessible service for the last several decades.

In order to implement such a comprehensive plan, many ideas and options are available, but the essential ingredients are to consolidate funding and implementation resources for one established hotline or app for states and/or localities to deliver on-demand taxi, sedan and TNC services. This could be accomplished through the establishment of a Wheelchair Accessible Vehicle Fund via a third party administrator that would manage an accessible “lockbox” fund to consolidate all public and private funding and policymaking. Standards could be developed for utilizing such monies for brokerage contracts, dispatch centers, and/or app-based dispatching through public transit authorities and other localities, with specific compliance and allocation standards.<sup>30</sup>

#### ***H. Universal Taxicab Apps***

One of the most promising new technologies and regulatory initiatives for increasing the competitiveness of the taxi industry to more fairly compete with TNCs is the development of new mobile e-hail applications for all taxis. While the definition of a “universal taxi app” is an evolving concept, and it is not yet capable of a precise ‘term-of-art’ definition, reference to a “universal app” could be defined as: *‘a public and/or private sector technology solution to allow for multiple or all taxicabs (and possibly other for-hire vehicle sub-modes or services), to be placed on one or more smartphone applications (for one or more government branded or private apps), to consolidate dispatch functions to allow for a more efficient delivery of the nearest taxicab or for-hire vehicle to consumers, with the goal of encouraging competition, consumer choice, safety and to allow for the*

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<sup>29</sup> In New York City for example, government-subsidized paratransit costs in excess of \$60 per passenger. As a solution, point-to-point transportation via taxicab or sedan can be delivered for around \$15 per passenger, resulting in a saving in just one year of approximately \$281,000,000. If applied throughout the United States, taxpayer savings would be astronomical, as a 2013 Paratransit Survey conducted by Metro Magazine reported that 24.9 million riders were provided trips in 7,024 vehicles nationwide. See Daus, Matthew W. and Mischel, Jason R., Accessible ***Transportation Reform: Transforming The Public Paratransit And Private For-Hire Ground Transportation Systems***. The Transportation Lawyer (Volume 17, No. 2, October 2015). [http://www.beneschlaw.com/Files/Publication/0f84dd11-9c46-4ccc-b1e9-5fed7d22db70/Presentation/PublicationAttachment/603fac98-36e9-4b0f-a446-6a63f40d74cf/TTL%20October%202015\\_Web.pdf](http://www.beneschlaw.com/Files/Publication/0f84dd11-9c46-4ccc-b1e9-5fed7d22db70/Presentation/PublicationAttachment/603fac98-36e9-4b0f-a446-6a63f40d74cf/TTL%20October%202015_Web.pdf).

<sup>30</sup> In 2015, the International Association of Transportation Regulators published its ***Model Rules for Accessible Taxicabs and For-Hire Vehicles***, including sections for Vehicle Accessibility, Driver Training, Accessible Dispatch Programs, and App Technology and Financing Mechanism which proposes the implementation of such a lockbox to achieve the goals stated herein. [http://www.windelsmarx.com/resources/documents/IATR%20Accessibility%20Model%20Regs%2012.11.15%20\(11157211\).pdf](http://www.windelsmarx.com/resources/documents/IATR%20Accessibility%20Model%20Regs%2012.11.15%20(11157211).pdf).

*collection, use and analysis of data, development of open data and cross-dispatching integrated platforms, and credit/debit card processing, with the overriding goal of leveling the playing field as an alternative to TNC market dominance.'*

In short, an easy-to-use universal e-hail application gives customers in a particular jurisdiction access to, and the ability to electronically hail the entire fleet of available taxis through a single smartphone or mobile device application, while allowing local taxi industries to more effectively compete with the user-responsiveness of increasingly popular taxi alternatives like TNCs. The success of any transportation service is ultimately dependent on how quickly, safely, affordably, and reliably a customer can get to their destination in comparison to other services or transportation modes. For TNCs and taxis, speed and reliability is dependent on the density of cars on the road. A service with 1,000 cars available in a certain area will respond to a dispatch request faster, on average, than a service with 500 cars. Ultimately, the goal of the universal app is to require traditional taxicab companies, and sometimes TNCs, to jointly use an efficient centralized (or "universal") electronic dispatch system adapted to their operations, in order to maintain high revenues for taxi drivers, and fast and reliable service for consumers.

There are currently several public and private sector projects underway in this area, and a recently completed partial *pro bono* report which I authored entitled: ***Study for a Centralized Application for Taxis in Montréal*** sets forth and analyzes the various approaches, by jurisdiction, in which regulators have attempted to implement (either partially, or completely) the respective universal taxi application model, categorized as follows:

1. Multiple Government Sanctioned Applications: Local government approves one or more privately owned and managed e-hail applications, of which all taxis would be required to use at least one of the approved applications (e.g., Chicago, Illinois);
2. Single Government Branded Applications: All taxi drivers are required to download and use the single e-hail application branded by the local government;
3. Single Government Branded Application with Competing Applications: All taxi drivers are required to download and use the single e-hail application branded by the local government, while allowing drivers the option to simultaneously utilize other private apps (e.g., Washington, D.C.);
4. Open Shared Platform (with or without Government Application): Local government approves multiple private sector taxi apps, as long as each provide an open data feed so that all apps are able to communicate on an open platform to locate and dispatch all licensed taxis, regardless of which taxi company a particular vehicle is affiliated with, or which app the driver or customer used (referred to as cross-dispatching). The government also has an option to develop or brand an app that is able to communicate on the open platform (e.g., Montgomery County, Maryland);



5. Government Regulatory Dashboard with Competing Applications: Uses a government branded platform to ensure that every taxi has integrated with e-hail capable technology and that all approved apps integrate with the platform, but does not require cross-dispatching (e.g., San Francisco, California); and
6. Private Sector Solutions: Incentivizes the private sector to create universal solutions such as all taxis using one private app (if the industry is small, or collaborates), or one multi-city app network (such as the International Road Transport Union – IRU of Europe’s - Global Taxi Network), or an aggregator service (including multiple for-hire ground transport sub-modes) (e.g., Vancouver, British Columbia).

Each individual jurisdiction has its own unique characteristics, evolutionary stage in terms of technology, and various political, socio-economic, legal and other dynamics that do not call for a “one-size-fits-all” approach to the implementation of a “universal taxi application” solution. The various regulatory agencies and private entities which have begun engaging in cutting-edge regulatory innovation, and exploring new ideas, should continue to be encouraged, tracked and monitored. At this nascent stage, it is too early to identify best or accepted regulatory practices that should be ubiquitously applied, but this solution can help “level the playing field” and further promote tourism and the taxi brand for the host city.

Moreover, technologies such as a universal taxicab e-hail app could potentially be used to carve out retail niches. For example, taxicabs using a universal e-hail application in a particular jurisdiction could be focused to provide service in underserved portions of the market, while TNCs and surge pricing would dominate peak hours and high-end customers. This could lead to the refocusing of taxicabs to serve specific niche areas in addition to the broader general consumer market, and potentially lead to the creation of new consumer bases.

### ***I. Self-Regulation, Government Regulation or a Hybrid-Tech Based Model?***

The essence of TNC laws revolves around a “we can do it faster and better than government” attitude, which, in terms of efficiency, may be correct given their resources. However, there is an ulterior motive, as no app-based dispatch model ever works without having an adequate supply of drivers. It is simply too costly and difficult to entice and subsidize the transfer of professionally licensed black car and taxicab drivers to TNCs (although this was done successfully at a very high cost by Uber in New York City). TNCs claim that college students and part-time workers would be discouraged by the process of purchasing insurance, completing physical paperwork, leaving their homes or computers and undertaking a simple five minute fingerprint check. While there is some truth to the convenience factor, the motive of TNCs is to attract more drivers by expanding the pie, making it easier to recruit drivers while managing and assuming the risks of some potentially unsafe or inexperienced drivers who slip through the cracks and cause harm to others. The self-regulation model allows the TNCs to control the information pertaining to public incidents such as sexual assaults and crashes, and discourages further media

coverage as such information – which is of public interest - has been labeled as “proprietary,” and neither within the government’s control, nor subject to public disclosure laws that keep such stories and criticism alive. The self-regulation model is an effort to control information, make licensing more efficient, and to facilitate a less costly market takeover.

Objectively speaking, it is possible to engage in modified self-regulation of transportation companies, as is done with trucking and limousine companies engaged in interstate commerce by the U.S. Department of Transportation’s Federal Motor Carrier Safety Administration (“FMCSA”). The FMCSA requires that interstate truckers and drivers obtain medical exams<sup>31</sup> and not work more than a certain number of hours during a time period for public safety reasons.<sup>32</sup> FMCSA-licensed carriers must collect information ensured by Federal auditor compliance.<sup>33</sup> As such, the key ingredients for the success of a self-regulation system are auditing resources, and significant penalties and fines to serve as an appropriate and effective deterrent. Without unbridled access to TNC data to audit real-time performance and compliance at all levels, including the ability to impose significant fines, this model is doomed to fail. In general, governments, and not private parties, should be the ones who regulate; but if TNCs are allowed to engage in self-regulation due to the lack of government resources, they should be required to pay for the enforcement resources and turn over their data to facilitate auditing and compliance.

TNCs have lived up to their self-proclaimed identity as disrupters. They have often done so by operating illegally in jurisdictions and then arguing for new and less stringent laws than those regulating other for-hire vehicle services. When states have adopted these new, less stringent regulations, they have put the incumbent industry at a disadvantage, even though they are providing the same service. One positive development to arise from this disruption is that many jurisdictions may now re-evaluate all of their for-hire vehicle laws and overall transportation systems, like is currently being done by Seattle County and King County, in Washington State. When they are able to implement laws that require TNCs to meet more stringent standards to protect public safety, and maybe deregulate in some areas, such as setting fares, to allow the incumbent industry to better compete, we will reach that happy middle ground where all can play on a truly level playing field.

### **III. Conclusion & Recommended Solutions or Next Steps**

As this extensive sidebar comment has revealed, urban and transportation planners have their work cut out for them, but planning for the future must be done swiftly and with all parties at the table, with “out-of-the-box” thinking. The federal role should not be to regulate or force specific solutions, but to appropriate funding for conducting state-wide and regional planning studies to integrate all modes and technologies, and to help solve longstanding regional rivalries and jurisdictional disputes for the common good. The policy emphasis should be on promoting shared rides and micro-transit, zero emissions or

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<sup>31</sup> <https://www.fmcsa.dot.gov/faq/Medical-Requirements>.

<sup>32</sup> <https://www.fmcsa.dot.gov/regulations/hours-of-service>.

<sup>33</sup> <https://www.fmcsa.dot.gov/international-programs/certification-safety-auditors-safety-investigators-and-drivervehicle>.

clean air vehicles, wheelchair accessibility and affordable fares, with all modes working together to move people in a sustainable and efficient manner.

The TNCs must become part of the mainstream and must be brought down to earth, and the playing field must be leveled not with “Band-Aid” approaches like allowing older cars for taxicabs, or getting rid of security cameras for drivers, or other small insignificant and ineffectual deregulation attempts for the incumbent industry. Instead, certain safety and accountability standards must be raised for TNCs on background checks and insurance, and these standards must apply to all. Universal apps and many smaller measures could help, but the most significant impact would be: (1) to institute growth limitations coupled with incentives that promote clean air, accessibility and service to underserved areas; (2) to equally apply, limit and/or eliminate surge pricing; and (3) to reform public paratransit by redirecting wasted multi-passenger van subsidies to wheelchair accessible taxicabs and for-hire vehicles with uniform dispatch systems or apps.

In terms of planning these changes, transit planning agencies, airports, business improvement districts, incumbent for-hire and taxi industries, TNCs and others must all be at the table working together, with government taking the lead. Self-regulation should be limited, and regulation and enforcement should be at the local level, especially economic and fare or curb space management. State regulations for uniform safety and licensing standards could work, but that must be coupled with local enforcement and appropriate penalties for non-compliance. There are solutions here for our transportation future, but our moment of opportunity is passing us by. We just need to think carefully, plan quickly and act quickly, with government taking the lead and working closely with the private and public transit and technology industries.