Transportation Network Companies

2016 Report

Virginia Department of Motor Vehicles
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Executive Summary

This report describes a number of outcomes and developments that followed the 2015 legislation authorizing transportation network companies (TNCs) such as Uber and Lyft to provide passenger transportation in Virginia. Specifically, the report presents information regarding the following:

- The number of vehicles registered for TNC use in Virginia. As of the end of Q1 FY17, the Department of Motor Vehicles (DMV) had registered 144,461 vehicles to provide TNC services. Just under half of these vehicles (48%) had Virginia license plates.

- Complaints received about TNCs and enforcement actions taken. As of the end of Q1 FY17, DMV had received 17 complaints from the public regarding TNC services, as compared to 25 complaints for all other types of carriers. Most complaints concerned vehicles not displaying decals and/or trade dress as required by law. DMV's enforcement actions thus far have emphasized proactive outreach to educate TNCs and their drivers, and warnings to drivers found in violation of the law.

- Review of TNCs' compliance with the law. In 2016 DMV undertook a review of TNCs' compliance with several key requirements in the law. The review suggested that TNCs generally complied with most of those requirements, but there were some areas where the TNCs needed to take further action to ensure consistent compliance. These further actions included ensuring that all vehicles have a valid Virginia safety inspection, and that all TNC vehicle records include vehicle registration information.

- TNC services at airports. TNCs are currently operating at all major public airports in Virginia. Airport authorities have been active partners with DMV in enforcing both their own policies and the provisions of the TNC statutes. To DMV's knowledge there currently is no prohibition against TNCs providing transportation to or from any public airport in Virginia.

- Recent developments in TNC insurance. At the time the 2015 legislation was enacted, all TNC drivers were insured under the TNCs' fleet coverage; however, the TNC insurance laws were written so as to accommodate other options that might emerge in the insurance marketplace, such as personal auto policies that included coverage for some or all TNC operations. Although a number of insurers currently have such products pending, none are available at this time to consumers in Virginia.

- TNC Fees. DMV currently charges TNCs fees of $100,000 for an original certificate and $60,000 for annual renewal. These fees, along with a fee for each driver transcript requested by a TNC as part of the required background screening for drivers, generated $609,892 in FY16, less than half as much as DMV's startup and regular operating expenses over the same period ($1,267,390). Nevertheless, the agency expects to recover its ongoing expenses in FY17, provided the number of certificated TNCs and the number of TNC partners remain constant. Virginia's fees are substantially higher than those of most other states, and they may be creating a barrier to entry for competitors. The report therefore includes draft legislation that would give all TNCs two fee options, with the freedom to choose either one when applying for an original or renewal of a certificate: (1) pay the certificate fees of $100,000 and $60,000 that are already in statute; or (2) pay a $20 surcharge per record when purchasing a driver transcript, on top of the current transcript fee ($8).

- Use of rental vehicles. DMV gives rental companies the option of registering either all or part of their Virginia-plated fleet for TNC use. These vehicles are issued a special, orange-and-black license plate decal and a vehicle registration card that reflects that the vehicle is registered for TNC use.

- TNCs' impact on highway safety. Data from 2014 through 2016 show a decline in alcohol-related crashes and fatalities in the Commonwealth, as well as a decline in the number of ignition interlock devices installed on vehicles. It is unclear, however, whether these declines are the result of TNCs beginning operations in Virginia or of education and enforcement efforts, or of both. A survey conducted between June and October 2016 by the Virginia Tech Center for Survey Research on behalf of DMV's Highway Safety Office indicates strong public awareness of TNCs as an option for avoiding the hazards involved in drinking and driving. The survey also indicated that a good number of people are exercising that option.

- Impact on access to transportation by the mobility challenged. Thus far, DMV has not received any complaints about access to service by the disabled, but a representative of the Virginia Centers for Independent Living has reported mixed feedback from the disabled, with blind, deaf, and autistic individuals generally enthusiastic about TNCs, while the mobility impaired have been less impressed. The concerns of the mobility challenged include the small number of wheelchair accessible vehicles available, confusion when a TNC app directs riders to a service that does have appropriately equipped vehicles, and a perception that drivers' response time is slower than it is for users without mobility impairments.

- Changes in the marketplace. Recent innovations in for-hire passenger transportation include the growth of limited-purpose TNCs (such as services providing child transportation), TNC ride reservation services offered by third parties, and transportation of property in personal vehicles, arranged online or with an app. In addition, the growth of TNCs has affected other types of carriers. TNCs may be contributing to the decline over the past two years in the number of taxi permits DMV has issued. TNC operations also have suggested possibilities for further reform, such as allowing other types of passenger carriers to use TNC-type window decals. These and other developments may be appropriate matters for further study, and possibly for legislative action.

The report concludes with three specific recommendations: (1) a change in the fees TNCs pay to operate in Virginia; (2) a continuing study of changes in the marketplace and other issues related to passenger transportation services; and (3) an end to DMV's publication of quarterly implementation reports.

1. Introduction

In 2015 the General Assembly enacted legislation authorizing the Department of Motor Vehicles (DMV) to license transportation network companies (TNCs), such as Uber and Lyft, to offer their services in Virginia.[1] The legislation also called upon DMV to submit a report to the chairs of the House and Senate transportation committees by December 1, 2016, which would include:

> enforcement activity undertaken regarding the provisions of this act, insurance policies available to TNC partners that may require changes to the provisions of subdivisions E 1 and 2 of § 46.2-2099.49 as created by this act, the fees set forth in § 46.2-2011.5 of the Code of Virginia as amended by this act, and in § 46.2-2099.50 as created by this act to determine whether those fees adequately cover the Department's costs of administering the additional responsibilities imposed on the Department under this act.

What follows is that report.

Along with the information called for in the legislation, this report covers a number of other items that DMV believes will be of interest to the legislature and to others reading this report. These items include:

- data concerning the number of vehicles registered to provide TNC services in Virginia;
- the results of DMV's compliance review;
- issues regarding TNCs providing transportation to and from public airports;
- drivers' (TNC partners') use of rental vehicles to provide transportation services;
- the impact TNCs have had on highway safety;
- the impact TNCs have had on access to transportation by the mobility challenged; and
- a review of some of the changes that have occurred in the marketplace for passenger transportation since 2015.

Appendix C to this report presents a table that summarizes key provisions in other states' TNC laws: insurance requirements, standards for background screening of drivers, whether the state requires vehicles to be registered for TNC use, and the fees imposed on TNCs. In general, other jurisdictions' rules regarding insurance and background screening have been in line with Virginia's. The Commonwealth differs from other states, however, in requiring TNC partner vehicles to be registered as such—though some jurisdictions have other vehicle marking, permitting, or special registration requirements, while others require registration or licensure of TNC partners. Virginia is also an outlier in the fees it charges TNCs: $100,000 for the initial certificate authorizing operations, $60,000 for annual renewal of the certificate. Only Colorado has fees that are this high; in most other states the annual fee is between $1,000 and $15,000, and in many jurisdictions there is no fee at all, at least at the state level.

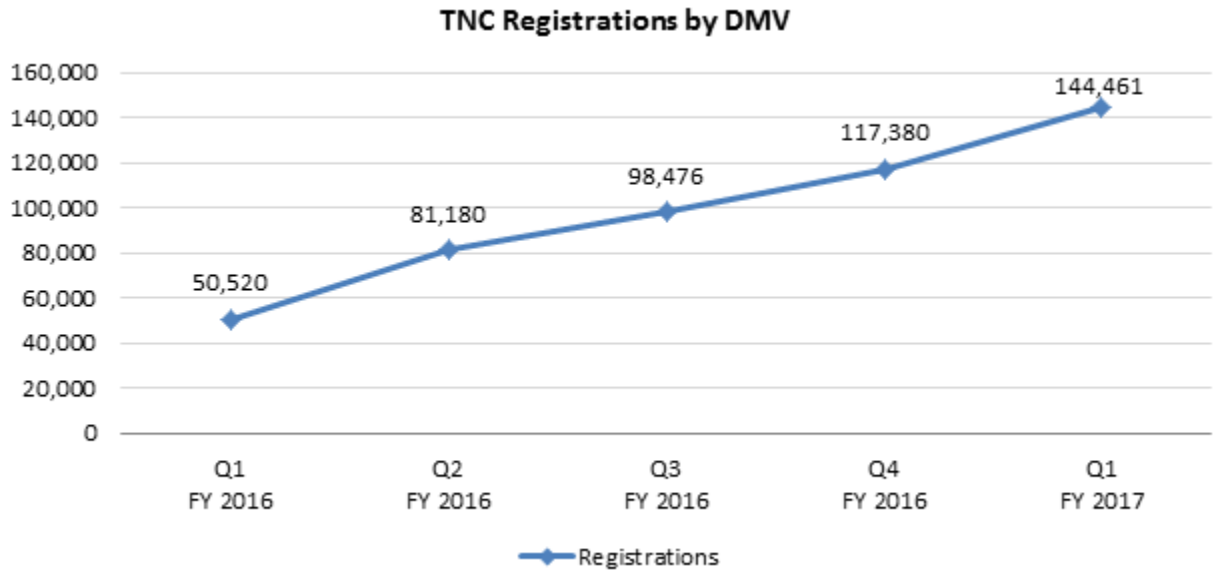
Other appendices offer draft legislation to implement the recommendations included in the report, and comments and submissions that DMV has received from stakeholders.

[1] 2015 Va. Acts chs. 2, 3.

2. TNC Partner Vehicle Registrations

Vehicles being used for TNC purposes (TNC partner vehicles) must be registered with DMV for such use and must display a special decal issued by the agency that indicates they have been properly registered. For vehicles with Virginia license plates, this decal replaces the standard year decal on the plate and features a distinctive color scheme of gold lettering on a black background. For out-of-state vehicles being registered for TNC use in Virginia, DMV issues a window decal. In addition to being registered for TNC use, all TNC partner vehicles are required to pass a Virginia vehicle safety inspection. TNC partners are not required to register as drivers, but are subject to other requirements that include criminal and driving record checks. A full list of the requirements that TNC partners and their vehicles must meet is available at www.dmv.virginia.gov/ commercial/#tnc/.

DMV began registering TNC partner vehicles in June 2015. As the chart below indicates, the number of active registrations has grown steadily since then, reaching 144,461 vehicles as of September 30, 2016. The number of out-of-state TNC partner vehicles is slightly greater than the number plated in Virginia: 75,067 (52%) versus 69,394 (48%). Another interesting development (discussed more fully in section 8 of this report) is that, beginning in June 2016, rental companies were given the option to register vehicles in their fleet for TNC use. Thus far two rental companies—Maven Drive, LLC (GM's "car sharing" subsidiary) and EAN Holdings, LLC (Enterprise Rent-A-Car)—have registered more than 7,000 vehicles in their fleets as TNC partner vehicles.



TNC partners (as well as other vehicle owners, TNCs, and rental companies) have several options for registering their vehicles, including in person at a DMV Customer Service Center, online at DMV's web site, or via a special web portal that DMV has arranged for bulk processing by the TNCs. However, the transactions may not be completed at DMV Select locations.

3. Complaints Received and Enforcement Actions Taken

General Results[2]

From July 2015 through September 2016 DMV received a total of 17 public complaints regarding TNC services, as compared to 25 complaints for all other types of for-hire passenger carriers. Nine of these complaints were in regard to a vehicle failing to display either its registration decal or its trade dress (*i.e.,* the signage or other marker provided by the TNC that identifies the vehicle as affiliated with that TNC). Other complaints concerned the fares charged by TNCs, the condition of TNC partner vehicles, off-app activity by TNC partners, and discrimination against passengers based on departure point or destination. DMV investigated all these complaints. The agency determined that three were unfounded and responded to the others by issuing a compliance notice, sending an education letter, or taking other appropriate action.

DMV's enforcement efforts thus far have emphasized outreach: from enactment of the 2015 legislation to the present, the agency has continued to provide information about Virginia's TNC laws to TNCs, TNC partners, law enforcement, judges, Commonwealth's Attorneys, and the general public. In cases involving noncompliance, DMV Special Agents have assisted local law enforcement agencies throughout Virginia, and have provided those agencies with training and instructional materials.

Through September 2016, DMV law enforcement examined 1,685 TNC partners and found that 416 of them (28.9%) had at least one violation. In comparison, over the same period 765 drivers for other types of passenger carriers were examined, and nearly 54% of them had at least one violation. For both the TNC partners and the other drivers, most received a warning from the officer or had their case referred to DMV Motor Carrier Services (MCS) for further review; only about 1% of TNC partners, and about 2% of drivers for other carriers, were issued a summons.

MCS reviews cases to determine appropriate follow-up action, which may include the assessment of civil penalties and suspension or revocation of a carrier's operating authority. Through September 2016, 50 cases involving TNC partners were forwarded to MCS for review (there were no cases involving TNCs themselves). MCS had completed its review of 48 of those cases by the end of the period. In none of the cases were any civil penalties assessed. In comparison, over the same period MCS completed its review of 168 cases involving other passenger carriers (out of 191 cases referred); in 19 of these cases DMV assessed civil penalties, and in three cases the agency revoked the carrier's operating authority.

Decals

The decals that DMV issues for TNC partner vehicles have generated a lot of feedback both from stakeholders generally and from law enforcement in particular. While these decals help consumers determine whether a vehicle has been properly registered, they also give law enforcement a means of identifying vehicles that are providing passenger transportation. Stakeholders have expressed a range of opinions concerning the value of registering TNC partner vehicles and issuing them decals. Some representatives of the TNCs have indicated that they believe the registration process and decals should be eliminated as an unnecessary burden on the industry, since the trade dress requirement already provides the public and law enforcement with a visible marker that a vehicle may be providing TNC services. In

[2] Much of this section summarizes highlights from DMV's quarterly implementation report for the first quarter of FY 2017, which is reprinted in its entirety as Appendix D to this report. The quarterly report includes detailed data regarding complaints received and enforcement actions taken by DMV, State Police, local law enforcement, and airport authorities.

contrast, at least one representative of the limousine industry has proposed that DMV *expand* production of the type of window decals currently issued out-of-state TNC partner vehicles, and allow other types of passenger carriers to display such decals on out-of-state vehicles when operating intrastate in Virginia (currently carriers in those circumstances must obtain and display a set of Virginia license plates—*i.e.*, they must be "dual plated").[3]

At a stakeholder meeting that DMV convened in August 2016, a representative from the Capital Region Airport Authority indicated that it would help law enforcement if the ID marker for non-Virginia vehicles could be placed on the front windshield, although the representative acknowledged that State Police generally oppose the display of decals on the windshield. State Police responded that a clear windshield is critical to safety. All stakeholders, and DMV, agreed that at a minimum there should be consistency in the placement of decals. Representatives of the TNCs indicated that they did strive for consistency, and that they believed the rear passenger window was the best location. Following the August stakeholder meeting, DMV surveyed stakeholders representing localities, Commissioners of the Revenue, and state, local, and airport law enforcement as to whether they thought the vehicle registration and decal requirements were important. The response from law enforcement, Commissioners of the Revenue, and airport officials was uniformly supportive of keeping the decals. Accordingly, DMV does not propose any change to the current statutory requirements regarding registration and decaling of TNC partner vehicles. The agency will, however, work closely with the TNCs to ensure that window decals are displayed in a consistent manner.

[3] This proposal is discussed at greater length in section 11 of this report.

4. Review of TNCs' Compliance with Current Law

From the end of June 2016 through October, DMV undertook a review of Lyft's and Uber's compliance with the statutory requirements applicable to TNCs. This review involved representative samples of TNC partner and vehicle records from Rasier (Uber's subsidiary providing TNC services in Virginia) and Lyft. Although DMV did not discover anything particularly alarming in this review, the results did highlight a few opportunities for both TNCs to improve their processes, particularly those for documenting vehicle registrations and state safety inspections. DMV provided each TNC with the results of its compliance review and with further actions the companies needed to take. As of the date of this report, the TNCs and the agency are continuing to discuss appropriate steps to take to ensure consistent compliance.

5. TNC Services at Airports

Operating contracts between passenger carriers and airport authorities establish the terms under which a carrier may pick up and drop off passengers at a public airport. Since enactment of the TNC legislation in 2015, airports in the Commonwealth have proposed and adopted ground transportation policies that include TNC services. As of the publication of this report, DMV is aware of TNC operations at the following Virginia airports: Washington Dulles International Airport, Ronald Reagan Washington National Airport, Richmond International Airport, Norfolk International Airport and Newport News/Williamsburg International Airport, and Charlottesville/Albemarle Airport. All these airports have been active partners with DMV, enforcing both airport policy and the provisions of the TNC statute.

In June 2015, the Metropolitan Washington Airports Authority (MWAA), which operates both Reagan National and Dulles International airports, held public hearings on its revised ground transportation policy. The meetings were attended by various stakeholders, including taxi and limousine drivers, TNC partners, and members of the public. The policy MWAA adopted after these hearings provided a framework around which TNCs can operate legally at both properties. The policy requires a $5,000 application fee, a $4 per vehicle access fee, and additional charges for longer dwelling times on airport property.[4]

In late 2015 contract negotiations between Uber and Norfolk International Airport reached an impasse concerning fees, resulting in Uber's drivers being banned from the airport.[5] The ban proved brief, however. In February 2016, Uber and Norfolk International entered an agreement under which the TNC would pay $2 for each ride to or from the airport. The airport also agreed to allow Lyft to provide services under the same terms (Lyft had previously agreed to a deal under which it would pay the airport $2 per ride, plus a $10,000 security deposit and a $5,000 annual fee). The TNCs' fee structure differs from the flat fee of $15 per month paid by taxicabs.[6]

To DMV's knowledge there currently is no prohibition against TNCs providing transportation to or from any public airport in Virginia.

[4] www.mwaa.com/sites/default/files/mwaa_regulations_posted_11-2015.pdf.

[5] WAVY, "Uber Banned from ORF" (www.wavy.com/2015/11/20/uber-banned-from-orf/).

[6] Jordan Pascale, "Uber and Norfolk Airport Ink Deal," *The Virginian-Pilot* (Feb. 10, 2016) (www.pilotonline.com/news/local/transportation/uber-and-norfolk-airport-ink-deal/article_0e42779a-0864-5324-9ce5-27977947b0fa.html).

6. Recent Developments in TNC Insurance

Section 46.2-2099.52 of the *Code of Virginia* provides that TNC partners must have insurance in the following amounts:

- liability limits of at least $50,000 per person and $100,000 per incident for death and bodily injury and at least $25,000 for property damage, applicable both (i) "from the moment a TNC partner logs on to a transportation network company's associated digital platform until the TNC partner accepts a request to transport a passenger" (Period 1) and (ii) "from the moment the TNC partner completes the transaction on the digital platform or the prearranged ride is complete, whichever is later, until the TNC partner either accepts another prearranged ride request on the digital platform or logs off the digital platform" (Period 3); and

- a liability limit of at least $1 million that applies "from the moment a TNC partner accepts a prearranged ride request on a transportation network company's digital platform until the TNC partner completes the transaction on the digital platform or until the prearranged ride is complete, whichever is later" (Period 2).

The statute contemplates that this insurance will be provided through either a policy obtained by the TNC (fleet coverage), or a policy obtained by the TNC partner (either an individual commercial policy or a personal policy that includes coverage for passenger transportation arranged through a TNC), or some combination of policies obtained by the TNC and the TNC partner. This flexibility was intended to accommodate the introduction of new insurance products in Virginia, without the need for further legislation. To the best of DMV's knowledge, at the time Virginia's law was enacted all TNC insurance was being provided through fleet coverage obtained by the TNC. This made sense, as the alternative of a full-time individual commercial liability policy would have represented a significant expense for TNC partners wanting to work only on a part-time or temporary basis and thus would have constrained the size of the TNCs' potential labor force. Also, the other alternative—a personal auto policy (PAP) providing coverage for some or all TNC operations—did not exist at the time Virginia's law was enacted. As of this writing, such a policy still is not available in Virginia, but it is certainly something that the insurance industry is preparing to offer both here and elsewhere in the United States.

In order for a new type of policy to be offered in a state, it first must meet with approval from the state's insurance regulators. In Virginia, the State Corporation Commission's (SCC's) Bureau of Insurance administers this approval process, and is empowered to adopt standard forms for PAPs,[7] which are developed by Insurance Services Office, Inc. (ISO), and filed nationally for state adoption. Under the standard form currently authorized in Virginia (and in nearly all other states), an insurer does not provide coverage for "liability arising out of the ownership or operation of a vehicle while it is being used as a public or livery conveyance," which includes the commercial activities of a TNC partner.[8] However, in 2015, ISO developed three new PAP endorsements addressing TNC operations:

- **PP 23 40 10 15 – Public or Livery Conveyance Exclusion Endorsement.** This endorsement clarifies that TNC operations fall within the scope of the livery exclusion. It specifies that the exclusion "includes but is not limited to any period of time that an 'insured' is logged into a

[7] Va. Code § 38.2-2218.

[8] Insurance Information Institute, "Ride-Sharing and Insurance: Q&A; Everything You Need to Know about Coverage for TNCs" (www.iii.org/article/ride-sharing-and-insurance-qa).

'transportation network platform' as a driver, whether or not a passenger is 'occupying' the vehicle."

- **PP 23 41 10 15 – Transportation Network Driver Coverage (No Passenger).** This premium-bearing endorsement extends coverage to when a driver logs into a TNC platform, until a passenger enters the vehicle.

- **PP 23 45 10 15 – Limited Transportation Network Driver Coverage (No Passenger).** This premium-bearing endorsement extends coverage to when a driver logs into a TNC platform, until the driver accepts a request. It does not cover the period when the driver is on the way to the passenger.

Note that none of the new forms extends coverage under a PAP to include the period when a passenger is in the TNC partner vehicle. As of this writing, the SCC has not adopted these new TNC-specific endorsements.

While ISO was developing these new standard forms, several insurance companies were creating and filing with state regulators new endorsements to their PAPs covering part or all of an insured's TNC operations. Some, such as Allstate, American Family, and Farmers, appear to be proposing endorsements similar to the new ISO forms, covering the periods while the TNC app is on and the driver is on the way to pick up a passenger.[9] Other insurers, including Erie, GEICO, and Progressive, have proposed coverage during all periods of TNC operation.[10] Again, none of these insurers' TNC endorsements has yet become available to consumers in Virginia.

Another significant development in insurance that has occurred since the enactment of Virginia's TNC legislation is the model law that has been drafted through cooperative efforts of the insurance industry, insurance regulators, and TNCs. The National Association of Insurance Commissioners (NAIC) released a "TNC Insurance Compromise Model Bill" in March 2015,[11] and the National Conference of Insurance Legislators (NCOIL) adopted a "Model Act to Regulate Insurance Requirements for Transportation Network Companies and Transportation Network Drivers" in July 2015.[12] Each entity's model legislation contains identical insurance requirements. As summarized in the table below, the model bills' insurance provisions largely mirror Virginia's. The key requirements that are more stringent in Virginia are: (1) TNC insurers must provide uninsured/underinsured motorist (UM/UIM) coverage when a TNC ride has been accepted and (2) TNC insurers have the exclusive duty to defend when a TNC ride has been accepted. Thus far, several states have adopted the NAIC/NCOIL model law in whole or in part, including Arkansas, Tennessee, North Carolina, and West Virginia.[13] However, DMV does not believe that there is anything in the model law that warrants a change to the *Code of Virginia*.

[9] www.amfam.com/insurance/car/rideshare; www.allstate.com/auto-insurance/ride-for-hire.aspx; www.farmers.com/news/2015/colorado-rideshare-endorsement/.

[10] www.erieinsurance.com/about-us/newsroom/press-releases/2014/ridesharing; www.progressive.com/newsroom/article/2016/february/tnc-coverage/; www.geico.com/about/ pressreleases/2015/20150204/.

[11] www.naic.org/documents/committees_c_sharing_econ_wg_related_tnc_insurance_compromise_bill_package.pdf.

[12] www.ncoil.org/wp-content/uploads/2016/04/07232015TNCModelAct.pdf.

[13] 2015 Ark. Acts chs. 1050, 1267; 2015 Tenn. Pub. Acts ch. 520; 2015 N.C. Sess. Laws 2015-237; 2016 W. Va. Acts ch. 159.

NAIC/NCOIL Model Law vs. Virginia Law		
Provisions that are substantially the same		
Liability limits: $50,000/$100,000/$25,000 when the app is on and $1,000,000 when a ride is accepted **Policy holder**: The TNC, driver, or a combination may maintain applicable TNC insurance—but if driver's policy lapses, TNC must provide coverage. **Primary coverage**: TNC insurance is primary, not contingent upon PAP denying coverage. **Proof and disclosures**: Driver must carry proof of insurance and TNCs must disclose to driver information about the TNC insurance and the potential for the driver's PAP to exclude coverage. **Cooperation**: TNCs must provide to relevant parties and insurers information regarding driver's activity on the app.		
Provisions that differ		
	Model	Virginia
UM/UIM	PAP may exclude UM/UIM during TNC operation.	After ride accepted, TNC insurance must provide $1,000,000 UM/UIM; no requirement for TNC insurance to cover UM/UIM during Period 1.
Exclusive duty to defend	No exclusive duty for TNC insurer to defend.	TNC insurer has exclusive duty to defend for period after ride accepted, but no exclusive duty during Period 1.
TNC insurance not dependent on PAP insurer denying claim	Applies to all periods.	Applies only after ride accepted.
PAP exclusions	PAP to exclude all periods of TNC operation. During all periods, no duty to defend if "expressly excluded."	No specific requirement that PAP exclude TNC operation. However, after ride accepted, PAP shall not provide coverage unless policy "expressly provides for that coverage."
Coverage if app fails	No provision for coverage if app fails.	Presumption of TNC insurance coverage after ride accepted.
TNC disclosures after crash	TNC must provide times operator logged on platform	Along with information required in model bills, TNC must provide identity and last known address of driver.

7. Virginia's TNC Fees

Section 46.2-2011.5 of the *Code of Virginia* provides for a fee of $100,000 for an original certificate authorizing a TNC to operate in the Commonwealth, and a fee of $60,000 annually to renew the certificate. At the time these fees were enacted, it was assumed that they—together with the fee collected by the agency for each driver transcript requested by a TNC as part of the required background screening for TNC partners—would generate sufficient revenue for DMV to recover its costs. That assumption rested in part on the further assumption that at least five TNCs would obtain certificates in Virginia in the first year following the effective date of the legislation. Neither of these assumptions turned out to be correct: only two TNCs have applied thus far for certificates and, partly as a result, DMV's revenues in the first year of operations have fallen short of the agency's expenses over that period.

Through June 2016, revenues—from TNC certificate application fees, driver transcript fees associated with screening of TNC partners, and replacement registration cards and decals issued to TNC partners—totaled $609,892. DMV's implementation costs over that period—which included start-up costs related to systems development and implementation team personnel, as well as twelve months of ongoing costs associated with adding law enforcement and other staff to administer the new program—totaled $1,267,390. Thus DMV incurred unrecovered costs of $657,498 in the first year of implementation. Nevertheless, the agency does expect to recover its ongoing expenses in fiscal year 2017, provided the number of certificated TNCs and the number of TNC partners remain constant.

When the current fee structure was being discussed in the 2015 legislative session, some concerns were raised that the high fees for TNC certificates might create a barrier to entry for smaller TNCs. Subsequent events have tended to bear out those concerns. Sidecar, a TNC that participated in stakeholder meetings and that had expressed some interest in operating in the Commonwealth, pointed to the $100,000 certificate fee when it later decided that it could not afford to compete for passengers in Virginia. In addition, over the past year DMV has been approached by several other TNCs regarding the possibility of expanding their operations here, but so far none has filed an application for a certificate. The agency believes that the high fees are probably a deterrent for these companies as well.

In light of continuing concerns about the certificate fees, DMV has developed a proposal for an alternative fee structure that (i) equitably treats those TNCs already certificated in the Commonwealth, (ii) removes a barrier to entry for smaller, specialized, or regional TNC operators, and (iii) will continue to provide cost recovery for DMV. The proposal is to give every TNC two fee options, with the freedom to choose either one when first applying for a certificate and the freedom to switch between the options when applying for renewal of a certificate. The first option is to pay the certificate fees of $100,000 and $60,000 that are already in statute. The other option is to pay a $20 surcharge per record when purchasing a TNC partner's driver transcript. This surcharge would be on top of the current $8 transcript fee. Under this proposal, a TNC's choice would be driven by, and directly related to, the number of TNC partners they have under contract. Thus, a small regional operator or new market entrant with 100 drivers would certainly choose the second fee option, under which it would pay $2,000 to obtain a certificate. In contrast, a larger TNC with 5,000 drivers would pay the same for an initial certificate under either option—$100,000—but would find it more cost effective to pay a flat fee of $60,000 for renewal of the certificate, rather than a $20 per transcript surcharge.

The statutory amendments needed to implement DMV's proposal are included in the draft legislation attached to this report as Appendix B.

8. Use of Rental Vehicles as TNC Partner Vehicles

In the fall of 2015 representatives from the insurance, rental car, and TNC industries met with DMV and expressed an interest in allowing TNC partners to use rental vehicles to transport passengers. The agency worked closely with these stakeholders to develop a plan that would meet their needs. Moreover, since that plan did not require any legislative action, DMV was able to implement it administratively.

Under the solution that DMV launched on November 17, 2016, rental companies now have the option of registering either their entire fleet of qualifying rental vehicles or only a portion of their fleet. At this time, only Virginia-plated rental vehicles are allowed to be registered for TNC use. If a rental vehicle is registered for TNC use, DMV issues a specially colored year decal for the license plates. The decal is orange and black, signifying that the vehicle is a rental vehicle and also is registered with DMV for use as a TNC vehicle. The vehicle registration card also reflects that the vehicle is registered for TNC use. As with other vehicles, law enforcement has the ability to validate that a rental vehicle has been registered for TNC use.

It took DMV several months to make the system and procedural changes necessary to support this solution. While those changes were underway, the agency developed and implemented an interim process to expedite the availability of rental vehicles to TNC partners. This interim process was in effect prior to November 17th and will remain visible for up to three more years. Under the interim process, rental companies filed an application with DMV's Motor Carrier Services unit to register their Virginia-plated rental vehicles for TNC use. When renting one of these vehicles to a TNC partner, the rental company, if it wished to authorize the TNC partner to use the vehicle to transport passengers, included express language to that effect in the rental agreement and provided the TNC partner with a TNC registration identification marker to place in the lower left rear window of the vehicle. DMV maintains a record of vehicles that have been registered for TNC use under the interim process, but the records are not housed in the DMV vehicle registration system used to support electronic inquiries by law enforcement. Instead, law enforcement and other authorized personnel have been provided contact information to use in validating that the rental vehicle has been registered with DMV for TNC use.

Rental companies are responsible for ensuring that all vehicles registered with DMV for TNC use comply with the TNC vehicle requirements of § 46.2-2099.50 of the *Code of Virginia—i.e.*, they are personal vehicle as defined in § 46.2-2000; have a seating capacity of no more than eight persons, including the driver; are validly titled and registered; have not been branded with a salvage, nonrepairable, rebuilt or equivalent brand; have undergone a valid Virginia safety inspection, proof of which is carried in and displayed on the vehicle; are registered with DMV for use as a TNC partner vehicle; and display an identification marker.

Additional information is available online at www.dmv.virginia.gov/commercial/#tnc/rental.asp.

9. TNCs' Impact on Highway Safety

DMV has reviewed several sources of information to try to determine whether TNCs have had a positive impact on highway safety in Virginia by reducing the number of motorists driving under the influence of alcohol or drugs. Although none of this information conclusively establishes that TNCs have reduced the numbers of DUI offenses and DUI-related crashes, it does appear that the public is embracing TNCs as a viable alternative for transporting people who are unable to operate a motor vehicle safely due to alcohol.

As detailed in the table below, alcohol-related crash and fatality data for July through August of 2013, 2014, 2015, and 2016 show a decline in the number of crashes and fatalities in Virginia. While it may be too soon to say definitively that the availability of Uber and Lyft played a major role in this decline, there appears to be a causal connection. However, many factors contribute to reductions in the number of alcohol-related crashes and fatalities, including education and enforcement efforts.

Comparison of Alcohol-Related Fatalities and Crashes for Localities with More Than and Less Than 100 TNC Vehicle Registrations for July through August 2014, 2015, 2016[14]

	July 1, 2015 to August 31, 2016	July 1, 2014 to August 31, 2015	July 1, 2013 to August 31, 2014
Localities with More Than 100 TNC Vehicle Registrations			
Alcohol-Related Fatalities	133	179	167
Alcohol-Related Crashes	6,431	6,735	6,809
Localities with Less Than 100 TNC Vehicle Registrations			
Alcohol-Related Fatalities	97	130	123
Alcohol-Related Crashes	2,688	2,661	2,672

Also interesting are the data that the Virginia Alcohol Safety Action Program (VASAP) has provided DMV regarding the number of ignition interlocks installed on motor vehicles. An ignition interlock is a device that is attached to the vehicle of a driver who has been convicted of a DUI offense, as a condition for issuing that driver a restricted license. The device prohibits the vehicle from starting unless the driver is alcohol-free. While many factors can affect the volume of ignition interlocks installed, the numbers have clearly declined—and at an increasing rate—since FY 2014, as the VASAP data tabulated at the top of the next page indicate.

[14] 2016 data are preliminary. Additional, detailed data are included in Appendix D to this report.

Comparison of the Number of Ignition Interlocks Installed							
Month	FY 2017	FY 2016	% Variance FY17-FY16	FY 2015	% Variance FY16-FY15	FY 2014	% Variance FY15-FY14
July	7,756	9,018	-14%	9,106	-1%	8,793	4%
August	7,958	8,737	-9%	9,031	-3%	8,976	1%
September	8,045	8,759	-8%	9,124	-4%	8,889	3%
October	-	8,707	-	9,077	-4%	9,099	0%
November	-	8,470	-	8,721	-3%	8,968	-3%
December	-	8,441	-	8,916	-5%	8,957	0%
January	-	7,983	-	8,644	-8%	8,746	-1%
February	-	7,922	-	8,303	-5%	8,556	-3%
March	-	8,105	-	8,641	-6%	8,677	0%
April	-	7,930	-	8,564	-7%	8,815	-3%
May	-	7,905	-	8,511	-7%	8,952	-5%
June	-	7,911	-	8,947	-12%	8,822	1%
Total	23,759	99,888	-10%	105,585	-5%	106,250	-1%

A third source of information regarding the possible safety impact of TNCs in Virginia is a survey conducted between June and October 2016 by the Virginia Tech Center for Survey Research on behalf of DMV's Highway Safety Office. Among the survey's findings:

- Approximately 36% of respondents reported using TNCs.
- Of those who reported using a TNC, about 52% reported alcohol consumption as their reason for using the service.
- When asked what they did when they deliberately decided not to drive after consuming alcohol, 31% responded that they used a TNC. This was the second most common response, after "riding with a designated driver" (52%).
- When asked what mode of transportation they used when deciding not to ride with an inebriated driver, nearly 18% indicated that they used a TNC. This was the third most common response, after "got ride with friend/family member" (24%) and "drove myself" (22%).

All these results appear to reflect public awareness of TNCs as an option for avoiding the hazards involved in drinking and driving.[15]

Some stakeholders have forwarded additional information to DMV regarding the impact of TNCs on highway safety. That information, together with other submissions from stakeholders, is collected in Appendix F.

[15] The results are from a preliminary report, attached as Appendix E. DMV expects to receive the final report in 2017.

10. Impact on Access to Transportation by the Mobility Challenged

Thus far, DMV has not received any complaints about access to service by the disabled. The agency has reached out on several occasions to representatives of the disabled community, the Virginia Municipal League, and the Virginia Association of Counties to learn whether any of them were seeing an impact.

Maureen Hollowell of the Virginia Centers for Independent Living has informed DMV that the 17 centers in her organization have had differing experiences with TNCs. The response to TNCs from the centers assisting blind, deaf, and autistic individuals has been very positive. Ms. Hollowell observed that the apps used to arrange rides through TNCs allow blind and deaf users to give drivers details as to their location and destination. This has resulted in greater and more flexible access to more types of transportation, and has lowered riders' costs. In contrast, the response from centers assisting the mobility impaired has been less positive. Ms. Hollowell noted that there still are not enough wheelchair-accessible vehicles available, and that users have reported confusion when a TNC app directs them to a service that turns out not to have these vehicles. The community also believes that drivers' response time is slower than it is for users without mobility impairments. Finally, Ms. Hollowell informed DMV that her organization has not received any comments, either positive or negative, from individuals using service animals or walkers.

According to the Virginia Municipal League, the advocacy groups they have contacted are saying that complaints of discrimination are being lodged with either the Virginia Disability Law Center or the Department of Justice. Localities themselves were not receiving any complaints, nor were the Area Agencies on Aging.

The fourth enactment of the 2015 legislation required TNCs to incorporate features into their digital platforms, no later than July 1, 2016, that would "allow customers or passengers prearranging rides to indicate whether a passenger requires a wheelchair-accessible vehicle or a vehicle that is otherwise accessible to individuals with disabilities." Both TNCs have complied with this requirement.

11. Changes in the Marketplace

Innovations in passenger transportation services have continued at a brisk pace over the past two years. This section summarizes some changes in the marketplace that may warrant changes to Virginia's current rules.

Other TNCs

While there are other TNC businesses operating in other states, only two currently operate in the Commonwealth: Rasier (a subsidiary of Uber Technologies, Inc.) and Lyft. A number of Uber's and Lyft's competitors in other markets cater to niches in passenger transportation, such as providing ride services for children or facilitating shared rides. DMV believes some of these competitors may have an interest in expanding their services to Virginia, but as noted in section 7 of this report the current TNC certificate fee may deter these companies from doing business in the Commonwealth. The proposed fee structure outlined in section 7 should help to make Virginia more attractive to these TNCs.

Third-Party TNC Ride Reservation Services

As TNC services have grown in popularity, other businesses have begun to develop app-based services that work in conjunction with the digital services offered by TNCs. A good example is the service offered by UZURV, a Richmond-based company. UZURV has developed and is offering a reservation services app that allows riders to make advance reservations with a TNC partner. Although the rides are reserved through UZURV, the transportation is (or is expected to be) ultimately completed through a TNC's digital platform. UZURV offers this service by contracting directly with TNC partners, not with TNCs.

UZURV began offering its services in Virginia without any form of operating authority issued by DMV. While the company did make an application under § 46.2-2099.18 for licensure as a broker of passenger transportation, DMV denied the application on the ground that brokers are prohibited from "employ[ing] any carrier by motor vehicle who is not the lawful holder of an effective certificate or permit" issued pursuant to Virginia's passenger carrier laws. Because TNC partners are not certificated or permitted as motor carriers, a broker may not lawfully arrange the use of their services.

An additional problem with UZURV's business model is that it requires TNC partners to violate § 46.2-2099.48(A), which provides that a TNC partner may not "solicit, accept, arrange, or provide transportation in any other manner" than through a TNC's digital platform. This statutory provision was enacted in response to concerns that TNCs and others expressed about drivers going off-app and providing transportation outside of the TNC's digital platform. Such transportation would not be covered under either the TNC's insurance or the driver's personal auto policy. Although UZURV expects passengers and TNC partners ultimately to use a TNC's app to complete the trip, the model facilitates or creates an environment that increases the opportunity for off-app activity.

On November 30, 2016, DMV issued letters to UZURV and to the TNCs notifying them that the agency would begin taking enforcement action against UZURV. Although DMV enforcement officers will initially be warning drivers, starting January 2017 they will begin citing drivers who arrange TNC transportation with the UZURV app. DMV will inform all licensed TNCs that these drivers have been operating outside of the TNC's digital platform. Upon receiving this notice, the TNC will be required to bar the offending drivers from operation for at least one year.

DMV would stress that there are no statutory provisions that preclude a TNC from offering on its own digital platform a reservation service like the one provided by UZURV. Moreover, in recent months

both Uber and Lyft have begun offering such reservation services in some markets in Virginia. The launch of these services gives consumers in those markets an alternative to UZURV.

The General Assembly may wish to take action to clarify whether reservation services offered by third parties should be subject to licensing and other requirements. If the legislature would like additional information or stakeholder input before making a decision, DMV could be directed to undertake a study, involving all stakeholders, to develop recommendations for consideration. Should a study be desired the legislature may wish to enact language clearly authorizing a service such as UZURV's to operate on a temporary basis while the study is being undertaken.

Transportation of Property

In the spring and summer of 2015 DMV learned that some TNCs and other companies were beginning to offer property transportation services that, like TNCs' passenger carriage business, involved the use of mobile devices and related technology to connect customers with drivers using their personal vehicles. In August 2015, the chairs of the House and Senate transportation committees called upon DMV to conduct a stakeholder study examining this emerging business. The agency is reporting the results and recommendations of that study in a separate document, titled *Property Carriers in Virginia*, which is being offered to the chairs alongside this report.

Impacts on Other Passenger Transportation Services

National media coverage of TNCs suggests that they were expected to have an adverse impact on taxi operators and potentially other types of passenger carrier services. DMV records indicate that there has indeed been a decline in the number of licensed taxis operating in the Commonwealth since TNCs began competing for passengers. Between November 2014, when TNCs were first granted temporary operating authority, and July 2016 the number of taxi permits declined 1.4%, from 3,137 to 3,094. In addition, the number of vehicles registered to operate under these taxi permits declined by 7.5% from 5,233 to 4,840. While DMV cannot with certainty attribute these declines to TNCs, it seems likely that there is a correlation.

Stimulus for Additional Regulatory Change

During the 2014 stakeholder study that developed Virginia's current TNC laws, DMV initially proposed broad legislative reform of all types of passenger carriers, in an effort to consolidate the existing structure of multiple operating authority types into fewer classes of carriers. The current classification system dates back to the days of heavy economic regulation, and the different operating authority types largely serve to segregate the marketplace and protect the different classes of service providers. While the taxi, limousine and other passenger carrier industries were largely opposed to broad reform when that possibility was discussed during the 2014 study, some opportunities for further reform have since been identified:

- A number of taxi operators have begun advocating regulatory reform for their industry at the local level, to allow them to better compete with TNCs.

- Representatives of the limousine industry have expressed an interest in eliminating the dual license plate requirements for limousine operators that provide intrastate transportation services in more than one state. Currently most states require for-hire vehicles (other than TNC partner vehicles) being operated point to point within their jurisdiction to be registered in their jurisdiction, pay vehicle registration fees, and display a license plate issued by that state. The Virginia Limousine Association is interested in relief from the requirement to

display multiple license plates and has advocated allowing limousine operators that are based outside of the Commonwealth to display only a decal, not a Virginia license plate, when providing intrastate transportation here.

- Many drivers wish to provide passenger transportation under a TNC's black car services (such as Uber Black, offered through Uber's subsidiary Drinnen, LLC, which has been licensed as a broker in Virginia), since such services can pay substantially more than operating as a TNC partner. However, these black car services require the driver to obtain their own insurance and their own operating authority as a motor carrier. The problem these drivers face is determining which type of motor carrier operating authority it would be better for them to obtain. There are basically two options: they can apply for a certificate to operate as a contract passenger carrier, or for a certificate to operate as an irregular route common carrier. Each has its advantages and its drawbacks. Contract passenger carriers are limited to servicing no more than one ride request per hour and are required to carry a trip sheet, contract order, or wireless text dispatching device in the vehicle prior to and during each ride that includes the names of the passengers who have arranged for use of the motor vehicle, the date and approximate time of pickup, and the origin and destination. Irregular route common carriers are required to designate a service area, which makes this type of authority more difficult to obtain as it requires the applicant to demonstrate a need for the service in the proposed service area. Additionally, applications for this type of authority are often protested by an attorney representing taxi companies on the basis that the need for the service is not justified, particularly if the applicant is seeking a statewide service area. The key concern of the protesting parties is that once the applicant receives an irregular route common carrier certificate they effectively become an unmarked taxi not subject to any of the local taxi regulations.

  DMV has seen an increase in the number of applications from drivers facing this quandary. In addition to the challenge of weighing the pros and cons of each option, the operating authority application process can be confusing and complicated for applicants to understand and navigate, making it difficult for some applicants to successfully complete the process. DMV has made every effort to simplify the application process while adhering to the statutory requirements for the applicant to make public notice and demonstrate public convenience and necessity.

The opportunities outlined above suggest that some changes may be warranted to the current statutes governing for-hire passenger carrier services. The dual plating issue is one that DMV believes would be appropriate for study in 2017, with recommended legislation presented in advance of the 2018 session of the General Assembly. Although the situation for black car drivers is particularly vexing, DMV anticipates that industry stakeholders would object to efforts to streamline the regulatory structure or relax the statutory requirements associated with the authority application process. Regardless, it is certainly worth questioning whether the existing regulatory structure remains appropriate in today's environment or goes beyond what is necessary to provide appropriate public safety and consumer protections.

12. Recommendations

DMV makes three recommendations:

1. **A change in the fees TNCs pay to operate in Virginia.** As detailed in section 7 of this report, DMV proposes that each TNC be given the option of paying either (i) the certificate fees of $100,000 and $60,000 that are already in statute, or (ii) a $20 surcharge per record when purchasing a TNC partner's driver transcript. Each TNC would be able to switch from one fee structure to the other each year upon applying for renewal of operating authority. The statutory amendments needed to implement this proposal are included in the draft legislation attached to this report as Appendix B.

2. **Continuing study of various issues related to passenger transportation services.** In addition to the issue of dual plating discussed in section 11 of this report, DMV has received comments from stakeholders that suggest a number of other issues that may need to be studied further in 2017, including:

    - whether to amend the *Code of Virginia* to better distinguish between two terms currently being used in the passenger carrier laws to describe different things: transportation that a contract passenger carrier provides on a "prearranged basis" versus the "prearranged ride" provided by a TNC;[16]

    - whether statutory provisions regarding contract passenger carriers' use of a "wireless text dispatching device"[17] should be updated to refer to a "digital dispatch device";

    - whether DMV should offer a special decal for taxicabs or other for-hire vehicles in order to make their license plates appropriately designated;

    - whether to amend § 46.2-2053(B) so that the insurance limits apply to a motor vehicle only when it is being operated commercially by the motor carrier;

    - whether to collapse and streamline the current array of types of operating authority for passenger carriers, including an examination of all current carrier requirements (insurance, bonds, driver background checks, tariffs, limited service areas or operational conditions, fees) and whether they should be applied across the board or eliminated;

    - whether any changes are warranted to statutory provisions regarding leased vehicles;

    - whether to require proof of insurance for all passenger carriers;

    - whether to deregulate passenger transportation brokers;

    - whether statutory provisions regarding a carrier's established place of business need to be updated for the age of mobile offices, shared office space, etc.; and

[16] Va. Code §§ 46.2-2099.1, 46.2-2000.

[17] Va. Code § 46.2-2099.1.

- whether there should be any changes in policy or law regarding passenger carriers' use of rental vehicles.

3. **An end to the publication of quarterly implementation reports.** Since beginning implementation of the TNC legislation last year DMV has been producing quarterly reports that include data on the number of TNC partner vehicles registered with the agency, revenue raised, complaints received, enforcement action taken, and other matters.[18] DMV has prepared these reports not because they were mandated, but simply as a courtesy to members of the General Assembly and others who may have been interested in the results of implementing the legislation. Now that TNCs have become an established part of the passenger carrier marketplace in Virginia, the agency does not believe there is a need for continued quarterly reporting on these businesses.

[18] www.dmv.virginia.gov/general/#tncrepts/. The latest quarterly report (Q1 of FY 17) is attached as Appendix D.

Appendix A. 2015 Legislation

CHAPTER 2

An Act to amend and reenact §§ 46.2-694, as it is currently effective and as it may become effective, 46.2-711, 46.2-749.5, 46.2-753, 46.2-755, 46.2-1400, 46.2-2000, 46.2-2001.3, 46.2-2011.5, 46.2-2011.6, 46.2-2011.20, 46.2-2011.22, 46.2-2011.24, 46.2-2011.29, and 46.2-2051 of the Code of Virginia and to amend the Code of Virginia by adding in Chapter 20 of Title 46.2 an article numbered 15, consisting of sections numbered 46.2-2099.45 through 46.2-2099.53, relating to transportation network companies.

[H 1662]

Approved February 16, 2015

Be it enacted by the General Assembly of Virginia:

1. That §§ 46.2-694, as it is currently effective and as it may become effective, 46.2-711, 46.2-749.5, 46.2-753, 46.2-755, 46.2-1400, 46.2-2000, 46.2-2001.3, 46.2-2011.5, 46.2-2011.6, 46.2-2011.20, 46.2-2011.22, 46.2-2011.24, 46.2-2011.29, and 46.2-2051 of the Code of Virginia are amended and reenacted and that the Code of Virginia is amended by adding in Chapter 20 of Title 46.2 an article numbered 15, consisting of sections numbered 46.2-2099.45 through 46.2-2099.53, as follows:

§ 46.2-694. (Contingent expiration date) Fees for vehicles designed and used for transportation of passengers; weights used for computing fees; burden of proof.

A. The annual registration fees for motor vehicles, trailers, and semitrailers designed and used for the transportation of passengers on the highways in the Commonwealth are:

1. Thirty-three dollars for each private passenger car or motor home if the passenger car or motor home weighs 4,000 pounds or less, provided that it is not used for the transportation of passengers for compensation and is not kept or used for rent or for hire, or is not operated under a lease without a chauffeur*; however, the fee provided under this subdivision shall apply to a private passenger car or motor home that weighs 4,000 pounds or less and is used as a TNC partner vehicle as defined in § 46.2-2000.*

2. Thirty-eight dollars for each *private* passenger car or motor home ~~which~~ *that* weighs more than 4,000 pounds, provided that it is not used for the transportation of passengers for compensation and is not kept or used for rent or for hire, or is not operated under a lease without a chauffeur*; however, the fee provided under this subdivision shall apply to a private passenger car or motor home that weighs more than 4,000 pounds and is used as a TNC partner vehicle as defined in § 46.2-2000.*

3. Thirty cents per 100 pounds or major fraction thereof for a private motor vehicle other than a motorcycle with a normal seating capacity of more than 10 adults, including the driver, if the private motor vehicle is not used for the transportation of passengers for compensation and is not kept or used for rent or for hire or is not operated under a lease without a chauffeur. In no case shall the fee be less than $23 if the vehicle weighs 4,000 pounds or less or $28 if the vehicle weighs more than 4,000 pounds.

4. Thirty cents per 100 pounds or major fraction thereof for a school bus. In no case shall the fee be less than $23 if the vehicle weighs 4,000 pounds or less or $28 if the vehicle weighs more than 4,000 pounds.

5. Twenty-three dollars for each trailer or semitrailer designed for use as living quarters for human beings.

6. Thirteen dollars plus $0.30 per 100 pounds or major fraction thereof for each motor vehicle, trailer, or semitrailer used as a common carrier of passengers, operating either intrastate or interstate. Interstate common carriers of interstate passengers may elect to be licensed and pay the fees prescribed in subdivision 7 on submission to the Commissioner of a declaration of operations and equipment as he may prescribe. An additional $5 shall be charged if the motor vehicle weighs more than 4,000 pounds.

7. Thirteen dollars plus $0.70 per 100 pounds or major fraction thereof for each motor vehicle, trailer, or semitrailer used as a common carrier of interstate passengers if election is made to be licensed under this subsection. An additional $5 shall be charged if the motor vehicle weighs more than 4,000 pounds. In lieu of the foregoing fee of $0.70 per 100 pounds, a motor carrier of passengers, operating two or more vehicles both within and outside the Commonwealth and registered for insurance purposes with the Surface Transportation Board of the U.S. Department of Transportation, Federal Highway Administration, may apply to the Commissioner for prorated registration. Upon the filing of such application, in such form as the Commissioner may prescribe, the Commissioner shall apportion the registration fees provided in this subsection so that the total registration fees to be paid for such vehicles of such carrier shall be that proportion of the total fees, if there were no apportionment, that the total number of miles traveled by such vehicles of such carrier within the Commonwealth bears to the total

number of miles traveled by such vehicles within and outside the Commonwealth. Such total mileage in each instance is the estimated total mileage to be traveled by such vehicles during the license year for which such fees are paid, subject to the adjustment in accordance with an audit to be made by representatives of the Commissioner at the end of such license year, the expense of such audit to be borne by the carrier being audited. Each vehicle passing into or through Virginia shall be registered and licensed in Virginia and the annual registration fee to be paid for each such vehicle shall not be less than $33. For the purpose of determining such apportioned registration fees, only those motor vehicles, trailers, or semitrailers operated both within and outside the Commonwealth shall be subject to inclusion in determining the apportionment provided for herein.

8. Thirteen dollars plus $0.80 per 100 pounds or major fraction thereof for each motor vehicle, trailer or semitrailer kept or used for rent or for hire or operated under a lease without a chauffeur for the transportation of passengers. An additional fee of $5 shall be charged if the vehicle weighs more than 4,000 pounds. This ~~subsection~~ *subdivision* does not apply to vehicles used as common carriers *or as TNC partner vehicles as defined in § 46.2-2000*.

9. Twenty-three dollars for a taxicab or other vehicle which is kept for rent or hire operated with a chauffeur for the transportation of passengers, and which operates or should operate under permits issued by the Department as required by law. An additional fee of $5 shall be charged if the vehicle weighs more than 4,000 pounds. This ~~subsection~~ *subdivision* does not apply to vehicles used as common carriers *or as TNC partner vehicles as defined in § 46.2-2000*.

10. Eighteen dollars for a motorcycle, with or without a sidecar. To this fee shall be added a surcharge of $3 which shall be distributed as provided in § 46.2-1191.

10a. Fourteen dollars for a moped, to be paid into the state treasury and set aside as a special fund to be used to meet the expenses of the Department.

10b. Eighteen dollars for an autocycle.

11. Twenty-three dollars for a bus used exclusively for transportation to and from church school, for the purpose of religious instruction, or church, for the purpose of divine worship. If the empty weight of the vehicle exceeds 4,000 pounds, the fee shall be $28.

12. Thirteen dollars plus $0.70 per 100 pounds or major fraction thereof for other passenger-carrying vehicles.

13. An additional fee of $4.25 per year shall be charged and collected at the time of registration of each pickup or panel truck and each motor vehicle under subdivisions 1 through 12. All funds collected from $4 of the $4.25 fee shall be paid into the state treasury and shall be set aside as a special fund to be used only for emergency medical service purposes. The moneys in the special emergency medical services fund shall be distributed as follows:

a. Two percent shall be distributed to the State Department of Health to provide funding to the Virginia Association of Volunteer Rescue Squads to be used solely for the purpose of conducting volunteer recruitment, retention, and training activities;

b. Thirty percent shall be distributed to the State Department of Health to support (i) emergency medical services training programs (excluding advanced life support classes); (ii) advanced life support training; (iii) recruitment and retention programs (all funds for such support shall be used to recruit and retain volunteer emergency medical services personnel only, including public awareness campaigns, technical assistance programs, and similar activities); (iv) emergency medical services system development, initiatives, and priorities based on needs identified by the State Emergency Medical Services Advisory Board; (v) local, regional, and statewide performance contracts for emergency medical services to meet the objectives stipulated in § 32.1-111.3; (vi) technology and radio communication enhancements; and (vii) improved emergency preparedness and response. Any funds set aside for distribution under this provision and remaining undistributed at the end of any fiscal year shall revert to the Rescue Squad Assistance Fund;

c. Thirty-two percent shall be distributed to the Rescue Squad Assistance Fund;

d. Ten percent shall be available to the State Department of Health's Office of Emergency Medical Services for use in emergency medical services; and

e. Twenty-six percent shall be returned by the Comptroller to the locality wherein such vehicle is registered, to provide funding for training of volunteer or salaried emergency medical service personnel of licensed, nonprofit emergency medical services agencies and for the purchase of necessary equipment and supplies for use in such locality for licensed, nonprofit emergency medical and rescue services.

All revenues generated by the remaining $0.25 of the $4.25 fee approved by the 2008 Session of the General Assembly shall be deposited into the Rescue Squad Assistance Fund and used only to pay for the costs associated with the certification and recertification training of emergency medical services personnel.

The Comptroller shall clearly designate on the warrant, check, or other means of transmitting these funds that such moneys are only to be used for purposes set forth in this subdivision. Such funds shall be in addition to any local appropriations and local governing bodies shall not use these funds to supplant local funds. Each local governing body shall report annually to the Board of Health on the use of the funds returned to it pursuant to this section. In any case in which the local governing body grants

the funds to a regional emergency medical services council to be distributed to the licensed, nonprofit emergency medical and rescue services, the local governing body shall remain responsible for the proper use of the funds. If, at the end of any fiscal year, a report on the use of the funds returned to the locality pursuant to this section for that year has not been received from a local governing body, any funds due to that local governing body for the next fiscal year shall be retained until such time as the report has been submitted to the Board.

B. All motor vehicles, trailers, and semitrailers registered as provided in subsection B of § 46.2-646 shall pay a registration fee equal to one-twelfth of all fees required by subsection A of this section or § 46.2-697 for such motor vehicle, trailer, or semitrailer, computed to the nearest cent, multiplied by the number of months in the registration period for such motor vehicles, trailers, and semitrailers.

C. The manufacturer's shipping weight or scale weight shall be used for computing all fees required by this section to be based upon the weight of the vehicle.

D. The applicant for registration bears the burden of proof that the vehicle for which registration is sought is entitled by weight, design, and use to be registered at the fee tendered by the applicant to the Commissioner or to his authorized agent.

§ 46.2-694. (Contingent effective date) Fees for vehicles designed and used for transportation of passengers; weights used for computing fees; burden of proof.

A. The annual registration fees for motor vehicles, trailers, and semitrailers designed and used for the transportation of passengers on the highways in the Commonwealth are:

1. Twenty-three dollars for each private passenger car or motor home if the passenger car or motor home weighs 4,000 pounds or less, provided that it is not used for the transportation of passengers for compensation and is not kept or used for rent or for hire, or is not operated under a lease without a chauffeur*; however, the fee provided under this subdivision shall apply to a private passenger car or motor home that weighs 4,000 pounds or less and is used as a TNC partner vehicle as defined in § 46.2-2000*.

2. Twenty-eight dollars for each *private* passenger car or motor home ~~which~~ *that* weighs more than 4,000 pounds, provided that it is not used for the transportation of passengers for compensation and is not kept or used for rent or for hire, or is not operated under a lease without a chauffeur*; however, the fee provided under this subdivision shall apply to a private passenger car or motor home that weighs more than 4,000 pounds and is used as a TNC partner vehicle as defined in § 46.2-2000*.

3. Thirty cents per 100 pounds or major fraction thereof for a private motor vehicle other than a motorcycle with a normal seating capacity of more than 10 adults, including the driver, if the private motor vehicle is not used for the transportation of passengers for compensation and is not kept or used for rent or for hire or is not operated under a lease without a chauffeur. In no case shall the fee be less than $23 if the vehicle weighs 4,000 pounds or less or $28 if the vehicle weighs more than 4,000 pounds.

4. Thirty cents per 100 pounds or major fraction thereof for a school bus. In no case shall the fee be less than $23 if the vehicle weighs 4,000 pounds or less or $28 if the vehicle weighs more than 4,000 pounds.

5. Twenty-three dollars for each trailer or semitrailer designed for use as living quarters for human beings.

6. Thirteen dollars plus $0.30 per 100 pounds or major fraction thereof for each motor vehicle, trailer, or semitrailer used as a common carrier of passengers, operating either intrastate or interstate. Interstate common carriers of interstate passengers may elect to be licensed and pay the fees prescribed in subdivision 7 on submission to the Commissioner of a declaration of operations and equipment as he may prescribe. An additional $5 shall be charged if the motor vehicle weighs more than 4,000 pounds.

7. Thirteen dollars plus $0.70 per 100 pounds or major fraction thereof for each motor vehicle, trailer, or semitrailer used as a common carrier of interstate passengers if election is made to be licensed under this subsection. An additional $5 shall be charged if the motor vehicle weighs more than 4,000 pounds. In lieu of the foregoing fee of $0.70 per 100 pounds, a motor carrier of passengers, operating two or more vehicles both within and outside the Commonwealth and registered for insurance purposes with the Surface Transportation Board of the U.S. Department of Transportation, Federal Highway Administration, may apply to the Commissioner for prorated registration. Upon the filing of such application, in such form as the Commissioner may prescribe, the Commissioner shall apportion the registration fees provided in this subsection so that the total registration fees to be paid for such vehicles of such carrier shall be that proportion of the total fees, if there were no apportionment, that the total number of miles traveled by such vehicles of such carrier within the Commonwealth bears to the total number of miles traveled by such vehicles within and outside the Commonwealth. Such total mileage in each instance is the estimated total mileage to be traveled by such vehicles during the license year for which such fees are paid, subject to the adjustment in accordance with an audit to be made by representatives of the Commissioner at the end of such license year, the expense of such audit to be borne by the carrier being audited. Each vehicle passing into or through Virginia shall be registered and licensed in Virginia and the annual registration fee to be paid for each such vehicle shall not be less than $33. For the purpose of determining such apportioned registration fees, only those motor vehicles,

trailers, or semitrailers operated both within and outside the Commonwealth shall be subject to inclusion in determining the apportionment provided for herein.

8. Thirteen dollars plus $0.80 per 100 pounds or major fraction thereof for each motor vehicle, trailer or semitrailer kept or used for rent or for hire or operated under a lease without a chauffeur for the transportation of passengers. An additional fee of $5 shall be charged if the vehicle weighs more than 4,000 pounds. This ~~subsection~~ *subdivision* does not apply to vehicles used as common carriers *or as TNC partner vehicles as defined in § 46.2-2000*.

9. Twenty-three dollars for a taxicab or other vehicle which is kept for rent or hire operated with a chauffeur for the transportation of passengers, and which operates or should operate under permits issued by the Department as required by law. An additional fee of $5 shall be charged if the vehicle weighs more than 4,000 pounds. This ~~subsection~~ *subdivision* does not apply to vehicles used as common carriers *or as TNC partner vehicles as defined in § 46.2-2000*.

10. Eighteen dollars for a motorcycle, with or without a sidecar. To this fee shall be added a surcharge of $3, which shall be distributed as provided in § 46.2-1191.

10a. Fourteen dollars for a moped, to be paid into the state treasury and set aside as a special fund to be used to meet the expenses of the Department.

10b. Eighteen dollars for an autocycle.

11. Twenty-three dollars for a bus used exclusively for transportation to and from church school, for the purpose of religious instruction, or church, for the purpose of divine worship. If the empty weight of the vehicle exceeds 4,000 pounds, the fee shall be $28.

12. Thirteen dollars plus $0.70 per 100 pounds or major fraction thereof for other passenger-carrying vehicles.

13. An additional fee of $4.25 per year shall be charged and collected at the time of registration of each pickup or panel truck and each motor vehicle under subdivisions 1 through 12. All funds collected from $4 of the $4.25 fee shall be paid into the state treasury and shall be set aside as a special fund to be used only for emergency medical service purposes. The moneys in the special emergency medical services fund shall be distributed as follows:

a. Two percent shall be distributed to the State Department of Health to provide funding to the Virginia Association of Volunteer Rescue Squads to be used solely for the purpose of conducting volunteer recruitment, retention and training activities;

b. Thirty percent shall be distributed to the State Department of Health to support (i) emergency medical services training programs (excluding advanced life support classes); (ii) advanced life support training; (iii) recruitment and retention programs (all funds for such support shall be used to recruit and retain volunteer emergency medical services personnel only, including public awareness campaigns, technical assistance programs, and similar activities); (iv) emergency medical services system development, initiatives, and priorities based on needs identified by the State Emergency Medical Services Advisory Board; (v) local, regional, and statewide performance contracts for emergency medical services to meet the objectives stipulated in § 32.1-111.3; (vi) technology and radio communication enhancements; and (vii) improved emergency preparedness and response. Any funds set aside for distribution under this provision and remaining undistributed at the end of any fiscal year shall revert to the Rescue Squad Assistance Fund;

c. Thirty-two percent shall be distributed to the Rescue Squad Assistance Fund;

d. Ten percent shall be available to the State Department of Health's Office of Emergency Medical Services for use in emergency medical services; and

e. Twenty-six percent shall be returned by the Comptroller to the locality wherein such vehicle is registered, to provide funding for training of volunteer or salaried emergency medical service personnel of licensed, nonprofit emergency medical services agencies and for the purchase of necessary equipment and supplies for use in such locality for licensed, nonprofit emergency medical and rescue services.

All revenues generated by the remaining $0.25 of the $4.25 fee approved by the 2008 Session of the General Assembly shall be deposited into the Rescue Squad Assistance Fund and used only to pay for the costs associated with the certification and recertification training of emergency medical services personnel.

The Comptroller shall clearly designate on the warrant, check, or other means of transmitting these funds that such moneys are only to be used for purposes set forth in this subdivision. Such funds shall be in addition to any local appropriations and local governing bodies shall not use these funds to supplant local funds. Each local governing body shall report annually to the Board of Health on the use of the funds returned to it pursuant to this section. In any case in which the local governing body grants the funds to a regional emergency medical services council to be distributed to the licensed, nonprofit emergency medical and rescue services, the local governing body shall remain responsible for the proper use of the funds. If, at the end of any fiscal year, a report on the use of the funds returned to the locality pursuant to this section for that year has not been received from a local governing body, any funds due to that local governing body for the next fiscal year shall be retained until such time as the report has been submitted to the Board.

B. All motor vehicles, trailers, and semitrailers registered as provided in subsection B of § 46.2-646

shall pay a registration fee equal to one-twelfth of all fees required by subsection A of this section or § 46.2-697 for such motor vehicle, trailer, or semitrailer, computed to the nearest cent, multiplied by the number of months in the registration period for such motor vehicles, trailers, and semitrailers.

C. The manufacturer's shipping weight or scale weight shall be used for computing all fees required by this section to be based upon the weight of the vehicle.

D. The applicant for registration bears the burden of proof that the vehicle for which registration is sought is entitled by weight, design, and use to be registered at the fee tendered by the applicant to the Commissioner or to his authorized agent.

§ 46.2-711. Furnishing number and design of plates; displaying on vehicles required.

A. The Department shall furnish one license plate for every registered moped, motorcycle, autocycle, tractor truck, semitrailer, or trailer, and two license plates for every other registered motor vehicle, except to licensed motor vehicle dealers and persons delivering unladen vehicles who shall be furnished one license plate. The license plates for trailers, semitrailers, commercial vehicles, and trucks, other than license plates for dealers, may be of such design as to prevent removal without mutilating some part of the indicia forming a part of the license plate, when secured to the bracket.

B. The Department shall issue appropriately designated license plates for:

1. Passenger-carrying vehicles for rent or hire for the transportation of passengers for private trips, *other than TNC partner vehicles as defined in § 46.2-2000*;

2. Taxicabs;

3. Passenger-carrying vehicles operated by common carriers or restricted common carriers;

4. Property-carrying motor vehicles to applicants who operate as private carriers only;

5. Applicants, *other than TNC partners as defined in § 46.2-2000,* who operate motor vehicles as carriers for rent or hire;

6. Vehicles operated by nonemergency medical transportation carriers as defined in § 46.2-2000; and

7. Trailers and semitrailers.

C. The Department shall issue appropriately designated license plates for motor vehicles held for rental as defined in § 58.1-1735.

D. The Department shall issue appropriately designated license plates for low-speed vehicles.

E. No vehicles shall be operated on the highways in the Commonwealth without displaying the license plates required by this chapter. The provisions of this subsection shall not apply to vehicles used to collect and deliver the Unites States mail to the extent that their rear license plates may be covered by the "CAUTION, FREQUENT STOPS, U.S. MAIL" sign when the vehicle is engaged in the collection and delivery of the United States mail.

F. Pickup or panel trucks are exempt from the provisions of subsection B with reference to displaying for-hire license plates when operated as a carrier for rent or hire. However, this exemption shall not apply to pickup or panel trucks subject to regulation under Chapter 21 (§ 46.2-2100 et seq.).

§ 46.2-749.5. Special license plates celebrating Virginia's tobacco heritage.

A. On receipt of an application, the Commissioner shall issue special license plates celebrating Virginia's tobacco heritage. For each set of license plates issued under this section, the Commissioner shall charge, in addition to the prescribed cost of state license plates, an annual fee of ~~ten dollars~~ *$10*.

B. License plates may be issued under this section for display on vehicles registered as trucks, as that term is defined in § 46.2-100, provided that no license plates are issued pursuant to this section for (i) vehicles operated for hire, *except TNC partner vehicles as defined in § 46.2-2000*; (ii) vehicles registered under the International Registration Plan~~,~~*;* or (iii) vehicles registered as tow trucks or tractor trucks as defined in § 46.2-100. No permanent license plates without decals as authorized in subsection B of § 46.2-712 may be issued under this section. For each set of truck license plates issued under this subsection, the Commissioner shall charge, in addition to the prescribed cost of state license plates, an annual fee of $25.

§ 46.2-753. Additional license fees in certain localities.

Notwithstanding any other provision of law, the governing bodies of Alexandria, Arlington, Fairfax County, Fairfax City, and Falls Church are authorized to charge annual license fees, in addition to those specified in § 46.2-752, on passenger cars, *including passenger cars that are used as TNC partner vehicles as defined in § 46.2-2000, but* not *on passenger cars that are otherwise* used for the transportation of passengers for compensation. The additional fee shall be no more than ~~five dollars~~ *$5*. The total local license fee shall be no more than ~~twenty-five dollars~~ *$25* on any vehicle, and this license fee shall not be imposed on any motor vehicle exempted under § 46.2-739.

The governing bodies are also authorized to charge additional annual license fees on the motor vehicles, trailers, and semitrailers as specified in § 46.2-697 in an amount of no more than ~~five dollars~~ *$5* for each such vehicle. This authorization shall not increase the maximum chargeable by more than ~~five dollars~~ *$5* or affect any existing exemption.

Any funds acquired in excess of those allowed by § 46.2-752, shall be allocated to the Northern Virginia Transportation Commission to be a credit to that ~~jurisdiction~~ *locality* making the payment for its share of any operating deficit assigned to it by the Washington Metropolitan Area Transit Authority.

§ 46.2-755. Limitations on imposition of motor vehicle license taxes and fees.

A. No ~~county, city, or town~~ *locality* shall impose any motor vehicle license tax or fee on any motor vehicle, trailer, or semitrailer when:

1. A similar tax or fee is imposed by the ~~county, city, or town~~ *locality* wherein the vehicle is normally garaged, stored, or parked;

2. The vehicle is owned by a nonresident of such locality and is used exclusively for pleasure or personal transportation *or as a TNC partner vehicle as defined in § 46.2-2000* and not *otherwise* for hire or for the conduct of any business or occupation other than that set forth in subdivision 3 ~~of this subsection~~;

3. The vehicle is (i) owned by a nonresident and (ii) used for transporting into and within the locality, for sale in person or by his employees, wood, meats, poultry, fruits, flowers, vegetables, milk, butter, cream, or eggs produced or grown by him, and not purchased by him for sale;

4. The motor vehicle, trailer, or semitrailer is owned by an officer or employee of the Commonwealth who is a nonresident of such ~~county, city, or town~~ *locality* and who uses the vehicle in the performance of his duties for the Commonwealth under an agreement for such use;

5. The motor vehicle, trailer, or semitrailer is kept by a dealer or manufacturer for sale or for sales demonstration;

6. The motor vehicle, trailer, or semitrailer is operated by a common carrier of persons or property operating between cities and towns in the Commonwealth and not in intracity transportation or between cities and towns on the one hand and points and places outside cities and towns on the other and not in intracity transportation; or

7. The motor vehicle, trailer, or semitrailer is inoperable and unlicensed pursuant to § 46.2-734.

B. No ~~county, city, or town~~ *locality* shall impose a license fee for any one motor vehicle owned and used personally by any veteran who holds a current state motor vehicle registration card establishing that he has received a disabled veteran's exemption from the Department and has been issued a disabled veteran's motor vehicle license plate as prescribed in § 46.2-739.

C. No ~~county, city, or town~~ *locality* shall impose any license tax or license fee or the requirement of a license tag, sticker or decal upon any daily rental vehicle, as defined in § 58.1-1735, the rental of which is subject to the tax imposed by subdivision A 2 of § 58.1-1736.

D. In the rental agreement between a motor vehicle renting company and a renter, the motor vehicle renting company may separately itemize and charge daily fees or transaction fees to the renter, provided that the amounts of such fees are disclosed at the time of reservation and rental as part of any estimated pricing provided to the renter. Such fees include a vehicle license fee to recover the company's incurred costs in licensing, titling, and registering its rental fleet, concession recovery fees actually charged the company by an airport, or other governmentally owned or operated facility, and consolidated facility charges actually charged by an airport, or other governmentally owned or operated facility for improvements to or construction of facilities at such facility where the motor vehicle rental company operates. The vehicle license fee shall represent the company's good faith estimate of the average per day per vehicle portion of the company's total annual vehicle licensing, titling, and registration costs.

No motor vehicle renting company charging a vehicle license fee, concession recovery fee, or consolidated facility charge may make an advertisement in the Commonwealth that includes a statement of the rental rate for a vehicle available for rent in the Commonwealth unless such advertisement includes a statement that the customer will be required to pay a vehicle license fee, concession recovery fee, or consolidated facility charge. The vehicle license fee, concession recovery fee, or consolidated facility charge shall be shown as a separately itemized charge on the rental agreement. The vehicle license fee shall be described in either the terms and conditions of the rental agreement as the "estimated average per day per vehicle portion of the company's total annual vehicle licensing, titling, and registration costs" or, for renters participating in an extended rental program pursuant to a master rental agreement, by posting such statement on the rental company website.

Any amounts collected by the motor vehicle renting company in excess of the actual amount of its costs incurred relating to its vehicle license fees shall be retained by the motor vehicle renting company and applied toward the recovery of its next calendar year's costs relating to such fees. In such event, the good faith estimate of any vehicle license fee to be charged by the company for the next calendar year shall be reduced to take into account the excess amount collected from the prior year.

E. As used in this section, common carrier of persons or property includes any person who undertakes, whether directly or by lease or any other arrangement, to transport passengers or household goods for the general public by motor vehicle for compensation over the highways of the Commonwealth, whether over regular or irregular routes, that has obtained the required certificate from the Department of Motor Vehicles pursuant to § 46.2-2075 or 46.2-2150.

§ 46.2-1400. "Ridesharing arrangement" defined.

"Ridesharing arrangement" means the transportation of persons in a motor vehicle when such transportation is incidental to the principal purpose of the driver, which is to reach a destination and not to transport persons for profit. The term includes ridesharing arrangements known as carpools, vanpools, and bus pools. *"Ridesharing arrangement" does not include a prearranged ride as defined in § 46.2-2000.*

§ 46.2-2000. Definitions.

Whenever used in this chapter unless expressly stated otherwise:

"Authorized insurer" means, in the case of an interstate motor carrier whose operations may or may not include intrastate activity, an insurer authorized to transact business in any one state, or, in the case of a solely intrastate motor carrier, an insurer authorized to transact business in the Commonwealth.

"Broker" means any person not included in the term "motor carrier" and not a bona fide employee or agent of any such carrier, who, as principal or agent, sells or offers for sale any transportation subject to this chapter, or negotiates for, or holds himself out by solicitation, advertisement, or otherwise as one who sells, provides, furnishes, contracts, or arranges for such transportation.

"Carrier by motor launch" means a common carrier ~~or contract carrier~~, which carrier uses one or more motor launches operating on the waters within the Commonwealth to transport passengers.

"Certificate" means a certificate of public convenience and necessity or a certificate of fitness.

"Certificate of fitness" means a certificate issued by the Department to a contract passenger carrier, a sight-seeing carrier, *a transportation network company,* or a nonemergency medical transportation carrier.

"Certificate of public convenience and necessity" means a certificate issued by the Department of Motor Vehicles to certain common carriers, but nothing contained in this chapter shall be construed to mean that the Department can issue any such certificate authorizing intracity transportation.

"Common carrier" means any person who undertakes, whether directly or by a lease or any other arrangement, to transport passengers for the general public by motor vehicle for compensation over the highways of the Commonwealth, whether over regular or irregular routes, including such motor vehicle operations of carriers by rail or water under this chapter. "Common carrier" does not include nonemergency medical transportation carriers, *transportation network companies, or TNC partners* as defined in this section.

~~"Contract carrier" means any person who, under special and individual contracts or agreements, and whether directly or by a lease or any other arrangement, transports passengers for compensation.~~

"Contract passenger carrier" means a motor carrier that transports groups of passengers under a single contract made with one person for an agreed charge for such transportation, regardless of the number of passengers transported, and for which transportation no individual or separate fares are solicited, charged, collected, or received by the carrier. *"Contract passenger carrier" does not include a transportation network company or TNC partner as defined in this section.*

"Department" means the Department of Motor Vehicles.

"Digital platform" means any online-enabled application, software, website, or system offered or utilized by a transportation network company that enables the prearrangement of rides with TNC partners.

"Employee hauler" means a motor carrier operating for compensation and exclusively transporting only bona fide employees directly to and from the factories, plants, office or other places of like nature where the employees are employed and accustomed to work.

"Excursion train" means any steam-powered train that carries passengers for which the primary purpose of the operation of such train is the passengers' experience and enjoyment of this means of transportation, and does not, in the course of operation, carry (i) freight other than the personal luggage of the passengers or crew or supplies and equipment necessary to serve the needs of the passengers and crew, (ii) passengers who are commuting to work, or (iii) passengers who are traveling to their final destination solely for business or commercial purposes.

"Financial responsibility" means the ability to respond in damages for liability thereafter incurred arising out of the ownership, maintenance, use, or operation of a motor vehicle, in the amounts provided for in this chapter.

"Highway" means every public highway or place of whatever nature open to the use of the public for purposes of vehicular travel in the Commonwealth, including the streets and alleys in towns and cities.

"Identification marker" means a decal or other visible identification issued *or required* by the Department to show *one or more of the following:* (i) that the operator of the vehicle has registered with the Department for the payment of the road tax imposed under Chapter 27 (§ 58.1-2700 et seq.) of Title 58.1~~,~~*;* (ii) proof of the possession of a certificate or permit issued pursuant to Chapter 20 (§ 46.2-2000 et seq.) ~~of this title, and/or~~*;* (iii) *proof that the vehicle has been registered with the Department as a TNC partner vehicle under subsection B of § 46.2-2099.50; (iv) proof that the vehicle has been authorized by a transportation network company to be operated as a TNC partner vehicle, in accordance with subsection C of § 46.2-2099.50; or (v)* proof of compliance with the insurance requirements of this chapter.

"Interstate" means transportation of passengers between states.

"Intrastate" means transportation of passengers solely within a state.

"License" means a license issued by the Department to a broker.

"Minibus" means any motor vehicle having a seating capacity of not less than seven nor more than 31 passengers, including the driver, and used in the transportation of passengers.

"Motor carrier" means any person who undertakes, whether directly or by lease, to transport

passengers for compensation over the highways of the Commonwealth.

"Motor launch" means a motor vessel that meets the requirements of the U.S. Coast Guard for the carriage of passengers for compensation, with a capacity of six or more passengers, but not in excess of ~~fifty~~ *50* passengers. *"*Motor launch~~, as defined herein, shall~~*" does* not include sight-seeing vessels, special or charter party vessels within the provisions of this chapter. A carrier by motor launch shall not be regarded as a steamship company.

"Nonemergency medical transportation carrier" means a motor carrier that exclusively provides nonemergency medical transportation and provides such transportation only (i) through the Department of Medical Assistance Services; (ii) through a broker operating under a contract with the Department of Medical Assistance Services; or (iii) as a Medicaid Managed Care Organization contracted with the Department of Medical Assistance Services to provide such transportation.

"Nonprofit/tax-exempt passenger carrier" means a bona fide nonprofit corporation organized or existing under Chapter 10 (§ 13.1-801 et seq.) of Title 13.1, or a tax-exempt organization as defined in §§ 501(c)(3) and 501(c)(4) of the ~~United States~~ Internal Revenue Code, as ~~from time to time~~ amended, who undertakes, whether directly or by lease, to control and operate minibuses exclusively in the transportation, for compensation, of members of such organization if it is a membership corporation, or of elderly, disabled, or economically disadvantaged members of the community if it is not a membership corporation.

"Operation" or "operations" includes the operation of all motor vehicles, whether loaded or empty, whether for compensation or not, and whether owned by or leased to the motor carrier who operates them or causes them to be operated.

"Operation of a TNC partner vehicle" means (i) any time a TNC partner is logged into a digital platform and is available to pick up passengers; (ii) any time a passenger is in the TNC partner vehicle; and (iii) any time the TNC partner has accepted a prearranged ride request through the digital platform and is en route to a passenger.

"Operator" means the employer or person actually driving a motor vehicle or combination of vehicles.

"Permit" means a permit issued by the Department to carriers operating as employee haulers or nonprofit/tax-exempt passenger carriers or to operators of taxicabs or other vehicles performing taxicab service under this chapter.

"Person" means any individual, firm, copartnership, corporation, company, association, or joint-stock association, and includes any trustee, receiver, assignee, or personal representative thereof.

"Personal vehicle" means a motor vehicle that is not used to transport passengers for compensation except as a TNC partner vehicle.

"Prearranged ride" means passenger transportation for compensation in a TNC partner vehicle arranged through a digital platform. "Prearranged ride" includes the period of time that begins when a TNC partner accepts a ride requested through a digital platform, continues while the TNC partner transports a passenger in a TNC partner vehicle, and ends when the passenger exits the TNC partner vehicle.

"Restricted common carrier" means any person who undertakes, whether directly or by a lease or other arrangement, to transport passengers for compensation, whereby such transportation service has been restricted. *"Restricted common carrier" does not include a transportation network company or TNC partner as defined in this section.*

"Route," when used in connection with or with respect to a certificate of public convenience and necessity, means the road or highway, or segment thereof, operated over by the holder of a certificate of public convenience and necessity or proposed to be operated over by an applicant therefor, whether such road or highway is designated by one or more highway numbers.

"Services" and "transportation" include the service of, and all transportation by, all vehicles operated by, for, or in the interest of any motor carrier irrespective of ownership or contract, expressed or implied, together with all facilities and property operated or controlled by any such carrier or carriers and used in the transportation of passengers or the performance of any service in connection therewith.

"Sight-seeing carrier" means a restricted common carrier authorized to transport passengers under the provisions of this chapter, whereby the primary purpose of the operation is the passengers' experience and enjoyment ~~and/or~~ *or* the promotion of tourism.

"Sight-seeing carrier by boat" means a restricted common carrier, which restricted common carrier uses a boat or boats operating on waters within the Commonwealth to transport passengers, and whereby the primary purpose of the operation is the passengers' experience and enjoyment ~~and/or~~ *or* the promotion of tourism. Sight-seeing carriers by boat shall not be regarded as steamship companies.

"Single state insurance receipt" means any receipt issued pursuant to 49 C.F.R. Part 367 evidencing that the carrier has the required insurance and paid the requisite fees to the Commonwealth and other qualified jurisdictions.

"Special or charter party carrier by boat" ~~for purposes of this chapter shall mean~~ *means* a restricted common carrier which transports groups of persons under a single contract made with one person for an agreed charge for such movement regardless of the number of persons transported. Special or charter

party carriers by boat shall not be regarded as steamship companies.

"Taxicab or other motor vehicle performing a taxicab service" means any motor vehicle having a seating capacity of not more than six passengers, excluding the driver, not operating on a regular route or between fixed terminals used in the transportation of passengers for hire or for compensation, and not a common carrier, restricted common carrier, *transportation network company, TNC partner,* or nonemergency medical transportation carrier as defined in this chapter.

"TNC insurance" means a motor vehicle liability insurance policy that specifically covers liabilities arising from a TNC partner's operation of a TNC partner vehicle.

"TNC partner" means a person authorized by a transportation network company to use a TNC partner vehicle to provide prearranged rides on an intrastate basis in the Commonwealth.

"TNC partner vehicle" means a personal vehicle authorized by a transportation network company and used by a TNC partner to provide prearranged rides on an intrastate basis in the Commonwealth.

"Trade dress" means a logo, insignia, or emblem attached to or visible from the exterior of a TNC partner vehicle that identifies a transportation network company or digital platform with which the TNC partner vehicle is affiliated.

"Transportation network company" means a person who provides prearranged rides using a digital platform that connects passengers with TNC partners.

§ 46.2-2001.3. Application; notice requirements.

A. Applications for a license, permit, certificate, ~~or~~ identification marker, *or TNC partner vehicle registration* or renewal of a license, permit, certificate, ~~or~~ identification marker, *or TNC partner vehicle registration* under this chapter shall be made to the Department and contain such information and exhibits as the Department shall require. Such information shall include *except in the case of a TNC partner vehicle,* in the application or otherwise, the matters set forth in § 46.2-2011.24 as grounds for denying licenses, permits, and certificates, and other pertinent matters requisite for the safeguarding of the public interest.

Notwithstanding any other provision of this chapter, the Commissioner may require all or certain applications for a license, permit, certificate, identification marker, or TNC partner vehicle registration to be filed electronically.

For the purposes of this subsection, "identification marker" does not include trade dress.

B. An applicant for any original certificate of public convenience and necessity issued under this chapter, or any request for a transfer of such certificate, unless otherwise provided, shall cause a notice of such application, on the form and in the manner prescribed by the Department, on every motor carrier holding the same type of certificate issued by the Department and operating or providing service within the area proposed to be served by the applicant.

C. For any application for original certificate or license issued under this chapter, or any request for a transfer of such certificate or license, the Department shall publish a notice of such application on the Department's public website in the form and in the manner prescribed by the Department.

D. An applicant for any original certificate of public convenience and necessity issued under this chapter, or any request for a transfer of such certificate of public convenience and necessity, shall cause a publication of a summary of the application to be made in a newspaper having a general circulation in the proposed area to be served or area where the primary business office is located within such time as the Department may prescribe.

§ 46.2-2011.5. Filing and application fees.

Unless otherwise provided, every applicant, *other than a transportation network company,* for an original license, permit, or certificate issued under this chapter and transfer of a license or certificate under the provisions of this chapter shall, upon the filing of an application, deposit with the Department, as a filing fee, a sum in the amount of ~~fifty~~ ~~dollars~~ *$50. The fee to accompany an application for an original of the certificate required under § 46.2-2099.45 shall be $100,000, and the annual fee to accompany an application for a renewal thereof shall be $60,000. If the Department does not approve an application for an original of the certificate required under § 46.2-2099.45, the Department shall refund $90,000 of the application fee to the applicant.* The Department shall collect a fee of ~~three~~ ~~dollars~~ *$3* for the issuance of a duplicate license, permit, or certificate.

§ 46.2-2011.6. Vehicle fees.

Every person, *other than a TNC partner,* who operates a passenger vehicle for compensation over the highways of the Commonwealth, unless such operation is exempted from this chapter, shall be required to pay an annual fee of $3 for each such vehicle so operated, unless a vehicle identification marker fee has been paid to the Department as to such vehicle for the current year under the provisions of Chapter 27 (§ 58.1-2700 et seq.) of Title 58.1. Such fee shall be paid through the single state registration system established pursuant to 49 U.S.C. § 14504 and 49 ~~CFR~~ *C.F.R.* Part 367 or through the unified carrier registration system established pursuant to 49 U.S.C. § 14504a and the federal regulations promulgated thereunder for carriers registered pursuant to those provisions. No more than one vehicle fee shall be charged or paid as to any vehicle in any one year under Chapter 27 (§ 58.1-2700 et seq.) of Title 58.1 and this chapter, including payments made pursuant to the single state registration system or the unified carrier registration system.

§ 46.2-2011.20. Unlawful use of registration and identification markers.

It shall be unlawful for any person to operate or cause to be operated on any highway in the Commonwealth any motor vehicle that (i) does not carry the proper registration and identification that this chapter requires, (ii) does not display an identification marker in such manner as is prescribed by the Department, or (iii) bears registration or identification markers of persons whose *TNC partner vehicle registration under subsection B of § 46.2-2099.50 or whose* license, permit, or certificate issued by the Department has been *canceled,* revoked, suspended, or renewal thereof denied in accordance with this chapter.

§ 46.2-2011.22. Violation; criminal penalties.

A. Any person knowingly and willfully violating any provision of this chapter, or any rule or regulation thereunder, or any term or condition of any certificate, permit, or license, for which a penalty is not otherwise herein provided, ~~shall be~~ *is* guilty of a misdemeanor and, upon conviction, shall be fined not more than $2,500 for the first offense and not more than $5,000 for any subsequent offense. Each day of such violation shall constitute a separate offense.

B. Any person, whether carrier, broker, or any officer, employee, agent, or representative thereof, *or a TNC partner,* who ~~shall~~ knowingly and willfully by any such means or otherwise fraudulently ~~seek~~ *seeks* to evade or defeat regulation as in this chapter~~,~~ shall be deemed guilty of a misdemeanor and, upon conviction thereof, be fined not more than $500 for the first offense and not more than $2,000 for any subsequent offense.

C. Any motor carrier, broker, or excursion train operator or any officer, agent, employee, or representative thereof, *or a TNC partner,* who willfully fails or refuses to make a report to the Department as required by this chapter or to keep accounts, records, and memoranda in the form and manner approved or prescribed by the Department, or knowingly and willfully falsifies, destroys, mutilates, or alters any such report, account, record, or memorandum, or knowingly and willfully files any false report, account, record, or memorandum, ~~shall be~~ *is* guilty of a misdemeanor and, upon conviction, be subject for each offense to a fine of not less than $100 and not more than $5,000.

§ 46.2-2011.24. Grounds for denying, suspending, or revoking licenses, permits, or certificates.

A license, permit, or certificate issued pursuant to this chapter may be denied, suspended, or revoked on any one or more of the following grounds, where applicable:

1. Material misstatement or omission in application for license, certificate, permit, identification marker, or vehicle registration;

2. Failure to comply subsequent to receipt of a written warning from the Department or any willful failure to comply with a lawful order, any provision of this chapter or any regulation promulgated by the Department under this chapter, or any term, condition, or restriction of a license, permit, or certificate;

3. Failure to comply with zoning or other land use regulations, ordinances, or statutes;

4. Use of deceptive business acts or practices;

5. Knowingly advertising by any means any assertion, representation, or statement of fact that is untrue, misleading, or deceptive relating to the conduct of the business for which a license, certificate, permit, identification marker, or vehicle registration is held or sought;

6. Having been found, through a judicial or administrative hearing, to have committed fraudulent or deceptive acts in connection with the business for which a license, permit, or certificate is held or sought or any consumer-related fraud;

7. Having been convicted of any criminal act involving the business for which a license, permit, or certificate is held or sought;

8. Failure to comply with § 46.2-2056 or any regulation promulgated pursuant thereto;

9. Improper leasing, renting, lending, or otherwise allowing the improper use of a license, certificate, permit, identification marker, or vehicle registration;

10. Having been convicted of a felony;

11. Having been convicted of any misdemeanor involving lying, cheating, stealing, or moral turpitude;

12. Failure to submit to the Department any tax, fees, dues, fines, or penalties owed to the Department;

13. Failure to furnish the Department information, documentation, or records required or requested pursuant to statute or regulation;

14. Knowingly and willfully filing any false report, account, record, or memorandum;

15. Failure to meet or maintain application certifications or requirements of public convenience and necessity, character, fitness, and financial responsibility pursuant to this chapter;

16. Willfully altering or changing the appearance or wording of any license, permit, certificate, identification marker, license plate, or vehicle registration;

17. Failure to provide services in accordance with license, permit, or certificate terms, limitations, conditions, or requirements;

18. Failure to maintain and keep on file with the Department motor carrier liability insurance, issued by a company licensed to do business in the Commonwealth, or a bond, certificate of insurance,

certificate of self-insurance, or unconditional letter of credit in accordance with this chapter, with respect to each motor vehicle operated in the Commonwealth;

19. Failure to comply with the Workers' Compensation Act of Title 65.2;

20. Failure to properly register a motor vehicle under this title;

21. Failure to comply with any federal motor carrier statute, rule, or regulation;

22. Failure to comply with the requirements of the Americans with Disabilities Act *or the Virginians with Disabilities Act (§ 51.5-1 et seq.)*; ~~or~~

23. Inactivity of a motor carrier as may be evidenced by the absence of a motor vehicle registered to operate under such certificate or permit for a period of greater than three months*; or*

24. Failure to comply with any provision regarding the filing and registered agent requirements set forth in Title 13.1.

§ 46.2-2011.29. Surrender of identification marker, license plate, and registration card; removal by law enforcement; operation of vehicle denied.

A. *For purposes of this section, "identification marker" does not include trade dress.*

B. It shall be unlawful for a licensee, permittee, or certificate holder*, or for the registrant or operator of a vehicle registered under subsection B of § 46.2-2099.50,* whose license, permit, ~~or~~ certificate*, or vehicle's registration as a TNC partner vehicle,* has been revoked, suspended*, canceled,* or renewal thereof denied pursuant to this chapter to fail or refuse to surrender, on demand, to the Department license plates, identification markers, and registration cards issued under this title.

~~B.~~ ~~If~~ *C. Except as provided in subsection D, if* any ~~law~~ ~~enforcement~~ *law-enforcement* officer finds that a motor carrier vehicle bearing Virginia license plates or temporary transport plates is being operated in violation of subsection ~~A~~ ~~of~~ ~~this~~ ~~section~~ *B*, such ~~law~~ ~~enforcement~~ *law-enforcement* officer shall remove the license plate, identification marker, and registration card and shall forward the same to the Department.

D. If the officer finds that a TNC partner vehicle bearing Virginia license plates is being operated in violation of subsection B, such law-enforcement officer shall direct the operator of the vehicle to promptly remove any identification marker and any registration card issued under subsection B of § 46.2-2099.50 and return the same to the Department. If any law-enforcement officer finds that a TNC partner vehicle not bearing Virginia license plates is being operated in violation of subsection B, such law-enforcement officer shall remove any identification marker and any registration card issued under subsection B of § 46.2-2099.50 and shall forward the same to the Department.

~~C.~~ *E.* When informed that a vehicle is being operated in violation of this section, the driver shall drive the vehicle to a nearby location off the public highways and not remove it or allow it to be moved until the motor carrier is in compliance with all provisions of this chapter.

§ 46.2-2051. Application of article.

Unless otherwise stated, this article shall apply to all motor carriers *except transportation network companies*.

Article 15.

Transportation Network Companies.

§ 46.2-2099.45. Certificates required unless exempted.

Unless otherwise exempted, no person shall engage in the business of a transportation network company on any highway within the Commonwealth on an intrastate basis unless such person has secured from the Department a certificate of fitness authorizing such business.

§ 46.2-2099.46. Control, supervision, and regulation by Department.

Except as otherwise provided in this chapter, every transportation network company, TNC partner, and TNC partner vehicle shall be subject to exclusive control, supervision, and regulation by the Department, but enforcement of statutes and Department regulations shall be not only by the Department but also by any other law-enforcement officer. Nothing in this section shall be construed as authorizing the adoption of local ordinances providing for local regulation of transportation network companies, TNC partners, or TNC partner vehicles.

§ 46.2-2099.47. Operation except in accordance with chapter prohibited.

No transportation network company or TNC partner shall transport passengers for compensation on any highway in the Commonwealth on an intrastate basis except in accordance with the provisions of this chapter.

§ 46.2-2099.48. General operational requirements for transportation network companies and TNC partner.

A. A transportation network company and a TNC partner shall provide passenger transportation only on a prearranged basis and only by means of a digital platform that enables passengers to connect with TNC partners using a TNC partner vehicle. No TNC partner shall transport a passenger unless a transportation network company has matched the TNC partner to that passenger through the digital platform. A TNC partner shall not solicit, accept, arrange, or provide transportation in any other manner.

B. A transportation network company shall authorize collection of fares for transporting passengers solely through a digital platform. A TNC partner shall not accept payment of fares directly from a

passenger or any other person prearranging a ride or by any means other than electronically via a digital platform.

C. A transportation network company with knowledge that a TNC partner has violated the provisions of subsection A or B shall remove the TNC partner from the transportation network company's digital platform for at least one year.

D. A transportation network company shall publish the following information on its public website and associated digital platform:

1. The method used to calculate fares or the applicable rates being charged and an option to receive an estimated fare;

2. Information about its TNC partner screening criteria, including a description of the offenses that the transportation network company will regard as grounds for disqualifying an individual from acting as a TNC partner;

3. The means for a passenger or other person to report a TNC partner reasonably suspected of operating a TNC partner vehicle under the influence of drugs or alcohol;

4. Information about the company's training and testing policies for TNC partners;

5. Information about the company's standards for TNC partner vehicles; and

6. A customer support telephone number or email address and instructions regarding any alternative methods for reporting a complaint.

E. A transportation network company shall associate a TNC partner with one or more personal vehicles and shall authorize a TNC partner to transport passengers only in a vehicle specifically associated with a TNC partner by the transportation network company. The transportation network company shall arrange transportation solely for previously associated TNC partners and TNC partner vehicles. A TNC partner shall not transport passengers except in a TNC partner vehicle associated with the TNC partner by the transportation network company.

F. A TNC partner shall carry at all times while operating a TNC partner vehicle proof of coverage under each in-force TNC insurance policy, which may be displayed as part of the digital platform, and each in-force personal automobile insurance policy covering the vehicle. The TNC partner shall present such proof of insurance upon request to the Commissioner, a law-enforcement officer, an airport owner and operator, an official of the Washington Metropolitan Area Transit Commission, or any person involved in an accident that occurs during the operation of a TNC partner vehicle. The transportation network company shall require the TNC partner's compliance with the provisions of this subsection.

G. Prior to a passenger's entering a TNC partner vehicle, a transportation network company shall provide through the digital platform to the person prearranging the ride the first name and a photograph of the TNC partner, the make and model of the TNC partner vehicle, and the license plate number of the TNC partner vehicle.

H. A transportation network company shall provide to each of its TNC partners a credential, which may be displayed as part of the digital platform, that includes the following information:

1. The name or logo of the transportation network company;

2. The name and a photograph of the TNC partner; and

3. The make, model, and license plate number of each TNC partner vehicle associated with the TNC partner and the state issuing each such license plate.

The TNC partner shall carry the credential at all times during the operation of a TNC partner vehicle and shall present the credential upon request to law-enforcement officers, airport owners and operators, officials of the Washington Metropolitan Area Transit Commission, or a passenger. The transportation network company shall require the TNC partner's compliance with this subsection.

I. A transportation network company and its TNC partner shall, at all times during a prearranged ride, make the following information available through its digital platform immediately upon request to representatives of the Department, to law-enforcement officers, to officials of the Washington Metropolitan Area Transit Commission, and to airport owners and operators:

1. The name of the transportation network company;

2. The name of the TNC partner and the identification number issued to the TNC partner by the transportation network company;

3. The license plate number of the TNC partner vehicle and the state issuing such license plate; and

4. The location, date, and approximate time that each passenger was or will be picked up.

J. Upon completion of a prearranged ride, a transportation network company shall transmit to the person who prearranged the ride an electronic receipt that includes:

1. A map of the route taken;

2. The date and the times the trip began and ended;

3. The total fare, including the base fare and any additional charges incurred for distance traveled or duration of the prearranged ride;

4. The TNC partner's first name and photograph; and

5. Contact information by which additional support may be obtained.

K. The transportation network company shall adopt and enforce a policy of nondiscrimination on the basis of a passenger's points of departure and destination and shall notify TNC partners of such policy.

TNC partners shall comply with all applicable laws regarding nondiscrimination against passengers or potential passengers.

A transportation network company shall provide passengers an opportunity to indicate whether they require a wheelchair-accessible vehicle. If a transportation network company cannot arrange wheelchair-accessible service in a TNC partner vehicle in any instance, it shall direct the passenger to an alternate provider of wheelchair-accessible service, if available.

A transportation network company shall not impose additional charges for providing services to persons with disabilities because of those disabilities.

TNC partners shall comply with all applicable laws relating to accommodation of service animals.

A TNC partner may refuse to transport a passenger for any reason not prohibited by law, including any case in which (i) the passenger is acting in an unlawful, disorderly, or endangering manner; (ii) the passenger is unable to care for himself and is not in the charge of a responsible companion; or (iii) the TNC partner has already committed to providing a ride for another passenger.

A TNC partner shall immediately report to the transportation network company any refusal to transport a passenger after accepting a request to transport that passenger.

L. No transportation network company or TNC partner shall conduct any operation on the property of or into any airport unless such operation is authorized by the airport owner and operator and is in compliance with the rules and regulations of that airport. The Department may take action against a transportation network company that violates any regulation of an airport owner and operator, including the suspension or revocation of the transportation network company's certificate.

M. A TNC partner shall access and utilize a digital platform in a manner that is consistent with traffic laws of the Commonwealth.

N. In accordance with § 46.2-812, no TNC partner shall operate a motor vehicle for more than 13 hours in any 24-hour period.

§ 46.2-2099.49. Requirements for TNC partners; mandatory background screening; drug and alcohol policy; mandatory disclosures to TNC partners; duty of TNC partners to provide updated information to transportation network companies.

A. Before authorizing an individual to act as a TNC partner, a transportation network company shall confirm that the person is at least 21 years old and possesses a valid driver's license.

B. 1. Before authorizing an individual to act as a TNC partner, and at least once every two years after authorizing an individual to act as a TNC partner, a transportation network company shall obtain a national criminal history records check of that person. The background check shall include (i) a Multi-State/Multi-Jurisdiction Criminal Records Database Search or a search of a similar nationwide database with validation (primary source search) and (ii) a search of the Sex Offender and Crimes Against Minors Registry and the U.S. Department of Justice's National Sex Offender Public Website. The person conducting the background check shall be accredited by the National Association of Professional Background Screeners or a comparable entity approved by the Department.

2. Before authorizing an individual to act as a TNC partner, and at least once annually after authorizing an individual to act as a TNC partner, a transportation network company shall obtain and review a driving history research report on that person from the individual's state of licensure.

3. Before authorizing an individual to act as a TNC partner, and at least once every two years after authorizing a person to act as a TNC partner, a transportation network company shall verify that the person is not listed on the Sex Offender and Crimes Against Minors Registry or on the U.S. Department of Justice's National Sex Offender Public Website.

C. A transportation network company shall not authorize an individual to act as a TNC partner if the criminal history records check required under subsection B reveals that the individual:

1. Is a person for whom registration with the Sex Offender and Crimes Against Minors Registry is required pursuant to Chapter 9 (§ 9.1-900 et seq.) of Title 9.1 or is listed on the U.S. Department of Justice's National Sex Offender Public Website;

2. Has ever been convicted of or has ever pled guilty or nolo contendere to a violent felony offense as listed in subsection C of § 17.1-805, or a substantially similar law of another state or of the United States;

3. Within the preceding seven years has been convicted of or has pled guilty or nolo contendere to any of the following offenses, either under Virginia law or a substantially similar law of another state or of the United States: (i) any felony offense other than those included in subdivision 2; (ii) an offense under § 18.2-266, 18.2-266.1, 18.2-272, or 46.2-341.24; or (iii) any offense resulting in revocation of a driver's license pursuant to § 46.2-389 or 46.2-391; or

4. Within the preceding three years has been convicted of or has pled guilty or nolo contendere to any of the following offenses, either under Virginia law or a substantially similar law of another state or of the United States: (i) three or more moving violations; (ii) eluding a law-enforcement officer, as described in § 46.2-817; (iii) reckless driving, as described in Article 7 (§ 46.2-852 et seq.) of Chapter 8; (iv) operating a motor vehicle in violation of § 46.2-301; or (v) refusing to submit to a chemical test to determine the alcohol or drug content of the person's blood or breath, as described in § 18.2-268.3.

D. A transportation network company shall employ a zero-tolerance policy with respect to the use of

drugs and alcohol by TNC partners and shall include a notice concerning the policy on its website and associated digital platform.

E. A transportation network company shall make the following disclosures in writing to a TNC partner or prospective TNC partner:

1. The transportation network company shall disclose the liability insurance coverage and limits of liability that the transportation network company provides while the TNC partner uses a vehicle in connection with the transportation network company's digital platform.

2. The transportation network company shall disclose any physical damage coverage provided by the transportation network company for damage to the vehicle used by the TNC partner in connection with the transportation network company's digital platform.

3. The transportation network company shall disclose the uninsured motorist and underinsured motorist coverage and policy limits provided by the transportation network company while the TNC partner uses a vehicle in connection with the transportation network company's digital platform and advise the TNC partner that the TNC partner's personal automobile insurance policy may not provide uninsured motorist and underinsured motorist coverage when the TNC partner uses a vehicle in connection with a transportation network company's digital platform.

4. The transportation network company shall include the following disclosure prominently in writing to a TNC partner or prospective TNC partner: "If the vehicle that you plan to use to transport passengers for our transportation network company has a lien against it, you must notify the lienholder that you will be using the vehicle for transportation services that may violate the terms of your contract with the lienholder."

F. A TNC partner shall inform each transportation network company that has authorized him to act as a TNC partner of any event that may disqualify him from continuing to act as a TNC partner, including any of the following: a change in the registration status of the TNC partner vehicle; the revocation, suspension, cancellation, or restriction of the TNC partner's driver's license; a change in the insurance coverage of the TNC partner vehicle; a motor vehicle moving violation; and a criminal arrest, plea, or conviction.

§ 46.2-2099.50. Requirements for TNC partner vehicles; registration with and identification markers issued by Department; identification markers issued by transportation network company.

A. A TNC partner vehicle shall:

1. Be a personal vehicle;

2. Have a seating capacity of no more than eight persons, including the driver;

3. Be validly titled and registered in the Commonwealth or in another state;

4. Not have been issued a certificate of title, either in Virginia or in any other state, branding the vehicle as salvage, nonrepairable, rebuilt, or any equivalent classification;

5. Have a valid Virginia safety inspection and carry proof of that inspection in the vehicle;

6. Be covered under a TNC insurance policy meeting the requirements of § 46.2-2099.51 or 46.2-2099.52, as applicable; and

7. Be registered with the Department for use as a TNC partner vehicle and display an identification marker issued by the Department as provided in subsection B.

No TNC partner shall operate a TNC partner vehicle unless that vehicle meets the requirements of this subsection.

B. A vehicle owner, lessee, or TNC partner shall register a personal vehicle for use as a TNC partner vehicle. A TNC partner that is not the vehicle owner or lessee shall, prior to registering any TNC partner vehicle with the Department, secure the consent of each owner, lessor, and lessee of the vehicle as applicable for its registration as a TNC partner vehicle and for its use as a TNC partner vehicle by the TNC partner. A transportation network company shall have the option of registering a TNC partner vehicle on behalf of a TNC partner electronically through a secure portal maintained by the Department provided the TNC partner, if the TNC partner is not the vehicle owner or lessee, certifies that it has secured consent from each owner, lessor, and lessee of the vehicle for its registration as a TNC partner vehicle and for its use as a TNC partner vehicle by the TNC partner.

Prior to registering for use as a TNC partner vehicle any vehicle that has been titled and registered in another state, the vehicle owner or lessee, or a transportation network company on behalf of the owner or lessee, shall provide the Department with such information as the Department requires to establish a customer record for that person and that person's vehicle. A transportation network company shall have the option to submit this information electronically through a secure portal maintained by the Department.

For each TNC partner vehicle a transportation network company authorizes, the transportation network company or TNC partner shall provide to the Department, in a form acceptable to the Department, any information reasonably necessary for the Department to identify the vehicle and register it for use as a TNC partner vehicle.

Upon registering a vehicle for use as a TNC partner vehicle, the Department shall issue a temporary registration, an identification marker to the vehicle owner or lessee, and a registration card indicating the vehicle's registration for use as a TNC partner vehicle.

The Commissioner may deny, suspend, cancel, or revoke the TNC partner vehicle registration and identification marker for any of the following reasons: (i) the vehicle is not properly registered, (ii) the vehicle does not carry insurance as required by this article, (iii) the vehicle is sold, or (iv) the vehicle is used by a TNC partner in a manner not authorized by this chapter.

Registration of a TNC partner vehicle under this subsection shall remain valid until (a) the vehicle is no longer authorized to operate as a TNC partner vehicle by a transportation network company; (b) the TNC partner, vehicle owner, or lessee requests cancellation of the registration; (c) there is a transfer of vehicle ownership, other than a transfer from the lessor of the vehicle to the lessee; (d) the vehicle's lease terminates and ownership is not transferred to the lessee; or (e) the Department suspends, revokes, or cancels the registration of the vehicle for use as a TNC partner vehicle. The fee for the replacement of a lost, mutilated, or illegible identification marker or registration card shall be the same as the fee set forth in § 46.2-692 for the replacement of a decal or vehicle registration card. However, if the TNC partner vehicle is not titled and registered in Virginia, the replacement fee for an identification marker shall be $40.

Any vehicle registered with the Department as a personal vehicle and subject to further registration as a TNC partner vehicle pursuant to this section shall be presumed to be used for nonbusiness purposes for the purpose of determining whether it is a qualifying vehicle under § 58.1-3523 absent clear and convincing evidence to the contrary, and any registration pursuant to this section shall not create any presumption of business or commercial use of the vehicle or of business activity on the part of the TNC partner, for purposes of any state or local requirement.

C. Before authorizing a vehicle to be used as a TNC partner vehicle, a transportation network company shall confirm that the vehicle meets the requirements of subsection A and shall provide each TNC partner with proof of any TNC insurance policy maintained by the transportation network company.

For each TNC partner vehicle it authorizes, a transportation network company shall issue trade dress to the TNC partner associated with that vehicle. The trade dress shall be sufficient to identify the transportation network company or digital platform with which the vehicle is affiliated and shall be displayed in a manner that complies with Virginia law. The trade dress shall be of such size, shape, and color as to be readily identifiable during daylight hours from a distance of 50 feet while the vehicle is not in motion and shall be reflective, illuminated, or otherwise patently visible in darkness. The trade dress may take the form of a removable device that meets the identification and visibility requirements of this subsection.

The transportation network company shall submit to the Department proof that the transportation network company has established the trade dress required under this subsection by filing with the Department an illustration or photograph of the trade dress.

A TNC partner shall keep the trade dress issued under this subsection visible at all times while the vehicle is being operated as a TNC partner vehicle.

No person shall operate a vehicle bearing trade dress issued under this subsection without the authorization of the transportation network company issuing the trade dress.

D. Any information provided to the Department pursuant to this section, whether held by the Department or another public entity, shall not be subject to disclosure under the Virginia Freedom of Information Act (§ 2.2-3700 et seq.). Neither the Department nor any such public entity shall disclose any such information to a nongovernmental entity absent a court order or subpoena. In the event information provided pursuant to this section is sought through a court order or subpoena, the Department or other public entity shall promptly notify the transportation network company prior to disclosure so as to afford the transportation network company the opportunity to take appropriate actions to prevent disclosure. The Department shall not disclose such information to a governmental entity other than to enable that entity to perform its governmental function.

§ 46.2-2099.51. TNC insurance until January 1, 2016.

A. Until January 1, 2016, at all times during the operation of a TNC partner vehicle, a transportation network company or TNC partner shall keep in force TNC insurance as provided in this section.

B. The following requirements shall apply to TNC insurance from the moment a TNC partner accepts a prearranged ride request on a transportation network company's digital platform until the TNC partner completes the transaction on the digital platform or until the prearranged ride is complete, whichever is later:

1. TNC insurance shall provide motor vehicle liability coverage. Such coverage shall be primary and the minimum amount of liability coverage for death, bodily injury, and property damage shall be $1 million.

2. TNC insurance shall provide uninsured motorist coverage and underinsured motorist coverage. Such coverage shall apply from the moment a passenger enters a TNC partner vehicle until the passenger exits the vehicle. The minimum amount of uninsured motorist coverage and underinsured motorist coverage for death, bodily injury, and property damage shall be $1 million.

3. The requirements of this subsection may be satisfied by any of the following:

a. TNC insurance maintained by a TNC partner;

b. TNC insurance maintained by a transportation network company; or

c. Any combination of subdivisions a and b.

A transportation network company may meet its obligations under this subsection through a policy obtained by a TNC partner under subdivision a or c only if the transportation network company verifies that the policy is maintained by the TNC partner.

4. Insurers providing insurance coverage under this subsection shall have the exclusive duty to defend any liability claim, including any claim against a TNC partner, arising from an accident occurring within the time periods specified in this subsection. Neither the TNC partner's nor the vehicle owner's personal automobile insurance policy shall have the duty to defend or indemnify the TNC partner's activities in connection with the transportation network company, unless the policy expressly provides otherwise for the period of time to which this subsection is applicable or the policy contains an amendment or endorsement to provide that coverage.

5. Coverage under a TNC insurance policy shall not be dependent on a personal automobile insurance policy first denying a claim, nor shall a personal automobile insurance policy be required to first deny a claim.

6. Nothing in this subsection shall be construed to require a personal automobile insurance policy to provide primary or excess coverage. Neither the TNC partner's nor the vehicle owner's personal automobile insurance policy shall provide any coverage to the TNC partner, the vehicle owner, or any third party, unless the policy expressly provides for that coverage during the period of time to which this subsection is applicable or the policy contains an amendment or endorsement to provide that coverage.

C. The following requirements shall apply to TNC insurance (i) from the moment a TNC partner logs on to a transportation network company's associated digital platform until the TNC partner accepts a request to transport a passenger and (ii) from the moment the TNC partner completes the transaction on the digital platform or the prearranged ride is complete, whichever is later, until the TNC partner either accepts another prearranged ride request on the digital platform or logs off the digital platform:

1. TNC insurance shall provide motor vehicle liability coverage. Such coverage shall be secondary and shall provide liability coverage of at least $125,000 per person and $250,000 per incident for death and bodily injury and at least $50,000 for property damage.

2. The requirements for the coverage required by this subsection may be satisfied by any of the following:

a. TNC insurance maintained by a TNC partner;

b. TNC insurance maintained by a transportation network company that provides coverage in the event that a TNC partner's insurance policy under subdivision a has ceased to exist or has been canceled or in the event that the TNC partner does not otherwise maintain TNC insurance; or

c. Any combination of subdivisions a and b.

A transportation network company may meet its obligations under this subsection through a policy obtained by a TNC partner pursuant to subdivision a or c only if the transportation network company verifies that the policy is maintained by the TNC partner and is specifically written to cover the TNC partner's use of a vehicle in connection with a transportation network company's digital platform.

3. If the TNC partner vehicle is insured under a personal automobile insurance policy that does not exclude coverage, then such policy shall provide primary coverage and an insurance policy maintained by the transportation network company under subdivision 2 c shall provide excess coverage up to at least the limits required by subdivision 1.

D. In the event that the digital platform becomes inaccessible due to failure or malfunction while a TNC partner is en route to or transporting a passenger during a prearranged ride described in subsection B, TNC insurance coverage shall be presumed to be that required in subdivision B 1 until the passenger exits the vehicle.

E. In every instance where TNC insurance maintained by a TNC partner to fulfill the insurance obligations of this section has lapsed or ceased to exist, the transportation network company shall provide the coverage required by this section beginning with the first dollar of a claim.

F. This section shall not limit the liability of a transportation network company arising out of an accident involving a TNC partner in any action for damages against a transportation network company for an amount above the required insurance coverage.

G. Any person, or an attorney acting on his behalf, who suffers a loss in an automobile accident with a reasonable belief that the accident involves a TNC partner vehicle driven by a TNC partner in connection with a transportation network company and who provides the transportation network company with the date, approximate time, and location of the accident, and if available the name of the TNC partner and if available the accident report, may request in writing from the transportation network company information relating to the insurance coverage and the company providing the coverage. The transportation network company shall respond electronically or in writing within 30 days. The transportation network company's response shall contain the following information: (i) whether, at the approximate time of the accident, the TNC partner was logged into the transportation network

company's digital platform and, if so logged in, whether a trip request had been accepted or a passenger was in the TNC partner vehicle; (ii) the name of the insurance carrier providing primary coverage; and (iii) the identity and last known address of the TNC partner.

H. No contract, receipt, rule, or regulation shall exempt any transportation network company from the liability that would exist had no contract been made or entered into, and no such contract, receipt, rule, or regulation for exemption from liability for injury or loss occasioned by the neglect or misconduct of such transportation network company shall be valid. The liability referred to in this subsection shall mean the liability imposed by law upon a transportation network company for any loss, damage, or injury to passengers in its custody and care as a transportation network company.

I. Any insurance required by this section may be placed with an insurer that has been admitted in Virginia or with an insurer providing surplus lines insurance as defined in § 38.2-4805.2.

J. Any insurance policy required by this section shall satisfy the financial responsibility requirement for a motor vehicle under § 46.2-706 during the period such vehicle is being operated as a TNC partner vehicle.

K. The Department shall not issue the certificate of fitness required under § 46.2-2099.45 to any transportation network company that has not certified to the Department that every TNC partner vehicle it has authorized to operate on its digital platform is covered by an insurance policy that meets the requirements of this section.

L. Each transportation network company shall keep on file with the Department proof of an insurance policy maintained by the transportation network company in accordance with this section. Such proof shall be in a form acceptable to the Commissioner. A record of the policy shall remain in the files of the Department six months after the certificate is suspended or revoked for any cause.

M. The Department may suspend a certificate if the certificate holder fails to comply with the requirements of this section. Any person whose certificate has been suspended pursuant to this subsection may request a hearing as provided in subsection D of § 46.2-2011.26.

N. In a claims coverage investigation, a transportation network company and its insurer shall cooperate with insurers involved in the claims coverage investigation to facilitate the exchange of information, including the dates and times of any accident involving a TNC partner and the precise times that the TNC partner logged in and was logged out of the transportation network company's digital platform.

§ 46.2-2099.52. TNC insurance.

A. On and after January 1, 2016, at all times during the operation of a TNC partner vehicle, a transportation network company or TNC partner shall keep in force TNC insurance as provided in this section.

B. The following requirements shall apply to TNC insurance from the moment a TNC partner accepts a prearranged ride request on a transportation network company's digital platform until the TNC partner completes the transaction on the digital platform or until the prearranged ride is complete, whichever is later:

1. TNC insurance shall provide motor vehicle liability coverage. Such coverage shall be primary and the minimum amount of liability coverage for death, bodily injury, and property damage shall be $1 million.

2. TNC insurance shall provide uninsured motorist coverage and underinsured motorist coverage. Such coverage shall apply from the moment a passenger enters a TNC partner vehicle until the passenger exits the vehicle. The minimum amount of uninsured motorist coverage and underinsured motorist coverage for death, bodily injury, and property damage shall be $1 million.

3. The requirements of this subsection may be satisfied by any of the following:

a. TNC insurance maintained by a TNC partner;

b. TNC insurance maintained by a transportation network company; or

c. Any combination of subdivisions a and b.

A transportation network company may meet its obligations under this subsection through a policy obtained by a TNC partner under subdivision a or c only if the transportation network company verifies that the policy is maintained by the TNC partner.

4. Insurers providing insurance coverage under this subsection shall have the exclusive duty to defend any liability claim, including any claim against a TNC partner, arising from an accident occurring within the time periods specified in this subsection. Neither the TNC partner's nor the vehicle owner's personal automobile insurance policy shall have the duty to defend or indemnify the TNC partner's activities in connection with the transportation network company, unless the policy expressly provides otherwise for the period of time to which this subsection is applicable or the policy contains an amendment or endorsement to provide that coverage.

5. Coverage under a TNC insurance policy shall not be dependent on a personal automobile insurance policy first denying a claim, nor shall a personal automobile insurance policy be required to first deny a claim.

6. Nothing in this subsection shall be construed to require a personal automobile insurance policy to provide primary or excess coverage. Neither the TNC partner's nor the vehicle owner's personal

automobile insurance policy shall provide any coverage to the TNC partner, the vehicle owner, or any third party, unless the policy expressly provides for that coverage during the period of time to which this subsection is applicable or the policy contains an amendment or endorsement to provide that coverage.

C. The following requirements shall apply to TNC insurance (i) from the moment a TNC partner logs on to a transportation network company's associated digital platform until the TNC partner accepts a request to transport a passenger and (ii) from the moment the TNC partner completes the transaction on the digital platform or the prearranged ride is complete, whichever is later, until the TNC partner either accepts another prearranged ride request on the digital platform or logs off the digital platform:

1. TNC insurance shall provide motor vehicle liability coverage. Such coverage shall be primary and shall provide liability coverage of at least $50,000 per person and $100,000 per incident for death and bodily injury and at least $25,000 for property damage.

2. The requirements for the coverage required by this subsection may be satisfied by any of the following:

a. TNC insurance maintained by a TNC partner;

b. TNC insurance maintained by a transportation network company that provides coverage in the event that a TNC partner's insurance policy under subdivision a has ceased to exist or has been canceled or in the event that the TNC partner does not otherwise maintain TNC insurance; or

c. Any combination of subdivisions a and b.

A transportation network company may meet its obligations under this subsection through a policy obtained by a TNC partner pursuant to subdivision a or c only if the transportation network company verifies that the policy is maintained by the TNC partner and is specifically written to cover the TNC partner's use of a vehicle in connection with a transportation network company's digital platform.

D. In the event that the digital platform becomes inaccessible due to failure or malfunction while a TNC partner is en route to or transporting a passenger during a prearranged ride described in subsection B, TNC insurance coverage shall be presumed to be that required in subdivision B 1 until the passenger exits the vehicle.

E. In every instance where TNC insurance maintained by a TNC partner to fulfill the insurance obligations of this section has lapsed or ceased to exist, the transportation network company shall provide the coverage required by this section beginning with the first dollar of a claim.

F. This section shall not limit the liability of a transportation network company arising out of an accident involving a TNC partner in any action for damages against a transportation network company for an amount above the required insurance coverage.

G. Any person, or an attorney acting on his behalf, who suffers a loss in an automobile accident with a reasonable belief that the accident involves a TNC partner vehicle driven by a TNC partner in connection with a transportation network company and who provides the transportation network company with the date, approximate time, and location of the accident, and if available the name of the TNC partner and if available the accident report, may request in writing from the transportation network company information relating to the insurance coverage and the company providing the coverage. The transportation network company shall respond electronically or in writing within 30 days. The transportation network company's response shall contain the following information: (i) whether, at the approximate time of the accident, the TNC partner was logged into the transportation network company's digital platform and, if so logged in, whether a trip request had been accepted or a passenger was in the TNC partner vehicle; (ii) the name of the insurance carrier providing primary coverage; and (iii) the identity and last known address of the TNC partner.

H. No contract, receipt, rule, or regulation shall exempt any transportation network company from the liability that would exist had no contract been made or entered into, and no such contract, receipt, rule, or regulation for exemption from liability for injury or loss occasioned by the neglect or misconduct of such transportation network company shall be valid. The liability referred to in this subsection shall mean the liability imposed by law upon a transportation network company for any loss, damage, or injury to passengers in its custody and care as a transportation network company.

I. Any insurance required by this section may be placed with an insurer that has been admitted in Virginia or with an insurer providing surplus lines insurance as defined in § 38.2-4805.2.

J. Any insurance policy required by this section shall satisfy the financial responsibility requirement for a motor vehicle under § 46.2-706 during the period such vehicle is being operated as a TNC partner vehicle.

K. The Department shall not issue the certificate of fitness required under § 46.2-2099.45 to any transportation network company that has not certified to the Department that every TNC partner vehicle it has authorized to operate on its digital platform is covered by an insurance policy that meets the requirements of this section.

L. Each transportation network company shall keep on file with the Department proof of an insurance policy maintained by the transportation network company in accordance with this section. Such proof shall be in a form acceptable to the Commissioner. A record of the policy shall remain in the files of the Department six months after the certificate is revoked or suspended for any cause.

M. The Department may suspend a certificate if the certificate holder fails to comply with the requirements of this section. Any person whose certificate has been suspended pursuant to this subsection may request a hearing as provided in subsection D of § 46.2-2011.26.

N. In a claims coverage investigation, a transportation network company and its insurer shall cooperate with insurers involved in the claims coverage investigation to facilitate the exchange of information, including the dates and times of any accident involving a TNC partner and the precise times that the TNC partner logged in and was logged out of the transportation network company's digital platform.

§ 46.2-2099.53. Recordkeeping and reporting requirements for transportation network companies.

A. Records maintained by a transportation network company shall be adequate to confirm compliance with subsection D of § 46.2-2099.48 and with §§ 46.2-2099.49 and 46.2-2099.50 and shall at a minimum include:

1. True and accurate results of each national criminal history records check for each individual that the transportation network company authorizes to act as a TNC partner;

2. True and accurate results of the driving history research report for each individual that the transportation network company authorizes to act as a TNC partner;

3. Driver's license records of TNC partners, including records associated with participation in a driver record monitoring program;

4. True and accurate results of the sex offender screening for each individual that the transportation network company authorizes to act as a TNC partner;

5. Proof of compliance with the requirements enumerated in subdivisions A 1 and 3 through 6 of § 46.2-2099.50;

6. Proof of compliance with the notice and disclosure requirements of subsection D of § 46.2-2099.48 and subsections D and E of § 46.2-2099.49; and

7. Proof that the transportation network company obtained certification from the TNC partner that the TNC partner secured the consent of each owner, lessor, and lessee of the vehicle for its registration as a TNC partner vehicle and for its use as a TNC partner vehicle by the TNC partner.

A transportation network company shall retain all records required under this subsection for a period of three years. Such records shall be retained in a manner that permits systematic retrieval and shall be made available to the Department in a format acceptable to the Commissioner for the purposes of conducting an audit on no more than an annual basis.

B. A transportation network company shall maintain the following records and make them available, in an acceptable format, on request to the Commissioner, a law-enforcement officer, an official of the Washington Metropolitan Area Transit Commission, or an airport owner and operator to investigate and resolve a complaint or respond to an incident:

1. Data regarding TNC partner activity while logged into the digital platform, including beginning and ending times and locations of each prearranged ride;

2. Records regarding any actions taken against a TNC partner;

3. Contracts or agreements between the transportation network company and its TNC partners;

4. Information identifying each TNC partner, including the TNC partner's name, date of birth, and driver's license number and the state issuing the license; and

5. Information identifying each TNC partner vehicle the transportation network company has authorized, including the vehicle's make, model, model year, vehicle identification number, and license plate number and the state issuing the license plate.

Requests for information pursuant to subdivision 2 or 3 shall be in writing.

C. Information obtained by the Department, law-enforcement officers, officials of the Washington Metropolitan Area Transit Commission, or airport owners and operators pursuant to this section shall be considered privileged information and shall only be used by the Department, law-enforcement officers, officials of the Washington Metropolitan Area Transit Commission, and airport owners and operators for purposes specified in subsection A or B. Such information shall not be subject to disclosure except on the written request of the Commissioner, a law-enforcement officer, an official of the Washington Metropolitan Area Transit Commission, or an airport owner and operator who requires such information for the purposes specified in subsection A or B.

D. Except as provided in subsection C, information obtained by the Department, law-enforcement officers, officials of the Washington Metropolitan Area Transit Commission, or airport owners and operators pursuant to this section shall not be disclosed to anyone without the transportation network company's express written permission and shall not be subject to disclosure through a court order or through a third-party request submitted pursuant to the Virginia Freedom of Information Act (§ 2.2-3700 et seq.). This provision shall not be construed to mean that a person is denied the right to seek such information directly from a transportation network company during a court proceeding.

E. Except as required under this section, a transportation network company shall not disclose any personal information, as defined in § 2.2-3801, about a user of its digital platform unless:

1. The transportation network company obtains the user's consent to disclose the personal information;

2. The disclosure is necessary to comply with a legal obligation; or

3. The disclosure is necessary to protect or defend the terms and conditions for use of the service or to investigate violations of the terms and conditions.

This limitation regarding disclosure does not apply to the disclosure of aggregated user data or to information about the user that is not personal information as defined in § 2.2-3801.

2. That the Department of Motor Vehicles shall periodically consult with local government officials to determine whether transportation network companies have had an effect on the availability of wheelchair-accessible transportation services. If evidence suggests an effect, the Department shall work collaboratively with appropriate stakeholders to develop recommendations to be submitted to the Chairmen of the House and Senate Committees on Transportation.

3. That beginning July 1, 2016, the Department of Motor Vehicles shall review enforcement activity undertaken regarding the provisions of this act, insurance policies available to TNC partners that may require changes to the provisions of subdivisions E 1 and 2 of § 46.2-2099.49 as created by this act, the fees set forth in § 46.2-2011.5 of the Code of Virginia as amended by this act, and in § 46.2-2099.50 as created by this act to determine whether those fees adequately cover the Department's costs of administering the additional responsibilities imposed on the Department under this act. The Department shall report the results of its review to the Chairmen of the House and Senate Committees on Transportation no later than December 1, 2016.

4. That the provisions of subsection K of § 46.2-2099.48 as created by this act, which require a digital platform to allow customers or passengers prearranging rides to indicate whether a passenger requires a wheelchair-accessible vehicle or a vehicle that is otherwise accessible to individuals with disabilities, shall become effective on July 1, 2016.

5. That the transportation network companies shall advise TNC partners that a TNC partner's personal automobile insurance policy may not provide collision or comprehensive coverage for damage to the vehicle when the TNC partner uses a vehicle in connection with a transportation network company's digital platform, unless such policy expressly provides for TNC insurance coverage. Such notice shall be provided to each TNC partner until January 1, 2016.

6. That notwithstanding any other provision of law, a personal automobile insurer may, at its discretion, offer an automobile liability insurance policy, or an amendment or endorsement to an existing policy, that covers a motor vehicle with a seating capacity of eight or fewer persons, including the driver, while used in connection with a transportation network company's digital platform.

7. That the provisions of this act adding § 46.2-2099.52 shall become effective on January 1, 2016.

8. That no provision of this act or existing law shall be construed to prevent any motor carrier regulated under the existing provisions of Chapter 20 (§ 46.2-2000 et seq.) of Title 46.2 from offering services through an online digital platform, unless such motor carrier chooses to operate as a transportation network company.

CHAPTER 3

An Act to amend and reenact §§ 46.2-694, as it is currently effective and as it may become effective, 46.2-711, 46.2-749.5, 46.2-753, 46.2-755, 46.2-1400, 46.2-2000, 46.2-2001.3, 46.2-2011.5, 46.2-2011.6, 46.2-2011.20, 46.2-2011.22, 46.2-2011.24, 46.2-2011.29, and 46.2-2051 of the Code of Virginia and to amend the Code of Virginia by adding in Chapter 20 of Title 46.2 an article numbered 15, consisting of sections numbered 46.2-2099.45 through 46.2-2099.53, relating to transportation network companies.

[S 1025]

Approved February 16, 2015

Be it enacted by the General Assembly of Virginia:

1. That §§ 46.2-694, as it is currently effective and as it may become effective, 46.2-711, 46.2-749.5, 46.2-753, 46.2-755, 46.2-1400, 46.2-2000, 46.2-2001.3, 46.2-2011.5, 46.2-2011.6, 46.2-2011.20, 46.2-2011.22, 46.2-2011.24, 46.2-2011.29, and 46.2-2051 of the Code of Virginia are amended and reenacted and that the Code of Virginia is amended by adding in Chapter 20 of Title 46.2 an article numbered 15, consisting of sections numbered 46.2-2099.45 through 46.2-2099.53, as follows:

§ 46.2-694. (Contingent expiration date) Fees for vehicles designed and used for transportation of passengers; weights used for computing fees; burden of proof.

A. The annual registration fees for motor vehicles, trailers, and semitrailers designed and used for the transportation of passengers on the highways in the Commonwealth are:

1. Thirty-three dollars for each private passenger car or motor home if the passenger car or motor home weighs 4,000 pounds or less, provided that it is not used for the transportation of passengers for compensation and is not kept or used for rent or for hire, or is not operated under a lease without a chauffeur*; however, the fee provided under this subdivision shall apply to a private passenger car or motor home that weighs 4,000 pounds or less and is used as a TNC partner vehicle as defined in § 46.2-2000.*

2. Thirty-eight dollars for each *private* passenger car or motor home ~~which~~ *that* weighs more than 4,000 pounds, provided that it is not used for the transportation of passengers for compensation and is not kept or used for rent or for hire, or is not operated under a lease without a chauffeur*; however, the fee provided under this subdivision shall apply to a private passenger car or motor home that weighs more than 4,000 pounds and is used as a TNC partner vehicle as defined in § 46.2-2000.*

3. Thirty cents per 100 pounds or major fraction thereof for a private motor vehicle other than a motorcycle with a normal seating capacity of more than 10 adults, including the driver, if the private motor vehicle is not used for the transportation of passengers for compensation and is not kept or used for rent or for hire or is not operated under a lease without a chauffeur. In no case shall the fee be less than $23 if the vehicle weighs 4,000 pounds or less or $28 if the vehicle weighs more than 4,000 pounds.

4. Thirty cents per 100 pounds or major fraction thereof for a school bus. In no case shall the fee be less than $23 if the vehicle weighs 4,000 pounds or less or $28 if the vehicle weighs more than 4,000 pounds.

5. Twenty-three dollars for each trailer or semitrailer designed for use as living quarters for human beings.

6. Thirteen dollars plus $0.30 per 100 pounds or major fraction thereof for each motor vehicle, trailer, or semitrailer used as a common carrier of passengers, operating either intrastate or interstate. Interstate common carriers of interstate passengers may elect to be licensed and pay the fees prescribed in subdivision 7 on submission to the Commissioner of a declaration of operations and equipment as he may prescribe. An additional $5 shall be charged if the motor vehicle weighs more than 4,000 pounds.

7. Thirteen dollars plus $0.70 per 100 pounds or major fraction thereof for each motor vehicle, trailer, or semitrailer used as a common carrier of interstate passengers if election is made to be licensed under this subsection. An additional $5 shall be charged if the motor vehicle weighs more than 4,000 pounds. In lieu of the foregoing fee of $0.70 per 100 pounds, a motor carrier of passengers, operating two or more vehicles both within and outside the Commonwealth and registered for insurance purposes with the Surface Transportation Board of the U.S. Department of Transportation, Federal Highway Administration, may apply to the Commissioner for prorated registration. Upon the filing of such application, in such form as the Commissioner may prescribe, the Commissioner shall apportion the registration fees provided in this subsection so that the total registration fees to be paid for such vehicles of such carrier shall be that proportion of the total fees, if there were no apportionment, that the total number of miles traveled by such vehicles of such carrier within the Commonwealth bears to the total

number of miles traveled by such vehicles within and outside the Commonwealth. Such total mileage in each instance is the estimated total mileage to be traveled by such vehicles during the license year for which such fees are paid, subject to the adjustment in accordance with an audit to be made by representatives of the Commissioner at the end of such license year, the expense of such audit to be borne by the carrier being audited. Each vehicle passing into or through Virginia shall be registered and licensed in Virginia and the annual registration fee to be paid for each such vehicle shall not be less than $33. For the purpose of determining such apportioned registration fees, only those motor vehicles, trailers, or semitrailers operated both within and outside the Commonwealth shall be subject to inclusion in determining the apportionment provided for herein.

8. Thirteen dollars plus $0.80 per 100 pounds or major fraction thereof for each motor vehicle, trailer or semitrailer kept or used for rent or for hire or operated under a lease without a chauffeur for the transportation of passengers. An additional fee of $5 shall be charged if the vehicle weighs more than 4,000 pounds. This ~~subsection~~ *subdivision* does not apply to vehicles used as common carriers *or as TNC partner vehicles as defined in § 46.2-2000*.

9. Twenty-three dollars for a taxicab or other vehicle which is kept for rent or hire operated with a chauffeur for the transportation of passengers, and which operates or should operate under permits issued by the Department as required by law. An additional fee of $5 shall be charged if the vehicle weighs more than 4,000 pounds. This ~~subsection~~ *subdivision* does not apply to vehicles used as common carriers *or as TNC partner vehicles as defined in § 46.2-2000*.

10. Eighteen dollars for a motorcycle, with or without a sidecar. To this fee shall be added a surcharge of $3 which shall be distributed as provided in § 46.2-1191.

10a. Fourteen dollars for a moped, to be paid into the state treasury and set aside as a special fund to be used to meet the expenses of the Department.

10b. Eighteen dollars for an autocycle.

11. Twenty-three dollars for a bus used exclusively for transportation to and from church school, for the purpose of religious instruction, or church, for the purpose of divine worship. If the empty weight of the vehicle exceeds 4,000 pounds, the fee shall be $28.

12. Thirteen dollars plus $0.70 per 100 pounds or major fraction thereof for other passenger-carrying vehicles.

13. An additional fee of $4.25 per year shall be charged and collected at the time of registration of each pickup or panel truck and each motor vehicle under subdivisions 1 through 12. All funds collected from $4 of the $4.25 fee shall be paid into the state treasury and shall be set aside as a special fund to be used only for emergency medical service purposes. The moneys in the special emergency medical services fund shall be distributed as follows:

a. Two percent shall be distributed to the State Department of Health to provide funding to the Virginia Association of Volunteer Rescue Squads to be used solely for the purpose of conducting volunteer recruitment, retention, and training activities;

b. Thirty percent shall be distributed to the State Department of Health to support (i) emergency medical services training programs (excluding advanced life support classes); (ii) advanced life support training; (iii) recruitment and retention programs (all funds for such support shall be used to recruit and retain volunteer emergency medical services personnel only, including public awareness campaigns, technical assistance programs, and similar activities); (iv) emergency medical services system development, initiatives, and priorities based on needs identified by the State Emergency Medical Services Advisory Board; (v) local, regional, and statewide performance contracts for emergency medical services to meet the objectives stipulated in § 32.1-111.3; (vi) technology and radio communication enhancements; and (vii) improved emergency preparedness and response. Any funds set aside for distribution under this provision and remaining undistributed at the end of any fiscal year shall revert to the Rescue Squad Assistance Fund;

c. Thirty-two percent shall be distributed to the Rescue Squad Assistance Fund;

d. Ten percent shall be available to the State Department of Health's Office of Emergency Medical Services for use in emergency medical services; and

e. Twenty-six percent shall be returned by the Comptroller to the locality wherein such vehicle is registered, to provide funding for training of volunteer or salaried emergency medical service personnel of licensed, nonprofit emergency medical services agencies and for the purchase of necessary equipment and supplies for use in such locality for licensed, nonprofit emergency medical and rescue services.

All revenues generated by the remaining $0.25 of the $4.25 fee approved by the 2008 Session of the General Assembly shall be deposited into the Rescue Squad Assistance Fund and used only to pay for the costs associated with the certification and recertification training of emergency medical services personnel.

The Comptroller shall clearly designate on the warrant, check, or other means of transmitting these funds that such moneys are only to be used for purposes set forth in this subdivision. Such funds shall be in addition to any local appropriations and local governing bodies shall not use these funds to supplant local funds. Each local governing body shall report annually to the Board of Health on the use of the funds returned to it pursuant to this section. In any case in which the local governing body grants

the funds to a regional emergency medical services council to be distributed to the licensed, nonprofit emergency medical and rescue services, the local governing body shall remain responsible for the proper use of the funds. If, at the end of any fiscal year, a report on the use of the funds returned to the locality pursuant to this section for that year has not been received from a local governing body, any funds due to that local governing body for the next fiscal year shall be retained until such time as the report has been submitted to the Board.

B. All motor vehicles, trailers, and semitrailers registered as provided in subsection B of § 46.2-646 shall pay a registration fee equal to one-twelfth of all fees required by subsection A of this section or § 46.2-697 for such motor vehicle, trailer, or semitrailer, computed to the nearest cent, multiplied by the number of months in the registration period for such motor vehicles, trailers, and semitrailers.

C. The manufacturer's shipping weight or scale weight shall be used for computing all fees required by this section to be based upon the weight of the vehicle.

D. The applicant for registration bears the burden of proof that the vehicle for which registration is sought is entitled by weight, design, and use to be registered at the fee tendered by the applicant to the Commissioner or to his authorized agent.

§ 46.2-694. (Contingent effective date) Fees for vehicles designed and used for transportation of passengers; weights used for computing fees; burden of proof.

A. The annual registration fees for motor vehicles, trailers, and semitrailers designed and used for the transportation of passengers on the highways in the Commonwealth are:

1. Twenty-three dollars for each private passenger car or motor home if the passenger car or motor home weighs 4,000 pounds or less, provided that it is not used for the transportation of passengers for compensation and is not kept or used for rent or for hire, or is not operated under a lease without a chauffeur*; however, the fee provided under this subdivision shall apply to a private passenger car or motor home that weighs 4,000 pounds or less and is used as a TNC partner vehicle as defined in § 46.2-2000*.

2. Twenty-eight dollars for each *private* passenger car or motor home ~~which~~ *that* weighs more than 4,000 pounds, provided that it is not used for the transportation of passengers for compensation and is not kept or used for rent or for hire, or is not operated under a lease without a chauffeur*; however, the fee provided under this subdivision shall apply to a private passenger car or motor home that weighs more than 4,000 pounds and is used as a TNC partner vehicle as defined in § 46.2-2000*.

3. Thirty cents per 100 pounds or major fraction thereof for a private motor vehicle other than a motorcycle with a normal seating capacity of more than 10 adults, including the driver, if the private motor vehicle is not used for the transportation of passengers for compensation and is not kept or used for rent or for hire or is not operated under a lease without a chauffeur. In no case shall the fee be less than $23 if the vehicle weighs 4,000 pounds or less or $28 if the vehicle weighs more than 4,000 pounds.

4. Thirty cents per 100 pounds or major fraction thereof for a school bus. In no case shall the fee be less than $23 if the vehicle weighs 4,000 pounds or less or $28 if the vehicle weighs more than 4,000 pounds.

5. Twenty-three dollars for each trailer or semitrailer designed for use as living quarters for human beings.

6. Thirteen dollars plus $0.30 per 100 pounds or major fraction thereof for each motor vehicle, trailer, or semitrailer used as a common carrier of passengers, operating either intrastate or interstate. Interstate common carriers of interstate passengers may elect to be licensed and pay the fees prescribed in subdivision 7 on submission to the Commissioner of a declaration of operations and equipment as he may prescribe. An additional $5 shall be charged if the motor vehicle weighs more than 4,000 pounds.

7. Thirteen dollars plus $0.70 per 100 pounds or major fraction thereof for each motor vehicle, trailer, or semitrailer used as a common carrier of interstate passengers if election is made to be licensed under this subsection. An additional $5 shall be charged if the motor vehicle weighs more than 4,000 pounds. In lieu of the foregoing fee of $0.70 per 100 pounds, a motor carrier of passengers, operating two or more vehicles both within and outside the Commonwealth and registered for insurance purposes with the Surface Transportation Board of the U.S. Department of Transportation, Federal Highway Administration, may apply to the Commissioner for prorated registration. Upon the filing of such application, in such form as the Commissioner may prescribe, the Commissioner shall apportion the registration fees provided in this subsection so that the total registration fees to be paid for such vehicles of such carrier shall be that proportion of the total fees, if there were no apportionment, that the total number of miles traveled by such vehicles of such carrier within the Commonwealth bears to the total number of miles traveled by such vehicles within and outside the Commonwealth. Such total mileage in each instance is the estimated total mileage to be traveled by such vehicles during the license year for which such fees are paid, subject to the adjustment in accordance with an audit to be made by representatives of the Commissioner at the end of such license year, the expense of such audit to be borne by the carrier being audited. Each vehicle passing into or through Virginia shall be registered and licensed in Virginia and the annual registration fee to be paid for each such vehicle shall not be less than $33. For the purpose of determining such apportioned registration fees, only those motor vehicles,

trailers, or semitrailers operated both within and outside the Commonwealth shall be subject to inclusion in determining the apportionment provided for herein.

8. Thirteen dollars plus $0.80 per 100 pounds or major fraction thereof for each motor vehicle, trailer or semitrailer kept or used for rent or for hire or operated under a lease without a chauffeur for the transportation of passengers. An additional fee of $5 shall be charged if the vehicle weighs more than 4,000 pounds. This ~~subsection~~ *subdivision* does not apply to vehicles used as common carriers *or as TNC partner vehicles as defined in § 46.2-2000*.

9. Twenty-three dollars for a taxicab or other vehicle which is kept for rent or hire operated with a chauffeur for the transportation of passengers, and which operates or should operate under permits issued by the Department as required by law. An additional fee of $5 shall be charged if the vehicle weighs more than 4,000 pounds. This ~~subsection~~ *subdivision* does not apply to vehicles used as common carriers *or as TNC partner vehicles as defined in § 46.2-2000*.

10. Eighteen dollars for a motorcycle, with or without a sidecar. To this fee shall be added a surcharge of $3, which shall be distributed as provided in § 46.2-1191.

10a. Fourteen dollars for a moped, to be paid into the state treasury and set aside as a special fund to be used to meet the expenses of the Department.

10b. Eighteen dollars for an autocycle.

11. Twenty-three dollars for a bus used exclusively for transportation to and from church school, for the purpose of religious instruction, or church, for the purpose of divine worship. If the empty weight of the vehicle exceeds 4,000 pounds, the fee shall be $28.

12. Thirteen dollars plus $0.70 per 100 pounds or major fraction thereof for other passenger-carrying vehicles.

13. An additional fee of $4.25 per year shall be charged and collected at the time of registration of each pickup or panel truck and each motor vehicle under subdivisions 1 through 12. All funds collected from $4 of the $4.25 fee shall be paid into the state treasury and shall be set aside as a special fund to be used only for emergency medical service purposes. The moneys in the special emergency medical services fund shall be distributed as follows:

a. Two percent shall be distributed to the State Department of Health to provide funding to the Virginia Association of Volunteer Rescue Squads to be used solely for the purpose of conducting volunteer recruitment, retention and training activities;

b. Thirty percent shall be distributed to the State Department of Health to support (i) emergency medical services training programs (excluding advanced life support classes); (ii) advanced life support training; (iii) recruitment and retention programs (all funds for such support shall be used to recruit and retain volunteer emergency medical services personnel only, including public awareness campaigns, technical assistance programs, and similar activities); (iv) emergency medical services system development, initiatives, and priorities based on needs identified by the State Emergency Medical Services Advisory Board; (v) local, regional, and statewide performance contracts for emergency medical services to meet the objectives stipulated in § 32.1-111.3; (vi) technology and radio communication enhancements; and (vii) improved emergency preparedness and response. Any funds set aside for distribution under this provision and remaining undistributed at the end of any fiscal year shall revert to the Rescue Squad Assistance Fund;

c. Thirty-two percent shall be distributed to the Rescue Squad Assistance Fund;

d. Ten percent shall be available to the State Department of Health's Office of Emergency Medical Services for use in emergency medical services; and

e. Twenty-six percent shall be returned by the Comptroller to the locality wherein such vehicle is registered, to provide funding for training of volunteer or salaried emergency medical service personnel of licensed, nonprofit emergency medical services agencies and for the purchase of necessary equipment and supplies for use in such locality for licensed, nonprofit emergency medical and rescue services.

All revenues generated by the remaining $0.25 of the $4.25 fee approved by the 2008 Session of the General Assembly shall be deposited into the Rescue Squad Assistance Fund and used only to pay for the costs associated with the certification and recertification training of emergency medical services personnel.

The Comptroller shall clearly designate on the warrant, check, or other means of transmitting these funds that such moneys are only to be used for purposes set forth in this subdivision. Such funds shall be in addition to any local appropriations and local governing bodies shall not use these funds to supplant local funds. Each local governing body shall report annually to the Board of Health on the use of the funds returned to it pursuant to this section. In any case in which the local governing body grants the funds to a regional emergency medical services council to be distributed to the licensed, nonprofit emergency medical and rescue services, the local governing body shall remain responsible for the proper use of the funds. If, at the end of any fiscal year, a report on the use of the funds returned to the locality pursuant to this section for that year has not been received from a local governing body, any funds due to that local governing body for the next fiscal year shall be retained until such time as the report has been submitted to the Board.

B. All motor vehicles, trailers, and semitrailers registered as provided in subsection B of § 46.2-646

shall pay a registration fee equal to one-twelfth of all fees required by subsection A of this section or § 46.2-697 for such motor vehicle, trailer, or semitrailer, computed to the nearest cent, multiplied by the number of months in the registration period for such motor vehicles, trailers, and semitrailers.

C. The manufacturer's shipping weight or scale weight shall be used for computing all fees required by this section to be based upon the weight of the vehicle.

D. The applicant for registration bears the burden of proof that the vehicle for which registration is sought is entitled by weight, design, and use to be registered at the fee tendered by the applicant to the Commissioner or to his authorized agent.

§ 46.2-711. Furnishing number and design of plates; displaying on vehicles required.

A. The Department shall furnish one license plate for every registered moped, motorcycle, autocycle, tractor truck, semitrailer, or trailer, and two license plates for every other registered motor vehicle, except to licensed motor vehicle dealers and persons delivering unladen vehicles who shall be furnished one license plate. The license plates for trailers, semitrailers, commercial vehicles, and trucks, other than license plates for dealers, may be of such design as to prevent removal without mutilating some part of the indicia forming a part of the license plate, when secured to the bracket.

B. The Department shall issue appropriately designated license plates for:

1. Passenger-carrying vehicles for rent or hire for the transportation of passengers for private trips, *other than TNC partner vehicles as defined in § 46.2-2000*;

2. Taxicabs;

3. Passenger-carrying vehicles operated by common carriers or restricted common carriers;

4. Property-carrying motor vehicles to applicants who operate as private carriers only;

5. Applicants, *other than TNC partners as defined in § 46.2-2000,* who operate motor vehicles as carriers for rent or hire;

6. Vehicles operated by nonemergency medical transportation carriers as defined in § 46.2-2000; and

7. Trailers and semitrailers.

C. The Department shall issue appropriately designated license plates for motor vehicles held for rental as defined in § 58.1-1735.

D. The Department shall issue appropriately designated license plates for low-speed vehicles.

E. No vehicles shall be operated on the highways in the Commonwealth without displaying the license plates required by this chapter. The provisions of this subsection shall not apply to vehicles used to collect and deliver the Unites States mail to the extent that their rear license plates may be covered by the "CAUTION, FREQUENT STOPS, U.S. MAIL" sign when the vehicle is engaged in the collection and delivery of the United States mail.

F. Pickup or panel trucks are exempt from the provisions of subsection B with reference to displaying for-hire license plates when operated as a carrier for rent or hire. However, this exemption shall not apply to pickup or panel trucks subject to regulation under Chapter 21 (§ 46.2-2100 et seq.).

§ 46.2-749.5. Special license plates celebrating Virginia's tobacco heritage.

A. On receipt of an application, the Commissioner shall issue special license plates celebrating Virginia's tobacco heritage. For each set of license plates issued under this section, the Commissioner shall charge, in addition to the prescribed cost of state license plates, an annual fee of ~~ten dollars~~ *$10*.

B. License plates may be issued under this section for display on vehicles registered as trucks, as that term is defined in § 46.2-100, provided that no license plates are issued pursuant to this section for (i) vehicles operated for hire, *except TNC partner vehicles as defined in § 46.2-2000*; (ii) vehicles registered under the International Registration Plan~~,~~*;* or (iii) vehicles registered as tow trucks or tractor trucks as defined in § 46.2-100. No permanent license plates without decals as authorized in subsection B of § 46.2-712 may be issued under this section. For each set of truck license plates issued under this subsection, the Commissioner shall charge, in addition to the prescribed cost of state license plates, an annual fee of $25.

§ 46.2-753. Additional license fees in certain localities.

Notwithstanding any other provision of law, the governing bodies of Alexandria, Arlington, Fairfax County, Fairfax City, and Falls Church are authorized to charge annual license fees, in addition to those specified in § 46.2-752, on passenger cars, *including passenger cars that are used as TNC partner vehicles as defined in § 46.2-2000, but* not *on passenger cars that are otherwise* used for the transportation of passengers for compensation. The additional fee shall be no more than ~~five dollars~~ *$5*. The total local license fee shall be no more than ~~twenty-five dollars~~ *$25* on any vehicle, and this license fee shall not be imposed on any motor vehicle exempted under § 46.2-739.

The governing bodies are also authorized to charge additional annual license fees on the motor vehicles, trailers, and semitrailers as specified in § 46.2-697 in an amount of no more than ~~five dollars~~ *$5* for each such vehicle. This authorization shall not increase the maximum chargeable by more than ~~five dollars~~ *$5* or affect any existing exemption.

Any funds acquired in excess of those allowed by § 46.2-752, shall be allocated to the Northern Virginia Transportation Commission to be a credit to that ~~jurisdiction~~ *locality* making the payment for its share of any operating deficit assigned to it by the Washington Metropolitan Area Transit Authority.

§ 46.2-755. Limitations on imposition of motor vehicle license taxes and fees.

A. No ~~county, city, or town~~ *locality* shall impose any motor vehicle license tax or fee on any motor vehicle, trailer, or semitrailer when:

1. A similar tax or fee is imposed by the ~~county, city, or town~~ *locality* wherein the vehicle is normally garaged, stored, or parked;

2. The vehicle is owned by a nonresident of such locality and is used exclusively for pleasure or personal transportation *or as a TNC partner vehicle as defined in § 46.2-2000* and not *otherwise* for hire or for the conduct of any business or occupation other than that set forth in subdivision 3 ~~of this subsection~~;

3. The vehicle is (i) owned by a nonresident and (ii) used for transporting into and within the locality, for sale in person or by his employees, wood, meats, poultry, fruits, flowers, vegetables, milk, butter, cream, or eggs produced or grown by him, and not purchased by him for sale;

4. The motor vehicle, trailer, or semitrailer is owned by an officer or employee of the Commonwealth who is a nonresident of such ~~county, city, or town~~ *locality* and who uses the vehicle in the performance of his duties for the Commonwealth under an agreement for such use;

5. The motor vehicle, trailer, or semitrailer is kept by a dealer or manufacturer for sale or for sales demonstration;

6. The motor vehicle, trailer, or semitrailer is operated by a common carrier of persons or property operating between cities and towns in the Commonwealth and not in intracity transportation or between cities and towns on the one hand and points and places outside cities and towns on the other and not in intracity transportation; or

7. The motor vehicle, trailer, or semitrailer is inoperable and unlicensed pursuant to § 46.2-734.

B. No ~~county, city, or town~~ *locality* shall impose a license fee for any one motor vehicle owned and used personally by any veteran who holds a current state motor vehicle registration card establishing that he has received a disabled veteran's exemption from the Department and has been issued a disabled veteran's motor vehicle license plate as prescribed in § 46.2-739.

C. No ~~county, city, or town~~ *locality* shall impose any license tax or license fee or the requirement of a license tag, sticker or decal upon any daily rental vehicle, as defined in § 58.1-1735, the rental of which is subject to the tax imposed by subdivision A 2 of § 58.1-1736.

D. In the rental agreement between a motor vehicle renting company and a renter, the motor vehicle renting company may separately itemize and charge daily fees or transaction fees to the renter, provided that the amounts of such fees are disclosed at the time of reservation and rental as part of any estimated pricing provided to the renter. Such fees include a vehicle license fee to recover the company's incurred costs in licensing, titling, and registering its rental fleet, concession recovery fees actually charged the company by an airport, or other governmentally owned or operated facility, and consolidated facility charges actually charged by an airport, or other governmentally owned or operated facility for improvements to or construction of facilities at such facility where the motor vehicle rental company operates. The vehicle license fee shall represent the company's good faith estimate of the average per day per vehicle portion of the company's total annual vehicle licensing, titling, and registration costs.

No motor vehicle renting company charging a vehicle license fee, concession recovery fee, or consolidated facility charge may make an advertisement in the Commonwealth that includes a statement of the rental rate for a vehicle available for rent in the Commonwealth unless such advertisement includes a statement that the customer will be required to pay a vehicle license fee, concession recovery fee, or consolidated facility charge. The vehicle license fee, concession recovery fee, or consolidated facility charge shall be shown as a separately itemized charge on the rental agreement. The vehicle license fee shall be described in either the terms and conditions of the rental agreement as the "estimated average per day per vehicle portion of the company's total annual vehicle licensing, titling, and registration costs" or, for renters participating in an extended rental program pursuant to a master rental agreement, by posting such statement on the rental company website.

Any amounts collected by the motor vehicle renting company in excess of the actual amount of its costs incurred relating to its vehicle license fees shall be retained by the motor vehicle renting company and applied toward the recovery of its next calendar year's costs relating to such fees. In such event, the good faith estimate of any vehicle license fee to be charged by the company for the next calendar year shall be reduced to take into account the excess amount collected from the prior year.

E. As used in this section, common carrier of persons or property includes any person who undertakes, whether directly or by lease or any other arrangement, to transport passengers or household goods for the general public by motor vehicle for compensation over the highways of the Commonwealth, whether over regular or irregular routes, that has obtained the required certificate from the Department of Motor Vehicles pursuant to § 46.2-2075 or 46.2-2150.

§ 46.2-1400. "Ridesharing arrangement" defined.

"Ridesharing arrangement" means the transportation of persons in a motor vehicle when such transportation is incidental to the principal purpose of the driver, which is to reach a destination and not to transport persons for profit. The term includes ridesharing arrangements known as carpools, vanpools, and bus pools. *"Ridesharing arrangement" does not include a prearranged ride as defined in § 46.2-2000.*

§ 46.2-2000. Definitions.

Whenever used in this chapter unless expressly stated otherwise:

"Authorized insurer" means, in the case of an interstate motor carrier whose operations may or may not include intrastate activity, an insurer authorized to transact business in any one state, or, in the case of a solely intrastate motor carrier, an insurer authorized to transact business in the Commonwealth.

"Broker" means any person not included in the term "motor carrier" and not a bona fide employee or agent of any such carrier, who, as principal or agent, sells or offers for sale any transportation subject to this chapter, or negotiates for, or holds himself out by solicitation, advertisement, or otherwise as one who sells, provides, furnishes, contracts, or arranges for such transportation.

"Carrier by motor launch" means a common carrier ~~or contract carrier~~, which carrier uses one or more motor launches operating on the waters within the Commonwealth to transport passengers.

"Certificate" means a certificate of public convenience and necessity or a certificate of fitness.

"Certificate of fitness" means a certificate issued by the Department to a contract passenger carrier, a sight-seeing carrier, *a transportation network company,* or a nonemergency medical transportation carrier.

"Certificate of public convenience and necessity" means a certificate issued by the Department of Motor Vehicles to certain common carriers, but nothing contained in this chapter shall be construed to mean that the Department can issue any such certificate authorizing intracity transportation.

"Common carrier" means any person who undertakes, whether directly or by a lease or any other arrangement, to transport passengers for the general public by motor vehicle for compensation over the highways of the Commonwealth, whether over regular or irregular routes, including such motor vehicle operations of carriers by rail or water under this chapter. "Common carrier" does not include nonemergency medical transportation carriers, *transportation network companies, or TNC partners* as defined in this section.

~~"Contract carrier" means any person who, under special and individual contracts or agreements, and whether directly or by a lease or any other arrangement, transports passengers for compensation.~~

"Contract passenger carrier" means a motor carrier that transports groups of passengers under a single contract made with one person for an agreed charge for such transportation, regardless of the number of passengers transported, and for which transportation no individual or separate fares are solicited, charged, collected, or received by the carrier. *"Contract passenger carrier" does not include a transportation network company or TNC partner as defined in this section.*

"Department" means the Department of Motor Vehicles.

"Digital platform" means any online-enabled application, software, website, or system offered or utilized by a transportation network company that enables the prearrangement of rides with TNC partners.

"Employee hauler" means a motor carrier operating for compensation and exclusively transporting only bona fide employees directly to and from the factories, plants, office or other places of like nature where the employees are employed and accustomed to work.

"Excursion train" means any steam-powered train that carries passengers for which the primary purpose of the operation of such train is the passengers' experience and enjoyment of this means of transportation, and does not, in the course of operation, carry (i) freight other than the personal luggage of the passengers or crew or supplies and equipment necessary to serve the needs of the passengers and crew, (ii) passengers who are commuting to work, or (iii) passengers who are traveling to their final destination solely for business or commercial purposes.

"Financial responsibility" means the ability to respond in damages for liability thereafter incurred arising out of the ownership, maintenance, use, or operation of a motor vehicle, in the amounts provided for in this chapter.

"Highway" means every public highway or place of whatever nature open to the use of the public for purposes of vehicular travel in the Commonwealth, including the streets and alleys in towns and cities.

"Identification marker" means a decal or other visible identification issued *or required* by the Department to show *one or more of the following:* (i) that the operator of the vehicle has registered with the Department for the payment of the road tax imposed under Chapter 27 (§ 58.1-2700 et seq.) of Title 58.1~~,~~*;* (ii) proof of the possession of a certificate or permit issued pursuant to Chapter 20 (§ 46.2-2000 et seq.) ~~of this title, and/or~~*;* (iii) *proof that the vehicle has been registered with the Department as a TNC partner vehicle under subsection B of § 46.2-2099.50; (iv) proof that the vehicle has been authorized by a transportation network company to be operated as a TNC partner vehicle, in accordance with subsection C of § 46.2-2099.50; or (v)* proof of compliance with the insurance requirements of this chapter.

"Interstate" means transportation of passengers between states.

"Intrastate" means transportation of passengers solely within a state.

"License" means a license issued by the Department to a broker.

"Minibus" means any motor vehicle having a seating capacity of not less than seven nor more than 31 passengers, including the driver, and used in the transportation of passengers.

"Motor carrier" means any person who undertakes, whether directly or by lease, to transport

passengers for compensation over the highways of the Commonwealth.

"Motor launch" means a motor vessel that meets the requirements of the U.S. Coast Guard for the carriage of passengers for compensation, with a capacity of six or more passengers, but not in excess of ~~fifty~~ *50* passengers. *"*Motor launch~~, as defined herein, shall~~*" does* not include sight-seeing vessels, special or charter party vessels within the provisions of this chapter. A carrier by motor launch shall not be regarded as a steamship company.

"Nonemergency medical transportation carrier" means a motor carrier that exclusively provides nonemergency medical transportation and provides such transportation only (i) through the Department of Medical Assistance Services; (ii) through a broker operating under a contract with the Department of Medical Assistance Services; or (iii) as a Medicaid Managed Care Organization contracted with the Department of Medical Assistance Services to provide such transportation.

"Nonprofit/tax-exempt passenger carrier" means a bona fide nonprofit corporation organized or existing under Chapter 10 (§ 13.1-801 et seq.) of Title 13.1, or a tax-exempt organization as defined in §§ 501(c)(3) and 501(c)(4) of the ~~United States~~ Internal Revenue Code, as ~~from time to time~~ amended, who undertakes, whether directly or by lease, to control and operate minibuses exclusively in the transportation, for compensation, of members of such organization if it is a membership corporation, or of elderly, disabled, or economically disadvantaged members of the community if it is not a membership corporation.

"Operation" or "operations" includes the operation of all motor vehicles, whether loaded or empty, whether for compensation or not, and whether owned by or leased to the motor carrier who operates them or causes them to be operated.

"Operation of a TNC partner vehicle" means (i) any time a TNC partner is logged into a digital platform and is available to pick up passengers; (ii) any time a passenger is in the TNC partner vehicle; and (iii) any time the TNC partner has accepted a prearranged ride request through the digital platform and is en route to a passenger.

"Operator" means the employer or person actually driving a motor vehicle or combination of vehicles.

"Permit" means a permit issued by the Department to carriers operating as employee haulers or nonprofit/tax-exempt passenger carriers or to operators of taxicabs or other vehicles performing taxicab service under this chapter.

"Person" means any individual, firm, copartnership, corporation, company, association, or joint-stock association, and includes any trustee, receiver, assignee, or personal representative thereof.

"Personal vehicle" means a motor vehicle that is not used to transport passengers for compensation except as a TNC partner vehicle.

"Prearranged ride" means passenger transportation for compensation in a TNC partner vehicle arranged through a digital platform. "Prearranged ride" includes the period of time that begins when a TNC partner accepts a ride requested through a digital platform, continues while the TNC partner transports a passenger in a TNC partner vehicle, and ends when the passenger exits the TNC partner vehicle.

"Restricted common carrier" means any person who undertakes, whether directly or by a lease or other arrangement, to transport passengers for compensation, whereby such transportation service has been restricted. *"Restricted common carrier" does not include a transportation network company or TNC partner as defined in this section.*

"Route," when used in connection with or with respect to a certificate of public convenience and necessity, means the road or highway, or segment thereof, operated over by the holder of a certificate of public convenience and necessity or proposed to be operated over by an applicant therefor, whether such road or highway is designated by one or more highway numbers.

"Services" and "transportation" include the service of, and all transportation by, all vehicles operated by, for, or in the interest of any motor carrier irrespective of ownership or contract, expressed or implied, together with all facilities and property operated or controlled by any such carrier or carriers and used in the transportation of passengers or the performance of any service in connection therewith.

"Sight-seeing carrier" means a restricted common carrier authorized to transport passengers under the provisions of this chapter, whereby the primary purpose of the operation is the passengers' experience and enjoyment ~~and/or~~ *or* the promotion of tourism.

"Sight-seeing carrier by boat" means a restricted common carrier, which restricted common carrier uses a boat or boats operating on waters within the Commonwealth to transport passengers, and whereby the primary purpose of the operation is the passengers' experience and enjoyment ~~and/or~~ *or* the promotion of tourism. Sight-seeing carriers by boat shall not be regarded as steamship companies.

"Single state insurance receipt" means any receipt issued pursuant to 49 C.F.R. Part 367 evidencing that the carrier has the required insurance and paid the requisite fees to the Commonwealth and other qualified jurisdictions.

"Special or charter party carrier by boat" ~~for purposes of this chapter shall mean~~ *means* a restricted common carrier which transports groups of persons under a single contract made with one person for an agreed charge for such movement regardless of the number of persons transported. Special or charter

party carriers by boat shall not be regarded as steamship companies.

"Taxicab or other motor vehicle performing a taxicab service" means any motor vehicle having a seating capacity of not more than six passengers, excluding the driver, not operating on a regular route or between fixed terminals used in the transportation of passengers for hire or for compensation, and not a common carrier, restricted common carrier, *transportation network company, TNC partner,* or nonemergency medical transportation carrier as defined in this chapter.

"TNC insurance" means a motor vehicle liability insurance policy that specifically covers liabilities arising from a TNC partner's operation of a TNC partner vehicle.

"TNC partner" means a person authorized by a transportation network company to use a TNC partner vehicle to provide prearranged rides on an intrastate basis in the Commonwealth.

"TNC partner vehicle" means a personal vehicle authorized by a transportation network company and used by a TNC partner to provide prearranged rides on an intrastate basis in the Commonwealth.

"Trade dress" means a logo, insignia, or emblem attached to or visible from the exterior of a TNC partner vehicle that identifies a transportation network company or digital platform with which the TNC partner vehicle is affiliated.

"Transportation network company" means a person who provides prearranged rides using a digital platform that connects passengers with TNC partners.

§ 46.2-2001.3. Application; notice requirements.

A. Applications for a license, permit, certificate, ~~or~~ identification marker, *or TNC partner vehicle registration* or renewal of a license, permit, certificate, ~~or~~ identification marker, *or TNC partner vehicle registration* under this chapter shall be made to the Department and contain such information and exhibits as the Department shall require. Such information shall include *except in the case of a TNC partner vehicle,* in the application or otherwise, the matters set forth in § 46.2-2011.24 as grounds for denying licenses, permits, and certificates, and other pertinent matters requisite for the safeguarding of the public interest.

Notwithstanding any other provision of this chapter, the Commissioner may require all or certain applications for a license, permit, certificate, identification marker, or TNC partner vehicle registration to be filed electronically.

For the purposes of this subsection, "identification marker" does not include trade dress.

B. An applicant for any original certificate of public convenience and necessity issued under this chapter, or any request for a transfer of such certificate, unless otherwise provided, shall cause a notice of such application, on the form and in the manner prescribed by the Department, on every motor carrier holding the same type of certificate issued by the Department and operating or providing service within the area proposed to be served by the applicant.

C. For any application for original certificate or license issued under this chapter, or any request for a transfer of such certificate or license, the Department shall publish a notice of such application on the Department's public website in the form and in the manner prescribed by the Department.

D. An applicant for any original certificate of public convenience and necessity issued under this chapter, or any request for a transfer of such certificate of public convenience and necessity, shall cause a publication of a summary of the application to be made in a newspaper having a general circulation in the proposed area to be served or area where the primary business office is located within such time as the Department may prescribe.

§ 46.2-2011.5. Filing and application fees.

Unless otherwise provided, every applicant, *other than a transportation network company,* for an original license, permit, or certificate issued under this chapter and transfer of a license or certificate under the provisions of this chapter shall, upon the filing of an application, deposit with the Department, as a filing fee, a sum in the amount of ~~fifty~~ ~~dollars~~ *$50. The fee to accompany an application for an original of the certificate required under § 46.2-2099.45 shall be $100,000, and the annual fee to accompany an application for a renewal thereof shall be $60,000. If the Department does not approve an application for an original of the certificate required under § 46.2-2099.45, the Department shall refund $90,000 of the application fee to the applicant.* The Department shall collect a fee of ~~three~~ ~~dollars~~ *$3* for the issuance of a duplicate license, permit, or certificate.

§ 46.2-2011.6. Vehicle fees.

Every person, *other than a TNC partner,* who operates a passenger vehicle for compensation over the highways of the Commonwealth, unless such operation is exempted from this chapter, shall be required to pay an annual fee of $3 for each such vehicle so operated, unless a vehicle identification marker fee has been paid to the Department as to such vehicle for the current year under the provisions of Chapter 27 (§ 58.1-2700 et seq.) of Title 58.1. Such fee shall be paid through the single state registration system established pursuant to 49 U.S.C. § 14504 and 49 ~~CFR~~ *C.F.R.* Part 367 or through the unified carrier registration system established pursuant to 49 U.S.C. § 14504a and the federal regulations promulgated thereunder for carriers registered pursuant to those provisions. No more than one vehicle fee shall be charged or paid as to any vehicle in any one year under Chapter 27 (§ 58.1-2700 et seq.) of Title 58.1 and this chapter, including payments made pursuant to the single state registration system or the unified carrier registration system.

§ 46.2-2011.20. Unlawful use of registration and identification markers.

It shall be unlawful for any person to operate or cause to be operated on any highway in the Commonwealth any motor vehicle that (i) does not carry the proper registration and identification that this chapter requires, (ii) does not display an identification marker in such manner as is prescribed by the Department, or (iii) bears registration or identification markers of persons whose *TNC partner vehicle registration under subsection B of § 46.2-2099.50 or whose* license, permit, or certificate issued by the Department has been *canceled,* revoked, suspended, or renewal thereof denied in accordance with this chapter.

§ 46.2-2011.22. Violation; criminal penalties.

A. Any person knowingly and willfully violating any provision of this chapter, or any rule or regulation thereunder, or any term or condition of any certificate, permit, or license, for which a penalty is not otherwise herein provided, ~~shall be~~ *is* guilty of a misdemeanor and, upon conviction, shall be fined not more than $2,500 for the first offense and not more than $5,000 for any subsequent offense. Each day of such violation shall constitute a separate offense.

B. Any person, whether carrier, broker, or any officer, employee, agent, or representative thereof, *or a TNC partner,* who ~~shall~~ knowingly and willfully by any such means or otherwise fraudulently ~~seek~~ *seeks* to evade or defeat regulation as in this chapter~~,~~ shall be deemed guilty of a misdemeanor and, upon conviction thereof, be fined not more than $500 for the first offense and not more than $2,000 for any subsequent offense.

C. Any motor carrier, broker, or excursion train operator or any officer, agent, employee, or representative thereof, *or a TNC partner,* who willfully fails or refuses to make a report to the Department as required by this chapter or to keep accounts, records, and memoranda in the form and manner approved or prescribed by the Department, or knowingly and willfully falsifies, destroys, mutilates, or alters any such report, account, record, or memorandum, or knowingly and willfully files any false report, account, record, or memorandum, ~~shall be~~ *is* guilty of a misdemeanor and, upon conviction, be subject for each offense to a fine of not less than $100 and not more than $5,000.

§ 46.2-2011.24. Grounds for denying, suspending, or revoking licenses, permits, or certificates.

A license, permit, or certificate issued pursuant to this chapter may be denied, suspended, or revoked on any one or more of the following grounds, where applicable:

1. Material misstatement or omission in application for license, certificate, permit, identification marker, or vehicle registration;

2. Failure to comply subsequent to receipt of a written warning from the Department or any willful failure to comply with a lawful order, any provision of this chapter or any regulation promulgated by the Department under this chapter, or any term, condition, or restriction of a license, permit, or certificate;

3. Failure to comply with zoning or other land use regulations, ordinances, or statutes;

4. Use of deceptive business acts or practices;

5. Knowingly advertising by any means any assertion, representation, or statement of fact that is untrue, misleading, or deceptive relating to the conduct of the business for which a license, certificate, permit, identification marker, or vehicle registration is held or sought;

6. Having been found, through a judicial or administrative hearing, to have committed fraudulent or deceptive acts in connection with the business for which a license, permit, or certificate is held or sought or any consumer-related fraud;

7. Having been convicted of any criminal act involving the business for which a license, permit, or certificate is held or sought;

8. Failure to comply with § 46.2-2056 or any regulation promulgated pursuant thereto;

9. Improper leasing, renting, lending, or otherwise allowing the improper use of a license, certificate, permit, identification marker, or vehicle registration;

10. Having been convicted of a felony;

11. Having been convicted of any misdemeanor involving lying, cheating, stealing, or moral turpitude;

12. Failure to submit to the Department any tax, fees, dues, fines, or penalties owed to the Department;

13. Failure to furnish the Department information, documentation, or records required or requested pursuant to statute or regulation;

14. Knowingly and willfully filing any false report, account, record, or memorandum;

15. Failure to meet or maintain application certifications or requirements of public convenience and necessity, character, fitness, and financial responsibility pursuant to this chapter;

16. Willfully altering or changing the appearance or wording of any license, permit, certificate, identification marker, license plate, or vehicle registration;

17. Failure to provide services in accordance with license, permit, or certificate terms, limitations, conditions, or requirements;

18. Failure to maintain and keep on file with the Department motor carrier liability insurance, issued by a company licensed to do business in the Commonwealth, or a bond, certificate of insurance,

certificate of self-insurance, or unconditional letter of credit in accordance with this chapter, with respect to each motor vehicle operated in the Commonwealth;

19. Failure to comply with the Workers' Compensation Act of Title 65.2;

20. Failure to properly register a motor vehicle under this title;

21. Failure to comply with any federal motor carrier statute, rule, or regulation;

22. Failure to comply with the requirements of the Americans with Disabilities Act *or the Virginians with Disabilities Act (§ 51.5-1 et seq.)*; ~~or~~

23. Inactivity of a motor carrier as may be evidenced by the absence of a motor vehicle registered to operate under such certificate or permit for a period of greater than three months*; or*

24. Failure to comply with any provision regarding the filing and registered agent requirements set forth in Title 13.1.

§ 46.2-2011.29. Surrender of identification marker, license plate, and registration card; removal by law enforcement; operation of vehicle denied.

A. *For purposes of this section, "identification marker" does not include trade dress.*

B. It shall be unlawful for a licensee, permittee, or certificate holder*, or for the registrant or operator of a vehicle registered under subsection B of § 46.2-2099.50,* whose license, permit, ~~or~~ certificate*, or vehicle's registration as a TNC partner vehicle,* has been revoked, suspended*, canceled,* or renewal thereof denied pursuant to this chapter to fail or refuse to surrender, on demand, to the Department license plates, identification markers, and registration cards issued under this title.

~~B.~~ ~~If~~ *C. Except as provided in subsection D, if* any ~~law~~ ~~enforcement~~ *law-enforcement* officer finds that a motor carrier vehicle bearing Virginia license plates or temporary transport plates is being operated in violation of subsection ~~A~~ ~~of~~ ~~this~~ ~~section~~ *B*, such ~~law~~ ~~enforcement~~ *law-enforcement* officer shall remove the license plate, identification marker, and registration card and shall forward the same to the Department.

D. If the officer finds that a TNC partner vehicle bearing Virginia license plates is being operated in violation of subsection B, such law-enforcement officer shall direct the operator of the vehicle to promptly remove any identification marker and any registration card issued under subsection B of § 46.2-2099.50 and return the same to the Department. If any law-enforcement officer finds that a TNC partner vehicle not bearing Virginia license plates is being operated in violation of subsection B, such law-enforcement officer shall remove any identification marker and any registration card issued under subsection B of § 46.2-2099.50 and shall forward the same to the Department.

~~C.~~ *E.* When informed that a vehicle is being operated in violation of this section, the driver shall drive the vehicle to a nearby location off the public highways and not remove it or allow it to be moved until the motor carrier is in compliance with all provisions of this chapter.

§ 46.2-2051. Application of article.

Unless otherwise stated, this article shall apply to all motor carriers *except transportation network companies*.

Article 15.

Transportation Network Companies.

§ 46.2-2099.45. Certificates required unless exempted.

Unless otherwise exempted, no person shall engage in the business of a transportation network company on any highway within the Commonwealth on an intrastate basis unless such person has secured from the Department a certificate of fitness authorizing such business.

§ 46.2-2099.46. Control, supervision, and regulation by Department.

Except as otherwise provided in this chapter, every transportation network company, TNC partner, and TNC partner vehicle shall be subject to exclusive control, supervision, and regulation by the Department, but enforcement of statutes and Department regulations shall be not only by the Department but also by any other law-enforcement officer. Nothing in this section shall be construed as authorizing the adoption of local ordinances providing for local regulation of transportation network companies, TNC partners, or TNC partner vehicles.

§ 46.2-2099.47. Operation except in accordance with chapter prohibited.

No transportation network company or TNC partner shall transport passengers for compensation on any highway in the Commonwealth on an intrastate basis except in accordance with the provisions of this chapter.

§ 46.2-2099.48. General operational requirements for transportation network companies and TNC partner.

A. A transportation network company and a TNC partner shall provide passenger transportation only on a prearranged basis and only by means of a digital platform that enables passengers to connect with TNC partners using a TNC partner vehicle. No TNC partner shall transport a passenger unless a transportation network company has matched the TNC partner to that passenger through the digital platform. A TNC partner shall not solicit, accept, arrange, or provide transportation in any other manner.

B. A transportation network company shall authorize collection of fares for transporting passengers solely through a digital platform. A TNC partner shall not accept payment of fares directly from a

passenger or any other person prearranging a ride or by any means other than electronically via a digital platform.

C. A transportation network company with knowledge that a TNC partner has violated the provisions of subsection A or B shall remove the TNC partner from the transportation network company's digital platform for at least one year.

D. A transportation network company shall publish the following information on its public website and associated digital platform:

1. The method used to calculate fares or the applicable rates being charged and an option to receive an estimated fare;

2. Information about its TNC partner screening criteria, including a description of the offenses that the transportation network company will regard as grounds for disqualifying an individual from acting as a TNC partner;

3. The means for a passenger or other person to report a TNC partner reasonably suspected of operating a TNC partner vehicle under the influence of drugs or alcohol;

4. Information about the company's training and testing policies for TNC partners;

5. Information about the company's standards for TNC partner vehicles; and

6. A customer support telephone number or email address and instructions regarding any alternative methods for reporting a complaint.

E. A transportation network company shall associate a TNC partner with one or more personal vehicles and shall authorize a TNC partner to transport passengers only in a vehicle specifically associated with a TNC partner by the transportation network company. The transportation network company shall arrange transportation solely for previously associated TNC partners and TNC partner vehicles. A TNC partner shall not transport passengers except in a TNC partner vehicle associated with the TNC partner by the transportation network company.

F. A TNC partner shall carry at all times while operating a TNC partner vehicle proof of coverage under each in-force TNC insurance policy, which may be displayed as part of the digital platform, and each in-force personal automobile insurance policy covering the vehicle. The TNC partner shall present such proof of insurance upon request to the Commissioner, a law-enforcement officer, an airport owner and operator, an official of the Washington Metropolitan Area Transit Commission, or any person involved in an accident that occurs during the operation of a TNC partner vehicle. The transportation network company shall require the TNC partner's compliance with the provisions of this subsection.

G. Prior to a passenger's entering a TNC partner vehicle, a transportation network company shall provide through the digital platform to the person prearranging the ride the first name and a photograph of the TNC partner, the make and model of the TNC partner vehicle, and the license plate number of the TNC partner vehicle.

H. A transportation network company shall provide to each of its TNC partners a credential, which may be displayed as part of the digital platform, that includes the following information:

1. The name or logo of the transportation network company;

2. The name and a photograph of the TNC partner; and

3. The make, model, and license plate number of each TNC partner vehicle associated with the TNC partner and the state issuing each such license plate.

The TNC partner shall carry the credential at all times during the operation of a TNC partner vehicle and shall present the credential upon request to law-enforcement officers, airport owners and operators, officials of the Washington Metropolitan Area Transit Commission, or a passenger. The transportation network company shall require the TNC partner's compliance with this subsection.

I. A transportation network company and its TNC partner shall, at all times during a prearranged ride, make the following information available through its digital platform immediately upon request to representatives of the Department, to law-enforcement officers, to officials of the Washington Metropolitan Area Transit Commission, and to airport owners and operators:

1. The name of the transportation network company;

2. The name of the TNC partner and the identification number issued to the TNC partner by the transportation network company;

3. The license plate number of the TNC partner vehicle and the state issuing such license plate; and

4. The location, date, and approximate time that each passenger was or will be picked up.

J. Upon completion of a prearranged ride, a transportation network company shall transmit to the person who prearranged the ride an electronic receipt that includes:

1. A map of the route taken;

2. The date and the times the trip began and ended;

3. The total fare, including the base fare and any additional charges incurred for distance traveled or duration of the prearranged ride;

4. The TNC partner's first name and photograph; and

5. Contact information by which additional support may be obtained.

K. The transportation network company shall adopt and enforce a policy of nondiscrimination on the basis of a passenger's points of departure and destination and shall notify TNC partners of such policy.

TNC partners shall comply with all applicable laws regarding nondiscrimination against passengers or potential passengers.

A transportation network company shall provide passengers an opportunity to indicate whether they require a wheelchair-accessible vehicle. If a transportation network company cannot arrange wheelchair-accessible service in a TNC partner vehicle in any instance, it shall direct the passenger to an alternate provider of wheelchair-accessible service, if available.

A transportation network company shall not impose additional charges for providing services to persons with disabilities because of those disabilities.

TNC partners shall comply with all applicable laws relating to accommodation of service animals.

A TNC partner may refuse to transport a passenger for any reason not prohibited by law, including any case in which (i) the passenger is acting in an unlawful, disorderly, or endangering manner; (ii) the passenger is unable to care for himself and is not in the charge of a responsible companion; or (iii) the TNC partner has already committed to providing a ride for another passenger.

A TNC partner shall immediately report to the transportation network company any refusal to transport a passenger after accepting a request to transport that passenger.

L. No transportation network company or TNC partner shall conduct any operation on the property of or into any airport unless such operation is authorized by the airport owner and operator and is in compliance with the rules and regulations of that airport. The Department may take action against a transportation network company that violates any regulation of an airport owner and operator, including the suspension or revocation of the transportation network company's certificate.

M. A TNC partner shall access and utilize a digital platform in a manner that is consistent with traffic laws of the Commonwealth.

N. In accordance with § 46.2-812, no TNC partner shall operate a motor vehicle for more than 13 hours in any 24-hour period.

§ 46.2-2099.49. Requirements for TNC partners; mandatory background screening; drug and alcohol policy; mandatory disclosures to TNC partners; duty of TNC partners to provide updated information to transportation network companies.

A. Before authorizing an individual to act as a TNC partner, a transportation network company shall confirm that the person is at least 21 years old and possesses a valid driver's license.

B. 1. Before authorizing an individual to act as a TNC partner, and at least once every two years after authorizing an individual to act as a TNC partner, a transportation network company shall obtain a national criminal history records check of that person. The background check shall include (i) a Multi-State/Multi-Jurisdiction Criminal Records Database Search or a search of a similar nationwide database with validation (primary source search) and (ii) a search of the Sex Offender and Crimes Against Minors Registry and the U.S. Department of Justice's National Sex Offender Public Website. The person conducting the background check shall be accredited by the National Association of Professional Background Screeners or a comparable entity approved by the Department.

2. Before authorizing an individual to act as a TNC partner, and at least once annually after authorizing an individual to act as a TNC partner, a transportation network company shall obtain and review a driving history research report on that person from the individual's state of licensure.

3. Before authorizing an individual to act as a TNC partner, and at least once every two years after authorizing a person to act as a TNC partner, a transportation network company shall verify that the person is not listed on the Sex Offender and Crimes Against Minors Registry or on the U.S. Department of Justice's National Sex Offender Public Website.

C. A transportation network company shall not authorize an individual to act as a TNC partner if the criminal history records check required under subsection B reveals that the individual:

1. Is a person for whom registration with the Sex Offender and Crimes Against Minors Registry is required pursuant to Chapter 9 (§ 9.1-900 et seq.) of Title 9.1 or is listed on the U.S. Department of Justice's National Sex Offender Public Website;

2. Has ever been convicted of or has ever pled guilty or nolo contendere to a violent felony offense as listed in subsection C of § 17.1-805, or a substantially similar law of another state or of the United States;

3. Within the preceding seven years has been convicted of or has pled guilty or nolo contendere to any of the following offenses, either under Virginia law or a substantially similar law of another state or of the United States: (i) any felony offense other than those included in subdivision 2; (ii) an offense under § 18.2-266, 18.2-266.1, 18.2-272, or 46.2-341.24; or (iii) any offense resulting in revocation of a driver's license pursuant to § 46.2-389 or 46.2-391; or

4. Within the preceding three years has been convicted of or has pled guilty or nolo contendere to any of the following offenses, either under Virginia law or a substantially similar law of another state or of the United States: (i) three or more moving violations; (ii) eluding a law-enforcement officer, as described in § 46.2-817; (iii) reckless driving, as described in Article 7 (§ 46.2-852 et seq.) of Chapter 8; (iv) operating a motor vehicle in violation of § 46.2-301; or (v) refusing to submit to a chemical test to determine the alcohol or drug content of the person's blood or breath, as described in § 18.2-268.3.

D. A transportation network company shall employ a zero-tolerance policy with respect to the use of

drugs and alcohol by TNC partners and shall include a notice concerning the policy on its website and associated digital platform.

E. A transportation network company shall make the following disclosures in writing to a TNC partner or prospective TNC partner:

1. The transportation network company shall disclose the liability insurance coverage and limits of liability that the transportation network company provides while the TNC partner uses a vehicle in connection with the transportation network company's digital platform.

2. The transportation network company shall disclose any physical damage coverage provided by the transportation network company for damage to the vehicle used by the TNC partner in connection with the transportation network company's digital platform.

3. The transportation network company shall disclose the uninsured motorist and underinsured motorist coverage and policy limits provided by the transportation network company while the TNC partner uses a vehicle in connection with the transportation network company's digital platform and advise the TNC partner that the TNC partner's personal automobile insurance policy may not provide uninsured motorist and underinsured motorist coverage when the TNC partner uses a vehicle in connection with a transportation network company's digital platform.

4. The transportation network company shall include the following disclosure prominently in writing to a TNC partner or prospective TNC partner: "If the vehicle that you plan to use to transport passengers for our transportation network company has a lien against it, you must notify the lienholder that you will be using the vehicle for transportation services that may violate the terms of your contract with the lienholder."

F. A TNC partner shall inform each transportation network company that has authorized him to act as a TNC partner of any event that may disqualify him from continuing to act as a TNC partner, including any of the following: a change in the registration status of the TNC partner vehicle; the revocation, suspension, cancellation, or restriction of the TNC partner's driver's license; a change in the insurance coverage of the TNC partner vehicle; a motor vehicle moving violation; and a criminal arrest, plea, or conviction.

§ 46.2-2099.50. Requirements for TNC partner vehicles; registration with and identification markers issued by Department; identification markers issued by transportation network company.

A. A TNC partner vehicle shall:

1. Be a personal vehicle;

2. Have a seating capacity of no more than eight persons, including the driver;

3. Be validly titled and registered in the Commonwealth or in another state;

4. Not have been issued a certificate of title, either in Virginia or in any other state, branding the vehicle as salvage, nonrepairable, rebuilt, or any equivalent classification;

5. Have a valid Virginia safety inspection and carry proof of that inspection in the vehicle;

6. Be covered under a TNC insurance policy meeting the requirements of § 46.2-2099.51 or 46.2-2099.52, as applicable; and

7. Be registered with the Department for use as a TNC partner vehicle and display an identification marker issued by the Department as provided in subsection B.

No TNC partner shall operate a TNC partner vehicle unless that vehicle meets the requirements of this subsection.

B. A vehicle owner, lessee, or TNC partner shall register a personal vehicle for use as a TNC partner vehicle. A TNC partner that is not the vehicle owner or lessee shall, prior to registering any TNC partner vehicle with the Department, secure the consent of each owner, lessor, and lessee of the vehicle as applicable for its registration as a TNC partner vehicle and for its use as a TNC partner vehicle by the TNC partner. A transportation network company shall have the option of registering a TNC partner vehicle on behalf of a TNC partner electronically through a secure portal maintained by the Department provided the TNC partner, if the TNC partner is not the vehicle owner or lessee, certifies that it has secured consent from each owner, lessor, and lessee of the vehicle for its registration as a TNC partner vehicle and for its use as a TNC partner vehicle by the TNC partner.

Prior to registering for use as a TNC partner vehicle any vehicle that has been titled and registered in another state, the vehicle owner or lessee, or a transportation network company on behalf of the owner or lessee, shall provide the Department with such information as the Department requires to establish a customer record for that person and that person's vehicle. A transportation network company shall have the option to submit this information electronically through a secure portal maintained by the Department.

For each TNC partner vehicle a transportation network company authorizes, the transportation network company or TNC partner shall provide to the Department, in a form acceptable to the Department, any information reasonably necessary for the Department to identify the vehicle and register it for use as a TNC partner vehicle.

Upon registering a vehicle for use as a TNC partner vehicle, the Department shall issue a temporary registration, an identification marker to the vehicle owner or lessee, and a registration card indicating the vehicle's registration for use as a TNC partner vehicle.

The Commissioner may deny, suspend, cancel, or revoke the TNC partner vehicle registration and identification marker for any of the following reasons: (i) the vehicle is not properly registered, (ii) the vehicle does not carry insurance as required by this article, (iii) the vehicle is sold, or (iv) the vehicle is used by a TNC partner in a manner not authorized by this chapter.

Registration of a TNC partner vehicle under this subsection shall remain valid until (a) the vehicle is no longer authorized to operate as a TNC partner vehicle by a transportation network company; (b) the TNC partner, vehicle owner, or lessee requests cancellation of the registration; (c) there is a transfer of vehicle ownership, other than a transfer from the lessor of the vehicle to the lessee; (d) the vehicle's lease terminates and ownership is not transferred to the lessee; or (e) the Department suspends, revokes, or cancels the registration of the vehicle for use as a TNC partner vehicle. The fee for the replacement of a lost, mutilated, or illegible identification marker or registration card shall be the same as the fee set forth in § 46.2-692 for the replacement of a decal or vehicle registration card. However, if the TNC partner vehicle is not titled and registered in Virginia, the replacement fee for an identification marker shall be $40.

Any vehicle registered with the Department as a personal vehicle and subject to further registration as a TNC partner vehicle pursuant to this section shall be presumed to be used for nonbusiness purposes for the purpose of determining whether it is a qualifying vehicle under § 58.1-3523 absent clear and convincing evidence to the contrary, and any registration pursuant to this section shall not create any presumption of business or commercial use of the vehicle or of business activity on the part of the TNC partner, for purposes of any state or local requirement.

C. Before authorizing a vehicle to be used as a TNC partner vehicle, a transportation network company shall confirm that the vehicle meets the requirements of subsection A and shall provide each TNC partner with proof of any TNC insurance policy maintained by the transportation network company.

For each TNC partner vehicle it authorizes, a transportation network company shall issue trade dress to the TNC partner associated with that vehicle. The trade dress shall be sufficient to identify the transportation network company or digital platform with which the vehicle is affiliated and shall be displayed in a manner that complies with Virginia law. The trade dress shall be of such size, shape, and color as to be readily identifiable during daylight hours from a distance of 50 feet while the vehicle is not in motion and shall be reflective, illuminated, or otherwise patently visible in darkness. The trade dress may take the form of a removable device that meets the identification and visibility requirements of this subsection.

The transportation network company shall submit to the Department proof that the transportation network company has established the trade dress required under this subsection by filing with the Department an illustration or photograph of the trade dress.

A TNC partner shall keep the trade dress issued under this subsection visible at all times while the vehicle is being operated as a TNC partner vehicle.

No person shall operate a vehicle bearing trade dress issued under this subsection without the authorization of the transportation network company issuing the trade dress.

D. Any information provided to the Department pursuant to this section, whether held by the Department or another public entity, shall not be subject to disclosure under the Virginia Freedom of Information Act (§ 2.2-3700 et seq.). Neither the Department nor any such public entity shall disclose any such information to a nongovernmental entity absent a court order or subpoena. In the event information provided pursuant to this section is sought through a court order or subpoena, the Department or other public entity shall promptly notify the transportation network company prior to disclosure so as to afford the transportation network company the opportunity to take appropriate actions to prevent disclosure. The Department shall not disclose such information to a governmental entity other than to enable that entity to perform its governmental function.

§ 46.2-2099.51. TNC insurance until January 1, 2016.

A. Until January 1, 2016, at all times during the operation of a TNC partner vehicle, a transportation network company or TNC partner shall keep in force TNC insurance as provided in this section.

B. The following requirements shall apply to TNC insurance from the moment a TNC partner accepts a prearranged ride request on a transportation network company's digital platform until the TNC partner completes the transaction on the digital platform or until the prearranged ride is complete, whichever is later:

1. TNC insurance shall provide motor vehicle liability coverage. Such coverage shall be primary and the minimum amount of liability coverage for death, bodily injury, and property damage shall be $1 million.

2. TNC insurance shall provide uninsured motorist coverage and underinsured motorist coverage. Such coverage shall apply from the moment a passenger enters a TNC partner vehicle until the passenger exits the vehicle. The minimum amount of uninsured motorist coverage and underinsured motorist coverage for death, bodily injury, and property damage shall be $1 million.

3. The requirements of this subsection may be satisfied by any of the following:

a. TNC insurance maintained by a TNC partner;

b. TNC insurance maintained by a transportation network company; or

c. Any combination of subdivisions a and b.

A transportation network company may meet its obligations under this subsection through a policy obtained by a TNC partner under subdivision a or c only if the transportation network company verifies that the policy is maintained by the TNC partner.

4. Insurers providing insurance coverage under this subsection shall have the exclusive duty to defend any liability claim, including any claim against a TNC partner, arising from an accident occurring within the time periods specified in this subsection. Neither the TNC partner's nor the vehicle owner's personal automobile insurance policy shall have the duty to defend or indemnify the TNC partner's activities in connection with the transportation network company, unless the policy expressly provides otherwise for the period of time to which this subsection is applicable or the policy contains an amendment or endorsement to provide that coverage.

5. Coverage under a TNC insurance policy shall not be dependent on a personal automobile insurance policy first denying a claim, nor shall a personal automobile insurance policy be required to first deny a claim.

6. Nothing in this subsection shall be construed to require a personal automobile insurance policy to provide primary or excess coverage. Neither the TNC partner's nor the vehicle owner's personal automobile insurance policy shall provide any coverage to the TNC partner, the vehicle owner, or any third party, unless the policy expressly provides for that coverage during the period of time to which this subsection is applicable or the policy contains an amendment or endorsement to provide that coverage.

C. The following requirements shall apply to TNC insurance (i) from the moment a TNC partner logs on to a transportation network company's associated digital platform until the TNC partner accepts a request to transport a passenger and (ii) from the moment the TNC partner completes the transaction on the digital platform or the prearranged ride is complete, whichever is later, until the TNC partner either accepts another prearranged ride request on the digital platform or logs off the digital platform:

1. TNC insurance shall provide motor vehicle liability coverage. Such coverage shall be secondary and shall provide liability coverage of at least $125,000 per person and $250,000 per incident for death and bodily injury and at least $50,000 for property damage.

2. The requirements for the coverage required by this subsection may be satisfied by any of the following:

a. TNC insurance maintained by a TNC partner;

b. TNC insurance maintained by a transportation network company that provides coverage in the event that a TNC partner's insurance policy under subdivision a has ceased to exist or has been canceled or in the event that the TNC partner does not otherwise maintain TNC insurance; or

c. Any combination of subdivisions a and b.

A transportation network company may meet its obligations under this subsection through a policy obtained by a TNC partner pursuant to subdivision a or c only if the transportation network company verifies that the policy is maintained by the TNC partner and is specifically written to cover the TNC partner's use of a vehicle in connection with a transportation network company's digital platform.

3. If the TNC partner vehicle is insured under a personal automobile insurance policy that does not exclude coverage, then such policy shall provide primary coverage and an insurance policy maintained by the transportation network company under subdivision 2 c shall provide excess coverage up to at least the limits required by subdivision 1.

D. In the event that the digital platform becomes inaccessible due to failure or malfunction while a TNC partner is en route to or transporting a passenger during a prearranged ride described in subsection B, TNC insurance coverage shall be presumed to be that required in subdivision B 1 until the passenger exits the vehicle.

E. In every instance where TNC insurance maintained by a TNC partner to fulfill the insurance obligations of this section has lapsed or ceased to exist, the transportation network company shall provide the coverage required by this section beginning with the first dollar of a claim.

F. This section shall not limit the liability of a transportation network company arising out of an accident involving a TNC partner in any action for damages against a transportation network company for an amount above the required insurance coverage.

G. Any person, or an attorney acting on his behalf, who suffers a loss in an automobile accident with a reasonable belief that the accident involves a TNC partner vehicle driven by a TNC partner in connection with a transportation network company and who provides the transportation network company with the date, approximate time, and location of the accident, and if available the name of the TNC partner and if available the accident report, may request in writing from the transportation network company information relating to the insurance coverage and the company providing the coverage. The transportation network company shall respond electronically or in writing within 30 days. The transportation network company's response shall contain the following information: (i) whether, at the approximate time of the accident, the TNC partner was logged into the transportation network

company's digital platform and, if so logged in, whether a trip request had been accepted or a passenger was in the TNC partner vehicle; (ii) the name of the insurance carrier providing primary coverage; and (iii) the identity and last known address of the TNC partner.

H. No contract, receipt, rule, or regulation shall exempt any transportation network company from the liability that would exist had no contract been made or entered into, and no such contract, receipt, rule, or regulation for exemption from liability for injury or loss occasioned by the neglect or misconduct of such transportation network company shall be valid. The liability referred to in this subsection shall mean the liability imposed by law upon a transportation network company for any loss, damage, or injury to passengers in its custody and care as a transportation network company.

I. Any insurance required by this section may be placed with an insurer that has been admitted in Virginia or with an insurer providing surplus lines insurance as defined in § 38.2-4805.2.

J. Any insurance policy required by this section shall satisfy the financial responsibility requirement for a motor vehicle under § 46.2-706 during the period such vehicle is being operated as a TNC partner vehicle.

K. The Department shall not issue the certificate of fitness required under § 46.2-2099.45 to any transportation network company that has not certified to the Department that every TNC partner vehicle it has authorized to operate on its digital platform is covered by an insurance policy that meets the requirements of this section.

L. Each transportation network company shall keep on file with the Department proof of an insurance policy maintained by the transportation network company in accordance with this section. Such proof shall be in a form acceptable to the Commissioner. A record of the policy shall remain in the files of the Department six months after the certificate is suspended or revoked for any cause.

M. The Department may suspend a certificate if the certificate holder fails to comply with the requirements of this section. Any person whose certificate has been suspended pursuant to this subsection may request a hearing as provided in subsection D of § 46.2-2011.26.

N. In a claims coverage investigation, a transportation network company and its insurer shall cooperate with insurers involved in the claims coverage investigation to facilitate the exchange of information, including the dates and times of any accident involving a TNC partner and the precise times that the TNC partner logged in and was logged out of the transportation network company's digital platform.

§ 46.2-2099.52. TNC insurance.

A. On and after January 1, 2016, at all times during the operation of a TNC partner vehicle, a transportation network company or TNC partner shall keep in force TNC insurance as provided in this section.

B. The following requirements shall apply to TNC insurance from the moment a TNC partner accepts a prearranged ride request on a transportation network company's digital platform until the TNC partner completes the transaction on the digital platform or until the prearranged ride is complete, whichever is later:

1. TNC insurance shall provide motor vehicle liability coverage. Such coverage shall be primary and the minimum amount of liability coverage for death, bodily injury, and property damage shall be $1 million.

2. TNC insurance shall provide uninsured motorist coverage and underinsured motorist coverage. Such coverage shall apply from the moment a passenger enters a TNC partner vehicle until the passenger exits the vehicle. The minimum amount of uninsured motorist coverage and underinsured motorist coverage for death, bodily injury, and property damage shall be $1 million.

3. The requirements of this subsection may be satisfied by any of the following:

a. TNC insurance maintained by a TNC partner;

b. TNC insurance maintained by a transportation network company; or

c. Any combination of subdivisions a and b.

A transportation network company may meet its obligations under this subsection through a policy obtained by a TNC partner under subdivision a or c only if the transportation network company verifies that the policy is maintained by the TNC partner.

4. Insurers providing insurance coverage under this subsection shall have the exclusive duty to defend any liability claim, including any claim against a TNC partner, arising from an accident occurring within the time periods specified in this subsection. Neither the TNC partner's nor the vehicle owner's personal automobile insurance policy shall have the duty to defend or indemnify the TNC partner's activities in connection with the transportation network company, unless the policy expressly provides otherwise for the period of time to which this subsection is applicable or the policy contains an amendment or endorsement to provide that coverage.

5. Coverage under a TNC insurance policy shall not be dependent on a personal automobile insurance policy first denying a claim, nor shall a personal automobile insurance policy be required to first deny a claim.

6. Nothing in this subsection shall be construed to require a personal automobile insurance policy to provide primary or excess coverage. Neither the TNC partner's nor the vehicle owner's personal

automobile insurance policy shall provide any coverage to the TNC partner, the vehicle owner, or any third party, unless the policy expressly provides for that coverage during the period of time to which this subsection is applicable or the policy contains an amendment or endorsement to provide that coverage.

C. The following requirements shall apply to TNC insurance (i) from the moment a TNC partner logs on to a transportation network company's associated digital platform until the TNC partner accepts a request to transport a passenger and (ii) from the moment the TNC partner completes the transaction on the digital platform or the prearranged ride is complete, whichever is later, until the TNC partner either accepts another prearranged ride request on the digital platform or logs off the digital platform:

1. TNC insurance shall provide motor vehicle liability coverage. Such coverage shall be primary and shall provide liability coverage of at least $50,000 per person and $100,000 per incident for death and bodily injury and at least $25,000 for property damage.

2. The requirements for the coverage required by this subsection may be satisfied by any of the following:

a. TNC insurance maintained by a TNC partner;

b. TNC insurance maintained by a transportation network company that provides coverage in the event that a TNC partner's insurance policy under subdivision a has ceased to exist or has been canceled or in the event that the TNC partner does not otherwise maintain TNC insurance; or

c. Any combination of subdivisions a and b.

A transportation network company may meet its obligations under this subsection through a policy obtained by a TNC partner pursuant to subdivision a or c only if the transportation network company verifies that the policy is maintained by the TNC partner and is specifically written to cover the TNC partner's use of a vehicle in connection with a transportation network company's digital platform.

D. In the event that the digital platform becomes inaccessible due to failure or malfunction while a TNC partner is en route to or transporting a passenger during a prearranged ride described in subsection B, TNC insurance coverage shall be presumed to be that required in subdivision B 1 until the passenger exits the vehicle.

E. In every instance where TNC insurance maintained by a TNC partner to fulfill the insurance obligations of this section has lapsed or ceased to exist, the transportation network company shall provide the coverage required by this section beginning with the first dollar of a claim.

F. This section shall not limit the liability of a transportation network company arising out of an accident involving a TNC partner in any action for damages against a transportation network company for an amount above the required insurance coverage.

G. Any person, or an attorney acting on his behalf, who suffers a loss in an automobile accident with a reasonable belief that the accident involves a TNC partner vehicle driven by a TNC partner in connection with a transportation network company and who provides the transportation network company with the date, approximate time, and location of the accident, and if available the name of the TNC partner and if available the accident report, may request in writing from the transportation network company information relating to the insurance coverage and the company providing the coverage. The transportation network company shall respond electronically or in writing within 30 days. The transportation network company's response shall contain the following information: (i) whether, at the approximate time of the accident, the TNC partner was logged into the transportation network company's digital platform and, if so logged in, whether a trip request had been accepted or a passenger was in the TNC partner vehicle; (ii) the name of the insurance carrier providing primary coverage; and (iii) the identity and last known address of the TNC partner.

H. No contract, receipt, rule, or regulation shall exempt any transportation network company from the liability that would exist had no contract been made or entered into, and no such contract, receipt, rule, or regulation for exemption from liability for injury or loss occasioned by the neglect or misconduct of such transportation network company shall be valid. The liability referred to in this subsection shall mean the liability imposed by law upon a transportation network company for any loss, damage, or injury to passengers in its custody and care as a transportation network company.

I. Any insurance required by this section may be placed with an insurer that has been admitted in Virginia or with an insurer providing surplus lines insurance as defined in § 38.2-4805.2.

J. Any insurance policy required by this section shall satisfy the financial responsibility requirement for a motor vehicle under § 46.2-706 during the period such vehicle is being operated as a TNC partner vehicle.

K. The Department shall not issue the certificate of fitness required under § 46.2-2099.45 to any transportation network company that has not certified to the Department that every TNC partner vehicle it has authorized to operate on its digital platform is covered by an insurance policy that meets the requirements of this section.

L. Each transportation network company shall keep on file with the Department proof of an insurance policy maintained by the transportation network company in accordance with this section. Such proof shall be in a form acceptable to the Commissioner. A record of the policy shall remain in the files of the Department six months after the certificate is revoked or suspended for any cause.

M. The Department may suspend a certificate if the certificate holder fails to comply with the requirements of this section. Any person whose certificate has been suspended pursuant to this subsection may request a hearing as provided in subsection D of § 46.2-2011.26.

N. In a claims coverage investigation, a transportation network company and its insurer shall cooperate with insurers involved in the claims coverage investigation to facilitate the exchange of information, including the dates and times of any accident involving a TNC partner and the precise times that the TNC partner logged in and was logged out of the transportation network company's digital platform.

§ 46.2-2099.53. Recordkeeping and reporting requirements for transportation network companies.

A. Records maintained by a transportation network company shall be adequate to confirm compliance with subsection D of § 46.2-2099.48 and with §§ 46.2-2099.49 and 46.2-2099.50 and shall at a minimum include:

1. True and accurate results of each national criminal history records check for each individual that the transportation network company authorizes to act as a TNC partner;

2. True and accurate results of the driving history research report for each individual that the transportation network company authorizes to act as a TNC partner;

3. Driver's license records of TNC partners, including records associated with participation in a driver record monitoring program;

4. True and accurate results of the sex offender screening for each individual that the transportation network company authorizes to act as a TNC partner;

5. Proof of compliance with the requirements enumerated in subdivisions A 1 and 3 through 6 of § 46.2-2099.50;

6. Proof of compliance with the notice and disclosure requirements of subsection D of § 46.2-2099.48 and subsections D and E of § 46.2-2099.49; and

7. Proof that the transportation network company obtained certification from the TNC partner that the TNC partner secured the consent of each owner, lessor, and lessee of the vehicle for its registration as a TNC partner vehicle and for its use as a TNC partner vehicle by the TNC partner.

A transportation network company shall retain all records required under this subsection for a period of three years. Such records shall be retained in a manner that permits systematic retrieval and shall be made available to the Department in a format acceptable to the Commissioner for the purposes of conducting an audit on no more than an annual basis.

B. A transportation network company shall maintain the following records and make them available, in an acceptable format, on request to the Commissioner, a law-enforcement officer, an official of the Washington Metropolitan Area Transit Commission, or an airport owner and operator to investigate and resolve a complaint or respond to an incident:

1. Data regarding TNC partner activity while logged into the digital platform, including beginning and ending times and locations of each prearranged ride;

2. Records regarding any actions taken against a TNC partner;

3. Contracts or agreements between the transportation network company and its TNC partners;

4. Information identifying each TNC partner, including the TNC partner's name, date of birth, and driver's license number and the state issuing the license; and

5. Information identifying each TNC partner vehicle the transportation network company has authorized, including the vehicle's make, model, model year, vehicle identification number, and license plate number and the state issuing the license plate.

Requests for information pursuant to subdivision 2 or 3 shall be in writing.

C. Information obtained by the Department, law-enforcement officers, officials of the Washington Metropolitan Area Transit Commission, or airport owners and operators pursuant to this section shall be considered privileged information and shall only be used by the Department, law-enforcement officers, officials of the Washington Metropolitan Area Transit Commission, and airport owners and operators for purposes specified in subsection A or B. Such information shall not be subject to disclosure except on the written request of the Commissioner, a law-enforcement officer, an official of the Washington Metropolitan Area Transit Commission, or an airport owner and operator who requires such information for the purposes specified in subsection A or B.

D. Except as provided in subsection C, information obtained by the Department, law-enforcement officers, officials of the Washington Metropolitan Area Transit Commission, or airport owners and operators pursuant to this section shall not be disclosed to anyone without the transportation network company's express written permission and shall not be subject to disclosure through a court order or through a third-party request submitted pursuant to the Virginia Freedom of Information Act (§ 2.2-3700 et seq.). This provision shall not be construed to mean that a person is denied the right to seek such information directly from a transportation network company during a court proceeding.

E. Except as required under this section, a transportation network company shall not disclose any personal information, as defined in § 2.2-3801, about a user of its digital platform unless:

1. The transportation network company obtains the user's consent to disclose the personal information;

2. The disclosure is necessary to comply with a legal obligation; or

3. The disclosure is necessary to protect or defend the terms and conditions for use of the service or to investigate violations of the terms and conditions.

This limitation regarding disclosure does not apply to the disclosure of aggregated user data or to information about the user that is not personal information as defined in § 2.2-3801.

2. That the Department of Motor Vehicles shall periodically consult with local government officials to determine whether transportation network companies have had an effect on the availability of wheelchair-accessible transportation services. If evidence suggests an effect, the Department shall work collaboratively with appropriate stakeholders to develop recommendations to be submitted to the Chairmen of the House and Senate Committees on Transportation.

3. That beginning July 1, 2016, the Department of Motor Vehicles shall review enforcement activity undertaken regarding the provisions of this act, insurance policies available to TNC partners that may require changes to the provisions of subdivisions E 1 and 2 of § 46.2-2099.49 as created by this act, the fees set forth in § 46.2-2011.5 of the Code of Virginia as amended by this act, and in § 46.2-2099.50 as created by this act to determine whether those fees adequately cover the Department's costs of administering the additional responsibilities imposed on the Department under this act. The Department shall report the results of its review to the Chairmen of the House and Senate Committees on Transportation no later than December 1, 2016.

4. That the provisions of subsection K of § 46.2-2099.48 as created by this act, which require a digital platform to allow customers or passengers prearranging rides to indicate whether a passenger requires a wheelchair-accessible vehicle or a vehicle that is otherwise accessible to individuals with disabilities, shall become effective on July 1, 2016.

5. That the transportation network companies shall advise TNC partners that a TNC partner's personal automobile insurance policy may not provide collision or comprehensive coverage for damage to the vehicle when the TNC partner uses a vehicle in connection with a transportation network company's digital platform, unless such policy expressly provides for TNC insurance coverage. Such notice shall be provided to each TNC partner until January 1, 2016.

6. That notwithstanding any other provision of law, a personal automobile insurer may, at its discretion, offer an automobile liability insurance policy, or an amendment or endorsement to an existing policy, that covers a motor vehicle with a seating capacity of eight or fewer persons, including the driver, while used in connection with a transportation network company's digital platform.

7. That the provisions of this act adding § 46.2-2099.52 shall become effective on January 1, 2016.

8. That no provision of this act or existing law shall be construed to prevent any motor carrier regulated under the existing provisions of Chapter 20 (§ 46.2-2000 et seq.) of Title 46.2 from offering services through an online digital platform, unless such motor carrier chooses to operate as a transportation network company.

Appendix B. Draft Legislation Implementing the Recommendations of this Report

SENATE BILL NO. _____ HOUSE BILL NO. _____

A BILL to amend and reenact § 46.2-2011.5 of the Code of Virginia, relating to application fees for licenses, permits, and certificates issued to motor carriers of passengers.

Be it enacted by the General Assembly of Virginia:

1. That § 46.2-2011.5 of the Code of Virginia is amended and reenacted as follows:

§ 46.2-2011.5. Filing and application fees.

A. Unless otherwise provided, every applicant, other than a transportation network company, for an original license, permit, or certificate issued under this chapter and transfer of a license or certificate under the provisions of this chapter shall, upon the filing of an application, deposit with the Department, as a filing fee, a sum in the amount of $50.

B. ~~The fee to accompany an application for an original of the certificate required~~ An applicant for a certificate under § 46.2-2099.45 shall elect and shall remit to the Department one of the following fees:

1. an annual fee of ~~be~~ $100,000 to accompany the application for an original of the certificate, or~~and the annual fee~~ $60,000 to accompany an application for a renewal thereof ~~shall be $60,000.~~; or

2. a fee of $20 per report to accompany payment for each driving history research report the applicant obtains from the Department pursuant to subsection B 2 of § 46.2-2099.49, which fee shall be in addition to any other fees that are authorized for such reports.

A transportation network company may change its election under this subsection when applying for renewal of its certificate.

If the Department does not approve an application for an original ~~of the~~ certificate ~~required under § 46.2-2099.45~~, the Department shall refund to the applicant $90,000 of the application fee paid under subsection B 1~~to the applicant~~.

C. The Department shall collect a fee of $3 for the issuance of a duplicate license, permit, or certificate issued under this chapter.

#

Appendix C. Comparison of Virginia Law to Laws in Other Jurisdictions

Jurisdiction	Background checks				Insurance requirements	Vehicle registration	Fees
	Method	Criminal record?	Driving record?	Other records?			
AL	Background check not required by state; individual localities may require them				**Logged on but not engaged in pre-arranged ride:** Death or bodily injury: $50K per person, $100K per incident. $25K for property damage. **Engaged in pre-arranged ride: $**1 million for combined death, bodily injury, and property	No State Requirement, but individual municipalities can determine if this is required.	No State Requirement, up to individual municipalities
AZ	Not specified	Yes	Yes	Sex Offender Registry	**Logged on but no ride accepted:** $25K death or bodily injury to any one person. $50K death or bodily injury to two or more persons in one accident. $20K for property. **Accepted ride request and during ride:** $250K per incident. Uninsured motorist coverage of $250K as well.	No requirement. Vehicles need to display TNC trade dress when operating, and an illustration of trade dress must be filed with ADOT	3 year permit: $1,000
AR	Not specified	Yes	Yes	Sex Offender Registry	**Logged on but not engaged in pre-arranged ride:** $50K per person, $100K per incident, $25K for property damage. **Engaged in pre-arranged ride:** $1 million for death, bodily injury, and property.	No State Requirement	Annual permit fee of $15K
CA	Based on Social Security Number	Yes	Yes	Sex Offender Registry	**Logged on but not engaged in pre-arranged ride:** $50K per person, $100K per incident, $30K property. TNC must have $200K in excess coverage. **Ride Accepted and during transport of passenger:** $1 million for death, personal injury, and property. TNC must maintain $1 million of uninsured motorist insurance during this period	No State Requirement	3 year permit: $1,000

Jurisdiction	Background checks				Insurance requirements	Vehicle registration	Fees
	Method	Criminal record?	Driving record?	Other records?			
CO	Not specified	Yes	Yes	Sex Offender Registry	**Logged on but not engaged: $**50K per person, $100K per incident, $30K property. **Engaged in pre-arranged ride: $**1 million	No State Requirement	Annual Permit Fee: $111,250
DC	Not specified	Yes	Yes	Sex Offender Registry	**Logged on but not engaged:** $50K per person, $100K per incident, $25K property. **Engaged in pre-arranged ride:** $1 million	No requirement	No requirement
GA	Either fingerprint through DDS or a private background checker	Yes	Yes	Sex Offender registry	**Logged on but not engaged:** $50K per person, 100K per incident, $50K property. **Engaged in ride:** $1 million per incident, TNC must also maintain $1 million underinsured motorist coverage	Must either get a for-hire endorsement or get a private background check	Annual Registration Fee: $75 per service
ID	Not specified	Yes	Yes	Sex Offender Registry	**Logged on but not engaged:** $50K per person, $100K per incident, $25K property damage. **Engaged in pre-arranged ride: $**1 million	No State Requirement	No State Requirement
IL	Not specified	Yes	Yes	Sex Offender Registry	**Logged on but not engaged:** $50K per person, $100K per incident, $25K property **Engaged:** $1 million	No State Requirement	No State Requirement, but individual counties can decide to do so
IN	Not specified	Yes	Yes	Sex Offender Registry	**Logged on:** $50K per person, $100K per incident, $25K property **Engaged:** 1 million	No State Requirement	$5,000/year
IA	Not specified	Yes	Yes	Sex Offender Registry	**Logged on but not engaged:** $50K/person, $100K/incident, $25k property **Engaged:** $1 million	No State Requirement	$5,000/year

Jurisdiction	Background checks				Insurance requirements	Vehicle registration	Fees
	Method	Criminal record?	Driving record?	Other records?			
KS	Fingerprint	Yes	Yes	No Requirement	**Logged on, not engaged:** $50K/person, $100K/incident, $25K property **Engaged:** $1 million	No State Requirement	No State Requirement
KY	Not specified	Yes	Yes	Sex Offender Registry	**Logged on, Not Engaged:** $50K/person, $100K/incident, $25K property **Engaged:** 1 million	$30 license fee annually	TNC Certificate, $250/year
LA	Background check not required by state; individual localities may require them				**Logged on, Not Engaged:** $25K/Person, $50K/incident, $25K property **Engaged:** $1 million	No State Requirement, varies by City	No State Requirement, varies by City
ME	Not specified	Yes	Yes	Sex Offender Registry	**Logged on, Not Engaged**: $50K/person, $100K/incident, $25K property **Engaged:** $1 million	No State Requirement	$10K Yearly Fee
MD	Not specified for temporary license; fingerprint for permanent license	Yes	Yes	Sex Offender Registry	**While "providing transportation network services"**: $50K/person, $100K/incident, $25K property	No State Requirement	No State Requirement- Localities can implement charge of up to $0.25/ride
MA	Not specified	Yes	Yes	Sex Offender Registry	**Logged on, Not Engaged:** $50K/person, $100K/incident, $30K property **Engaged:** $1 million	Drivers must get a TNC driver certificate	TNC's must get certificate, but no specific cost. "reasonable cost" used in recent bill passed
MN	Background check not required by state; individual localities may require them				**Logged on, Not Engaged:** $50K/person, $100K/incident, $30K property **Engaged**: $1.5 million	No State Requirement	No State Requirement- Cities can implement charge

Jurisdiction	Background checks				Insurance requirements	Vehicle registration	Fees
	Method	Criminal record?	Driving record?	Other records?			
MS	Not specified	Yes	Yes	Sex Offender Registry	**Logged on, Not Engaged:** $50K/person, $100K/incident, $25K property **Engaged:** $1 million	Must register the vehicle being used as a commercial vehicle	$5K/year license fee
MT	Not specified	Yes	Yes	No	**Logged on, Not Engaged:** $50K/person, $100K/incident, $25K property **Engaged:** $1 million	No State Requirement	$500 filing fee for motor carrier certificate
NE	Not specified	Yes	Yes	Sex Offender Registry	**Logged on, Not Engaged:** $25K/person, $50K/incident, $25K property **Engaged:** $1 million	No State Requirement	Annual fee not exceeding the sum of $80 for each motor vehicle operated or $25,000. Company choice
NV	Not specified	Yes	Yes	Sex Offender Registry	**Logged on, Not Engaged:** $50K/person, $100K/incident, $25K property **Engaged:** $1.5 million	Must Get TNC Permit Decal and display TNC trade dress	Annual fee determined by the commission
NM	Not specified	Yes	Yes	Sex Offender Registry	**Logged on, Not Engaged:** $50K/person, $100K/incident, $25K property **Engaged:** $1 million	No State Requirement	Annual Fee $10K
NC	Not specified	Yes	Yes	Sex Offender Registry	**Logged on, Not Engaged:** $50K/person, $100K/incident, $25K property **Engaged:** $1.5 million	No State Requirement	Annual Fee $5K
ND	Not specified	Yes	Yes	Sex Offender Registry	**Logged on, Not Engaged:** $50K/person, $100K/incident, $25K property **Engaged:** $1 million	No State Requirement	No State Requirement
OH	Not specified	Yes	Yes	Sex Offender Registry	**Logged on, Not Engaged:** $50K/person, $100K/incident, $25K property **Engaged:** $1 million	No State Requirement	Annual Permit fee of $5K

Jurisdiction	Background checks				Insurance requirements	Vehicle registration	Fees
	Method	Criminal record?	Driving record?	Other records?			
OK	Not specified	Yes	Yes	Sex Offender Registry	**Logged on, Not Engaged:** $50K/person, $100K/incident, $25K property **Engaged:** $1 million	No State Requirement	Annual Permit Fee of $5K
PA	Not specified	Yes	Yes	Sex Offender Registry	**Logged on, Not Engaged:** $50K/person, $100K/incident, $25K property; First-party medical benefits: $25k pedestrians, $5k driver **Engaged:** $500k; First-party medical benefits: : $25k pedestrians, $5k driver	No State Requirement, but must have TNC decal	Permit Fee of $50K
SC	Not specified	Yes	Yes	Sex Offender Registry	**Logged on, Not Engaged:** $50K/person, $100K/incident, $50K property **Engaged:** $1 million	No State Requirement, but must have trade dress	Permit required, no fee listed
SD	Not specified	Yes	Yes	Sex Offender Registry	**Logged On, Not Engaged:** $50K/person, $100K/incident, $25K property **Engaged:** $1 million	No State Requirement	Individual municipalities can impose different fees
TN	Not specified	Yes	Yes	Sex Offender Registry	**Logged On, Not Engaged:** $50K/person, $100K/incident, $25K property **Engaged:** $1 million	No State Requirement	No State Requirement
TX	Not specified	No	No	No	**Logged On, Not Engaged:** $50K/person, $100K/incident, $25K property **Engaged:** $1 million	No State Requirement	No fee listed
UT	Not Specified	Yes	Yes	Sex and Kidnap Offender Registry	**Logged On, Not Engaged:** $50K/person, $100K/incident, $30K property **Engaged:** $1 million	No State Requirement	Initial Applicant: $15K Annual application fee: $5k
WA	Not specified	No	No		**Logged On, Not Engaged:** $50K/person, $100K/incident, $30K property **Engaged:** $1 million	No State Requirement	No fee listed

Jurisdiction	Background checks				Insurance requirements	Vehicle registration	Fees
	Method	Criminal record?	Driving record?	Other records?			
WV	Not specified	Yes	Yes	Sex Offender Registry	**Logged On, Not Engaged:** $50K/person, $100K/incident, $25K property **Engaged:** $1 million	No State Requirement	Annual Permit $1,000
WI	Not specified	Yes	Yes	Sex Offender Registry	**Logged On, Not Engaged:** $50K/person, $100K/incident, $25K property **Engaged:** $1 million	No State Requirement	Initial Applicant: $5K Biennial renewal: $5K

Appendix D. Latest Quarterly Report of TNC Implementation Results (Q1 FY 2017)

Transportation Network Companies (TNCs)
First Quarter of Fiscal Year 2017
July through September 2016

Executive Summary

Outreach

The Virginia Department of Motor Vehicles (DMV), from July through September of 2016, continued to provide information about the new Transportation Network Company (TNC) legislation to TNCs, TNC partners (drivers), the general public, the media, law enforcement, judges, and Commonwealth's Attorneys.

TNC Vehicle Registration

All vehicles being used for TNC purposes in Virginia must be registered as such with DMV. Drivers must hold a valid license in their home state, but are not required to register with Virginia as TNC drivers.

- From July 1 to September 30, DMV registered 27,081 vehicles for intrastate TNC services in Virginia.
- Of those registrations, 12,495 are Virginia-registered vehicles, and 14,586 are registered in other states.

As of June 21, 2016, rental companies had the option to register rental vehicles for TNC use with DMV. Two rental companies have registered 6,667 rental vehicles for TNC purposes.

Complaints

DMV encouraged the traveling public, as well as all stakeholders, to forward complaints regarding TNCs and all other passenger carriers to the Department during the first quarter.

- DMV received two complaints regarding TNCs; one from another TNC driver, and one from an airport authority.
- DMV received four complaints regarding Other Passenger Carriers; three from the general public and one from DMV law enforcement.

DMV Enforcement Activity

DMV law enforcement officer contacts with TNC drivers and Other Passenger Carrier drivers include such activities as inspections, traffic stops, and selective enforcement events. Selective enforcement events are enforcement actions taken at specific events, such as concerts or sporting events where there is a high use of passenger carrier services. DMV enforcement staff activity was as follows:

- TNCs
    - 512 contacts with TNC drivers, 77 drivers or 15.0% had violations.
    - Most frequently occurring violations for TNC drivers: no trade dress (issued by the TNC and displayed when the vehicle is being used as a TNC vehicle), no TNC decal (issued by DMV and displayed at all times), and operating off company application.
    - Most frequent action taken was a warning. In addition, summonses were issued in seven cases.
- Other Passenger Carriers
    - 176 contacts with Other Passenger Carriers drivers, 93 drivers or 52.8% had violations.
    - Most frequently occurring violations for Other Passenger Carriers drivers: unlicensed, no lease agreement, and failure to observe operating requirements for a contract passenger carrier.

- Most frequent actions taken were a warning or a referral to DMV's Motor Carrier staff for further review. In addition, a summons was issued in one case and one case resulted in an arrest.

Alcohol-Related Driving Statistics

Alcohol-related crash and fatality data for July through August of 2013, 2014, 2015, and 2016 show a decline in the number of crashes and fatalities. While it may be too soon to say definitively that the availability of Uber and Lyft in Virginia played a major role in that, there appears to be a causal connection. However, many factors contribute to reductions in the number of alcohol-related crashes and fatalities, including education and enforcement efforts. DMV will continue to analyze these statistics in coming years to make a firm determination about the relationship between the use of TNCs or other passenger carriers and the incidence of alcohol-related crashes and fatalities.

Cost Recovery from Fees

DMV collected $246,421 in revenue in the first quarter of Fiscal Year (FY) 2017 for administering the TNC law. During the same period, DMV incurred a total cost of $138,698, resulting in a balance of $107,723. For the remaining FY 2017, DMV estimates that its costs will be met assuming the number of TNC operators and drivers stays constant. Please see the next table for a breakdown of revenues and costs. The revenues for FY 2015/FY 2016, as well as FY 2017, include fees for driver transcript records which are required annually for TNC drivers.

Transportation Network Companies (TNCs)
First Quarter of Fiscal Year 2017
July through September 2016

1. Outreach

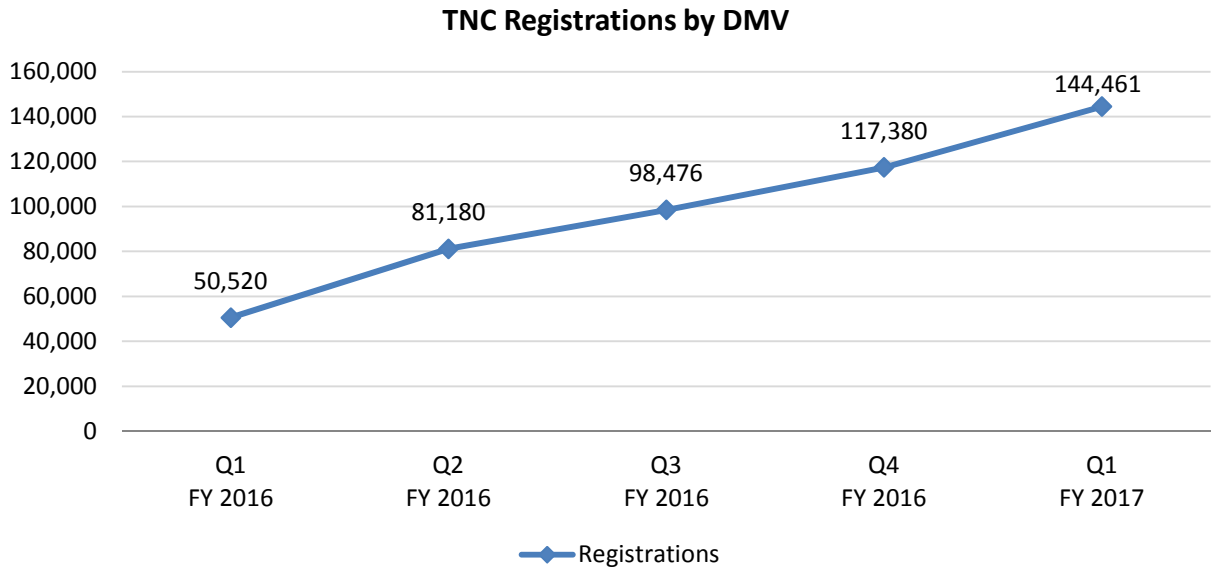
DMV continues to provide information about the Transportation Network Company (TNC) legislation to TNCs, TNC partners (drivers), the general public, law enforcement, judges and Commonwealth Attorneys. DMV regularly sends non-compliance and in-compliance correspondence to affected parties. DMV responded to frequent phone calls from individuals seeking to become compliant with TNC regulations. DMV Special Agents continue to be successful in court jurisdictions that have prosecuted non-compliant individuals.

This quarter DMV law enforcement has partnered with other law enforcement entities to conduct compliance checks at airports, local colleges and other prominent locations with reported TNC activity. DMV Agents have assisted and provided training for local law enforcement agencies throughout Virginia. DMV Agents continue to provide pamphlets and CDs of TNC training that DMV developed for law enforcement. Agents continue to meet regularly with the passenger carrier industry, in an effort to promote outreach and education of TNC regulations and to respond to concerns.

2. TNC Vehicle Registration

Vehicles being used for TNC purposes are required to be registered as such with DMV. DMV then issues these vehicles a special registration decal that replaces the normal year decal for vehicles registered in Virginia. For vehicles registered outside of Virginia, DMV issues a window decal. All vehicles being operated as TNCs in Virginia are required to pass a Virginia vehicle safety inspection. Drivers are not required to register as TNC partners. For a full list of the TNC vehicle and driver requirements, please see http://www.dmv.virginia.gov/commercial/tnc/index.asp.

DMV began registering TNC vehicles in June 2015. As of September 30, 2016, 144,461 vehicles held an active TNC registration (see next chart). Of those 144,461 vehicles, 27,081 vehicles were registered in the first quarter. As of June 21, 2016, rental companies had the option to register rental vehicles for TNC use with DMV. Two rental companies have registered 6,667 rental vehicles for TNC purposes.



Of these 27,081 vehicles, 12,495 registrations, or 46.1%, were for Virginia plated vehicles while 14,586 registrations, or 53.9%, were for out-of-state plated vehicles (see table below).

Active TNC Registration	First Quarter	% of First Quarter Total	Grand Total	% of Grand Total
Virginia Plated Vehicle	12,495	46.1%	69,394	48.0%
Out-of-State Plated Vehicle	14,586	53.9%	75,067	52.0%
Total	27,081	100.0%	144,461	100.0%

Note: breakdowns of registrations by locality (county and city) and by other states as of September 30, 2016 are in Appendices 1 and 2.

DMV customers can register their vehicles for TNC use through different service channels, including a Customer Service Center (CSC), online, or a special Web Portal that DMV has arranged for bulk processing by the two TNC companies, Rasier (Uber) and Lyft. DMV customers can perform three types of transactions related to TNC vehicles: adds, replacements, and cancellations. Adds indicate new TNC registrations, replacements indicate vehicles for which the customer requested a new DMV-issued TNC decal, and cancellations are vehicles that removed TNC status. Through September 30, most transactions for TNC vehicles were add transactions through the Web Portal (see table below).

Transactions for the First Quarter									
Transaction Type	CSC	Online	Motor Carrier	DMV Select	DMV Direct	Special Registration	Web Portal	Other	Total
Adds	1,620	1,326	20	4	0	0	30,436	4	33,410
Replacements	887	133	226	58	77	10	0	1	1,392
Cancellations	3,020	2,768	221	149	0	33	0	36	6,227

*Note: these types are not comprehensive; the sum of "adds" minus cancellations will not match the total active registrations for September 30, 2016.

Please note that the difference between total TNC adds and TNC cancellations above does not match the number of active registrations because there are other transactions that may impact a vehicle's TNC status that do not fall into one of the three categories listed above. For example, if a TNC-registered

vehicle is sold or the registration is not renewed, that transaction would not be reflected in the table above.

3. Complaints

Complaints by the public are received from various sources and reviewed by DMV Motor Carrier staff. For the first quarter, DMV's Motor Carrier staff received two complaints for TNCs and four complaints for Other Passenger Carriers, which are non-TNC passenger carrier services (e.g. taxis and limousines).

Complaint Intake*				
	TNCs		*Other Passenger Carriers***	
Source	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
DMV Motor Carrier	2	17	4	25
DMV Law Enforcement	0	0	0	0
DMV Direct	0	0	0	0
Website	0	0	0	0
Legal/FOIA	0	0	0	0
Total	2	17	4	25

*Complaint data is reported for complaints entered into the complaint database during July through September 2016.

**Others transporting passengers for compensation (e.g., taxis, limousines, non-emergency medical transports)

One TNC complaint received in the first quarter came from a TNC driver and one came from an airport authority. For Other Passenger Carriers, three complaints came from the general public and one came from DMV law enforcement. Additional information on the complaint data is available upon request.

Complaint Sources				
Source	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Rider	0	0	0	0
Driver	1	1	0	0
General Public	0	11	3	13
Other Passenger Carrier	0	3	0	6
Business	0	0	0	1
Other Law Enforcement- Airport Authority	1	2	0	0
Other Law Enforcement- Local Law Enforcement	0	0	0	0
Other Law Enforcement- Virginia State Police	0	0	0	0
WMATC	0	0	0	0
Other Government Agency	0	0	0	1
Other	0	0	1	4
Unknown	0	0	0	0
Total	2	17	4	25

As shown in the next table, one TNC complaint received in first quarter involved no decal being displayed and the other involved an off app ride. One Other Passenger Carrier complaint involved price,

one involved the vehicle, and two complaints categorized as “Other” involved not being compliant with state and local regulations.

Complaint Type				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Wheelchair Accessibility	0	0	0	0
Service Animals	0	0	0	0
Disabled Service Refusal	0	0	0	0
Discrimination Based on Departure/Destination	0	1	0	0
Price	0	2	1	1
Off App Ride/Street Hail	1	1	N/A	N/A
No Trade Dress Displayed	0	4	N/A	N/A
No TNC Decal	1	5	N/A	N/A
Complaint About Driver	0	0	0	4
Complaint About Vehicle	0	1	1	1
Unfair Competitive Advantage	0	0	0	3
No Operating Authority	0	0	0	0
Incorrect Operating Authority	N/A	N/A	0	0
Taxi Markings	N/A	N/A	0	0
No I.D. Marker	N/A	N/A	0	0
Damage Claim	0	0	0	0
Poor Service	0	0	0	0
Contract Dispute	0	0	0	0
Other	0	3	2	16
Total	2	17	4	25

Of the two TNC complaints, one was assigned to Motor Carrier Services and one was designated as unfounded. Of the four Other Passenger Carrier complaints, one was designated as unfounded, one was assigned to Motor Carrier Services, one was referred to a local law enforcement agency, and one was issued a compliance notice.

Complaint Follow-up				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
In-compliance	0	1	0	0
Unfounded	1	3	1	3
Assigned to Motor Carrier Services	1	3	1	6
Further Investigation	0	0	0	2
Assigned to Law Enforcement	0	1	0	7
Referred to Outside Law Enforcement	0	0	1	2
Monitor for Trend	0	3	0	2
Education Letter	0	1	0	1

Notify Respective Company	0	1	0	0
Compliance Notice	0	2	1	2
Total	2	17	4	25

4. Enforcement

DMV law enforcement officers have contact with TNC drivers and Other Passenger Carrier drivers to enforce state laws and DMV regulations. These contacts include such activities as inspections, traffic stops, and selective enforcement events such as concerts or proms. During the first quarter, DMV enforcement staff had 512 contacts with TNC drivers and 176 with Other Passenger Carrier drivers. For both, most of the enforcement activities came from selective enforcement events.

Type of Enforcement Activities				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Plain Clothes	64	296	0	3
Traffic Stop/On View	1	15	14	36
Selective Enforcement	438	1,342	106	510
Inspection	0	0	2	36
Complaint	9	32	54	180
Total	512	1,685	176	765

While conducting enforcement, DMV law enforcement officers assess whether drivers are compliant with Virginia law and DMV regulations. For the first quarter of Fiscal Year 2017, 85.0% of the TNC drivers contacted did not have a violation while 47.2% of the Other Passenger Carrier drivers contacted did not have a violation. During the same period, 15.0% of TNC drivers contacted had violations while 52.8% of Other Passenger Carrier drivers contacted had violations. Offending drivers may have more than one violation, so the total number of violations does not equal the total number of drivers with violations.

Enforcement: Violations								
Category	*TNCs**				*Other Passenger Carriers***			
	First Quarter		*Grand Total*		*First Quarter*		*Grand Total*	
Drivers without Violations	435	85.0%	1,269	71.1%	83	47.2%	355	46.4%
Drivers with Violations	77	15.0%	416	28.9%	93	52.8%	410	53.6%
Total Drivers	512	100.00%	1,685	100.0%	176	100.0%	765	100.0%
Total-All Violations	97		549		140		665	

*TNC-- frequently occurring violations for the first quarter were: No trade dress, No DMV issued TNC decal, and Operating off of company application.

** Other Passenger Carrier--frequently occurring violations for the first quarter were: unlicensed, failure to observe operating requirements for a contract passenger carrier, and no lease agreement.

As shown in the next table, most TNC Partners (drivers) and Other Passenger Carriers who had violations were given warnings by DMV law enforcement staff. The most frequently cited violations for TNC drivers were not displaying the TNC trade dress of or not displaying the TNC license plate decals. The most common violation for Other Passenger Carriers was being unlicensed.

Enforcement: Actions Taken				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
In-Compliance	435	1,269	83	355
Unfounded	0	0	0	1
Warnings	67	348	54	214
Arrests	1	1	1	1
Summons	7	16	1	13
Further Investigation	0	0	0	3
Referred to Outside Law Enforcement	0	0	0	0
Referred to Respective Company	0	0	0	0
Referred to Motor Carrier	2	51	37	177
Total	512	1,685	176	764

While DMV seeks to eliminate all violations, we believe that most of the TNC violations for this time period can be attributed to TNC partners becoming acclimated to the new regulatory environment.

5. Civil Penalties

DMV's Motor Carrier staff will review cases to determine appropriate follow-up action which could include the assessment of civil penalties. If penalties are issued, motor carrier operators can request a DMV hearing. If they are not satisfied with results of the hearing, they can appeal their case to a circuit court. For the first quarter, DMV Motor Carrier staff reviewed 11 cases for TNC Partners and 50 for Other Passenger Carriers. All 11 cases for TNC Partners were completed without issuing civil penalties. Of the 50 Other Passenger Carrier cases, 43 were completed without issuing civil penalties while seven had a civil penalty. Eighteen cases are outstanding and carried over to the next quarter (see table below).

Compliance Case Referrals and Civil Penalty Assessments						
	TNCs		**TNC Partners**		**Other Passenger Carriers**	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Motor Carrier						
Total Cases Referred	0	0	2	50	43	191
Case Reviews Completed	0	0	11	48	50	168
Cases: Civil Penalties	0	0	0	0	7	19
Cases: No Civil Penalties	0	0	11	48	43	149
Outstanding Cases	0	0	0	2	18	23
Hearing Office						
Hearing Decisions Completed	0	0	0	0	2	3
Cases Upheld	0	0	0	0	2	3
Cases Not Upheld	0	0	0	0	0	0

Outstanding Cases	0	0	0	0	1	1
Courts						
Court Cases Completed	0	0	0	0	0	0
Cases Upheld	0	0	0	0	0	0
Cases Not Upheld	0	0	0	0	0	0
Outstanding Cases	0	0	0	0	0	0
Collections						
Civil Penalties Collected	0	0	0	0	$0	$5,200
Outstanding Civil Penalties	0	0	0	0	$3,300	$7,100

6. Credential Cases

DMV's review of cases may result in the denial, suspension or revocation of motor carrier operating authority and/or vehicle registrations. Such credential actions may be taken in lieu of or in addition to the assessment of civil penalties. Such actions can be appealed and if appealed will result in an administrative hearing. Four credential cases occurred during the first quarter for Other Passenger Carriers. The DMV Hearing Office completed one decision which resulted in the case being upheld. Three additional cases are outstanding.

Credential Cases						
	TNCs		**TNC Vehicle Owners**		**Other Passenger Carriers**	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Motor Carrier						
Denial of Vehicle Registration	N/A	N/A	0	0	0	0
Suspension of Vehicle Registration	N/A	N/A	0	0	0	0
Revocation of Vehicle Registration	N/A	N/A	0	0	0	0
Total Registration Actions	N/A	N/A	0	0	0	0
Denial of Authority	0	0	N/A	N/A	3	13
Suspension of Authority	0	0	N/A	N/A	0	0
Revocation of Authority	0	0	N/A	N/A	1	3
Total Authority Actions	0	0	N/A	N/A	4	16
Hearing Office						
Hearing Decisions Completed	0	0	0	0	1	5
Cases Upheld	0	0	0	0	1	5
Cases Not Upheld	0	0	0	0	0	0
Outstanding Cases	0	0	0	0	3	3

7. Airport Activities

The Richmond International Airport, Metropolitan Washington Airports Authority (MWAA), Newport News/Williamsburg International Airport, Charlottesville Albemarle Airport, and Norfolk International Airport provided the following information about complaints and enforcement activities involving TNCs and Other Passenger Carriers. MWAA includes Dulles International Airport and Reagan National Airport. For more detailed information on their reported activities, please see Appendix 3.

Summary of Airport/Airport Authority Complaints				
Airport/Airport Authority	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Richmond International Airport	201	726	19	76
Metropolitan Washington Airport Authority	3	135	182	889
Newport News/Williamsburg International Airport	0	0	8	31
Charlottesville Albemarle Airport	0	28	0	0
Norfolk International Airport	5	24	1	15

Summary of Airport/Airport Authority Enforcement: Contacts				
Airport/Airport Authority	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Richmond International Airport	192	589	17	69
Metropolitan Washington Airport Authority	5,552	34,229	2,093	21,942
Newport News/Williamsburg International Airport	0	0	8	40
Charlottesville Albemarle Airport	0	194	0	0
Norfolk International Airport	5	175	1	5

Airport/Airport Authority Enforcement: Violations				
Airport/Airport Authority	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Richmond International Airport				
Drivers without Violations	2	8	0	2
Drivers with Violations	190	608	17	65
Total Drivers	192	616	17	67
Total Violations	228	726	19	67
Metropolitan Washington Airport Authority				
Drivers without Violations	4,806	29,801	2,031	17,920
Drivers with Violations (Airport Code and Statutory)	746	4,428	62	4,022
Total Drivers	5,552	34,229	2,093	21,942
Total Violations	786	4,559	67	4,152
Newport News/Williamsburg International Airport				
Drivers without Violations	0	0	0	33
Drivers with Violations	0	0	8	19
Total Drivers	0	0	8	52
Total Violations	0	0	8	19

Charlottesville Albemarle Airport				
Drivers without Violations	0	0	0	0
Drivers with Violations	0	194	0	0
Total Drivers	0	194	0	0
Total Violations	0	194	0	0
Norfolk International Airport				
Drivers without Violations	4	4	0	0
Drivers with Violations	1	171	1	8
Total Drivers	5	175	1	8
Total Violations	1	171	1	8

8. Localities

DMV requested information on TNC and Other Passenger Carrier complaints and enforcement activities from localities for the purposes of this report. Prince William County, Henrico County, Chesterfield County, Page County, Gloucester County, and the Town of Amherst responded to DMV's request, indicating there were no incidents to report. Arlington County, Amherst County, and the City of Charlottesville reported the following information about complaints and enforcement activities concerning TNCs and Other Passenger Carriers. The City of Charlottesville reported no complaint activity. It should be noted that DMV recommended TNC complaints be referred to DMV's Motor Carrier staff.

Arlington County Complaints by Source				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Rider	2	6	4	42
Driver	0	0	0	0
General Public	0	0	0	0
Other Passenger Carrier	0	0	0	0
Business	0	0	0	0
Other	0	0	0	0
Unknown	0	0	0	0
Total	2	6	4	42

Arlington County Complaints by Type				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Wheelchair Accessibility	0	0	0	0
Service Animals	0	0	0	0
Disabled Service Refusal	0	0	0	0
Discrimination Based on Departure/Destination	0	0	0	0
Price	0	0	0	0
Off App Ride/Street Hail	0	0	N/A	N/A
No Trade Dress Displayed	0	0	N/A	N/A
No TNC Decal	0	0	N/A	N/A
Violation of Operational Requirements	N/A	N/A	0	0
No Identification Marker	N/A	N/A	0	0
Failure to Display Required Signage	N/A	N/A	0	0
Complaint About Driver	2	6	4	42
Complaint About Vehicle	0	0	0	0
Unfair Competitive Advantage	0	0	0	0
Other	0	0	0	0
Total	2	6	4	42

Arlington County Complaints by Follow-up				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
No Action Needed	1	3	0	0
Investigation	1	1	4	42
Referred to Local Law Enforcement	0	0	0	0
Referred to TNC	0	0	0	0
Referred to DMV	0	2	0	0
Total	2	6	4	42

Arlington County Enforcement: Contacts				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Total	50	50	32	32

Arlington County Enforcement: Violations				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Drivers without Violations	Unknown*	Unknown	Unknown	Unknown
Drivers with Violations	50	76	32	56
Total Drivers	50	76	32	56
Total Violations	50	78	32	56
*As reported by Arlington County				

Arlington County Enforcement: Actions Taken*				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
No Action Taken	0	0	0	0
Unfounded	0	0	0	0
Warnings	0	3	0	0
Arrests	0	1	0	0
Summons	50	83	32	63
Referred to DMV Law Enforcement	0	0	0	0
Total	50	87	32	63
*Arlington County notes that multiple actions can be taken per violation.				

City of Charlottesville Complaints by Source				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Rider	0	1	0	0
Driver	0	0	0	0
General Public	0	0	0	0
Other Passenger Carrier	0	0	0	0
Business	0	0	0	0
Other	0	0	0	0
Unknown	0	0	0	0
Total	0	1	0	0

City of Charlottesville Complaints by Type				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Wheelchair Accessibility	0	0	0	0
Service Animals	0	0	0	0
Disabled Service Refusal	0	0	0	0
Discrimination Based on Departure/Destination	0	0	0	0
Price	0	0	0	0

Off App Ride/Street Hail	0	0	N/A	N/A
No Trade Dress Displayed	0	0	N/A	N/A
No TNC Decal	0	0	N/A	N/A
Violation of Operational Requirements	N/A	N/A	0	0
No Identification Marker	N/A	N/A	0	0
Failure to Display Required Signage	N/A	N/A	0	0
Complaint About Driver	0	1	0	0
Complaint About Vehicle	0	0	0	0
Unfair Competitive Advantage	0	0	0	0
Other	0	0	0	0
Total	0	1	0	0

City of Charlottesville Complaints by Follow-up				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
No Action Needed	0	0	0	0
Investigation	0	1	0	0
Referred to Local Law Enforcement	0	0	0	0
Referred to TNC	0	0	0	0
Referred to DMV	0	0	0	0
Total	0	1	0	0

City of Charlottesville Enforcement: Contacts				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Total	0	2	19	26

City of Charlottesville Enforcement: Violations				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Drivers without Violations	Unknown*	Unknown	Unknown	Unknown
Drivers with Violations	Unknown	1	19	21
Total Drivers	Unknown	Unknown	Unknown	5
Total Violations	Unknown	1	Unknown	2
*As reported by City of Charlottesville.				

City of Charlottesville Enforcement: Actions Taken				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
No Action Taken	Unknown*	0	0	0
Warnings	Unknown	0	19	19

Arrests	Unknown	1	0	0
Summons	Unknown	1	0	0
Referred to DMV Law Enforcement	Unknown	1	0	9
Total	Unknown	3	19	28
*As reported by City of Charlottesville.				

Amherst County Complaints by Source				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Rider	0	0	0	0
Driver	0	0	0	0
General Public	0	0	0	2
Other Passenger Carrier	0	0	0	0
Business	0	0	0	0
Other	0	0	0	0
Unknown	0	0	0	0
Total	0	0	0	2

Amherst County Complaints by Type				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Wheelchair Accessibility	0	0	0	0
Service Animals	0	0	0	0
Disabled Service Refusal	0	0	0	0
Discrimination Based on Departure/Destination	0	0	0	0
Price	0	0	0	0
Off App Ride/Street Hail	0	0	N/A	N/A
No Trade Dress Displayed	0	0	N/A	N/A
No TNC Decal	0	0	N/A	N/A
Violation of Operational Requirements	N/A	N/A	0	0
No Identification Marker	N/A	N/A	0	0
Failure to Display Required Signage	N/A	N/A	0	0
Complaint About Driver	0	0	0	2
Complaint About Vehicle	0	0	0	0
Unfair Competitive Advantage	0	0	0	0
Other	0	0	0	0
Total	0	0	0	2

Amherst County Complaints by Follow-up				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
No Action Needed	0	0	0	0
Investigation	0	0	0	0
Referred to Local Law Enforcement	0	0	0	2
Referred to TNC	0	0	0	0
Referred to DMV	0	0	0	0
Total	0	0	0	2

Amherst County Enforcement: Contacts				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Total	0	0	2	4

Amherst County Enforcement: Violations				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Drivers without Violations	0	0	0	0
Drivers with Violations	0	0	2	4
Total Drivers	0	0	2	4
Total Violations	0	0	2	4

Amherst County Enforcement: Actions Taken				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
No Action Taken	0	0	0	0
Warnings	0	0	0	0
Arrests	0	0	0	0
Summons	0	0	2	4
Referred to DMV Law Enforcement	0	0	0	0
Total	0	0	2	4

9. State Police

DMV recommended complaints be referred to DMV's Motor Carrier staff. The VSP provided the following information about enforcement activities concerning TNCs and Other Passenger Carriers.

Virginia State Police Complaints by Source				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Rider	0	0	0	0
Driver	0	0	0	0
General Public	0	0	0	0
Other Passenger Carrier	0	0	0	0
Business	0	0	0	0
Other	0	0	3	8
Unknown	0	0	0	0
Total	0	0	3	8

Virginia State Police Complaints by Type				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Wheelchair Accessibility	0	0	0	0
Service Animals	0	0	0	0
Disabled Service Refusal	0	0	0	0
Discrimination Based on Departure/Destination	0	0	0	0
Price	0	0	0	0
Off App Ride/Street Hail	0	0	N/A	N/A
No Trade Dress Displayed	0	0	N/A	N/A
No TNC Decal	0	0	N/A	N/A
Violation of Operational Requirements	N/A	N/A	0	0
No Identification Marker	N/A	N/A	0	0
Failure to Display Required Signage	N/A	N/A	0	0
Complaint About Driver	0	0	2	2
Complaint About Vehicle	0	0	1	6
Unfair Competitive Advantage	0	0	0	0
Other	0	0	0	0
Total	0	0	3	8

Virginia State Police Complaints by Follow-up				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
No Action Needed	0	0	0	0
Investigation	0	0	0	5
Referred to Local Law Enforcement	0	0	0	0
Referred to Respective Company	0	0	3	3
Referred to DMV	0	0	0	0
Total	0	0	3	8

Virginia State Police Enforcement: Contacts				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Total	0	7	15	189

Virginia State Police Enforcement: Violations				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
Drivers without Violations	0	0	0	114
Drivers with Violations	0	7	15	74
Total Drivers	0	7	15	188
Total Violations	0	10	31	236

Virginia State Police Enforcement: Actions Taken				
Category	*TNCs*		*Other Passenger Carriers*	
	First Quarter	*Grand Total*	*First Quarter*	*Grand Total*
No Action Taken	0	0	0	0
Warnings	0	3	28	241
Arrests	0	1	0	0
Summons	0	7	3	22
Referred to DMV Law Enforcement	0	0	0	0
Total	0	11	31	263

10. Alcohol-Related Driving Statistics

Alcohol-related crash and fatality data for July through August of 2013, 2014, 2015, and 2016 show a decline in the number of crashes and fatalities. While it may be too soon to say definitively that the availability of Uber and Lyft in Virginia played a major role in that, there appears to be a causal connection. However, many factors contribute to reductions in the number of alcohol-related crashes and fatalities, including education and enforcement efforts. DMV will continue to analyze these statistics

in coming years to make a firm determination about the relationship between the use of TNCs or other passenger carriers and the incidence of alcohol-related crashes and fatalities.

Comparison of Alcohol-Related Fatalities and Crashes for Localities with More Than and Less Than 100 TNC Vehicle Registrations for July through August 2014, 2015, 2016			
	July 1, 2015 to August 31, 2016*	July 1, 2014 to August 31, 2015	July 1, 2013 to August 31, 2014
Localities with More Than 100 TNC Vehicle Registrations**			
Alcohol-Related Fatalities	133	179	167
Alcohol-Related Crashes	6,431	6,735	6,809
Localities with Less Than 100 TNC Vehicle Registrations			
Alcohol-Related Fatalities	97	130	123
Alcohol-Related Crashes	2,688	2,661	2,672

*2016 data are preliminary.

**See Appendices 4 and 5 for the fatality and crash data by localities with 100 or more TNC vehicle registrations.

TNCs and Other Passenger Carriers may also reduce the number of ignition interlocks installed that are offered by the Virginia Alcohol Safety Action Program (VASAP). Through this program, a device is attached to the cars of drivers as a condition of a restricted license if they are convicted of a DUI. The device prohibits their vehicles from starting unless these drivers are alcohol free. While many factors can affect the volume of ignition interlocks installed, there were fewer interlocks installed over time.

Comparison of the Number of Ignition Interlocks Installed							
Month	FY 2017	FY 2016	% Variance FY17-FY16	FY 2015	% Variance FY16-FY15	FY 2014	% Variance FY15-FY14
July	7,756	9,018	-14%	9,106	-1%	8,793	4%
August	7,958	8,737	-9%	9,031	-3%	8,976	1%
September	8,045	8,759	-8%	9,124	-4%	8,889	3%
October	-	8,707	-	9,077	-4%	9,099	0%
November	-	8,470	-	8,721	-3%	8,968	-3%
December	-	8,441	-	8,916	-5%	8,957	0%
January	-	7,983	-	8,644	-8%	8,746	-1%
February	-	7,922	-	8,303	-5%	8,556	-3%
March	-	8,105	-	8,641	-6%	8,677	0%
April	-	7,930	-	8,564	-7%	8,815	-3%
May	-	7,905	-	8,511	-7%	8,952	-5%
June	-	7,911	-	8,947	-12%	8,822	1%
Total	23,759	99,888	-10%	105,585	-5%	106,250	-1%

*Source: VASAP

11. Persons with Disabilities

DMV received information from the Virginia Association for Centers for Independent Living (VACIL) reporting on TNC services for persons with disabilities. VACIL is a statewide advocacy association for people with disabilities. VACIL reported the following:

Advocates at the 17 Virginia Centers for Independent Living have continued to discuss how TNCs are responding to requests for rides from people with disabilities. People with sensory and developmental disabilities continue to report that they are successfully using TNCs. Effective communication for people using the TNC apps is a positive feature of the TNC experience. Several individuals have reported that they have attempted to use the app feature to schedule a ride in a wheelchair accessible vehicle. Each of these individuals reported that the TNC app referred them to a separate entity for information. None of them completed an accessible ride. There is confusion about the separate entities being used by the TNCs for wheelchair accessible rides. This quarter we will be exploring two questions - Are rides available for people with physical disabilities through the TNC apps? Is the method of requesting wheelchair accessible rides equivalent to the manner in which other individuals request rides?

12. Cost Recovery from Fees

DMV collected $246,421 in revenue in the first quarter of FY 2017 for administering the TNC law. During the same period, DMV incurred a total cost of $138,698, resulting in a balance of $107,723. For the remaining FY 2017, DMV estimates that its costs will be met assuming the number of TNC operators and drivers stays constant. Please see the next table for a breakdown of revenues and costs. The revenues for FY 2015/FY 2016, as well as FY 2017, include fees for driver transcript records which are required annually for TNC drivers.

TNC Implementation **Revenue Collected and Operating Cost through September 30, 2016**	
FY15/FY16 Start Up and First Year	
Category	**Total**
Total Revenue Collected	$609,892
Start-Up Cost	$845,617
On-Going Cost - FY16	$421,773
Total Revenue minus Cost through June 30, 2016	($657,498)
Revenue - Collected thru First Quarter FY17	
Category	**Total**
Revenue - Licenses Renewed (2 TNCs X $60,000 per license)	$120,000
Miscellaneous (registration cards, decals, cancellations and driver transcripts)	$126,421
Total Revenue	$246,421
Projected Revenue - Remaining in FY17	
Miscellaneous (registration cards, decals, cancellations and driver transcripts)	$417,199
Total Projected Revenue	$417,199

On-Going Cost - Incurred thru First Quarter of FY17			
Category	**Personal Services**	**Non-Personal Services**	**Total**
Law Enforcement	$64,678	$8,562	$73,240
Motor Carrier	$59,158	$6,300	$65,458
Total Cost	*$123,836*	*$14,862*	*$138,698*
On-Going Cost - Remaining in FY17			
Category	**Personal Services**	**Non-Personal Services**	**Total**
Law Enforcement	$157,075	$25,687	$182,762
Motor Carrier	$144,832	$22,808	$167,640
Total Cost	*$301,907*	*$48,495*	*$350,402*
First Quarter FY17 Revenue - Cost			
Total Revenue minus Cost through September 30, 2016			$107,723
Total Collected/Projected Revenue minus Cost through June 30, 2017			$174,520

Appendix 1:
Number of Active TNC Registrations by Jurisdiction for Virginia Plated Vehicles

The table below lists TNC-registered vehicles by locality or state where the vehicle is garaged, as reported by the vehicle owner or registrant. An application to title and register a vehicle in Virginia can list an address in another state as the garage jurisdiction. However, it is important to note that all vehicle registrations listed below are titled and registered in Virginia.

Garage Jurisdiction	Number of Active TNC Registrations Through September 30, 2016
Fairfax County	14,289
Prince William	6,949
Virginia Beach	5,732
Loudoun	3,978
Alexandria	3,812
Henrico	3,305
Norfolk	3,104
Arlington	2,915
Chesterfield	2,294
Chesapeake	2,269
Richmond City	2,160
Newport News	1,791
Hampton	1,330
Stafford	1,138
Portsmouth	893
Spotsylvania	771
Fairfax City	650
Manassas	642
Suffolk	548
Hanover	512
Albemarle	504
Roanoke City	472
James City	370
Charlottesville	355
Roanoke County	338
York	330
Harrisonburg	304
Lynchburg	284
Fauquier	276
Town Of Herndon	255
Fredericksburg	254
Falls Church	249
Montgomery	226
Frederick	218
Manassas Park	210
Maryland	195
Rockingham	184
Petersburg	183
Prince George	140
Williamsburg	139
Caroline	137
Bedford County	132
Orange	132
Culpeper	130

Appendix 1:
Number of Active TNC Registrations by Jurisdiction for Virginia Plated Vehicles

Garage Jurisdiction	Number of Active TNC Registrations Through September 30, 2016
Augusta	121
Hopewell	115
Town Of Blacksburg	114
Gloucester	102
Campbell	99
District Of Columbia	99
Isle Of Wight	97
Town Of Vienna	95
Town Of Leesburg	94
King George	92
Louisa	92
Colonial Heights	88
Fluvanna	87
Winchester	87
Goochland	78
Greene	76
Waynesboro	76
Salem	74
Franklin County	73
New Kent	73
Powhatan	73
Military	68
Staunton	68
Town Of Christiansburg	68
Dinwiddie	66
Shenandoah	65
Radford	62
Warren	60
Botetourt	59
California	50
Florida	50
Poquoson	50
Pulaski	50
Amherst	49
Henry	41
Clarke	40
Richmond County	40
Texas	40
Westmoreland	39
King William	38
North Carolina	33
Rockbridge	33
Charles City	29
Town Of Warrenton	29
Amelia	28
Sussex	28
Madison	26
New York	26
Town Of Culpeper	26
Buckingham	25

Appendix 1:
Number of Active TNC Registrations by Jurisdiction for Virginia Plated Vehicles

Garage Jurisdiction	Number of Active TNC Registrations Through September 30, 2016
Georgia	25
Ohio	24
Accomack	23
Nelson	23
Prince Edward	23
Virginia	23
Essex	20
Giles	20
Middlesex	20
Northampton	20
Town Of Smithfield	20
Floyd	19
King And Queen	19
Brunswick	18
Franklin City	18
Rappahannock	18
Page	17
Pittsylvania	17
Martinsville	16
Surry	16
Town Of Dumfries	16
Town Of Ashland	15
Appomattox	14
Charlotte	14
Cumberland	14
Danville	14
Mecklenburg	14
Nottoway	14
Pennsylvania	14
Southampton	14
Town Of Quantico	14
Halifax	13
Lexington	13
Northumberland	13
South Carolina	13
Illinois	12
Mathews	12
Town Of Bedford	12
Town Of Virgilina	12
Alleghany	11
Colorado	11
Emporia	11
Massachusetts	11
Tennessee	11
Town Of Pulaski	11
Town Of Vinton	11
Alabama	10
Town Of West Point	10
Arizona	9
Greensville	9

Appendix 1:
Number of Active TNC Registrations by Jurisdiction for Virginia Plated Vehicles

Garage Jurisdiction	Number of Active TNC Registrations Through September 30, 2016
Lancaster	9
Lunenburg	9
Patrick	9
Washington	9
Craig	8
Michigan	8
Town Of Front Royal	8
Wythe	8
Carroll	7
New Jersey	7
Town Of Berryville	7
Town Of Strasburg	7
Connecticut	6
Hawaii	6
Tazewell	6
Town Of Colonial Beach	6
Town Of Purcellville	6
Town Of Rocky Mount	6
Washington State	6
Wise	6
Buchanan	5
Galax	5
Non Virginia	5
Town Of Gordonsville	5
Town Of Stephens City	5
West Virginia	5
Minnesota	4
Missouri	4
Town Of Cape Charles	4
Town Of Elkton	4
Town Of Luray	4
Town Of Orange	4
Alaska	3
Bristol	3
Buena Vista	3
Covington	3
Indiana	3
Kansas	3
Louisiana	3
Nevada	3
Town Of Broadway	3
Town Of Haymarket	3
Town Of South Boston	3
Town Of Wytheville	3
Wisconsin	3
Arkansas	2
Grayson	2
Idaho	2
Maine	2
New Hampshire	2
New Mexico	2

Appendix 1:
Number of Active TNC Registrations by Jurisdiction for Virginia Plated Vehicles

Garage Jurisdiction	Number of Active TNC Registrations Through September 30, 2016
North Dakota	2
Rhode Island	2
Smyth	2
Town Of Altavista	2
Town Of Bridgewater	2
Town Of Chase City	2
Town Of Chatham	2
Town Of Clifton Forge	2
Town Of Farmville	2
Town Of Louisa	2
Town Of Occoquan	2
Town Of Remington	2
Town Of Timberville	2
Town Of Warsaw	2
Town Of Windsor	2
Utah	2
Bath	1
Delaware	1
Dickenson	1
Iowa	1
Kentucky	1
Mississippi	1
Nebraska	1
Oklahoma	1
Oregon	1
Out Of USA	1
Scott	1
Town Of Belle Haven	1
Town Of Bloxom	1
Town Of Bluefield	1
Town Of Boones Mill	1
Town Of Brodnax	1
Town Of Capron	1
Town Of Cheriton	1
Town Of Chincoteague	1
Town Of Columbia	1
Town Of Dendron	1
Town Of Dublin	1
Town Of Exmore	1
Town Of Floyd	1
Town Of Glasgow	1
Town Of Hamilton	1
Town Of Hillsville	1
Town Of Hurt	1
Town Of Kenbridge	1
Town Of Kilmarnock	1
Town Of Lebanon	1
Town Of Lovettsville	1
Town Of Mckenney	1
Town Of Melfa	1
Town Of Middletown	1
Town Of Mineral	1
Town Of Montross	1
Town Of Mount Crawford	1
Town Of New Castle	1
Town Of Pembroke	1
Town Of Scottsville	1

Appendix 1:
Number of Active TNC Registrations by Jurisdiction for Virginia Plated Vehicles

Garage Jurisdiction	Number of Active TNC Registrations Through September 30, 2016
Town Of Shenandoah	1
Town Of South Hill	1
Town Of Stanardsville	1
Town Of Stony Creek	1
Town Of Urbanna	1
Town Of Victoria	1
Town Of Wakefield	1
Town Of White Stone	1
Town Of Woodstock	1
Vermont	1
Virgin Islands	1
Total	69,394

*Military designates registrations for vehicles owned by active military personnel.

**Non Virginia designates registrations for vehicles titled outside of Virginia.

***Out of USA designates registrations for vehicles that are no longer in the USA.

Appendix 2:
Number of Active TNC Registrations for Out-of-State Plated Vehicles

State	Number of Active TNC Registrations Through September 30, 2016
Maryland	54,732
District of Columbia	14,153
Florida	838
North Carolina	747
Pennsylvania	546
Georgia	358
New York	321
New Jersey	314
California	302
Texas	276
West Virginia	262
South Carolina	215
Washington	171
Tennessee	169
Michigan	165
Ohio	134
Illinois	122
Delaware	104
Alabama	102
Massachusetts	100
Louisiana	79
Connecticut	76
Arizona	70
Indiana	65
Kentucky	57
Wisconsin	41
Missouri	40
Mississippi	39
Colorado	38
Alaska	36
Oklahoma	33
Kansas	32
New Hampshire	31
Oregon	31
New Mexico	29
Nevada	27
Arkansas	26
Rhode Island	23
Maine	21
Hawaii	20
Minnesota	17
South Dakota	17
Idaho	16
Iowa	13
Vermont	13
Montana	11
Nebraska	10
North Dakota	9
Utah	8
Wyoming	8
Total	75,067

Appendix 3:
Complaint and Enforcement Activity for Airports/Airport Authorities

Richmond International Airport Complaint Sources				
	TNCs		*Other Passenger Carriers*	
Source	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Rider	0	0	0	1
Driver	0	0	0	0
General Public	0	0	0	0
Other Passenger Carrier	1	18	5	6
Business	0	0	0	0
Other	200	708	14	69
Unknown	0	0	0	0
Total	201	726	19	76
Comments (year-to-date): At RIC, Airport Ground Transportation is included as an "Other" source.				

Richmond International Airport Complaint Type				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Wheelchair Accessibility	0	0	0	0
Service Animals	0	0	0	0
Disabled Service Refusal	0	0	0	0
Discrimination Based on Departure/Destination	0	0	0	0
Price	0	0	0	1
Violation of Operational Requirements	N/A	N/A	0	1
Off App Ride/Street Hail	0	3	N/A	N/A
No Trade Dress Displayed	85	311	N/A	N/A
No Decal	31	115	N/A	N/A
Complaint About Driver	0	1	0	0
Complaint About Vehicle	0	0	0	3
Unfair Competitive Advantage	0	1	1	1
No Identification Marker	N/A	N/A	0	0
Failure to Display Required Signage	N/A	N/A	0	0
Other	112	335	18	71
Total	228	766	19	77
Comments (year-to-date): Violations of Airport Rules and Regulations, such as cruising/solicitation, use of prohibited pick-up zones, unattended vehicles - essentially operating in an unauthorized manner - were included in the "Other" type of complaints.				

Appendix 3:
Complaint and Enforcement Activity for Airports/Airport Authorities

Richmond International Airport Complaint Follow-up				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
No Action Needed	157	400	13	49
Investigation	0	1	0	2
Referred to Local Law Enforcement	42	228	0	17
Referred to Respective Company	0	3	2	6
Referred to DMV	0	1	4	6
Total	196	633	19	80
Comments (year-to-date): Local law enforcement = RICPD. No Action includes drive offs and resolved on the spot. Investigations are by RIC GT office.				

Richmond International Airport Enforcement: Contacts*				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Total	192	589	17	69
Comments (year-to-date): Contact is made because a violation is observed.				

Richmond International Airport Enforcement: Violations				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Drivers without Violations	2	8	0	2
Drivers with Violations	190	608	17	65
Total Drivers	192	616	17	67
Total Violations	228	726	19	67

Richmond International Airport Enforcement: Actions Taken				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
No Action Taken	38	69	0	1
Unfounded	0	12	0	4
Warnings	135	391	15	55
Arrests	0	0	0	0
Summons	29	93	0	2
Referred to DMV Law Enforcement	0	0	2	5
Total	202	565	17	67
Comments (year-to-date): Summons includes local traffic violation ticket. No Action includes drive off. Unfounded includes resolved on the spot.				

Appendix 3:
Complaint and Enforcement Activity for Airports/Airport Authorities

Metropolitan Washington Airports Authority Complaint Sources				
	TNCs		*Other Passenger Carriers*	
Source	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Rider	3	13	144	698
Driver	0	0	0	0
General Public	0	0	38	187
Other Passenger Carrier	0	0	0	1
Business	0	122	0	1
Other	0	0	0	1
Unknown	0	0	0	1
Total	3	135	182	889

Metropolitan Washington Airports Authority Complaint Type				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Wheelchair Accessibility	0	0	0	0
Service Animals	0	0	0	0
Disabled Service Refusal	0	0	0	0
Discrimination Based on Departure/Destination	1	2	0	27
Price	0	8	36	134
Violation of Operational Requirements	N/A	N/A	0	172
Off App Ride/Street Hail	0	0	N/A	N/A
No Trade Dress Displayed	0	0	N/A	N/A
No Decal	0	0	N/A	N/A
Complaint About Driver	2	2	135	531
Complaint About Vehicle	0	0	0	5
Unfair Competitive Advantage	0	0	0	0
No Identification Marker	N/A	N/A	0	0
Failure to Display Required Signage	N/A	N/A	0	0
Other	0	123	21	61
Total	3	135	192	930
Comments (year-to-date): Other Passenger Carrier 'Other': Parking. PD received 10 parking complaints for Limos. All were handle by a responding officer. None required follow up.				

Appendix 3:
Complaint and Enforcement Activity for Airports/Airport Authorities

Metropolitan Washington Airports Authority Complaint Follow-up				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
No Action Needed	0	9	38	84
Investigation	0	0	0	2
Referred to Local Law Enforcement	0	122	0	0
Referred to Respective Company	3	4	144	834
Referred to DMV	0	0	0	0
Total	3	135	182	920

Metropolitan Washington Airports Authority Enforcement: Contacts				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Total	5,552	34,229	2,093	21,942
Comments (year-to-date): Does not include taxi inspections. During the first quarter 2017, there were 467 Notices of Violation issued (TNC-440/For Hire-27). The Notices of Violations were added in the Warnings columns.				

Metropolitan Washington Airports Authority Enforcement: Violations				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Drivers without Violations	4,806	29,801	2,031	17,920
Drivers with Violations	746	4,428	62	4,022
Total Drivers	5,552	34,229	2,093	21,942
Total Violations	786	4,559	67	4,152
Comments (First Quarter, 2017): TNC frequently occurring violations were: No Trade Dress and Staging Area. Other passenger carrier frequently occurring violations were: Staging Area and No AVI.				

Appendix 3:
Complaint and Enforcement Activity for Airports/Airport Authorities

Metropolitan Washington Airports Authority Enforcement: Actions Taken				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
No Action Taken	4,806	29,656	2,031	17,913
Unfounded	0	0	0	0
Warnings	680	3,995	50	3,956
Arrests	1	3	0	0
Summons	102	546	17	243
Referred to DMV Law Enforcement	3	71	0	7
Total	5,592	34,271	2,098	22,119
Comments (First Quarter, 2017): Approximately 37% of summonses written to TNC's were for traffic infractions, 53% of the summonses for TNC related (Va Code) and around 10% of the summonses were written for Airport code violations such as No Permit, No or not working AVI and Solicitation. The one arrest was for a Road Rage incident where the Uber driver threw a large soda cup at another vehicle. There were 440 Notices of Violations added to the TNC Warnings category. There were 27 Notices of Violations added to the Other Pass Carrier Warnings category.				

Newport News/Williamsburg International Airport Complaint Sources				
	TNCs		*Other Passenger Carriers*	
Source	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Rider	0	0	4	7
Driver	0	0	4	4
General Public	0	0	0	6
Other Passenger Carrier	0	0	0	3
Business	0	0	0	0
Other	0	0	0	11
Unknown	0	0	0	0
Total	0	0	8	31

Appendix 3:
Complaint and Enforcement Activity for Airports/Airport Authorities

Newport News/Williamsburg International Airport Complaint Type				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Wheelchair Accessibility	0	0	0	0
Service Animals	0	0	0	0
Disabled Service Refusal	0	0	0	0
Discrimination Based on Departure/Destination	0	0	0	3
Price	0	0	0	3
Violation of Operational Requirements	N/A	N/A	0	0
Off App Ride/Street Hail	0	0	N/A	N/A
No Trade Dress Displayed	0	0	N/A	N/A
No Decal	0	0	N/A	N/A
Complaint About Driver	0	0	4	13
Complaint About Vehicle	0	0	0	1
Unfair Competitive Advantage	0	0	0	0
No Identification Marker	N/A	N/A	0	0
Failure to Display Required Signage	N/A	N/A	0	2
Other	0	0	4	4
Total	0	0	8	26

Newport News/Williamsburg International Airport Complaint Follow-up				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
No Action Needed	0	0	0	0
Investigation	0	0	8	11
Referred to Local Law Enforcement	0	0	0	6
Referred to Respective Company	0	0	0	0
Referred to DMV	0	0	0	0
Total	0	0	8	17

Newport News/Williamsburg International Airport Enforcement: Contacts				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Total	0	0	8	40

Appendix 3:
Complaint and Enforcement Activity for Airports/Airport Authorities

Newport News/Williamsburg International Airport Enforcement: Violations				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Drivers without Violations	0	0	0	33
Drivers with Violations	0	0	8	19
Total Drivers	0	0	8	52
Total Violations	0	0	8	19

Newport News/Williamsburg International Airport Enforcement: Actions Taken				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
No Action Taken	0	0	0	0
Unfounded	0	0	2	2
Warnings	0	0	6	24
Arrests	0	0	0	0
Summons	0	0	0	6
Referred to DMV Law Enforcement	0	0	0	0
Total	0	0	8	32

Charlottesville Albemarle Airport Complaint Sources				
	TNCs		*Other Passenger Carriers*	
Source	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Rider	0	0	0	0
Driver	0	0	0	0
General Public	0	0	0	0
Other Passenger Carrier	0	28	0	0
Business	0	0	0	0
Other	0	0	0	0
Unknown	0	0	0	0
Total	0	28	0	0

Appendix 3:
Complaint and Enforcement Activity for Airports/Airport Authorities

Charlottesville Albemarle Airport Complaint Type				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Wheelchair Accessibility	0	0	0	0
Service Animals	0	0	0	0
Disabled Service Refusal	0	0	0	0
Discrimination Based on Departure/Destination	0	0	0	0
Price	0	0	0	0
Violation of Operational Requirements	N/A	N/A	0	0
Off App Ride/Street Hail	0	0	N/A	N/A
No Trade Dress Displayed	0	0	N/A	N/A
No Decal	0	0	N/A	N/A
Complaint About Driver	0	0	0	0
Complaint About Vehicle	0	0	0	0
Unfair Competitive Advantage	0	0	0	0
No Identification Marker	N/A	N/A	0	0
Failure to Display Required Signage	N/A	N/A	0	0
Other	0	28	0	0
Total	0	28	0	0

Charlottesville Albemarle Airport Complaint Follow-up				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
No Action Needed	0	0	0	0
Investigation	0	28	0	0
Referred to Local Law Enforcement	0	0	0	0
Referred to Respective Company	0	0	0	0
Referred to DMV	0	0	0	0
Total	0	28	0	0
Comments (year-to-date): Due to the significant increase of Uber presence, we have requested additional enforcement assistance in writing to our local DMV Agent. The request was made verbally on November 30th followed with an official letter of request on December 1st, 2015. Increases such as this have made it very challenging on airports such as ours. The officers tasked with this new duty are also responsible for the all Police, Fire and EMS functions related to the airport.				

Charlottesville Albemarle Airport Enforcement: Contacts				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Total	0	194	0	0

Appendix 3:
Complaint and Enforcement Activity for Airports/Airport Authorities

Charlottesville Albemarle Airport Enforcement: Violations				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Drivers without Violations	0	0	0	0
Drivers with Violations	0	194	0	0
Total Drivers	0	194	0	0
Total Violations	0	194	0	0

Charlottesville Albemarle Airport Enforcement: Actions Taken				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
No Action Taken	0	0	0	0
Unfounded	0	0	0	0
Warnings	0	194	0	0
Arrests	0	0	0	0
Summons	0	0	0	0
Referred to DMV Law Enforcement	0	0	0	0
Total	0	194	0	0
Comments (year-to-date): Due to the significant increase of Uber presence, we have requested additional enforcement assistance in writing to our local DMV Agent. The request was made verbally on November 30th followed with an official letter of request on December 1st, 2015. Increases such as this have made it very challenging on airports such as ours. The officers tasked with this new duty are also responsible for the all Police, Fire and EMS functions related to the airport.				

Norfolk International Airport Complaint Sources				
	TNCs		*Other Passenger Carriers*	
Source	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Rider	0	0	0	7
Driver	0	1	1	1
General Public	0	0	0	0
Other Passenger Carrier	0	3	0	5
Business	0	0	0	0
Other	5	20	0	2
Unknown	0	0	0	0
Total	5	24	1	15

Appendix 3:
Complaint and Enforcement Activity for Airports/Airport Authorities

Norfolk International Airport Complaint Type				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Wheelchair Accessibility	0	0	0	0
Service Animals	0	0	0	0
Disabled Service Refusal	0	0	0	0
Discrimination Based on Departure/Destination	0	0	0	0
Price	0	0	0	1
Violation of Operational Requirements	N/A	N/A	0	3
Off App Ride/Street Hail	0	0	N/A	N/A
No Trade Dress Displayed	0	1	N/A	N/A
No Decal	1	3	N/A	N/A
Complaint About Driver	0	2	0	5
Complaint About Vehicle	0	1	0	1
Unfair Competitive Advantage	0	1	0	0
No Identification Marker	N/A	N/A	0	0
Failure to Display Required Signage	N/A	N/A	0	0
Other	4	16	1	1
Total	5	24	1	11
Comments (year-to-date): During this reporting cycle we received one complaint against an other passenger carrier, taxi cab. Another driver complained that the suspect drived refused to carry a passenger to a military base when he had a permit and a requirement to do so. The investigation revealed that the suspected driver thought that his permit had expired; therefore, he declined the fare not knowing that his permit actually expired two days later. A warning was issue to the driver. During this period we have had five contacts with TNC drivers and none were related to a complaint. One driver did not have his Trade Dress displayed properly and a warning was given. The other four involved drivers not being in the proper stageing area for passenget pick-up. All driver6s were warned and directed to the proper staging area.				

Norfolk International Airport Complaint Follow-up				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
No Action Needed	5	20	0	0
Investigation	0	0	1	12
Referred to Local Law Enforcement	0	0	0	0
Referred to Respective Company	0	1	0	3
Referred to DMV	0	0	0	0
Total	5	21	1	15
Comments (year-to-date):				

Appendix 3:
Complaint and Enforcement Activity for Airports/Airport Authorities

Norfolk International Airport Enforcement: Contacts				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Total	5	175	1	5
Comments (year-to-date): The taxi driver complaint is still open and resolution pending. All TNC drivers received warnings.				

Norfolk International Airport Enforcement: Violations				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
Drivers without Violations	4	4	0	0
Drivers with Violations	1	171	1	8
Total Drivers	5	175	1	8
Total Violations	1	171	1	8
Comments (year-to-date): The one other carrier complaint came in on June 28, 2016 and the conclusion is pending.				

Norfolk International Airport Enforcement: Actions Taken				
	TNCs		*Other Passenger Carriers*	
Category	*First Quarter*	*Grand Total*	*First Quarter*	*Grand Total*
No Action Taken	0	0	0	0
Unfounded	0	0	0	0
Warnings	5	175	1	3
Arrests	0	0	0	0
Summons	0	0	0	0
Referred to DMV Law Enforcement	0	0	0	0
Total	5	175	1	3
Comments (year-to-date): The TNC violations consisted of two for not displaying the proper decals, one for not displaying the proper Trade Dress and twelve for picking up passengers in a non designated area (curbside). The one other carrier complaint is pending resolution.				

Appendix 4:
Alcohol-Related Fatalities for Localities with 100+ TNC Registrations

Locality (Col. 1)	Number of TNC Registrations* (Col. 2)	July 1, 2015 to May 31, 2016** (Col. 3)	July 1, 2014 to May 31, 2015 (Col. 4)	Variance (Col. 5) (Col. 3 - Col. 4)	% Variance (Col. 6) (Col. 5/Col.4)	July 1, 2013 to May 31, 2014 (Col. 7)	Variance (Col. 8) (Col. 3 - Col. 7)	% Variance (Col. 9) (Col. 8/Col. 7)
Fairfax County	14,289	9	11	-2	-18%	19	-10	-53%
Prince William	6,949	8	4	4	100%	8	0	0%
Virginia Beach	5,732	4	16	-12	-75%	7	-3	-43%
Loudoun	3,978	2	3	-1	-33%	7	-5	-71%
Alexandria	3,812	1	2	-1	-50%	0	1	100%
Henrico	3,305	10	7	3	43%	8	2	25%
Norfolk	3,104	3	13	-10	-77%	10	-7	-70%
Arlington	2,915	0	3	-3	-100%	1	-1	-100%
Chesterfield	2,294	10	11	-1	-9%	8	2	25%
Chesapeake	2,269	6	7	-1	-14%	4	2	50%
Richmond City	2,160	8	6	2	33%	4	4	100%
Newport News	1,791	8	7	1	14%	3	5	167%
Hampton	1,330	2	5	-3	-60%	4	-2	-50%
Stafford	1,138	5	2	3	150%	2	3	150%
Portsmouth	893	1	1	0	0%	2	-1	-50%
Spotsylvania	771	8	8	0	0%	9	-1	-11%
Fairfax City	650	1	0	1	100%	0	1	100%
Manassas	642	0	0	0	0%	0	0	0%
Suffolk	548	2	3	-1	-33%	5	-3	-60%
Hanover	512	3	2	1	50%	4	-1	-25%
Albemarle	504	3	6	-3	-50%	6	-3	-50%
Roanoke City	472	5	7	-2	-29%	5	0	0%
James City	370	0	6	-6	-100%	4	-4	-100%
Charlottesville	355	0	0	0	0%	0	0	0%
Roanoke County	338	2	4	-2	-50%	3	-1	-33%
York	330	2	2	0	0%	5	-3	-60%
Harrisonburg	304	3	0	3	100%	0	3	100%
Lynchburg	284	2	1	1	100%	0	2	100%
Fauquier	276	1	7	-6	-86%	6	-5	-83%
Town Of Herndon	255	0	0	0	0%	0	0	0%
Fredericksburg	254	0	0	0	0%	0	0	0%
Falls Church	249	0	1	-1	-100%	0	0	0%
Montgomery	226	0	3	-3	-100%	1	-1	-100%
Frederick	218	1	4	-3	-75%	3	-2	-67%
Manassas Park	210	0	0	0	0%	0	0	0%
Rockingham	184	1	5	-4	-80%	11	-10	-91%
Petersburg	183	1	1	0	0%	1	0	0%
Prince George	140	1	3	-2	-67%	3	-2	-67%
Williamsburg	139	0	0	0	0%	0	0	0%
Caroline	137	1	3	-2	-67%	0	1	100%
Bedford County	132	5	3	2	67%	4	1	25%
Orange	132	6	1	5	500%	3	3	100%
Culpeper	130	1	2	-1	-50%	3	-2	-67%
Augusta	121	6	6	0	0%	3	3	100%
Hopewell	115	0	0	0	0%	0	0	0%
Town Of Blacksbur	114	0	0	0	0%	0	0	0%
Gloucester	102	1	3	-2	-67%	1	0	0%
Total	**65,356**	**133**	**179**	**-46**	**-26%**	**167**	**-34**	**-20%**

* Number of TNC Registrations is as of September 30, 2016.

**Preliminary data.

Appendix 5:
Alcohol-Related Crashes for Localities with 100+ TNC Registrations

Locality (Col. 1)	Number of TNC Registrations* (Col. 2)	July 1, 2015 to August 31, 2016** (Col. 3)	July 1, 2014 to August 31, 2015 (Col. 4)	Variance (Col. 5) (Col. 3 - Col. 4)	% Variance (Col. 6) (Col. 5/Col.4)	July 1, 2013 to August 31, 2014 (Col. 7)	Variance (Col. 8) (Col. 3 - Col. 7)	% Variance (Col. 9) (Col. 8/Col. 7)
Fairfax County	14,289	786	855	-69	-8%	926	-140	-15%
Prince William	6,949	386	383	3	1%	383	3	1%
Virginia Beach	5,732	570	630	-60	-10%	551	19	3%
Loudoun	3,978	291	258	33	13%	262	29	11%
Alexandria	3,812	117	119	-2	-2%	120	-3	-3%
Henrico	3,305	346	364	-18	-5%	352	-6	-2%
Norfolk	3,104	231	264	-33	-13%	290	-59	-20%
Arlington	2,915	234	263	-29	-11%	281	-47	-17%
Chesterfield	2,294	383	341	42	12%	366	17	5%
Chesapeake	2,269	166	171	-5	-3%	190	-24	-13%
Richmond City	2,160	278	272	6	2%	291	-13	-4%
Newport News	1,791	210	194	16	8%	214	-4	-2%
Hampton	1,330	184	205	-21	-10%	215	-31	-14%
Stafford	1,138	107	117	-10	-9%	122	-15	-12%
Portsmouth	893	39	88	-49	-56%	71	-32	-45%
Spotsylvania	771	153	159	-6	-4%	156	-3	-2%
Fairfax City	650	32	36	-4	-11%	35	-3	-9%
Manassas	642	41	43	-2	-5%	48	-7	-15%
Suffolk	548	97	93	4	4%	76	21	28%
Hanover	512	105	113	-8	-7%	121	-16	-13%
Albemarle	504	139	149	-10	-7%	153	-14	-9%
Roanoke City	472	106	149	-43	-29%	134	-28	-21%
James City	370	54	63	-9	-14%	43	11	26%
Charlottesville	355	41	53	-12	-23%	73	-32	-44%
Roanoke County	338	67	72	-5	-7%	79	-12	-15%
York	330	67	55	12	22%	56	11	20%
Harrisonburg	304	55	51	4	8%	58	-3	-5%
Lynchburg	284	100	112	-12	-11%	81	19	23%
Fauquier	276	105	112	-7	-6%	112	-7	-6%
Town Of Herndon	255	19	31	-12	-39%	25	-6	-24%
Fredericksburg	254	55	52	3	6%	64	-9	-14%
Falls Church	249	12	12	0	0%	6	6	100%
Montgomery	226	98	112	-14	-13%	110	-12	-11%
Frederick	218	96	73	23	32%	83	13	16%
Manassas Park	210	20	5	15	300%	4	16	400%
Rockingham	184	122	114	8	7%	122	0	0%
Petersburg	183	57	52	5	10%	61	-4	-7%
Prince George	140	24	29	-5	-17%	35	-11	-31%
Williamsburg	139	7	10	-3	-30%	18	-11	-61%
Caroline	137	50	37	13	35%	34	16	47%
Bedford County	132	93	100	-7	-7%	79	14	18%
Orange	132	34	26	8	31%	40	-6	-15%
Culpeper	130	50	63	-13	-21%	63	-13	-21%
Augusta	121	87	95	-8	-8%	94	-7	-7%
Hopewell	115	35	35	0	0%	35	0	0%
Town Of Blacksburg	114	35	49	-14	-29%	31	4	13%
Gloucester	102	47	56	-9	-16%	46	1	2%
Total	**65,356**	**6,431**	**6,735**	**-304**	**-5%**	**6,809**	**-378**	**-6%**

* Number of TNC Registrations is as of September 30, 2016.

**Preliminary data.

Appendix E. Cell-Phone Survey Concerning Use of Transportation Network Companies as an Alternate Form of Transportation in Large Urban Areas in Virginia

Preliminary Results
from
Cell-Phone Survey about
Use of Transportation Network Companies (TNCs) as an Alternate Form of Transportation
in Large Urban Areas in Virginia

November 1, 2016

Kathleen Hancock, PE, PhD
and
The Center for Survey Research
Virginia Polytechnic Institute and State University

for
Highway Safety Office
Virginia Department of Motor Vehicles

CONTENTS

DESCRIPTION

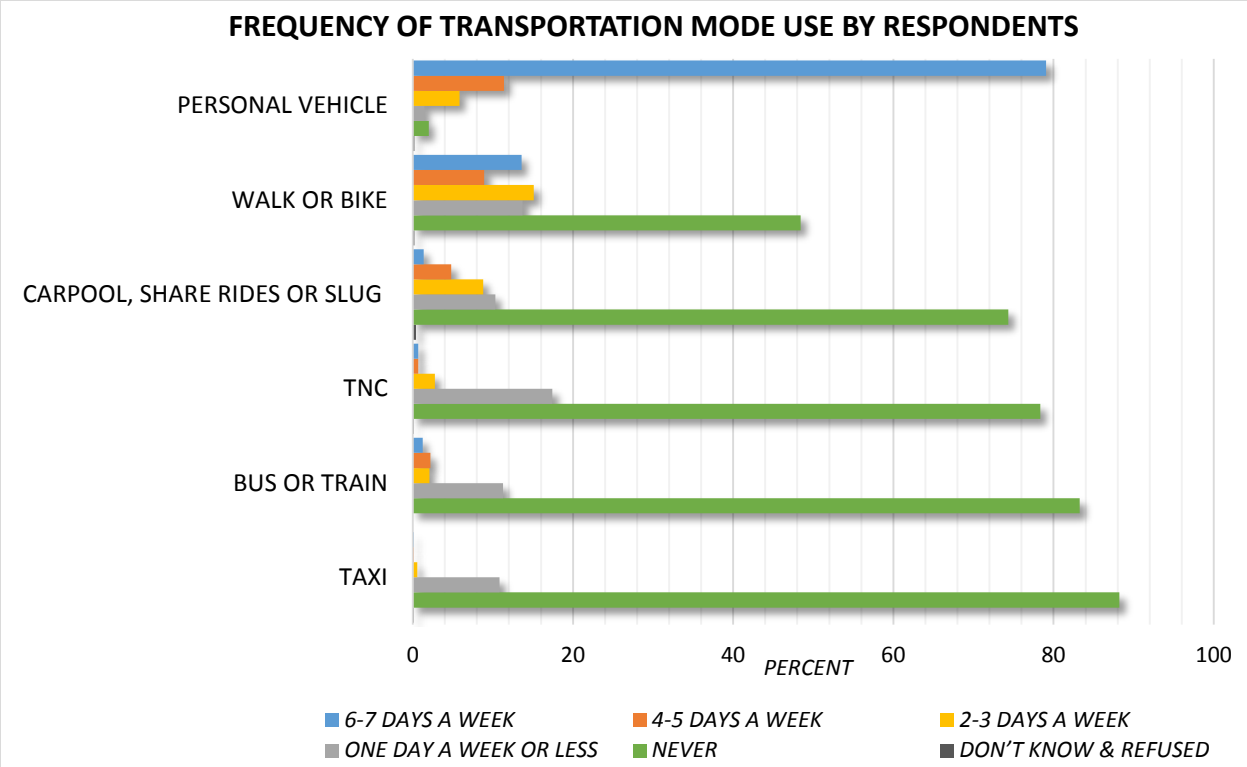
This document provides a summary of preliminary information about the use of alternate modes of transportation in general and after consuming alcohol. The information was obtained through a cell-phone survey conducted by Virginia Tech's Center for Survey Research from June through October, 2016. Because the focus of the study is on use of alternative modes of transportation including transportation network companies (TNCs), public transportation, taxis, and possible other modes, the survey was directed to cell-phone numbers belonging to people age 21 and older in jurisdictions in the three largest urban areas in Virginia as shown in table 1. The information and graphs in the following sections highlight the relationship of TNC use with respect to other modes of transportation.

Because this is preliminary information, only single tabulations are presented, meaning that the graphs and discussions represent aggregates of all responses to individual questions. More detailed information about how responses to questions relate to each other will be provided in the final report, ie how TNC use varies by gender, age, location, etc. Questions, and therefore the graphs, have different numbers of responses depending on answers to earlier questions. For example, if respondents replied that they do not drink alcohol, they were not asked any questions about driving or use of alternate modes of transportation after consuming alcohol. Respondents also had the option to refuse to answer any questions at any time during the survey. As a result, all graphs and the corresponding discussions present information as a percentage of the number responses to that question. Finally, the survey completion rate was approximately 74%.

Alcohol related questions asked respondents to respond to whether they had consumed alcohol without referencing the level of consumption. The tenth graph and discussion refer to a question that asked respondents whether they had avoided riding with a driver that respondents perceived as having consumed too much alcohol. No inference is made with respect to respondents driving under the influence of alcohol in this report. It should also be noted, that this survey does not account for alcohol related programs such as SoberRide.

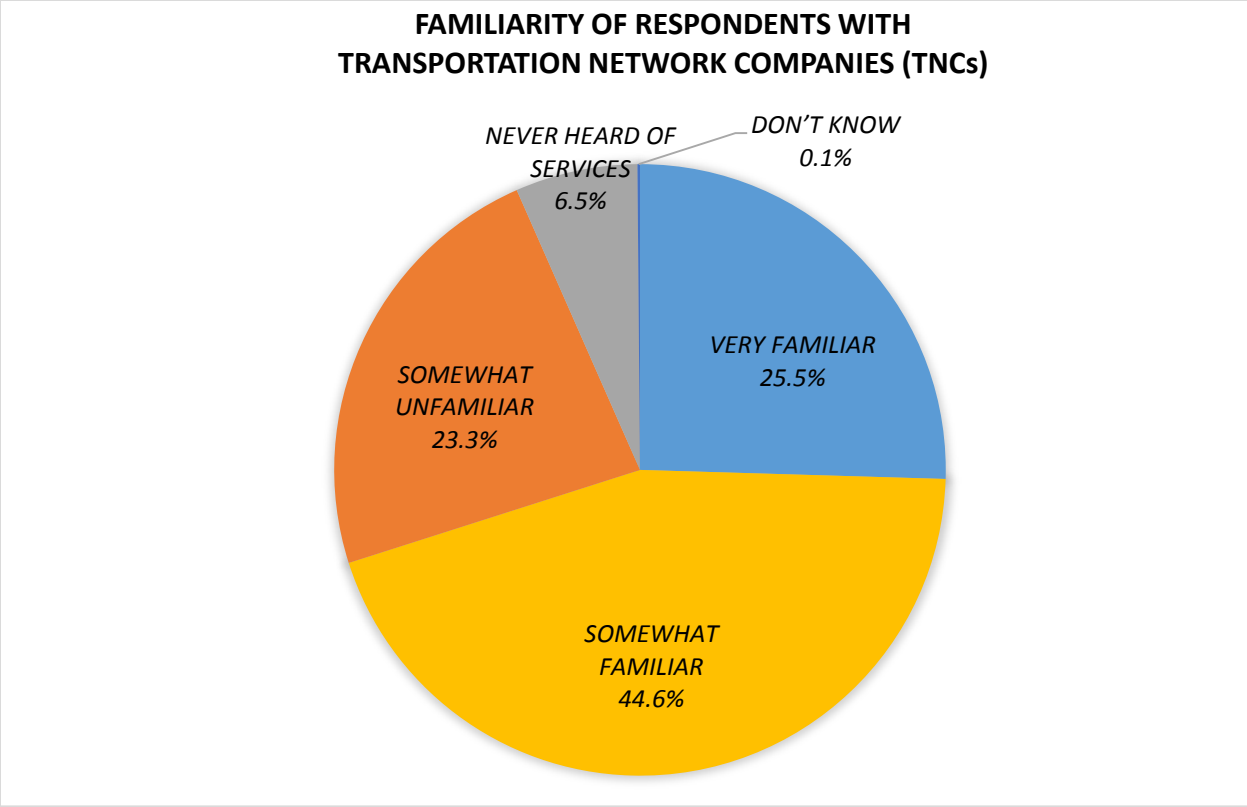
Table 1. Virginia Urban Areas Targeted for Survey

Northern Virginia	Hampton Roads/Tidewater	Richmond Region
Arlington	Chesapeake	Chesterfield
Alexandria	Hampton	Colonial Heights
Fairfax	James City	Hanover
Fairfax City	Newport News	Henrico
Falls Church	Norfolk	Hopewell
Loudoun	Poquoson	Petersburg
Manassas	Portsmouth	Richmond
Manassas Park	Suffolk	
Prince William	Virginia Beach	
	Williamsburg	
	York	



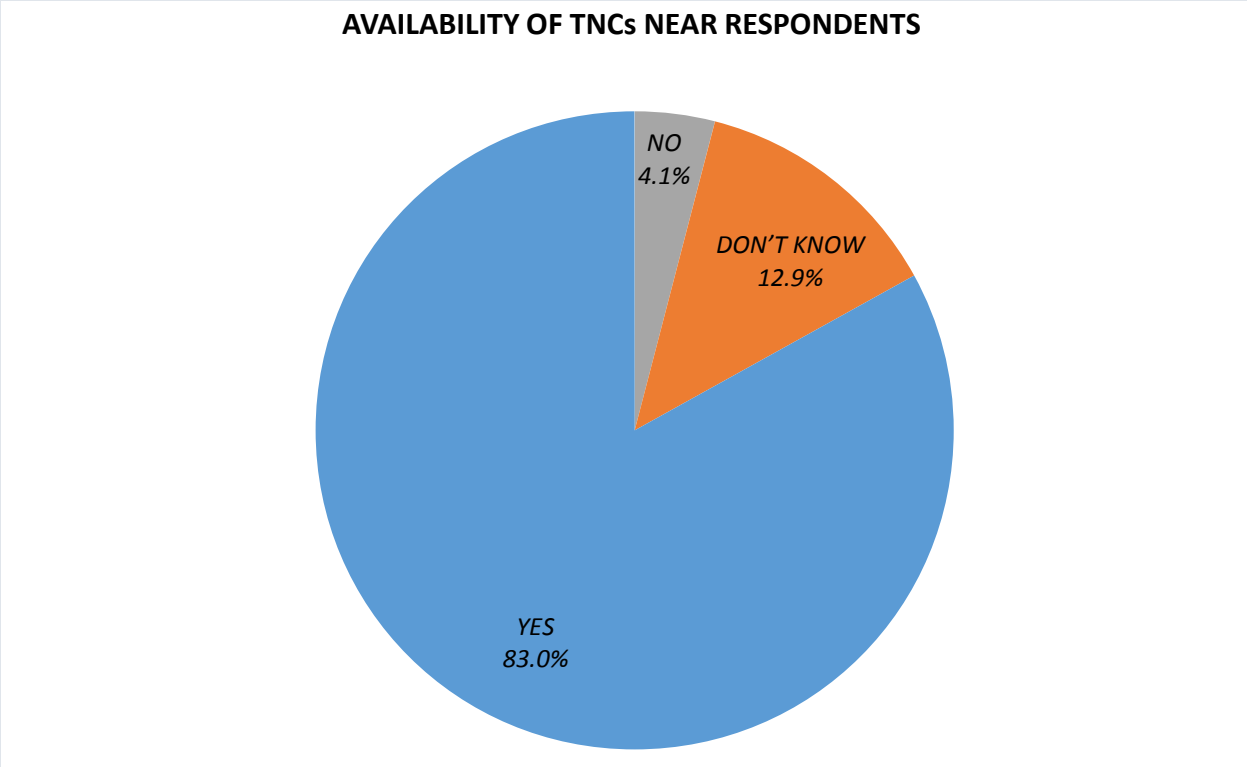
Note: Approximately 73% of all respondents answered this question

1) To understand general use of TNCs with respect to other modes of transportation, respondents were asked how often they used each of the modes shown in the figure above. As expected, most respondents use personal vehicles most of the time. 4% of respondents indicated that they used TNCs regularly – two or more days per week. 17% indicated that they use them periodically. Of alternate modes of transportation (not personal vehicle), respondents used TNC most often for periodic trips.



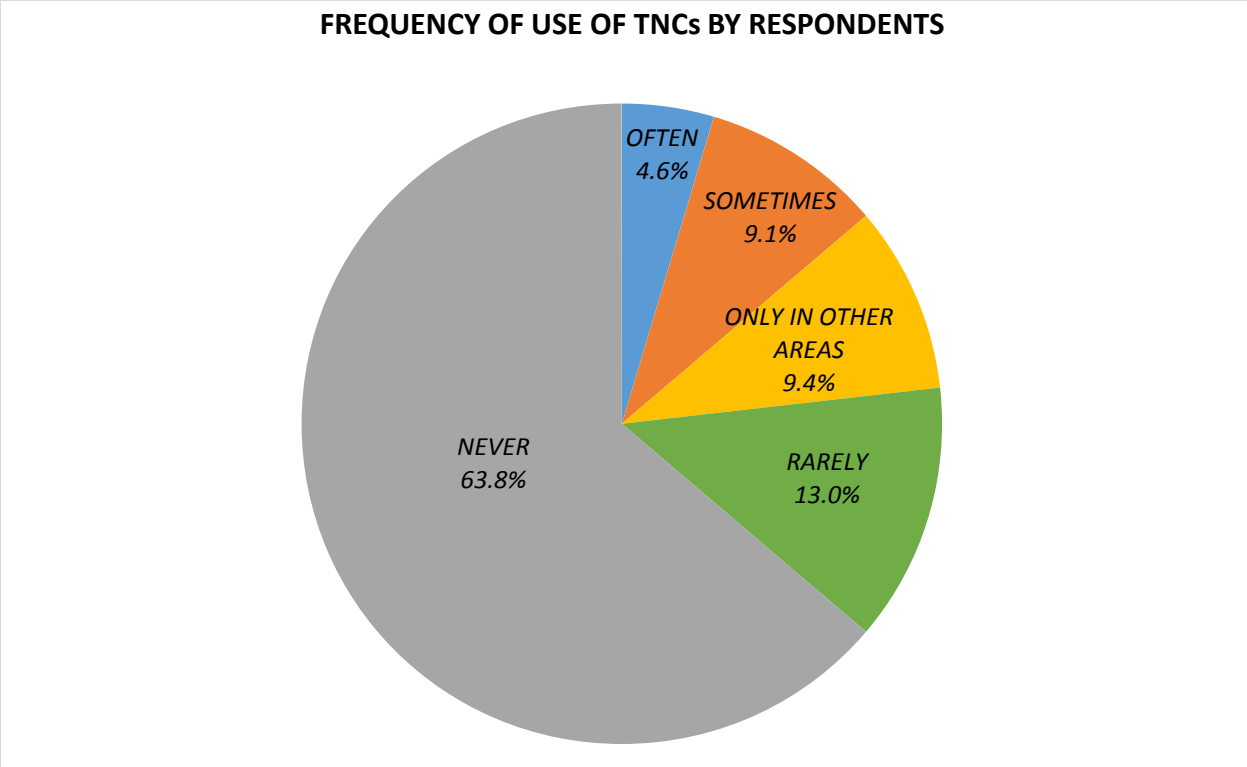
Note: Approximately 74% of all respondents answered this question.

2) Because Transportation Network Companies are relatively new both in concept and to Virginia, the survey asked respondents whether they were familiar with them. 93% of those that answered this question had heard of them with approximately 70% knowing their purpose. A quarter of those that answered were very familiar with TNCs.



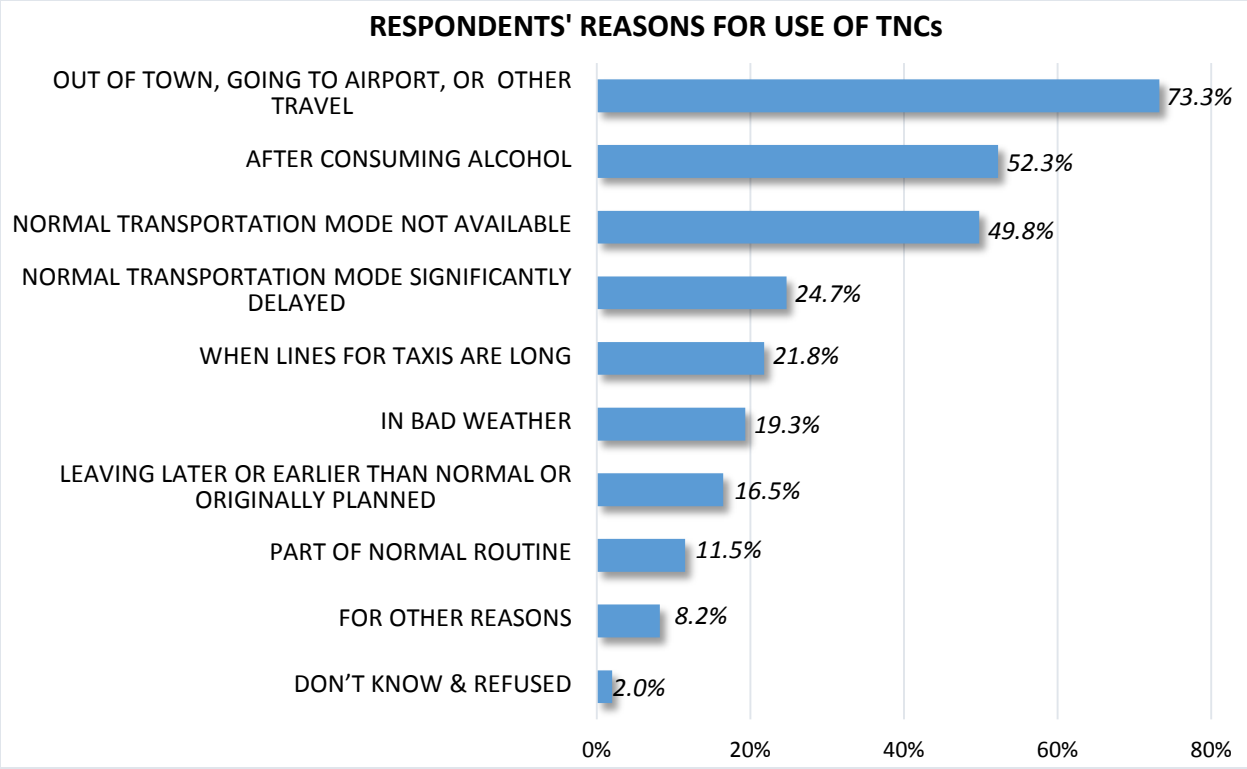
Note: Approximately 74% of all respondents answered this question.

3) When asked whether TNCs were available to respondents, 83% replied yes while 4% indicated that they were not. Although not confirmed, this implies that a large part of the driving population in these urban areas are aware of and have access to TNCs.



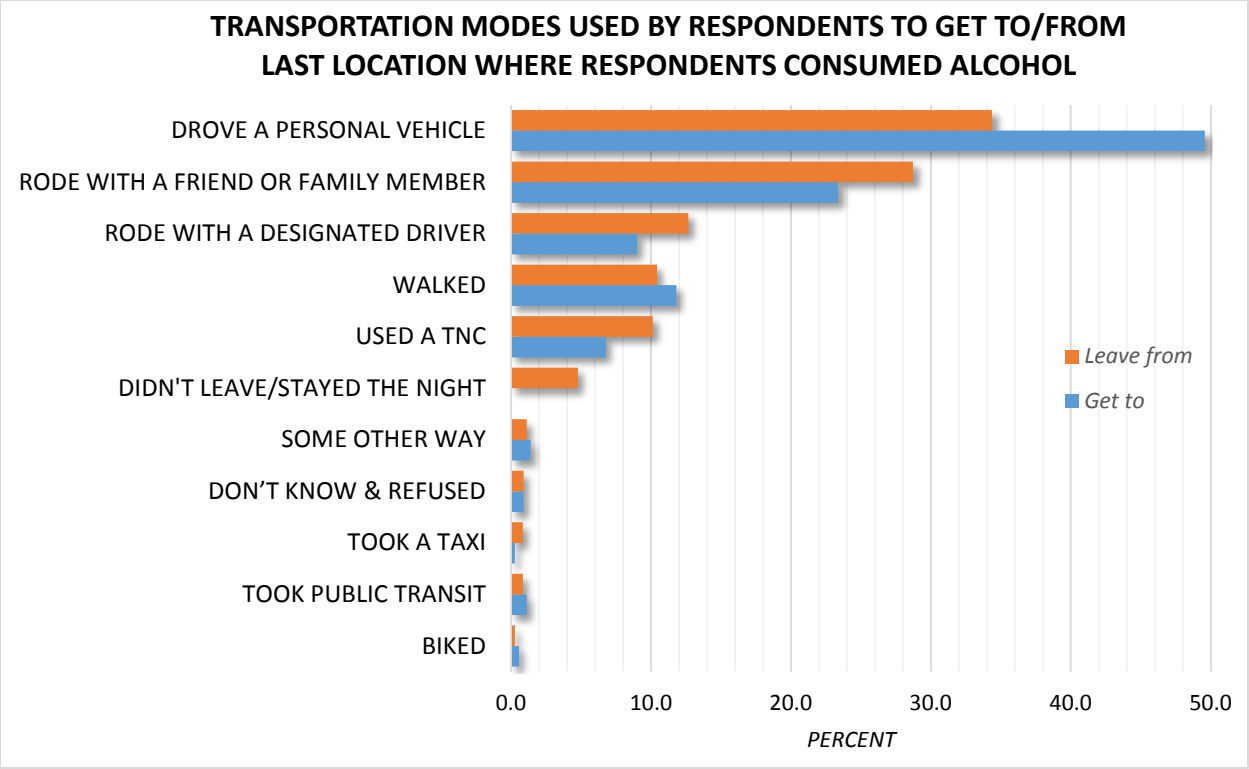
Note: Approximately 69% of all respondents answered this question which represents approximately 99% of respondents that are familiar with TNCs.

4) The first figure provided TNC use as it relates to other modes of transportation. The figure above specifically considers the relative frequency of TNC use. The percentage of respondents that use TNCs often is comparable to those that indicated they use TNCs two or more times per week. The number of respondents that sometimes use TNCs locally is approximately the same as the number of respondents that use them while traveling away from home.



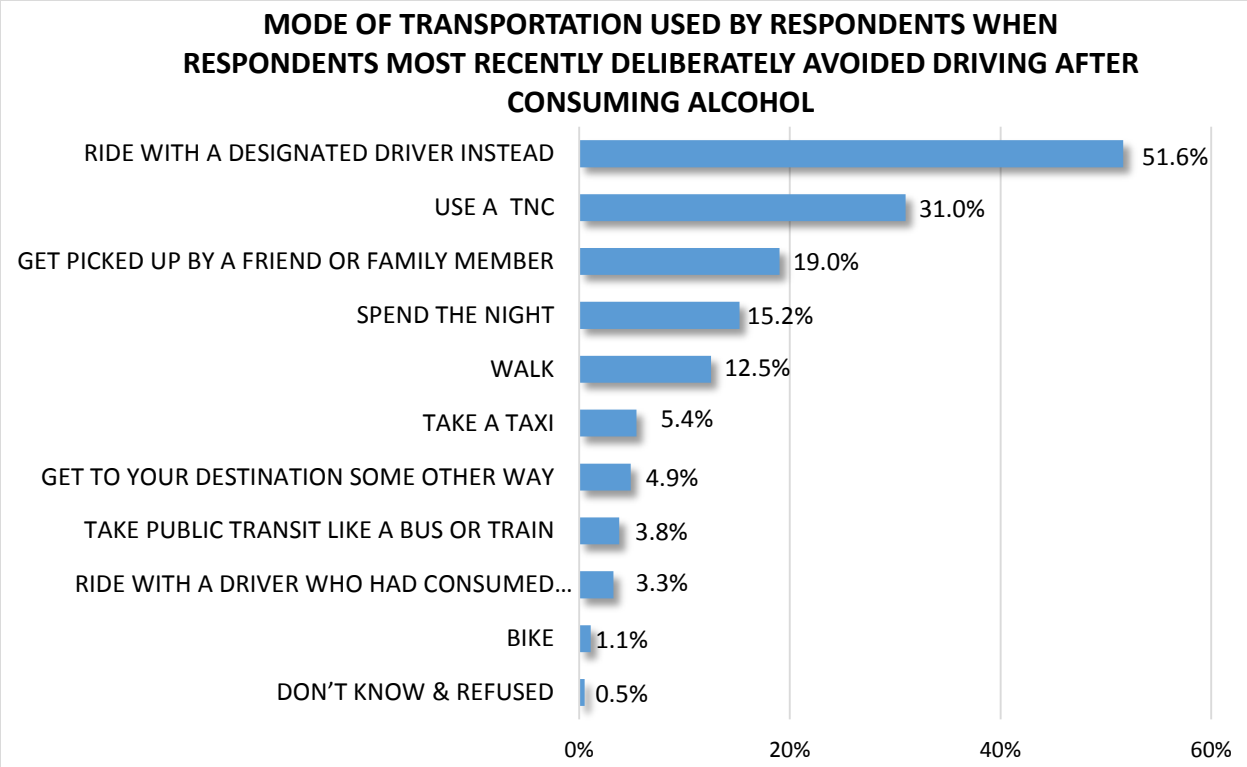
Note: Approximately 25% of all respondents answered this question. This represents approximately 97% of respondents who indicated they use TNCs.

5) Of the respondents that use TNCs, the most common use at about 73% was related to travel. This was followed by about 52% of respondents indicating they use TNCs after consuming alcohol or 50% when normal modes were not available.



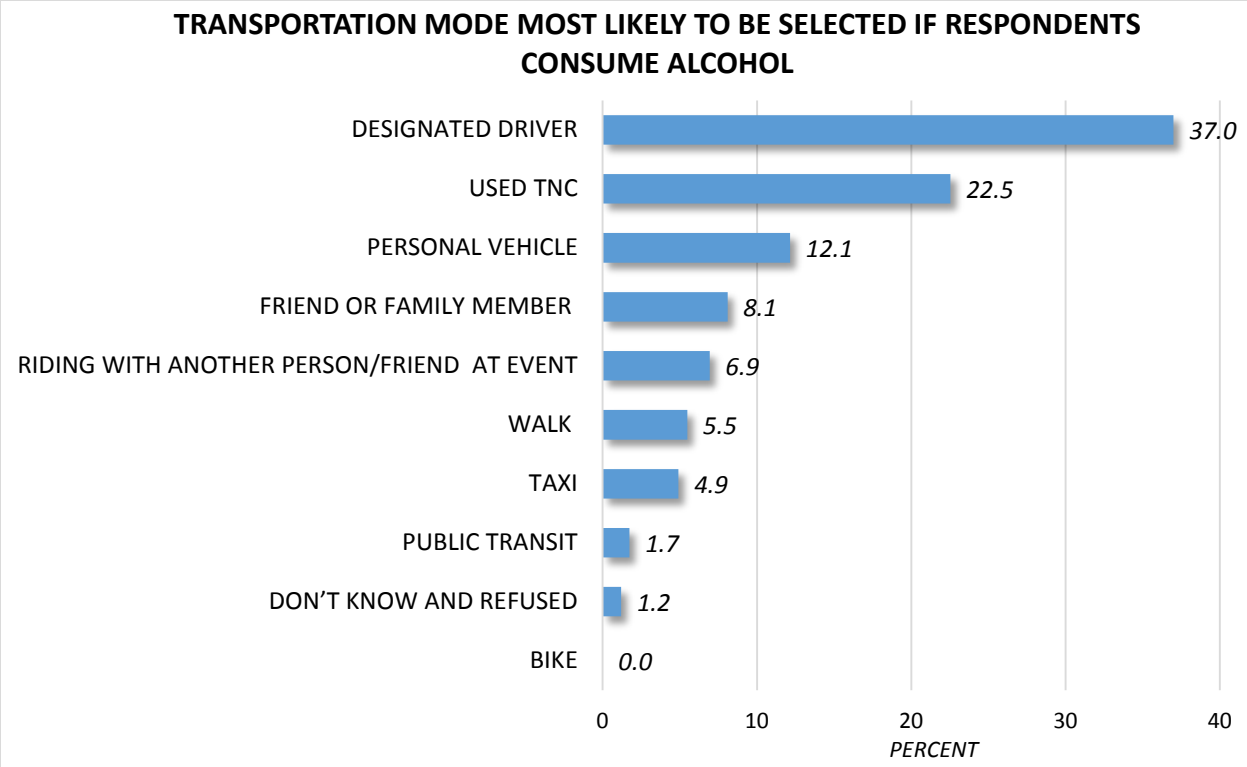
Note: Approximately 36% of all respondents answered this question. This represents 67% of respondents who indicated they had consumed alcohol in the previous year

6) Care should be taken when interpreting the information in the figure above. The figure shows aggregate numbers and not what individual respondents did going to and leaving from the last location where they consumed alcohol. Of all respondents that replied, approximately 49% drove a personal vehicle to that location and 34% drove a personal vehicle when they left that location. This does not indicate that the same 34% that drove a personal vehicle when they left, drove a personal vehicle when they arrived. That level of information will be available in the final report. The figure does indicate that the difference in the number of respondents who drove a personal vehicle to the location and the number who drove from the location were distributed across riding with a friend or family member, riding with a designated driver, using a TNC or spending the night at the location. For alternate modes of transportation, TNC was second to walking and, unlike walking, indicated an increase in its use for leaving the location where alcohol was consumed.



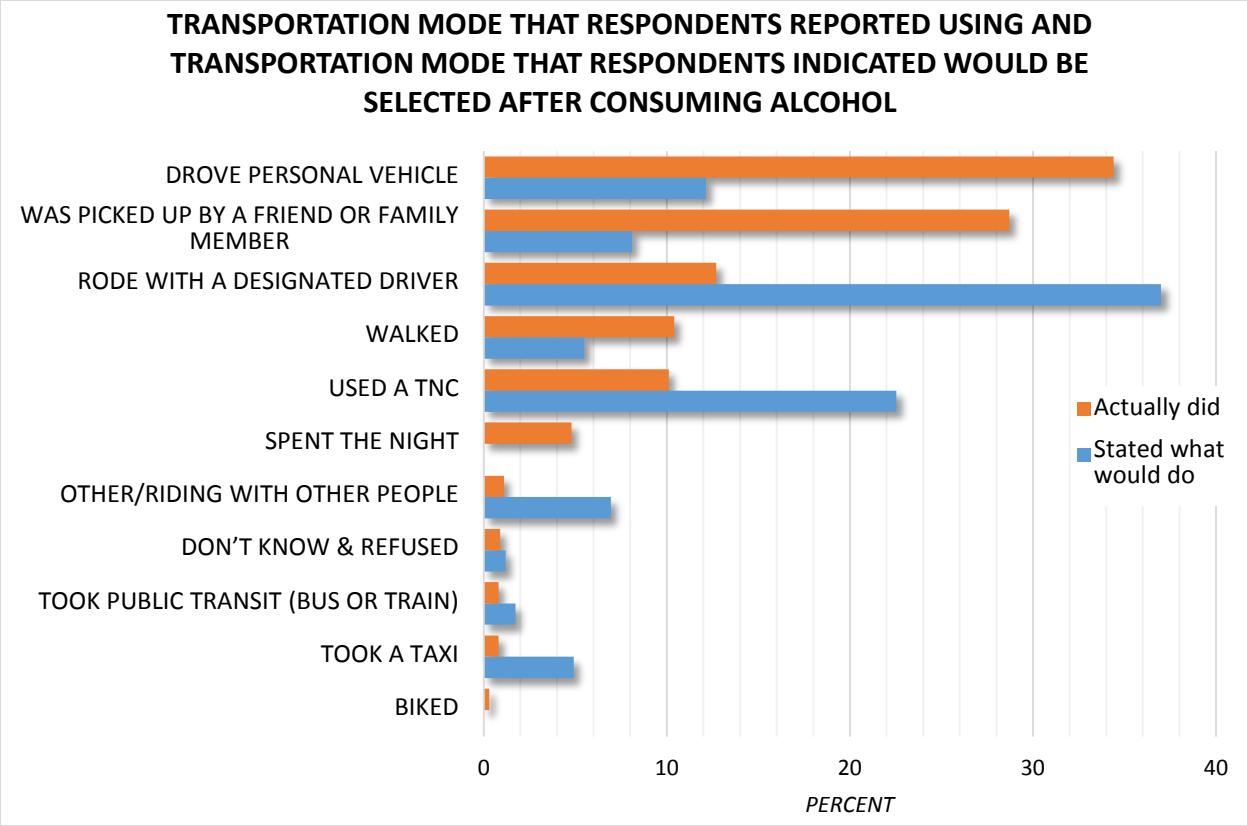
Note: Approximately 18% of all respondents answered this question. This represents 35% of respondents who indicated they had consumed alcohol in the previous year and 99% of respondents who indicated they deliberately avoided driving after consuming alcohol

7) Respondents were asked what they did when they deliberately decided not to drive after consuming alcohol. Use of a TNC was the second most common response at 31% after riding with a designated driver. Although the number of respondents for this question was less than 20% of all respondents, the indication is that for those individuals who decide not to drive, TNCs are a recognized alternative.



Note: Approximately 35% of all respondents answered this question. This represents 65% of respondents who indicated they had consumed alcohol in the previous year

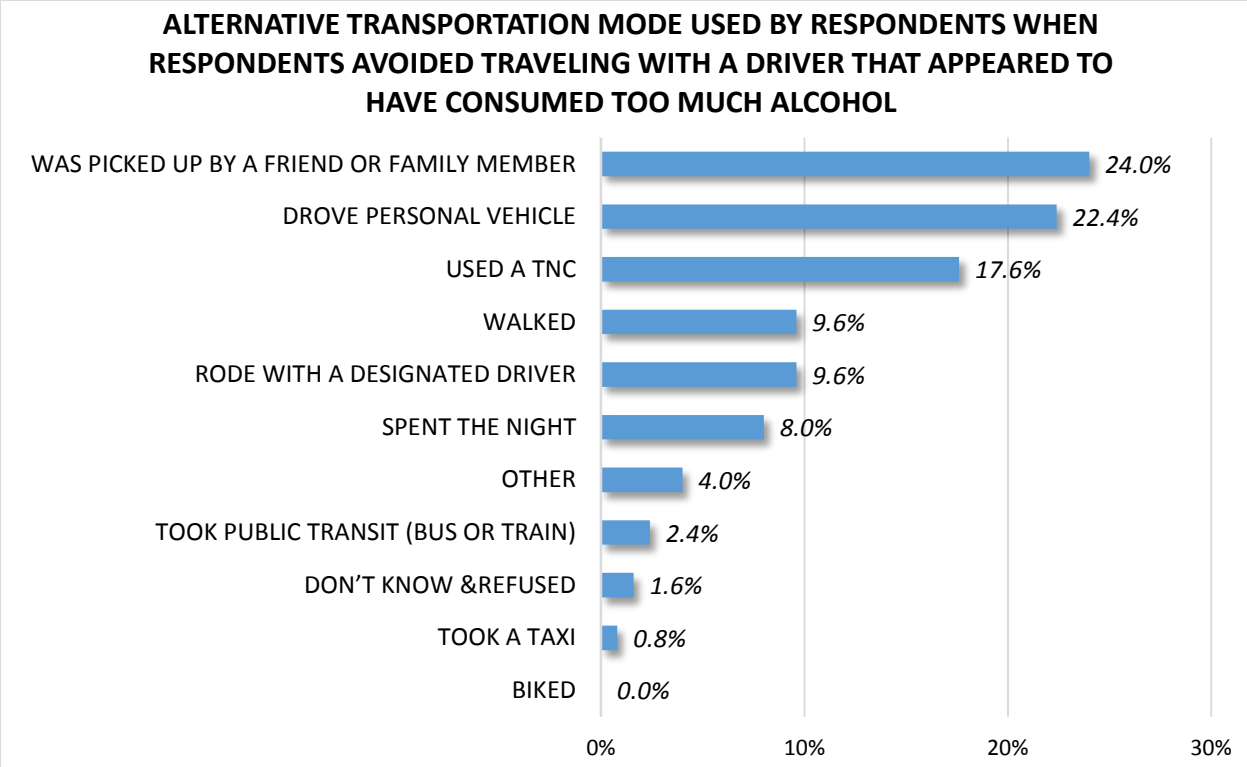
8) Unlike the previous questions, this question asked respondents what they "would" do after they consume alcohol. Because this is a stated preference type of question, the possibility exists that respondents provide answers that they perceive are "correct". Some influence of this appears to exist in the nearly 60 percent of respondents who selected a designated driver or TNC. That TNC is the second most likely choice does support the increasing awareness of it as an alternate mode of transportation for this purpose.



Note: Approximately 35% of all respondents answered this question. This represents 65% of respondents who indicated they had consumed alcohol in the previous year

9) The figure above should be interpreted with care. It provides a comparison of what respondents stated they did after they consumed alcohol and what they indicated they would do after consuming alcohol. As indicated in the previous discussion, responses to the latter could be influenced by what the respondent considers the "correct" answer. This appears to be supported by the figure above where stated indication of what respondents would do for driving a personal vehicle and using a designated driver are reversed from what was actually done. Similarly, the percent who indicated they would use a TNC is approximately double the percentage of those who did.

Note on figure – the labels in the legend should be **Actually did** for the orange bars and **Stated what would do** for the blue bars (there is a text box in the figure with the correct wording but it is not part of the actual graph). I am having this figure redone but wanted to get the report out.



Note: Approximately 13% of all respondents answered this question. This represents 24% of respondents who indicated they had consumed alcohol in the previous year

10) Finally, respondents were asked what mode they used when they decided not to ride with a driver they considered to have consumed too much alcohol. After friend/family member and driving themselves, use of a TNC was the most common alternative transportation mode. Again, the actual number of respondents was small due to the specificity of the question. However, the results appear to reinforce the awareness and potential use of TNCs as an option for avoiding a potentially hazardous situation.

Appendix F. Submissions from Stakeholders

Show Me The Way To Go Home: An Empirical Investigation of Ride Sharing and Alcohol Related Motor Vehicle Homicide

Brad N Greenwood **Sunil Wattal**
Fox School of Business
Temple University

Abstract

In this work, we investigate how the entry of the ride sharing service Uber influences the rate of alcohol related motor vehicle homicides. While significant debate has surrounded the entry of driving services such as Uber and Lyft, limited rigorous empirical work has been devoted to uncovering the societal benefits of such services (or the mechanism which drives these benefits). Using a difference-in-difference approach to exploit a natural experiment, the entry of two Uber services into markets in California between 2009 and 2014, we find a significant drop in the rate of homicides after the introduction of Uber. Furthermore, results suggest that not all services offered by Uber have the same effect, insofar as the effect for the Uber Black car service is intermittent and manifests only in selective locations (i.e. large cities). These results underscore the coupling of increased availability with cost savings which are necessary to exploit the public welfare gains offered by the sharing economy. Practical and theoretical implications are discussed within.

Key Words*: Uber, sharing economy, ride sharing, drunk driving, vehicular homicide, difference in difference, natural experiment, platforms*

Introduction

The introduction of ridesharing platforms such as Uber and Lyft has sparked a host of policy debates over the last half decade. Detractors of such programs argue not only that the entry of these firms puts the public at significant risk through their limited liability corporate structure[1], but that patrons are equally at risk[2] and these firms upset the delicate balance of service providers[3]. Countervailing these perceptions, both scholars and policy makers have argued that such services resolve market failures by providing customers with a much needed service that circumnavigates the bureaucratic processes of licensed livery (Rempel 2014). However, limited empirical evidence exists to establish the social benefits (or lack thereof) of these platforms. To the extent that Uber, the market leader in ride sharing by market valuation (MacMillan and Demos 2015) and penetration (DePillis 2013), has entered more than 58 countries and 300 cities worldwide as of 2015 (and many are debating legislation regarding these platforms), a robust estimate of any social impact that these services provide could factor heavily in the legislative debates.

One social benefit consistently associated with these platforms, and presently being debated in the media, is the potential for reducing the instances of drunk driving (Badger 2014). As existing regulatory structures for traditional vehicle for hire services, viz. taxicabs, are designed to retard the number of licensed vehicles on the road in order to manufacture excess demand (Sternberg 1996), the absence of a sufficient number of taxis may result in citizens operating motor vehicles under the influence of alcohol (Grove 2013, Jackson and Owens 2011). Inasmuch as these welfare losses are often born by taxpayers, such as the cost of prosecuting and incarcerating individuals convicted of DUI, the effective management of the number of and type of vehicle for hire services poses a significant challenge for policy makers.

Preliminary analysis conducted by ride sharing firms and several industry analysts suggest that introduction of Uber and other ride sharing services has a negative effect on DUI arrests[4]. However, these studies have been questioned on several grounds: including involvement of ride sharing firms in the data

[1] http://www.nytimes.com/2014/10/19/upshot/when-uber-lyft-and-airbnb-meet-the-real-world.html?abt=0002&abg=0
[2] http://www.sfexaminer.com/sanfrancisco/uber-driver-suspected-of-attacking-passenger-in-sf-raises-safety-concerns/Content?oid=2907619
[3] http://www.nytimes.com/2014/09/30/business/uniteds-deal-with-uber-raises-concerns.html
[4] http://blog.uber.com/duiratesdecline

analysis, methodological rigor (i.e. single city estimations), and the presence of confounding factors such as changes in city's population, bar scene, and tougher enforcement.

Moreover, a limited understanding of the mechanisms by which such services influence the rate of intoxicated driving exists. On one hand, it is possible that the decrease is simply the result of availability of vehicles for hire. Insofar as it is often difficult to hire a taxi, based on time, location, or even the race of the patron (Meeks 2010), it is plausible that the presence of the platform mitigates these market inefficiencies by soliciting the driver electronically. As electronic solicitation should be significantly easier (Davis 1989, DeLone and McLean 1992), and be accompanied by reduced search costs (Parker and Van Alstyne 2005), an excess of utility should be generated for the consumer. On the other hand, it is equally plausible that the consumer's choice to drive under the influence is affected by the cost of hiring a taxi as well as the availability of drivers, i.e. the cost of searching for and hiring a car is prohibitive (Clarke and Cornish 1985, Cornish and Clarke 2014). Therefore the decrease in intoxicated driving after the introduction of sharing services may be a result of reduced cost as well as vehicle availability. This broad question: what is the impact of Uber's introduction on alcohol related motor vehicle homicides in the local area, and by what mechanisms is such change affected, forms the core of the research investigated in this paper.

Empirically, we exploit a natural experiment to investigate the effect: the introduction of the ride sharing service Uber into cities in the State of California between 2009 and 2014. Leveraging this econometric setup offers us two advantages. First, to the extent that the entrance of Uber is staggered temporally and geographically, we execute a *difference-in-difference* estimation to establish the effect. Second, Uber offers multiple services with varying price points (note that these services also enter at varying times and orders). On one hand, Uber Black, a town car service, offers transportation with a significant markup over taxicabs (~20% - ~30% price premium). On the other, the Uber X service is a personalized driving service which offers significant *discounts* (~20% - ~30% price reductions from taxis). To the degree that each of these services identifies a different mechanism (availability vs. availability and price point), we are able to cleanly identify the dominant mechanisms. We test these

using hand collected data from the California Highway Patrol (CHP) safety and crash dataset and a custom webscraper which indicates when each service entered a geographic area in California.

Results indicate four notable findings. First, while the entry of Uber X strongly and negatively affects the number of motor vehicle homicides which occur, limited evidence exists to support previous claims that this occurs with the Uber Black car service as well (indicating that prior claims about the efficacy of Uber may have been overstated (Badger 2014)). Second, results indicate that the time for such effects to manifest is non-trivial (upwards of 9 – 15 months). Third, results suggest no effect of Uber when surge pricing is likely in effect, thereby underscoring the importance of cost considerations. Fourth, results indicate no negative effect of Uber entry on the rate of non-alcohol related motor vehicle fatalities (suggesting that the potential spike in automobiles on the road is not negatively affecting other drivers). These results are robust to a variety of estimations (e.g. OLS, Quasi-Maximum Likelihood count models) and operationalizations, with no heterogeneous pre-treatment homicide trend detected; indicating that the primary assumption of the difference in difference model is not violated (Angrist and Pischke 2008, Bertrand et al. 2002)[5]. Economically, results indicate that the entrance of Uber X results in a 3.6% – 5.6% decrease in the rate of motor vehicle homicides per quarter in the state of California. With more than 1000 deaths[6] occurring in California due to alcohol related car crashes every year, this represents a substantial opportunity to improve public welfare and save lives.

Theoretically, these results add interesting nuance to extant understanding of the sharing economy. To the extent that researchers have proposed the sharing economy as a viable alternative to established market firms in many markets, e.g. AirBnB (Edelman and Luca 2014) and crowdsourcing for the funding of nascent ventures (Burtch et al. 2013), our results highlight the importance of cost considerations in resolving such market failures. While it is plausible that increased access to services, regardless of cost, would allow consumers to price point differentiate based on their own preferences, a

[5] Note also that diagnostics of the estimations suggest that the residuals do not suffer the serial correlation problems which often plague difference in difference estimations (Bertrand et al. 2002).
[6] http://apps.dmv.ca.gov/about/profile/rd/r_d_report/Section_5/S5-243.pdf

preference of consumers towards established providers as costs increase is suggested. Further, to the degree that results underscore the beneficial effects of ridesharing services, inasmuch as considerable public welfare loss in the form of motor vehicle homicide is avoided, this work informs the ongoing policy debate regarding ridesharing services. Finally, this work contributes to the small, but growing, stream of literature discussing both the societal impacts of electronic platforms (Burtch et al. 2013, Chan and Ghose 2014, Greenwood and Agarwal 2015, Seamans and Zhu 2013) as well as the need to conceptualize IT services as a core aspect of the IS field (Alter 2010). To the degree that platforms have been found to both enhance and diminish public welfare, our work contributes by drawing a richer picture of the public welfare implications of platform introduction and how these services are driving commerce.

Related Literature

To investigate which mechanism drives the observed change in the rate of alcohol related fatalities we invoke three literatures: extant work in technology adoption, current work regarding platforms, and existing work from criminology regarding rational choice theory.

Platform Theory

Extant work in platforms has a rich tradition in information systems and economics spanning more than two decades (Bakos and Bailey 1997, Brynjolfsson et al. 2003, Brynjolfsson and Smith 2000, Malone et al. 1987, Parker and Van Alstyne 2005, Rochet and Tirole 2003). To date, two perspectives have been taken. In the first, scholars have argued that the creation of platforms which promote commerce can reduce market inefficiencies by facilitating the buyer-seller match (Bakos and Bailey 1997). As a result, the implementation of the platform reduces the cost of transactions by increasing the likelihood that an individual who is leveraging the platform finds an acceptable trading partner. In the other, platforms have been argued to increase information transparency in markets by reducing information asymmetries (Brynjolfsson et al. 2003). In this work, researchers have argued that the platform facilitates frictionless commerce by protecting the buyer and seller from opportunism on the part of the other party through increased price transparency (Williamson 1981). While the perspectives taken by each of these literatures is different, the end result is the same; by increasing the amount of publically available knowledge regarding prices and products, platforms are able to expedite the exchange of goods and services while

creating a surplus of welfare for both buyer and seller (Parker and Van Alstyne 2005).

While early manifestations of such work were either analytically driven to advance platform theory (Birkland and Lawrence 2009), or focused on more traditional examples of internet platforms such as eBay or Amazon.com (Brynjolfsson et al. 2003, Chevalier and Goolsbee 2003, Forman et al. 2008), a recent burgeoning literature on the societal impact of platforms has emerged. Interestingly, bevy of topics have been investigated: ranging from dating (Bapna et al. 2012), to the disruption of established media vendors (Seamans and Zhu 2013), to the spread of HIV (Chan and Ghose 2014, Greenwood and Agarwal 2015), to crowdfunding (Burtch et al. 2013), to even the spread of hate crimes (Chan et al. 2015). In each, much as was the case for commerce driven platforms, two mechanisms have been suggested to drive the effect: self-selection into using the platform and decreased search costs (Brynjolfsson and Smith 2000). It is within this budding literature on the societal impact of platforms where we position this work. To the degree that the regulating America's roadways has received significant attention from scholars (Feng et al. 2005, West 2004), due both to the economic scope of the industry and the externalities which it generates (Parry et al. 2007), it is an ideal context to further the scope of this literature.

Rational Choice Theory and Drunk Driving

Next, we reference prior work which sheds light on how intoxicated individuals make decisions. Although intoxication will clearly bias an individual's perception of risks (Assaad and Exum 2002, Exum 2002), extant research suggests that even inebriated decision makers take action only after comparing viable alternatives (Jackson and Owens 2011, Turrisi and Jaccard 1992). Based on Rational Choice Theory (Clarke and Cornish 1985, Cornish and Clarke 2014), this research argues that individuals commit crimes out of a set of trade-offs which benefit them, as opposed to individual level psychoses or a natural predilection to engage in criminal enterprise. More simply, Rational Choice Theory suggests that offenders respond selectively to particular situations based on the probability of being apprehended, the benefit they will reap from the crime, and the opportunity cost of selecting one option over another (Clarke and Cornish 1985). In the context of drunk driving, the theory would suggest that intoxicated individuals respond selectively to particular situations based on the probability of being apprehended, the

cost of varying alternatives (e.g. court costs, cost of the taxi, social stigma, jail sentences), and the payoff of achieving the intended objective (i.e. arriving at the intended destination) (Jackson and Owens 2011, Ross 1982, Thurman et al. 1993, Turrisi and Jaccard 1992). Strikingly, significant anecdotal and empirical evidence exists to support such findings. Anecdotal evidence suggests, for example, that DUIs are linked to lack of availability of low cost public transport options, suggesting that individuals evaluate the cost of drunk driving versus the cost of available alternatives[7]. Academic research further supports this idea. Jackson and Owens (2011), for example, found that DUIs decreased by 40% in Washington DC Metro area when late night public transportation services were expanded by the DC Transit Authority.

Hypothesis Development

Impact of Premium Ride Sharing Services

Why might the introduction of a premium ride sharing service influence the rate of alcohol related motor vehicle fatalities? Received research offers two perspectives as to why an effect may accrue. The first, as discussed above, relates to extant platforms theory. The second is rooted in the extensive IS literature on technology adoption (Davis 1989, DeLone and McLean 1992).

To the extent that it is often difficult to hire a cab (Meeks 2010), platform theory would suggest that the search costs associated with finding transportation would decrease significantly when a ridesharing app is used. Insofar as the ridesharing app mitigates information asymmetries, by granting the patron access to information like the type of vehicle and the time it will take the driver to get to the user's location, the patron should garner significant utility; the reason being that the patron need no longer rely on stochastic discovery of a cab by standing on the side of the road. Moreover, as ridesharing services have been consistently characterized as "taxi[s] without the hassle" (Solinsky 2014), existing literature in technology adoption would also suggest that ride sharing apps will be adopted and utilized. To the degree that the hiring of a ridesharing car requires only opening the app and setting the pickup location (which is automatically determined by the phone's GPS), it is self-evident that the app is significantly easier to use and more useful (Davis 1989, DeLone and McLean 1992, 2003). The fact that the patron is automatically

[7] http://www.mutineermagazine.com/blog/2008/10/the-dui-and-the-failure-of-los-angeles-public-transportation/

updated with the current location of the driver and cash is unnecessary[8] only underscores this point.

As a result, it is plausible that consumers may be willing to pay a price premium for such a service by trading off the costs of searching for a cab/ease of solicitation with the certainty of knowing not only when a car will arrive, but *if* it will arrive. Put another way, because the process of discovering a traditional cab is not costless, the search for a cab is characterized by considerable uncertainty, and ridesharing apps significantly increase the ease with which a car can be summoned, it is plausible that risk averse users will value the certainty of knowing when the car will arrive more than the time spent searching for a cab. As a result, users may be willing to pay a premium for the service. Following this logic through to completion, this would suggest that a decrease in the rate of drunk driving may conceivably be tied to a service like the Uber Black car service, which charges users a price premium over taxis, but mitigates the vast majority of the uncertainty[9]. We therefore propose the following:

H1: Implementation of a premium ridesharing service will be associated with a negative and significant decrease in the rate of alcohol related motor vehicle homicides.

Impact of Discount Ride Sharing Services

The proposition put forth in H1 relies on two assumptions. First, users are willing to pay for taxis in the first place. Second, the utility the user garners from the platform's ease of use and reduced search cost is sufficient to bridge the gap in price between the price point of a taxi service and the price point of the premium service. Given that received research suggests that the price of cabs is often a component in a person's decision to drive under the influence (Jackson and Owens 2011, Nagin and Paternoster 1993, Thurman et al. 1993, Turrisi and Jaccard 1992) these assumptions are questionable. It is therefore possible that premium services such as Uber Black will not decrease the drunk driving rate, notably if the platform's decreased search costs/ease of use does not generate excess utility.

While platform theory would suggest that intoxicated driving is the result of the individual being unable to hire a cab (i.e. availability), rational choice theory would suggest that individuals may be able to

[8] Payment using ridesharing apps is automatically integrated via credit card, PayPal, or Google Wallet / Apple Pay, etc.
[9] It should be noted that our empirical investigation cannot control for the sequence of steps the user takes before using a ridesharing service like Uber, e.g. if the user installs the app before or after becoming inebriated. However, as the purpose of the empirical exercise is to quantify the effect of entry on the alcohol related motor vehicle homicide rate the sequence of steps is outside the scope of this investigation.

find drivers, but are electing to drive themselves based on the price point those taxi's offer (i.e. cost or a mix of availability and cost). More simply, because of the cost of hiring a taxi, and the perceived cost and probability of being apprehended by the police, individuals are making the decision to drive themselves while under the influence. As a result, services such as Uber X, which offer a significant price reduction over traditional taxi cabs (~20% - ~30% depending on location) may have a greater negative effect on the drunk driving rate because they both increase the accessibility/ease of use of transportation (much like Uber Black) and decrease the gap between the costs of being discovered driving under the influence and the cost of hiring the driver.

Before proposing our hypothesis we make one cautionary note. As mentioned previously, alcohol consumption has been tied inexorably to a bias in the perception of risks by extant literature (Assaad and Exum 2002, Exum 2002). However, this does not imply that, conditional on consuming alcohol, individuals are purely irrational (Jackson and Owens 2011). Recall that in the focal context the individual may only be comparing the options of being taken home by a premium car service, a discount car service, or driving themselves. As a result, the comparisons are relatively simplistic and do not require a complex analysis of tradeoffs. Further, as discussed by Paternoster (1989): "although rule breaking [i.e. drunk driving] is presumed to be a product of informed choice, the rational choice model does not presume perfect or even optimally accurate informed choice." We would conclude, therefore, that while an individual under the influence of alcohol may not make decisions which appear rational to a sober person, the decision is "substantively rational" to the individual at the time the decision is made (Assaad and Exum 2002, Goldfarb et al. 2009). Therefore, we propose the following:

H2: Implementation of a discount ridesharing service will be associated with a negative and significant decrease in the rate of alcohol related motor vehicle homicides.

Before moving to our empirical analysis, we note that these two hypotheses (H1 and H2) are not mutually exclusive. To the degree that some individuals may be motivated by costs, and others are willing to pay the premium cost associated with the black car service, it is plausible that both services have an effect. However, the goal of this investigation is to determine which effect dominates the other (i.e. has the

largest effect on the rate of alcohol related motor vehicle homicides).

Methodology

Context

As discussed above, we investigate the effect of ridesharing using Uber (an app based ridesharing service operating in more than 58 countries and 300 cities across the globe as of August 2015). Founded in March of 2009 in San Francisco, California, the service offers a platform for owner-operator drivers to find local fares electronically and provide them with transportation to their intended destination. As of December 2014 the firm was valued at over $40 billion with $10 billion in projected 2015 revenues[10]. Originally designed as a black car service, where users would pay a premium to be taken to their destination by a fleet of high end vehicles (e.g. Lincoln Town Cars, Cadillacs), the service now offers a host of transportation options, including car seat services for families, SUV services, and even helicopter services for super luxury passengers which will take them from New York City to the Hamptons. Most pertinent to our research, however, in 2012 the firm introduced the lower price Uber X where drivers could use their personal vehicles to transport patrons at a discounted price.

Figure 1 contains a screen shot of the current Uber app. As can be seen, the app provides an estimated time it will take the patron to be picked up, as well as a sliding bar which allows the user to choose which service she wishes to use. Once the vehicle has been requested the fare is linked to the user's credit card (which is stored in the app) or PayPal account and after the transaction is complete the user's account is electronically billed. The app also allows for ratings of both passengers and drivers through a traditional online reviews 1-5 star rating. It should be noted that the user does not have the option of installing the app for one service (i.e. Uber X) but not the other (i.e. Uber Black). All locally implemented services are available when the app is installed and it is costless to switch between them.

Importantly for our research question, the two dominant services used, Uber Black (the traditional black car service) and Uber X (the discount service), offer significantly different price points for providing their services. As discussed previously, Uber Black charges a significant premium over

[10] http://www.businessinsider.com/uber-revenue-projection-in-2015-2014-11

traditional taxi cab services (~20%-30%) while Uber X offers a significant price reduction (~20%-30% lower than taxis). The services were also rolled out in different cities at different times, and in varying orders (i.e. Uber Black launched before Uber X and vice versa). Because both of the services offer the platform advantages of increased availability and increased ease of use, but different price points, this setup, as well as the staggered rollout, allows us to determine if either or both services will have an effect.

Data

To empirically estimate the effect of Uber entry on the motor vehicle homicide rate we create a unique dataset from several sources within the California Highway Patrol's Statewide Integrated Traffic Report System (SWITRS). These data are then combined with entry data which is retrieved directly from the Uber website. This rich dataset gives us information not only on the number of crashes which occurred within each township in the state of California, but blood alcohol content of the driver (i.e. if alcohol was involved), the number of parties involved, weather, speed, and other environmental factors. Although California is a single state, the fact that it is the most populated state in the nation and has had Uber service the longest, makes it ideal for testing our research question. When combined, this dataset comprises 12420 observations spanning 23 quarters (January 2009 – September of 2014) over 540 townships in the state of California[11]. Summary statistics and correlations can be found in Table 1.

Variable Definitions

Dependent Variable: The dependent variable, *ln(NumDeaths)*, is the natural log (+1) of the number of people who were killed in a motor vehicle accident in town j[12] during quarter t where at least one of the involved parties was under the influence of alcohol (i.e. a blood alcohol content >= 0.08%)[13]. Logging the variable permits us to interpret the effect as a percentage change and resolves a normality concern[14].

Independent Variables: Our primary independent variables of interest are two dichotomous treatment

[11] Townships refer to judicial townships such as incorporated cities and towns within counties in the State of California. No townships in the State of California straddle county lines. These data were collected in November 2014.

[12] Note that results are consistent when estimated at the week and month level. We use quarters, as opposed to these time periods, to increase the interpretability of the later estimations, viz. the relative time model.

[13] We use the number of deaths, as opposed to the number of crashes or traffic stops, because there is a significant delay in the aggregation of data which does not involve significant injury. At the time of data collection, non-injury collision data were available only through October 2013 (thereby dramatically limiting the variability in the entry of Uber services and the duration of treatment).

[14] Robustness checks with an untransformed DV are performed as well.

indicators, *Uber X* and *Uber Black*, which indicate the entry of the Uber Black car service and Uber X service into the county where city *j* is located at time *t*[15]. A full listing of the counties which receive the Uber treatments is available in Table 2. As discussed previously, *Uber Black* is a premium car service which can be hired through the application at a price premium. Further, *Uber X* is a discount service where drivers will bring the user to her requested location using their personal vehicles for a price discount. Information regarding Uber entry is retrieved by hand from the Uber website[16]. These variables are coded as 1 during the first *full* quarter the city has received treatment. Finally, to complete the difference in difference estimation we include time (quarter) and city fixed effects.

Empirical Estimation

As mentioned above, we use a difference in difference estimation to establish the effect of Uber entry on the alcohol related motor vehicle homicide rate. The primary benefit of such a model is that we can mimic an experimental design using observational data because the treatments, i.e. *Uber X* and *Uber Black*, are applied in different locations at different times, i.e. are geographically and temporally dispersed. Unsurprisingly, difference in difference estimations have become a popular way to infer causal relationships in economics and social sciences (Bertrand et al. 2002) because *ex ante* differences between the units of observation (i.e. towns) can be controlled for through the use of fixed effects. This allows us to avoid the "endogeneity problems that typically arise when making comparisons between heterogeneous individuals" (Bertrand et al. 2002). While these models offer enormous benefits, they are not without their drawbacks. First, there can be serial correlations in the residuals which yield inconsistent standard errors (Bertrand et al. 2002). Second, the model assumes a homogeneous pre-treatment trend between treated and control observations (Angrist and Pischke 2008). We deal with each of these concerns in robustness checks below. We estimate the effect using the following equation:

$$y_{jt} = M'\theta_1 + H'\eta_1 + R'\gamma_1 + \varepsilon \qquad (1)$$

where y_{jt} represents the log of the number of drivers killed in alcohol related crashes, M is the vector of

[15] Attempts to acquire data on the number of drivers working for Uber in each location were made but denied by the firm.
[16] http://blog.uber.com

Uber treatments, H is the vector of time fixed effects, and R is the vector of town fixed effects. ε indicates the error term. {θ, η, γ} represent the terms to be estimated. To reduce heteroscedasticity concerns we leverage robust standard errors clustered at the county level. Results are in Table 3.

Before discussing the results we first remediate several well-known concerns with the difference in difference estimation (Angrist and Pischke 2008, Bertrand et al. 2002). Chief among them is the assumption that there is no difference in the pre-treatment trend across observations which is not resolved by the location fixed effects. To the extent that randomly distributed factors across the state of California may result in pre-treatment heterogeneity, such as non-random selection (i.e. endogenous entry) into different counties, we replicate our investigation using the relative time model discussed in Greenwood and Agarwal (2015). This is done by creating a second series of time dummies, in addition to the chronological time dummies, which indicate the relative chronological distance between time *t* and the time Uber is implemented in city *j*. Intuitively, what this model allows us to do is measure the effect of treatment over time (both before and after the treatment is applied). Econometrically, the primary benefit of this model is that it can determine if a pre-treatment trend exists (i.e. a significant difference between treated and untreated counties before treatment) in order to determine if the untreated counties are an acceptable control group. If such a trend exists, it would violate one of the primary assumptions of the model (Angrist and Pischke 2008). We therefore model y_{jt} using the following specification:

$$y_{jt} = \rho'[s_2 * \varphi] + H'\eta_2 + R'\gamma_2 + \varepsilon \qquad (2)$$

As before, y_{jt} represents the log of the number of people killed in alcohol related crashes, H is the vector of time fixed effects, and R is the vector of town fixed effects. ε indicates the error term. s_2 is a dichotomous variable which indicates whether or not Uber will ever affect city *j* during the study and the vector $\{\rho\}$ contains the relative time parameters to be estimated (i.e. the chronological distance between time *t* and the time the Uber service will be implemented at city *j*). Standard errors are robust and clustered at the county level. Results are in Table 4. Graphical representations are in Figures 2 and 3.

Results

With respect to our independent variables of interest, *Uber X* and *Uber Black*, the results are intriguing.

While results suggest that introducing *Uber X* (Columns 1 and 3 of Table 3) into a city has a significant dampening effect on the number of alcohol related driving deaths, the introduction of *Uber Black* (Columns 2 and 3) does not. All else equal this suggests several key pieces of information. First, it suggests that previous within city investigations of the effect of Uber entry may have been overstated (e.g. Badger 2014). Second, it suggests that a coupling of cost, availability, and ease of use is the driving force behind the decrease in DUI related deaths, indicating that patrons are unwilling to pay a price premium for the *Uber Black* service, even in the short term. Economically, these results suggest an average decrease in alcohol related homicides of 3.6% in locations treated by *Uber X* in the state of California.

The results from the relative time model (Table 4) further underscore these findings. We first note that none of the pre-treatment time dummies (i.e. Rel $\text{Time}_{(t-x)}$) are significant, thereby allowing us to validate the assumptions of the difference in difference model (Angrist and Pischke 2008, Bertrand et al. 2002)[17]. The absence of significance suggests that there is no significant heterogeneity, pre-treatment, across cities which receive the Uber treatment, and those which do not, which has not been accounted for. Second, we see that while an effect manifests almost immediately for *Uber X*, it does not become stable until roughly nine months after treatment. This further underscores the absence of an effect for *Uber Black*, even in the long term. Finally, the fact that the stable effect takes a significant period of time to manifest casts further doubt on prior investigations which claim an effect appears in weeks or even days.

Figures 2 and 3 corroborate these findings. In both figures polynomial trend lines have been superimposed on the estimates and we see no significant pre-treatment trend; indicating no unaccounted for heterogeneity between the treated and untreated locations. Further, in Figure 3 (*Uber Black*) we see no significant post treatment change, thereby underscoring the lack of significant effect for the premium service. Finally, in Figure 2 (*Uber X*) we see a minimal initial trend which bends sharply down roughly 9-12 months after implementation. Taken in sum, results indicate a significant effect for *Uber X*, and the absence of an effect for *Uber Black*.

[17] Note that the other relative time dummies (those greater than 4 quarters pre-treatment and 5 quarters post treatment) are included in the model and omitted in the interest of space. Full results are available upon request.

Robustness Checks

Selection Model

While our preliminary results indicate the absence of a significant pre-treatment trend, the assumption that Uber entry into varying locations is purely exogenous remains questionable. To further test this assumption we include a robust set of controls which may influence the decision by Uber executives to enter local markets. More specifically, to account for population level factors (e.g. age, education, population, wealth) which might influence the entry of Uber into a local area we combine the existing dataset with information from the US Department of Health and Human Services' Area Resource File and the Federal Bureau of Investigation's Law Enforcement Officers Killed and Assaulted dataset.

The resulting dataset contains three additional sets of controls. First, because the population in locales may influence entry we include the log of the local population (to control for the size of the market), median income (to control for the wealth of the market), and number of college graduates (to control for the market of likely users). Second, to control for the portion of the extant population unlikely to leverage the Uber service, we include the log of the population living in poverty, who have limited disposable income and are less likely to use cutting edge IT (DiMaggio et al. 2004), and those over the age of 65 (i.e. the elderly), who are also likely to suffer from digital inequalities (Warschauer 2004). Third, as the expansion of Uber has been contentious legally we include the log of the number of individuals within the county working in law enforcement. We then replicate the estimation of equations 1 and 2 with these controls included. Results are available in Tables 5 and 6.

Before considering the effect of *Uber Black* and *Uber X* in these estimations we first consider the effects from our control variables. Interestingly, we see that the change in any of the other controls dies not significantly influence the number of motor vehicle homicides involving alcohol during the period of investigation. This further underscores the fact that the fixed effects for the local municipalities are effectively controlling for across city heterogeneity in the estimations. Recall that, as there are time fixed effects in the estimations as well, these variables should be interpreted as changes in the independent variable. Moreover, results from the primary variables of interest remain consistent insofar as we see a negative and significant effect of *Uber X* and no significant effect of *Uber Black.*

Count Model

Although our initial regressions have shown consistency across several specifications, other potentially confounding problems remain. The first is that the distribution of the dependent variable is not strictly Gaussian, despite being logged. To the extent that this violates one of the basic assumptions of the Gauss-Markov theorem, because the distribution of the error term will not be Gaussian, it may lead to inconsistent estimations of the results. To remedy this concern we re-estimate our results using a non-transformed dependent variable to increase our confidence in the baseline estimations.

Empirically, we perform these regressions using two different estimators. The first is a traditional OLS. The second is a Poisson quasi-maximum likelihood estimator (Simcoe 2007) (QMLE) which has been used extensively in recent work (Azoulay et al. 2010, Greenwood and Gopal 2012). We use the QMLE, in lieu of other options like the Poisson or Negative Binomial estimators, for several reasons. First, it allows for the creation of robust standard errors when the distribution of the dependent variable is not Negative Binomial or Poisson (Azoulay et al. 2010). Second, because the QMLE is not constrained by the same assumptions as the Negative Binomial or Poisson estimators (i.e. that the conditional variance of y given x is equal to the conditional mean), the assumptions of the model are not violated if the distribution of the dependent variable is not Negative Binomial or Poisson. A full description of the estimator, as well as its derivation, can be found in Wooldridge (1997). As before, we replicate the estimation of both equation 1 and 2 using the non-transformed DV. Results are in Tables 7 and 8.

Results in Table 7 add interesting nuance to the previous estimations. While the effect of *Uber Black* remains insignificant using both estimators, the effect of *Uber X* is significant only using the OLS. However, when considering the results from Table 8 the reason behind the insignificant result becomes clear. While the log relative time model (Tables 4 and 6) and the OLS count model (Table 8 Column 2) both suggest the effect becomes consistently significant after nine months, the QMLE suggests that the effect takes significantly longer to manifest (5 quarters). All else equal, this suggests that the delay in the time for the effect to manifest, i.e. the initially insignificant effect, is masking the later significant effect. Furthermore, both models show an intermittent effect for *Uber Black* (Columns 2 and 4), although the

rarity with which the effect appears makes any conclusion being drawn from the estimations dubious.

Introduction of other Ride Sharing Services

The next concern we address is the fact that other ridesharing services, which were emerging contemporaneously to Uber, may be biasing the estimations. Inasmuch as it is difficult to tell if these omitted factors (which would not have been resolved by the town fixed effects because their presence is heterogeneous over time) are actually driving the observed effect, an omitted variable bias may exist. We therefore gather data on the implementation of Uber's four major competitors: Lyft, Sidecar, Flywheel (previously Cabulous), and Curb (previously Taxi Magic)[18], exclude all observations when one of these services is operating, and replicate our estimations. We elect to exclude the observations, as opposed to controlling for them with dummies for two reasons. First, due to the similarity in the implementation patterns between the services, the inclusion of controls creates significant multicollinearity problems. Second, as the ridesharing market continues to witness new competitors entering, the model would *still* be improperly specified unless every competitor's exact implementation schedule could be determined. Results are in Table 9 and remain consistent with our earlier findings. Entry of the *Uber X* service is correlated with a significant decrease in the rate of fatalities and *Uber Black* is not.

Coarsened Exact Match

Our next concern is that while the controls and fixed effects account for much of the unobserved heterogeneity between treated and untreated groups, insofar as the controls in Tables 5 and 6 yield no significant effect on the dependent variable, it is plausible that the untreated cities are not a representative counterfactual for treated cities[19]. To resolve this we execute a coarsened exact matching (CEM) procedure to limit the *ex-ante* differences between the treatment and control samples (Blackwell et al. 2009, Iacus et al. 2012). Principally, the CEM allows us to match explicitly on observable characteristics and simultaneously limit the differences between the two groups from both a multivariate and univariate perspective. To the extent that this increase the homogeneity between the two samples, it increases the

[18] It is worth noting that many taxi firms have recently developed their own hailing apps. However, we were unable to identify any instances where one of these apps entered a market before one of the Uber competitors. The same is true of more recent emerging competitors like Hailo.

[19] Recall that the level of the observation is the city but the treatment is applied at the county.

strength of the causal claims from change in the treatment (Overby and Forman 2014), i.e. Uber entry. To execute this procedure we match on three different criteria: the population of the city as determined by the SWITRS dataset, per capita income of the city, and current period[20]. We then replicate the analysis from Table 3. Results, Table 10, indicate a strong and significant effect of *Uber X* entry, and an insignificant effect of *Uber Black* entry. Moreover, we note that the size of the *Uber X* coefficient is significantly larger in this far more constrained model (more than 1.5x the size).

Data Generating Process

As mentioned previously, we eschew the use of alcohol related crashes as the dependent variable for this study because of the significant time delay in incorporating non-injury data into the SWITRS dataset. However, to the extent that initial under-reporting or delayed reporting may occur, we must ensure that the data generating process for fatal crashes is not biased as well. Put another way, insofar as there *may* be a delay in the acquisition of fatality data, we must ensure that any potential delay is not correlated with the independent variables of interest, viz. Uber entry. We therefore remove the final year (4 quarters) of data from our analysis and replicate our estimations. Results, Table 11, remain consistent with previous estimations. Strikingly, as with the CEM model, we note that the effect of *Uber X* is significantly larger in this more constrained estimate.

Diagnosis of Standard Errors

The final set of robustness tests we run relate to an examination of the standard errors. As discussed by Bertrand et al. (2002), apart from heterogeneous pre-treatment trends, one of the most significant problems with difference in difference estimations is serial correlation within the residuals. While we have taken some steps to account for this potential problem, such as clustering the standard errors within the county, i.e. level of treatment, these problems may persist.

Random Treatment Model: The first diagnostic test we run is a random implementation model to determine the probability of the observed effect occurring purely by chance. Pragmatically, this test allows us to do two things. First, placebo tests can cleanly identify if correlation within the county-quarter

[20] The inclusion of additional matching variables reduced the size of the sample, and therefore power of the estimations, to a point where robust conclusions could not be drawn from the data.

is unaccounted for (Bertrand et al. 2002, Donald and Lang 2007). Second, to the extent that significant changes in the motor vehicle homicide rate may be occurring in untreated locations, or the effect of the Uber treatment is substantially driven by a single location, this model provides a check against outliers.

To execute this model we take two approaches. In the first we randomly apply the *Uber X* treatment to 862 city-quarters (1249 for *Uber Black*). We then regress the log of the alcohol related motor vehicle homicide rate upon this "pseudo" treatment and store the coefficient. This analysis is then replicated 1000 times and the draw of the actual treatment is compared against the mean and standard deviation of the pseudo-treatments. In the second approach we apply the pseudo treatment only to cities which eventually receive the *Uber* treatment. Results are in Table 12. As can be seen from the results, the probability of a similar coefficient occurring purely by chance is exceptionally likely for *Uber Black* (which is unsurprising given the insignificant coefficient in the majority of the estimated models). However, in both random treatments (both purely random and random within treated cities) the probability of a similarly sized coefficient appearing purely by chance for *Uber X* is exceptionally low ($p<0.001$). Finally, in all models the estimated placebo coefficient is insignificantly different from zero, suggesting correlation within the county-quarter has been accounted for.

Direct Tests: In addition to the placebo test Bertrand et al. (2002) suggest two additional tests. The first is to block bootstrap the standard errors, as opposed to clustering them, in the manner discussed by (Efron and Tibshirani 1994). As with the placebo test, the block bootstrap provides a reliable check to ensure that the standard errors are well behaved. Results are in Table 13 and remain consistent.

The second suggested test is a direct examination of the auto-correlation coefficients of the residuals. Intuitively, what this test allows us to do is determine, first hand, if there is a significant correlation between the residual y_{jt} and y_{jt+1}. To perform this test we replicate our regressions using the fully specified model and extract the residuals. We then regress the residual from y_{jt} on y_{jt-1} and then again on y_{jt-1}. and y_{jt-2}. Results are in Table 14. Both the first and second order residuals are insignificant[21].

[21] In unreported tests we also examine non-blocked bootstrapped standard errors with 10,000 replications as well as AR(1) and AR(2) models. Results remain consistent and are available upon request.

Empirical Extensions

While our empirical estimations thus far suggest that the coupling of availability, ease of use, and cost considerations are of the utmost importance when consumers avoid operating under the influence it is worth considering the boundary conditions of this effect, i.e. when the strength of the effect is intensified or attenuated. To explore these conditions we consider two potential moderators to demand: days of the year when demand is likely to spike, thereby causing Uber's surge pricing to be put into effect, and the size of the local population, which should correlate with the steady state demand in the local market. Further, we examine the effect of Uber entry on *non-alcohol related* driving fatalities.

Times of Likely Surge Pricing

The first empirical extension we investigate is whether or not the effect of Uber still manifests during spikes in demand. To the extent that spikes in demand will cause Uber's surge pricing[22] to be put into effect, thereby raising the price of hiring either an Uber X or Uber Black car, this is an important extension to conduct because of the dependence of our results on low cost options. If, for example, the effect of Uber intensified or stayed constant during periods of higher demand, this would suggest that the lack of supply of taxis is the dominant mechanism by which the drop in alcohol related motor vehicle homicides occurs. Alternatively, if the effect shrinks during spikes in demand, when cost concomitantly rises due to the surge pricing, but quality, ease of use, and availability remain constant, this would suggest that cost is indeed the driving mechanism because Ubers, of either type, are no longer being hired.

To estimate the effect of Uber entry during these times we recalculate the dependent variable as the number of alcohol related motor vehicle deaths during on weekends (i.e. when drinking is more prevalent) and major US holidays which involve drinking[23], thereby resulting in a likely increased load on the ridesharing services. We then re-estimate equation 1. Results in Table 15 and indicate no significant effect of Uber entry on the number of persons killed during these times. Taken in sum, this underscores the importance of costs, coupled with availability, as the driving factor in influencing the negative effect

[22] A full explanation of surge pricing from Uber can be found here: https://support.uber.com/hc/en-us/articles/201836656-What-is-surge-pricing-and-how-does-it-work-

[23] The full list of holidays includes: Fourth of July, Memorial Day, Labor Day, Cinco de Mayo, Thanksgiving, the day before Thanksgiving, Christmas, Christmas Eve, Halloween, Easter, New Years Eve, and Superbowl Sunday. The source of these data is: http://content.time.com/time/specials/packages/article/0,28804,1986906_1986905_1986891,00.html

of Uber entry on the decrease in the alcohol related motor vehicle homicide rate.

Population

Our next empirical extension relates to the size of the local population. To the extent that population will affect the steady state demand, and by extension the supply of Ubers in the local area, it is reasonable to assume that markets will exist in a steady state equilibrium of Uber distribution. While this would suggest that there would be no difference in the per capita effect of Uber, by city population size, the opposite may also be true. For example, the effect in larger cities may be smaller because larger cities often have more established alternative transportation options, viz. public transportation. Alternatively, it is also possible that the effect would be larger in large cities because smaller townships have too small a population to garner significant attention from Uber drivers. As an *a priori* expectation of the effect is absent, and an understanding of how different locations are affected differently paints a richer picture of how the sharing economy influences public welfare, we allow our empirical analysis to guide us.

To investigate in which cities Uber has a stronger and weaker effect we trichotomize the population data from the SWITRS dataset into three groups: small cities (which serves as the base case), medium sized cities (those with populations greater than 50,000 people and less than 250,000 people), and large cities (those with populations greater than 250,000 people). We then interact these new variables with the Uber treatment and replicate our estimations[24]. Results are in Table 16. Strikingly, these findings suggest several interesting differences. First, we see that as the population of local cities increases, there is a concomitant rise in the effect of Uber entry. Moreover, we see that a significant effect also manifests for *Uber Black* car services (although the size of the effect declines precipitously in the presence of *Uber X* (Column 3)). Taken in sum, these results suggest a significantly stronger negative effect on the alcohol related fatalities rate in larger cities when compared with smaller cities.

Overall Fatalities

While our examination has provided compelling evidence both for the effect of ridesharing services on the alcohol related motor vehicle homicide rate, as well as the boundary conditions of such an effect, it is

[24] Note that the base effect, i.e. the non-interacted term, of the newly created variables will not be estimated because the city fixed effect perfectly predicts the base effect.

plausible that the introduction of Uber into local markets has negative, unintended, consequences as well. For example, Uber entering a market may result in an increased number of vehicles on the road at any given time. To the extent that congestion is a major cause of accidents, it is possible that the Uber service is decreasing the number of alcohol related fatalities, but *increasing* the overall number of fatalities. We therefore recalculate our dependent variable as the log (+1) of all motor vehicle fatalities and replicate our estimations. Results are in Table 17 and indicate no significant correlation.

Discussion and Conclusion

In this work we investigated the effect of the ridesharing service Uber on the incidence rate of alcohol related motor vehicle fatalities. While intuition would suggest the rate of alcohol related crashes should decrease after alternate transportation options enter a local market, we argued that the willingness to pay for such a service and the necessary conditions for an effect to manifest are still unknown. On one hand, it is plausible that an effect would manifest as a result of the increased availability of driving services, due to the decrease in search costs, ease of use, and common difficulty in hiring a cab based on the location, time, or even race of the patron. On the other hand, it is equally plausible that both cost and availability are the main mitigating factors preventing individuals from hiring cabs. To the extent that rational choice theory (Clarke and Cornish 1985, Cornish and Clarke 2014) suggests that most decisions to engage in illegal activity are a function of the reward, potential penalty, and the probability of being apprehended by law enforcement, it is possible that these homicides are a result of "reasoned" choice on the part of consumers. Results indicate that there is a significant effect of the entry of lower priced Uber options, viz. Uber X, indicating that price, conditional upon sufficient availability of the service, is the main barrier to reducing the DUI rate in many jurisdictions; a finding which is corroborated by the lack of effect when surge pricing is likely in effect (i.e. during weekends and drinking holidays). Furthermore, results suggest a significantly stronger effect in large cities and no effect on the overall, i.e. sober, fatality rate.

Economically, results indicate that the entrance of Uber X results in a 3.6% – 5.6% decrease in the rate of motor vehicle homicides per quarter in the state of California. With more than 13k deaths

occurring nationally each year due to alcohol related car crashes at a cost of 37 billion dollars[25], results indicate that a complete implementation of Uber X would create a public welfare net of over 1.3 billion to American taxpayers and save roughly 500 lives annually. Moreover, with costs to the individual (e.g. court costs, insurance rate increases, loss of income) totaling between 5k and 12k dollars for the first DUI offence[26], significant welfare accrues to the individual as well by leveraging these services.

Theoretically, these results have many implications for the sharing economy. To the degree that vendors such as AirBnB, Uber, and Lyft have been proposed as solutions to many market failures our work provides cautionary evidence that consumers will continue to use established vendors when prices increase. As a result, while lower priced hotels and car services may be usurped by these emerging business models, minimal evidence exists to suggest that premium vendors will be displaced (as evidenced by the absence of a stable and consistent effect for Uber Black car services).

These findings have direct implications for policy makers and regulators by informing the ongoing debate regarding the legality of services like Uber. Although the results of this investigation cannot speak to public welfare losses which may result from improper vehicle handling or safety on the part of consumers (although our results do not indicate an effect on sober deaths), they provide important insights into the potential benefits of the sharing economy and inform licensed livery services of the necessary steps which need to be taken to compete with firms like Uber. For policy makers, by allowing Uber to operate, a non-trivial effect (i.e. decreased mortality) is realized by constituents. For the managers and regulators of the taxi industry, two notable implications exist as well. First, these results underscore the punitive effects of barriers to entry. If limited pools of medallions, onerous insurance and licensing procedures, and other forms of regulation are in fact making it impossible for existing livery services to compete with Uber, then there are serious implications which need to be balanced against these regulations. Second, these results highlight what cab companies need to do in order to compete with firms like Uber, i.e. integrate the hailing process into ubiquitous mobile technology and decrease price.

[25] http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/by_the_numbers/drunk_driving/index.html
[26] http://dui.drivinglaws.org/resources/how-much-does-a-first-offense-dui-cost.htm

Furthermore, results indicate significant potential benefit for restaurateurs, event planners, and nightlife managers, i.e. individuals whose livelihood often depends on the sale of alcohol. In particular, this work suggests the potential benefits of partnering with ridesharing firms. To the extent that vendors can be held culpable for overserving patrons, and to the degree that return business is vital for these firms, integration of Uber during the dining or event experience offers significant benefit for all parties. In particular, the vendor is able to eschew a significant liability risk, while still ensuring that her patrons do not endanger themselves. Moreover, as chauffeured service is often seen as a sign of prestige, there may be additional social externalities which accrue to both patron and vendor.

Finally, this work contributes to the small, but growing, literature in information systems about the societal impacts of information sharing (Bapna et al. 2012, Burtch et al. 2013, Chan and Ghose 2014, Greenwood and Agarwal 2015). To the degree that platforms have been found both enhance (Burtch et al. 2013) and diminish (Chan and Ghose 2014, Greenwood and Agarwal 2015) public welfare, our work contributes by drawing a richer picture of the public welfare implications of platform introduction. Moreover, it serves as an open call to extend this research into other aspects of the sharing economy; such as education market places, government to citizen platforms, and innovation markets.

It is important to note that this work is subject to several limitations which offer rich opportunities for future research. First, we conduct our analysis only in the State of California due to data availability. While California is a large and economically diverse state, which offers the ability to study Uber over a protracted period of time, this is simply a limitation and further research will be necessary to ensure the robustness of the results. Second, although results indicate an absence of unaccounted for heterogeneity before the implementation of Uber, it is important to note that the results of this work are not based on a randomized trial. As a result, further work is necessary to ensure that there are not confounding factors which also influence the findings. Third, to the degree that limited information is available about the drivers of vehicles which are involved in the crashes, we are unable to uncover which populations and sub-populations are influenced to the greatest degree based on race, gender, age, or socio-economic status. Given the paucity of data available about such factors, we leave them as topics for future research.

Finally, although the positive externalities resulting from the introduction of Uber are significant, this work does not attempt to quantify the negative externalities which may emerge from the introduction of ridesharing platforms (e.g. fair wages, patron safety through either inadequate liability coverage or poor driver screening[27], to the facilitation of escort services[28]). In light of this limitation, it would be inappropriate to make any inference about the overall public welfare effect of Uber (or ridesharing services in general) from this work.

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[27] http://www.forbes.com/sites/ellenhuet/2014/06/03/uber-driver-with-felony-conviction-charged-with-battery-for-allegedly-hitting-passenger/

[28] http://www.chicagobusiness.com/article/20150225/OPINION/150229886/uber-should-focus-disruption-on-technology-not-effects-of-lousy-pr

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Figure 1: Screen Shot of Uber App

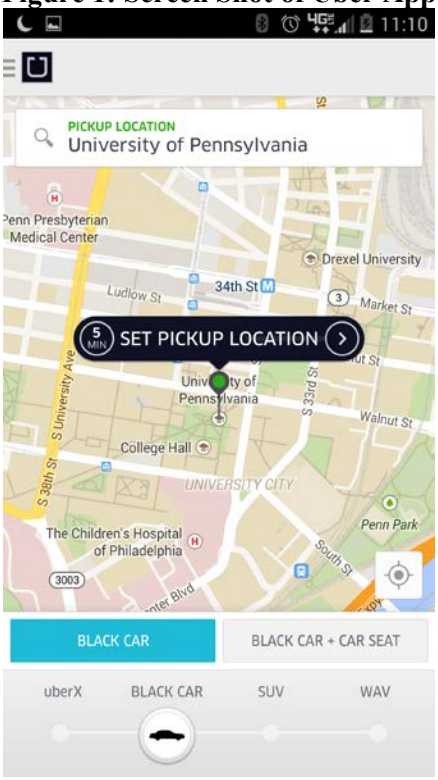
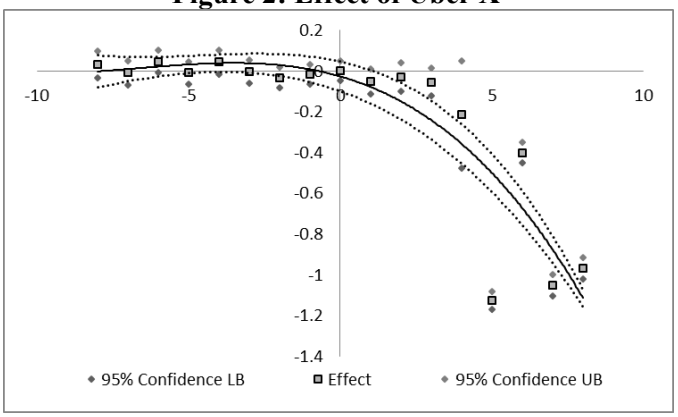
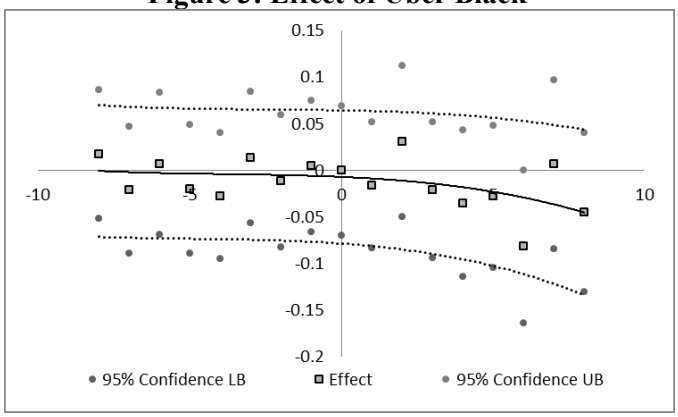


Figure 2: Effect of Uber X



Y-Axis – Logged Fatality Rate / X-Axis – Time (Quarters)
Solid Line is Trend of Uber X Relative Time Coefficients (3rd Degree Polynomial), Dotted Lines are Trend of 95% Confidence Intervals (3rd Degree Polynomial)

Figure 3: Effect of Uber Black



Y-Axis – Logged Fatality Rate / X-Axis – Time (Quarters)
Solid Line is Trend of Uber X Relative Time Coefficients (3rd Degree Polynomial), Dotted Lines are Trend of 95% Confidence Intervals (3rd Degree Polynomial)

Table 1: Summary Statistics and Correlations
N – 12420

	Mean	Std. Dev.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)ln(Num Deaths)	0.202	0.444								
(2)Uber X	0.069	0.254	-0.041							
(3)Uber Black	0.101	0.301	-0.007	0.506						
(4)ln(Population)	13.636	1.725	0.080	0.241	0.393					
(5)ln(Median)	10.927	0.230	-0.025	0.008	-0.008	0.322				
(6)ln(Poverty)	2.808	0.297	0.054	0.098	0.148	0.017	-0.869			
(7)ln(Elderly)	11.541	1.618	0.072	0.248	0.408	0.994	0.346	-0.026		
(8)ln(Police)	7.033	1.675	0.080	0.259	0.429	0.978	0.214	0.092	0.976	
(9)ln(College)	12.304	1.888	0.065	0.230	0.387	0.982	0.458	-0.131	0.987	0.949

Table 2: Listing of Uber Black and Uber X Treated Counties (Month/Year)

County	Uber Black	Uber X
Riverside		5/2014
San Bernardino		5/2014
Bakersfield		7/2014
Fresno		2/2014
Los Angeles	3/2012	9/2013
Modesto		4/2014
Orange	4/2014	9/2013
Palm Springs		9/2013
Sacramento	1/2013	11/2013
San Diego	2/2012	5/2013
San Francisco	6/2010	7/2012
San Luis Obispo		7/2014
Santa Barbara	10/2013	4/2014
Ventura		7/2014

Table 3: Time Series OLS Estimations of Uber Entry on Alcohol Related Driving Fatalities

	(1)	(2)	(3)
Dependent Variable	ln(Num Deaths)	ln(Num Deaths)	ln(Num Deaths)
Uber X	-0.0369**		-0.0362**
	(0.0180)		(0.0179)
Uber Black		-0.0142	-0.00156
		(0.0153)	(0.0151)
Constant	0.250***	0.250***	0.250***
	(0.0123)	(0.0123)	(0.0123)
Time Fixed Effects	Yes	Yes	Yes
City Fixed Effects	Yes	Yes	Yes
N	12,420	12,420	12,420
R-squared	0.035	0.035	0.035

Robust standard errors in parentheses (Clustered on County)
*** p<0.01, ** p<0.05, * p<0.1

Table 4: Relative Time Model of Uber Entry on Alcohol Related Motor Vehicle Deaths

	(1)	(2)
Dependent Variable	ln(Num Deaths)	ln(Num Deaths)
Model	Uber X	Uber Black
Rel Time $_{(t-4)}$	0.0435	-0.0269
	(0.0280)	(0.0346)
Rel Time $_{(t-3)}$	-0.00199	0.0141
	(0.0270)	(0.0360)
Rel Time $_{(t-2)}$	-0.0314	-0.0112
	(0.0274)	(0.0361)
Rel Time $_{(t-1)}$	-0.0159	0.00498
	(0.0272)	(0.0361)
Rel Time $_{(t0)}$	Omitted Base Case	
Rel Time$_{(t+1)}$	-0.0494*	-0.0155
	(0.0292)	(0.0346)
Rel Time$_{(t+2)}$	-0.0301	0.0315
	(0.0312)	(0.0414)
Rel Time$_{(t+3)}$	-0.0539*	-0.0205
	(0.0314)	(0.0372)
Rel Time$_{(t+4)}$	-0.214***	-0.0353
	(0.0705)	(0.0402)
Rel Time$_{(t+5)}$	-1.124***	-0.0277
	(0.300)	(0.0390)
Constant	0.216***	0.251***
	(0.0185)	(0.0158)
Time Fixed Effects	Yes	Yes
City Fixed Effects	Yes	Yes
N	12,420	12,420
R-squared	0.041	0.041

Robust standard errors in parentheses (Clustered on county)
*** p<0.01, ** p<0.05, * p<0.1

Table 5: OLS Estimations of Uber Entry on Alcohol Related Driving Fatalities including Controls

	(1)	(2)	(3)
Dependent Variable	ln(Num Deaths)	ln(Num Deaths)	ln(Num Deaths)
Uber X	-0.0321**		-0.0324**
	(0.0141)		(0.0153)
Uber Black		-0.0105	0.000716
		(0.0125)	(0.0136)
ln(Population)	-75.04	-27.13	-76.68
	(664.4)	(664.8)	(665.1)
ln(Median)	0.0163	0.0351	0.0160
	(0.145)	(0.145)	(0.146)
ln(Poverty)	-0.108	-0.111	-0.108
	(0.0707)	(0.0709)	(0.0709)
ln(Elderly)	0.162	0.166	0.163
	(0.171)	(0.174)	(0.174)
ln(Police)	0.000451	0.000353	0.000559
	(0.0350)	(0.0351)	(0.0351)
ln(College)	74.68	26.71	76.31
	(664.5)	(664.9)	(665.2)
Constant	103.0	39.66	105.1
	(883.8)	(884.4)	(884.8)
Time Fixed Effects	Yes	Yes	Yes
City Fixed Effects	Yes	Yes	Yes
N	12,420	12,420	12,420
R-squared	0.036	0.035	0.036

Robust standard errors in parentheses (Clustered on county)
*** p<0.01, ** p<0.05, * p<0.1

Table 6: Relative Time Model of Uber Entry on Alcohol Related Motor Vehicle Deaths

	(1)	(2)
Dependent Variable	ln(Num Deaths)	ln(Num Deaths)
Model	Uber X	Uber Black
Rel Time $_{(t-4)}$	0.0428	-0.0296
	(0.0280)	(0.0348)
Rel Time $_{(t-3)}$	-0.00251	0.0116
	(0.0270)	(0.0361)
Rel Time $_{(t-2)}$	-0.0316	-0.0138
	(0.0274)	(0.0362)
Rel Time $_{(t-1)}$	-0.0160	0.00491
	(0.0272)	(0.0361)
Rel Time $_{(t0)}$	Omitted Base Case	
Rel Time$_{(t+1)}$	-0.0487*	-0.0154
	(0.0292)	(0.0346)
Rel Time$_{(t+2)}$	-0.0291	0.0318
	(0.0312)	(0.0414)
Rel Time$_{(t+3)}$	-0.0530*	-0.0200
	(0.0314)	(0.0373)
Rel Time$_{(t+4)}$	-0.212***	-0.0346
	(0.0705)	(0.0402)
Rel Time$_{(t+5)}$	-1.114***	-0.0270
	(0.301)	(0.0390)
ln(Population)	-242.4	-34.69
	(665.4)	(321.4)
ln(Median)	0.00978	0.0495
	(0.148)	(0.145)
ln(Poverty)	-0.104	-0.0939
	(0.0713)	(0.0658)
ln(Elderly)	0.122	0.128
	(0.173)	(0.190)
ln(Police)	-0.00972	-0.00628
	(0.0351)	(0.0306)
ln(College)	242.2	34.27
	(665.5)	(321.6)
Constant	324.4	49.95
	(885.1)	(425.9)
Time Fixed Effects	Yes	Yes
City Fixed Effects	Yes	Yes
N	12,420	12,420
R-squared	0.042	0.041

Robust standard errors in parentheses (Clustered on county)
*** p<0.01, ** p<0.05, * p<0.1

Table 7: Count Model Estimates of Uber Entry on Alcohol Related Motor Vehicle Deaths

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable	Num Deaths	Num Deaths	Num Deaths	Num Deaths	Num Deaths	Num Deaths
Estimator	OLS	OLS	OLS	QMLE	QMLE	QMLE
Uber X	-0.142*		-0.126**	-0.0345		-0.00921
	(0.0726)		(0.0534)	(0.0902)		(0.0950)
Uber Black		-0.0931	-0.0493		-0.0576	-0.0556
		(0.0839)	(0.0766)		(0.0623)	(0.0656)
Constant	18.36	0.546***	0.546***			
	(11.46)	(0.0350)	(0.0350)			
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
City Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
N	12,420	12,420	12,420	9,200	9,200	9,200
R-squared	0.030	0.029	0.030			
χ-squared				325.89	326.56	326.55

Robust standard errors in parentheses (Clustered on County)
*** p<0.01, ** p<0.05, * p<0.1

Table 8: Count Based Relative Time Model of Uber Entry on Alcohol Related Motor Vehicle Deaths

	(1)	(2)	(3)	(4)
Dependent Variable	Num Deaths	Num Deaths	Num Deaths	Num Deaths
Model	Uber X	Uber Black	Uber X	Uber Black
Estimator	OLS	OLS	QMLE	QMLE
Rel Time $_{(t-4)}$	0.158**	-0.0874	0.0438	-0.203
	(0.0715)	(0.0742)	(0.142)	(0.147)
Rel Time $_{(t-3)}$	0.0108	0.0387	-0.160	0.0134
	(0.0690)	(0.0693)	(0.158)	(0.124)
Rel Time $_{(t-2)}$	-0.0435	-0.00880	-0.228	-0.0683
	(0.0698)	(0.0706)	(0.145)	(0.135)
Rel Time $_{(t-1)}$	-0.0481	-0.00129	-0.211*	-0.0437
	(0.0696)	(0.0814)	(0.126)	(0.154)
Rel Time $_{(t0)}$		Omitted Category		
Rel Time$_{(t+1)}$	-0.118	-0.0401	-0.393**	-0.147
	(0.0745)	(0.0933)	(0.175)	(0.186)
Rel Time$_{(t+2)}$	-0.124	0.108	-0.266	0.124
	(0.0796)	(0.0910)	(0.220)	(0.148)
Rel Time$_{(t+3)}$	-0.155*	-0.122	-0.450	-0.168
	(0.0800)	(0.141)	(0.351)	(0.226)
Rel Time$_{(t+4)}$	-0.660***	-0.225*	-0.580	-0.354*
	(0.180)	(0.137)	(0.572)	(0.194)
Rel Time$_{(t+5)}$	-2.723***	-0.125	-14.84***	-0.115
	(0.767)	(0.119)	(1.023)	(0.185)
Rel Time$_{(t+6)}$	-1.650**	-0.287**	-0.761***	-0.467***
	(0.768)	(0.114)	(0.146)	(0.168)
Rel Time$_{(t+7)}$	-2.580***	-0.0928	-14.26***	-0.00810
	(0.768)	(0.149)	(1.027)	(0.225)
Rel Time$_{(t+8)}$	-2.433***	-0.242	-11.96***	-0.477
	(0.768)	(0.195)	(1.118)	(0.337)
Constant	0.414***	0.541***		
	(0.0473)	(0.0372)		
Time Fixed Effects	Yes	Yes	Yes	Yes
City Fixed Effects	Yes	Yes	Yes	Yes
Observations	12,420	12,420	9,200	9,200
R-squared	0.037	0.036		
χ-squared			353.04	350.28

Robust standard errors in parentheses (Clustered on County)
*** p<0.01, ** p<0.05, * p<0.1

Table 9: Time Series OLS Estimations of Uber Entry on Alcohol Related Driving Fatalities
Observations with Other Ridesharing Services Omitted

	(1)	(2)	(3)
Dependent Variable	ln(Num Deaths)	ln(Num Deaths)	ln(Num Deaths)
Uber X	-0.0578***		-0.0588***
	(0.0174)		(0.0161)
Uber Black		-0.000293	0.0115
		(0.0106)	(0.0132)
Constant	0.214***	0.211***	0.214***
	(0.0126)	(0.0131)	(0.0124)
Time Fixed Effects	Yes	Yes	Yes
City Fixed Effects	Yes	Yes	Yes
N	7,476	7,476	7,476
R-squared	0.031	0.030	0.031

Robust standard errors in parentheses (Clustered on county)
*** p<0.01, ** p<0.05, * p<0.1

Table 10: Coarsened Exact Match OLS of Uber Entry on Alcohol Related Motor Vehicle Deaths

	(1)	(2)	(3)
Dependent Variable	ln(Num Deaths)	ln(Num Deaths)	ln(Num Deaths)
Uber X	-0.0559**		-0.0566**
	(0.0236)		(0.0234)
Uber Black		-0.0542	-0.0567
		(0.0550)	(0.0547)
Constant	0.186***	0.216***	0.217***
	(0.0194)	(0.0355)	(0.0354)
Time Fixed Effects	Yes	Yes	Yes
City Fixed Effects	Yes	Yes	Yes
Observations	2,037	2,037	2,037
R-squared	0.056	0.054	0.057

Robust standard errors in parentheses (Clustered on County)
*** p<0.01, ** p<0.05, * p<0.1

Table 11: Time Constrained Estimate of Uber Entry on Alcohol Related Motor Vehicle Deaths
Final Year of Dataset Omitted From Estimation

	(1)	(2)	(3)
Dependent Variable	ln(Num Deaths)	ln(Num Deaths)	ln(Num Deaths)
Uber X	-0.120***		-0.118***
	(0.0225)		(0.0228)
Uber Black		-0.00660	-0.00306
		(0.0121)	(0.00923)
Constant	0.250***	0.250***	0.250***
	(0.0110)	(0.0112)	(0.0111)
Time Fixed Effects	Yes	Yes	Yes
City Fixed Effects	Yes	Yes	Yes
Observations	10,260	10,260	10,260
R-squared	0.009	0.009	0.009

Robust standard errors in parentheses (Clustered on county)
*** p<0.01, ** p<0.05, * p<0.1

Table 12: Output of Random Implementation Model

	Random Implementation		Random Implementation In Treated	
Sample	Uber X	Uber Black	Uber X	Uber Black
μ of Random β	0.00215	-0.00027	-0.00041	-0.00039
σ Random β	0.01060	0.00897	0.01028	0.00856
Estimated β	-0.0362	-0.00156	-0.0362	-0.00156
Replications	1000	1000	1000	1000
Z-Score	-3.619029	-0.144076	-3.481857	-0.137099
P-Value	p<0.001	0.44272	p<0.001	0.44548

Table 13: Block Bootstrapped Standard Errors of Uber Entry on Alcohol Related Motor Vehicle Deaths

	(1)	(2)	(3)
Dependent Variable	ln(Num Deaths)	ln(Num Deaths)	ln(Num Deaths)
Uber X	-0.03691**		-0.03621**
	(0.0139)		(0.0151)
Uber Black		-0.1417	-0.00156
		(0.0122)	-0.0133
Constant	0.5805***	0.5805***	0.5805***
	(0.06230)	(0.06230)	(0.06230)
Time Fixed Effects	Yes	Yes	Yes
City Fixed Effects	Yes	Yes	Yes
N	12,420	12,420	12,420
R-squared	0.011	0.011	0.011

Block Bootstrapped Standard Errors (Clustered on county)
*** p<0.01, ** p<0.05, * p<0.1

Table 14: Examination of the Auto-Correlation Coefficients of Residuals

	(1)	(2)
Dependent Variable	Residual $_{j\,t}$	Residual $_{j\,t}$
Residual $_{j\,t-1}$	-0.00967	-0.0101
	(0.00921)	(0.00940)
Residual $_{j\,t-2}$		-0.0123
		(0.00939)
Constant	5.89e-11	0
	(0.00262)	(0.00268)
Observations	11,880	11,340
R-squared	0.000	0.000

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 15: Estimations of Uber Entry on Alcohol Related Deaths on High Demand Days
High Demand Days Defined as Weekends and Drinking Holidays

	(1)	(2)	(3)
Dependent Variable	ln(Num Deaths)	ln(Num Deaths)	ln(Num Deaths)
Uber X	-0.00240		-0.00628
	(0.0110)		(0.0120)
Uber Black		0.00640	0.00859
		(0.00893)	(0.00973)
Constant	0.0922***	0.0922***	0.0922***
	(0.00892)	(0.00892)	(0.00892)
Time Fixed Effects	Yes	Yes	Yes
City Fixed Effects	Yes	Yes	Yes
N	12,420	12,420	12,420
R-squared	0.011	0.011	0.011

Robust standard errors in parentheses (Clustered on county)
*** p<0.01, ** p<0.05, * p<0.1

Table 16: OLS Estimations of Uber Entry Interacted with Population
Medium City indicates Population 50,000 – 250,000
Large City indicates Population >= 250,000

	(1)	(2)	(3)
Dependent Variable	ln(Num Deaths)	ln(Num Deaths)	ln(Num Deaths)
Uber X	0.00745		0.00404
	(0.0166)		(0.0174)
Uber X * Medium City	-0.164***		-0.166***
	(0.0534)		(0.0552)
Uber X * Large City	-0.523***		-0.426***
	(0.111)		(0.115)
Uber Black		0.0128	0.00709
		(0.0145)	(0.0151)
Uber Black * Medium City		-0.0745*	0.00401
		(0.0427)	(0.0412)
Uber Black * Large City		-0.411***	-0.196*
		(0.0953)	(0.104)
Constant	0.250***	0.250***	0.250***
	(0.0123)	(0.0123)	(0.0123)
Time Fixed Effects	Yes	Yes	Yes
City Fixed Effects	Yes	Yes	Yes
N	12,420	12,420	12,420
R-squared	0.044	0.039	0.045

Robust standard errors in parentheses (Clustered on county)
*** p<0.01, ** p<0.05, * p<0.1

Table 17: OLS Estimations of Uber Entry On Log of All Driving Fatalities

	(1)	(2)	(3)
Dependent Variable	ln(All Deaths)	ln(All Deaths)	ln(All Deaths)
Uber X	-0.0397		-0.0351
	(0.0256)		(0.0267)
Uber Black		-0.0223	-0.0101
		(0.0195)	(0.0182)
Constant	0.444***	0.444***	0.444***
	(0.0159)	(0.0162)	(0.0162)
Time Fixed Effects	Yes	Yes	Yes
City Fixed Effects	Yes	Yes	Yes
N	12,420	12,420	12,420
R-squared	0.061	0.061	0.061

Robust standard errors in parentheses (Clustered on county)
*** p<0.01, ** p<0.05, * p<0.1

MORE OPTIONS.
SHIFTING MINDSETS.
DRIVING BETTER CHOICES.

#ThinkandRide

The Uber app was created to ensure reliable access to safe rides whenever, wherever. But a first-of-its-kind, comprehensive study conducted by Uber and Mothers Against Drunk Driving (MADD) reveals that Uber is more than just a convenient transportation option. The choice, reliability and flexibility it affords also make Uber a powerful tool in the quest to protect families from drunk driving. Uber is proud to partner with MADD as part of a broader effort to raise awareness around drunk driving and reduce the rate of alcohol-related crashes.

UBER | madd

A SOBERING SITUATION

Since 2012, nearly 300,000 people have driven drunk every day. To put that in perspective, that's enough to fill University of Phoenix Stadium in Glendale more than four times over. It's estimated that every 52 minutes someone is killed in a drunk driving crash.

Drunk driving is a scourge on our society. It wrecks lives, shatters families and puts communities and innocent bystanders at risk.

Not too long ago, options were limited for getting home after a night out. Taxi services were often limited, and confined to dense urban landscapes. With ridesharing services like Uber, that is beginning to change. Now, you can tap a button to request a safe, reliable ride home.

Uber and Mothers Against Drunk Driving are working toward a world where more options empower more people to make the right choice; where a safe, reliable ride home is always within reach.

Drunk driving affects everyone who shares the road, and we all have a role to play in making it a thing of the past. While much work remains, we are making progress, together, toward that goal. This report is an attempt to outline our progress to date.

It's estimated that every 52 minutes someone is killed in a drunk driving crash.

THE "UBER EFFECT" IN SEATTLE

In May 2014, Uber set out to answer a simple but important question: what, if any, effect did the availability of safe, reliable rides on the Uber ridesharing platform have on drunk driving in Seattle, where prior to Uber's arrival in 2013, approximately 7.6 people per day—or 2,750 per year—were arrested for driving under the influence.

Using publicly available data and a simple econometric model, we discovered Uber's entry into the Emerald City was associated with a 10% decrease in DUI arrests. The results were robust and statistically significant, providing meaningful evidence of the power Uber's network of safe, reliable rides has on drunk driving in major metropolitan cities.

Uber's entry into the Emerald City was associated with a 10% decrease in DUI arrests.

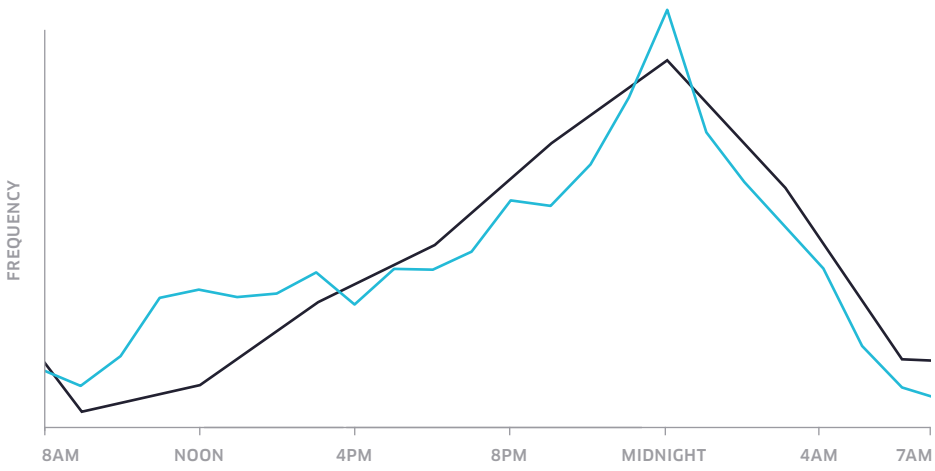
IMPACT AT SCALE

Heartened and energized by what we discovered in Seattle, we asked ourselves a bigger, more audacious question: if Uber is having such a tremendous impact in Seattle, what effect is Uber's network of safe, reliable rides having in other markets where Uber operates?

We discovered that when people have more options, they make better, safer choices.

Our study examined data and trends in several metropolitan cities across the United States. While intuition led us to believe that the reliability and flexibility of Uber makes it easy to make the responsible choice, we did not have a way to quantify this effect. But, there is evidence that riders use Uber to get home from bars and restaurants after drinking.

In Miami, Uber ridership peaks at the same time as historical drunk driving crashes. The graph below shows how the distribution of Uber requests on the weekend in Miami coincides closely with drunk driving crashes.



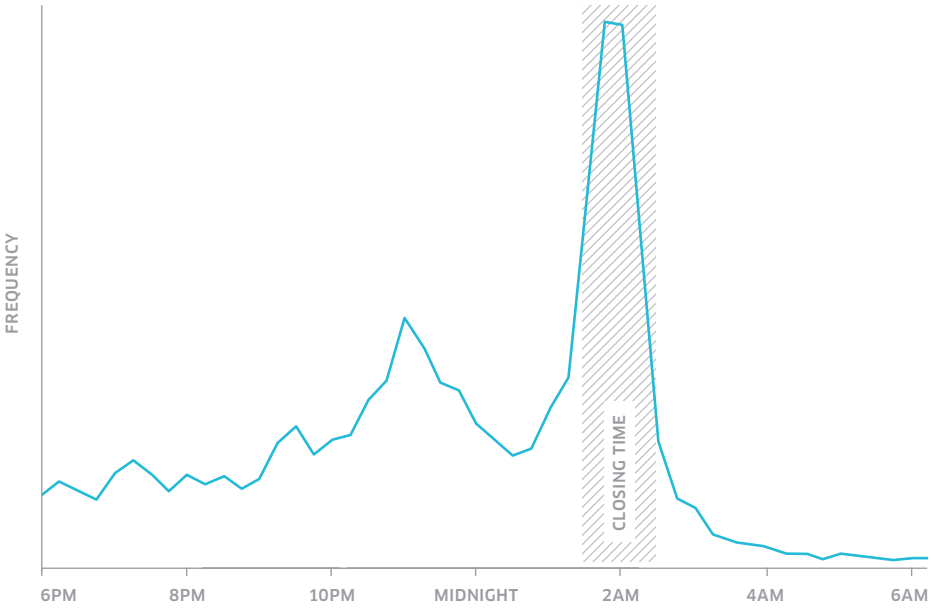
In Miami, Uber ridership peaks at the same time as historical drunk-driving related crashes.

MIAMI:
UBER IS A BETTER LATE NIGHT OPTION

– ALCOHOL-RELATED CRASH FATALITIES
– REQUESTED UBER TRIPS

AND THE PATTERN IS THE SAME IN CITIES ACROSS AMERICA

In Pittsburgh, we found further evidence of Uber's popularity as a form of late-night transportation. Here, bars close at 2AM. Thus, we'd expect to see a temporary and unusual spike in requests at closing time if people were using Uber as a method to get home after drinking. Indeed, our findings show that demand for Uber spikes right around closing time.



Our findings show that demand for Uber spikes right around the times bars close.

PITTSBURGH:
SATURDAY NIGHT RIDE REQUESTS

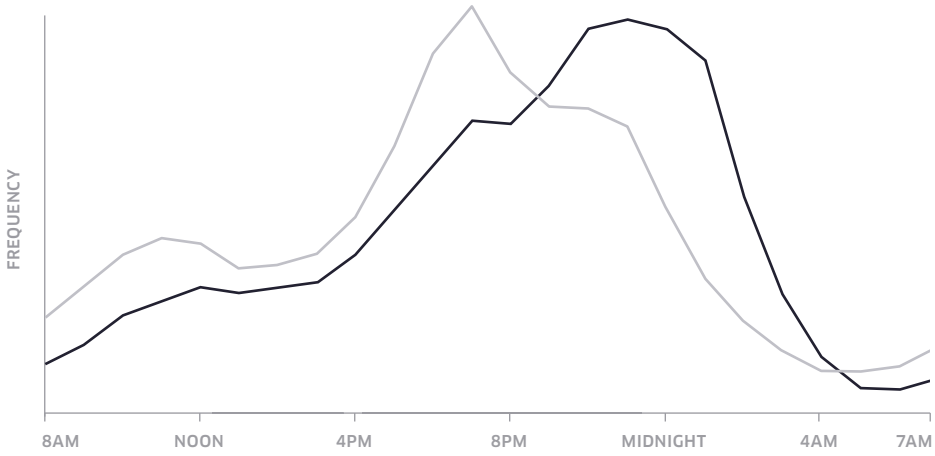
– REQUESTED UBER TRIPS

WHAT IS MORE: THIS PATTERN IS REPLICATED IN ALMOST EVERY CITY WHERE UBER OPERATES

Of course, this isn't hard proof that requests were coming from drinking establishments such as bars and restaurants. So we dug deeper.

In Chicago, we identified whether rides were requested within 50 meters of a bar, restaurant, or hotel that serves alcohol. Our findings revealed that a disproportionate number of weekend, late-night Uber requests come from businesses with liquor licenses, with 45.8% of rides requested from these locations coming during the peak drinking hours of 10PM and 3AM, compared to 28.9% at off peak times.

A disproportionate number of weekend, late-night Uber requests come from businesses with liquor licenses.



CHICAGO:
ORIGIN OF WEEKEND UBER TRIPS

- ALCOHOL SERVED
- NO ALCOHOL SERVED

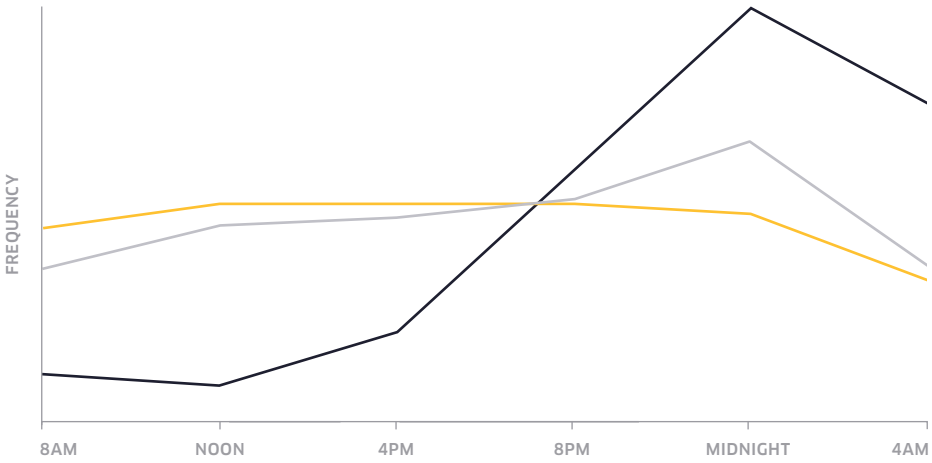
Trips from alcohol-serving establishments peak in Chicago late at night.

FLEXIBILITY = RELIABILITY

One of the reasons that Uber is able to coordinate so many late night rides from drinking establishments is the flexibility of supply on the platform. Uber's model works to ensure supply keeps up with demand. Driver-partners are free to log on to the platform at any time, and higher demand serves as a strong incentive to log on and drive.

This is noteworthy given that in Austin (one of the few cities for which we could find any publicly-available taxi supply data), the average number of taxis actually *drops* at midnight due to restrictions on supply, leaving many ride-seekers stranded and more likely to make unwise driving decisions.

In Austin, taxi supply decreases when people most want rides, and when DUI arrests are most common.



AUSTIN:
TAXI SUPPLY AND DEMAND

- ALCOHOL-RELATED CRASHES
- TAXI RIDES COMPLETED
- TAXI REQUESTS

Taxi supply decreases when people most want rides, and when DUI arrests are most common.

The freedom and flexibility of the Uber platform—in which driver-partners are free to log on or log off whenever they want—does not suffer from this problem. Supply increases when demand increases, and people have a safe, reliable option to get home.

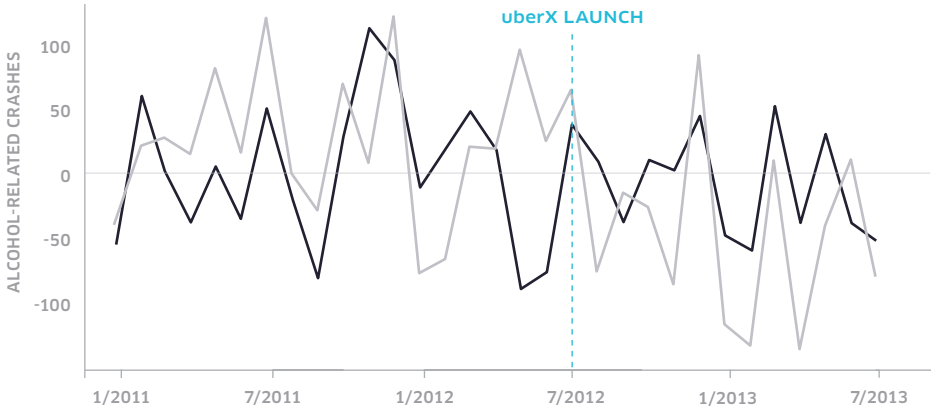
UBER: DRIVING BETTER CHOICES

Uber is a young company (driving a small fraction of the nation's trillions of yearly vehicle miles). However, we see some evidence in publicly available crash data in our most mature markets that Uber is having a measurable impact on driving down alcohol-related crashes.

San Francisco was the first place Uber launched both UberBLACK and uberX, and in California, Uber has become increasingly available in markets across the state. Inspired by Nate Good's analysis—which demonstrated a clear downward trend in alcohol-related crashes in Pennsylvania's youngest cohort once ridesharing was available—we decided to replicate that study in California at large using data procured from the State.

What did we find? Using a "difference-in-differences" regression to control for seasonality and other factors, our findings uncovered that monthly alcohol-related crashes decreased by 6.5% (or 59.21 per month) among drivers under 30 following the launch of uberX ridesharing in California in markets where Uber operates.

Monthly alcohol-related crashes decreased by 6.5% among drivers under 30 following the launch of uberX ridesharing in California.



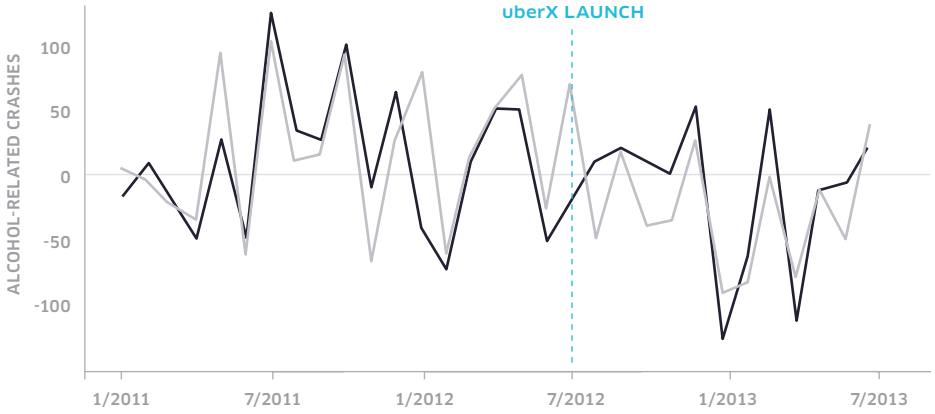
Source: California Highway Patrol

CALIFORNIA:
ALCOHOL-RELATED CRASHES IN MARKETS WHERE UBER OPERATES

— 30 AND OVER
— UNDER 30

As the total number of crashes for the age groups are often different, the graph has normalized the total number of crashes, with 0 being the average for the age group (a negative number of crashes means that for that month crashes were below normal).

Our findings revealed this pattern is not seen at all in areas of California where Uber isn't operating. Outside Uber-serviced parts of California, there are an average of 697 alcohol-related crashes per month, with the above-30 crowd averaging 353.8 vs. 343 for below 30.



Source: California Highway Patrol

CALIFORNIA:
ALCOHOL-RELATED CRASHES
IN MARKETS WHERE UBER
DOES NOT OPERATE

— 30 AND OVER
— UNDER 30

In other words, we believe there is a direct relationship between the presence of uberX in a city and the amount of drunk driving crashes involving younger populations.

SHIFTING MINDSETS

In light of our findings, a simple but important question remained: What shift in mindsets is behind these outcomes? To answer that question, a survey was conducted to better understand concerns and attitudes around drunk driving and the perceived role ridesharing platforms like Uber play in reducing it.

First, the survey—conducted by the Benenson Group—aimed to uncover the level of priority people placed on ending drunk-driving in more "mature" Uber cities.

Here's what we found:

86% of respondents are concerned about drunk driving, and far more than other transportation issues, people want their elected leaders working toward solutions that reduce it.

A solid majority of respondents (65%) said elected officials should prioritize reducing drunk driving as a way to keep streets safe for drivers and passengers.

The majority of adults already believe services like Uber meaningfully reduce drunk driving in their cities. And they have reason to, as:

88% of respondents over the age of 21 agree with the statement that "Uber has made it easier for me to avoid driving home when I've had too much to drink."

78% of people say that since Uber launched in their city, their friends are less likely to drive after drinking.

57% of transportation network service users agreed with the statement: "Without Uber, I'd probably end up driving more after drinking at a bar or restaurant."

And after hearing about Uber's impact on drunk driving already, 93% of people would recommend a friend take Uber instead of driving if the friend had been drinking.

The results of our survey show that the availability of additional, reliable transportation options is shifting mindsets and driving people to make better, safer choices.

The results of our survey show that the availability of additional, reliable transportation options is shifting mindsets and driving people to make better, safer choices.

THE ROAD AHEAD

Uber offers a safe and convenient transportation alternative that didn't exist just 5 years ago and is growing rapidly. Indeed, just one year ago, Uber operated in 60 cities and 21 countries. Today, Uber is connecting riders and drivers in over 260 cities and 50 countries around the globe. And Uber is proud to partner with MADD as part of a broader effort to raise awareness around drunk driving and reduce the rate of alcohol-related crashes.

This study and survey provide strong evidence that Uber is having a meaningful and positive impact on mindsets and the rate of drunk driving. Our mission isn't complete, but we are making progress together toward the goal of reliable rides and safer roads for everyone. This is the future we are working toward: one in which more people in more cities around the nation are empowered with more options that lead to better, safer choices.

About Mothers Against Drunk Driving

Founded by a mother whose daughter was killed by a drunk driver, Mothers Against Drunk Driving® (MADD) is celebrating its 35th anniversary by creating a future of NO MORE VICTIMS™. MADD is the nation's largest nonprofit working to end drunk driving, help fight drugged driving, support the victims of these crimes and prevent underage drinking. MADD supports drunk and drugged driving victims and survivors at no charge, serving one person every ten minutes through local MADD victim advocates and at 1-877-MADD-HELP. Learn more by visiting madd.org or calling 1-877-ASK-MADD.

About Uber Technologies, Inc.

Uber is evolving the way the world moves. By connecting riders to drivers through our apps, we make cities more accessible, opening up more possibilities for riders and more business for drivers. From our founding in 2009 to our launches in over 260 cities today, Uber's rapidly expanding global presence continues to bring people and their cities closer.

Survey Methodology

The survey results included in this report are from a poll conducted by Benenson Strategy Group. The interviews took place from December 1-4, 2014 and included 807 interviews with a representative general population sample from the largest cities where Uber operates. All interviews were conducted over the internet. The margin of error for the entire data set is 3.38% at the 95% confidence level.

University Transportation Research Center

NYU Labor & Employment Law
New York University School of Law

Cornell University
ILR School

The Expanding Transportation Network Company

"Equity Gap"

Adverse Impacts on Passengers with Disabilities, Underserved Communities, the Environment & the On-Demand Workforce

Table of Contents

ABSTRACT

This report provides an analysis and evaluation of the negative impacts that the proliferation of Transportation Network Companies ("TNCs") have had on people with disabilities, underserved communities, the environment, social responsibility, and the sharing economy. Methods of analysis include: a look at the past and current climate of legislation and litigation, as well as the inherent shortcomings in the TNC business model, that have otherwise halted progress in achieving accessibility in public transportation for people with disabilities; a statistical examination exposing the practice of TNC drivers ignoring low-income, minority, rural, the unbanked and technologically deprived communities; the effects that vehicle proliferation and surge pricing have had on carbon emissions and congestion; the cost to taxpayers and governments resulting from TNC financial practices; and an overview of how the concept of the "sharing economy" does not, in fact, apply to TNCs despite their claims to the contrary. This report is a colloquy on the adverse impact of TNCs have had on transportation "equity," and will demonstrate that the TNC template is nothing more than a privileged access model that operates to the detriment of those in most need of their services.

This report was originally published by the University Transportation Research Center (Region 2) of The City College of New York, at the City University of New York, was edited and solicited by New York University School of Law's Labor and Employment Law Center and Cornell University's School of Industrial and Labor Relations. This work is also scheduled to be republished in an upcoming book entitled: *Who is an Employee and Who is the Employer?: Proceedings of the New York University 68th Annual Conference on Labor* (LexisNexis, 2016) (series editor: Samuel Estreicher; volume editor: Kati L. Griffith).

The author gratefully acknowledges the support of these institutions, of the noted research contributors, and the findings and opinions of the author are shared by the peer reviewers of this report.

About the Author

Professor Matthew W. Daus Esq.

Distinguished Lecturer, University Transportation Research Center

Matthew W. Daus was appointed by former Mayor Rudolph W. Giuliani and unanimously confirmed by the New York City Council on August 22, 2001 as the tenth Commissioner/Chairman of the New York City Taxi and Limousine Commission (TLC). On July 23, 2003, Commissioner Daus was reappointed to a seven (7) year term by Mayor Michael R. Bloomberg and the New York City Council, which expired on January 31, 2010. Mr. Daus is the longest serving Chairman in TLC history, serving for 8 ½ years as Chief Executive Officer as well as counsel for a combined total of 14 years at the agency. Prior to his tenure as Commissioner/Chair of the TLC, Mr. Daus served as General Counsel to the Commission and Deputy Commissioner for Legal Affairs since 1998, and before that, as Special Counsel to the TLC Chairperson.

During his tenure at TLC, Commissioner Daus designed and implemented unprecedented reforms in the country's largest for-hire ground transportation industry – which includes the taxicab, black car, livery, limousine, paratransit and commuter van businesses. These multi-billion dollar industries transport approximately one million passengers daily, and the TLC licenses and regulates approximately 100,000 drivers, over 50,000 licensed vehicles and over 900 businesses. Commissioner Daus conceived and spearheaded numerous safety, technology, customer service and environmental initiatives, proactively responded to several crisis-related challenges, and effectively managed and streamlined a government agency with over 480 employees, a budget of over $29 million and annual revenues in excess of $40 million.

Under Commissioner Daus' leadership, TLC's accomplishments included:

- Taxi Technology – oversaw the installation of credit/debit card payment options, Global Positioning Systems, and passenger and driver information screens in all taxicabs, enabling data collection, lost property recovery and fare opportunities;
- Hybrid Taxicabs– saw the introduction of significant numbers of clean air taxicabs, which now comprise more than 23 percent of the fleet;

- Medallion Sales – several medallion sales yielding hundreds of millions of dollars in revenue to New York City's General Fund;
- Accessible Taxi Dispatch System Pilot Program – wheelchair accessible taxi service for disabled passengers available by calling 311;
- Taxi Group Rides – passengers ride share at stands where passengers pay less and drivers earn more;
- Livery Stands Pilot Program – passengers obtain more efficient car services via dispatcher-staffed stands on private property;
- For-Hire Vehicle Passenger Reforms – established passenger bill of rights, increased vehicle and safety standards;
- Taxi of Tomorrow – development and issuance of a Request for Proposals for a custom-built iconic future taxicab;
- Transit Strike Contingency Plan – implemented successful ride-sharing plan during 2005 transit strike and private bus strikes;
- Distracted Driving Program – implemented first-of-its-kind program to promote safety and combat the problem of cell phone use by drivers; and
- 9/11 Business Recovery Plan – agency policies expedited economic recovery of regulated industries.

Since leaving the TLC, Mr. Daus has joined the City University of New York's (CUNY's) Transportation Research Center of The City College of New York as a Distinguished Lecturer. The Transportation Research Center is one of ten original University Transportation Centers established in 1987 by the U.S. Congress. These Centers and their faculty members provide a critical link in resolving national and regional transportation problems while training the professionals who address our transportation systems and their customers on a daily basis. It represents the U.S. Department of Transportation's Region II, which includes New York, New Jersey, Puerto Rico and the U.S. Virgin Islands. Functioning as a consortium of twelve major universities throughout the region, the Center is located at the CUNY Institute for Transportation Systems at The City College of New York, the lead institution of the consortium. The Center supports research, education and the transfer of technology in the field of transportation.

Mr. Daus also continues to serve as President of the International Association of Transportation Regulators (IATR), a group of government professionals and regulatory agencies from around the world who share best practices and promote positive change in the for-hire ground transportation industry.

Mr. Daus joined City government in 1994 as a Prosecutor for the New York City Commission on Human Rights, where he represented the agency in the prosecution and mediation of discrimination complaints in the areas of employment, housing and public accommodation. Thereafter, he was appointed General Counsel of the New York City Community Development Agency (CDA), now known as the Department of Youth and Community Development (DYCD), where he supervised all procurement activities relating to government anti-poverty funding and social service contracts awarded to

community organizations. After serving at CDA, Mr. Daus was appointed Special Counsel to the New York City Trade Waste Commission, where he was responsible for assisting in the formation of this newly created agency designed to eliminate corruption within the private sanitation industry. Prior to joining City government, Mr. Daus began his legal career in private practice as a litigator specializing in tort law.

Mayor Bloomberg and the City Council appointed Mr. Daus as Commissioner of the Civil Service Commission, an independent quasi-judicial agency that hears and decides appeals under the New York State Civil Service Law. Mr. Daus has extensive experience in labor and employment law, including a Masters of Law (LL.M.) from N.Y.U. School of Law specializing in the field. He received his Juris Doctor (JD) degree from Touro School of Law and his Bachelor of Arts degree from CUNY, where he has also served as an Adjunct Professor of Business Law. Mr. Daus has published numerous legal articles in journals and periodicals on topics which include labor and employment law, mediation/alternative dispute resolution and transportation law.

About the Peer Reviewers

Patricia Gatling

Former New York State Deputy Secretary for Civil Rights

Former Chair/Commissioner, New York City Human Rights Commission

Patricia L. Gatling is the former Deputy Secretary for Civil Rights under New York State Governor Andrew Cuomo. She oversaw the operations of the Department of Civil Service, the Governor's Office of Employee Relations, the Division of Veterans Affairs, the Division of Human Rights, and the Public Employee Relations Board. For over a decade, Ms. Gatling served as the Commissioner and Chair of the New York City Commission on Human Rights under Mayor Michel Bloomberg and Mayor Bill de Blasio. As Commissioner, Ms. Gatling was charged with enforcing the Human Rights Law and combating discrimination in New York City. Ms. Gatling is also the Executive Producer of Fighting for Justice: New York Voices of the Civil Rights Movement, a series of groundbreaking documentary films for the New York City Commission on Human Rights and NYC Media's online Civil Rights Museum.

In addition, Ms. Gatling worked as a senior trainer with John Jay College of Criminal Justice, as part of the U.S. State Department's International Law Enforcement Academy (ILEA), teaching "Human Dignity and the Law" in newly emerging democratic countries, such as Botswana, Thailand, and Budapest, and at the Dubai Police Academy International Conference in the United Arab Emirates. She has served on the New York City Charter Revision Commission and is currently a member of the Board of Trustees for the New York Lawyers' Fund for Client Protection.

Isabelle Ducharme

Chairman of the Board, Kéroul

Ms. Isabelle Ducharme has been working on social integration of people with disabilities for more than 20 years. During the last ten years, Miss Ducharme has presented at various conferences and facilitated multiple workshops on creating awareness for integrating people with disabilities.

Her personal experience of living with a spinal cord injury since her car accident in 1988 gives her unique insight in the barriers many persons with disabilities face. She truly understands the different needs and accommodation needed to attain full integration.

She has a bachelor's degree in communications at *Université de Montréal* and a Master's degree in business and tourism planning at *Université du Québec à Montréal*. She also completed a course in ''communication and leadership'' from *Dale Carnegie* to further refine her presentation skills.

In the field of disabilities, she has delivered keynotes, has trained and consulted, specifically, she has:

- Delivered sensitivity awareness classes to workers of the travel industry.
- Created a new concept of accessible circuit to promote accessible venues: www.theaccessibleroad.com.
- Master trainer and leader of *My Toolbox,* a self-management workshops for people with chronic illnesses, including one adapted specifically for people with spinal cord injury.
- Created and hosted a radio show to keep people with disabilities informed of products and services available: *Accès libre* at *Canal M* of *Vues et Voix*.

Ms. Ducharme is Chairman of the Board at *Kéroul*, a Quebec based organization whose mission is to make tourism and culture more accessible for persons with limited physical abilities. She is also active on the Board of *Bibliothèque et Archives nationales du Québec*.

Maureen Koetz

Former Acting Assistant Secretary and Principal Deputy Assistant Secretary, United States Air Force

Principal, Koetz & Duncan

KOETZ AND DUNCAN is a small, woman-owned business that provides strategic consulting in all areas of enterprise management and public affairs pertaining to sustainable development and asset management.

KOETZ AND DUNCAN is led by Maureen T. Koetz, who formed the company after a distinguished career at the intersection of government, infrastructure, and energy management as an attorney, federal policymaker, and member of the Senior Executive Service.

Ms. Koetz is the former Acting Assistant Secretary, and Principal Deputy Assistant Secretary for Installations, Environment, and Logistics of the United States Air Force, managing a 10 million acre/$250 billion asset portfolio in support of sustainable operations for the largest energy consumer in the federal government. In addition to overseeing multi-billion dollar construction, sustainment, sully, and environment programs, she also served as the Historic Preservation Official, the Natural Resource Trustee, and a Member of the Air Force Base Closure Executive Group.

During her service as a Presidential appointee, Ms. Koetz formulated advanced management and communications programs to address encroachment and excess operational costs resulting from diminished natural capital access and supply, in what would become a template for efficiency and effectiveness for enterprise sustainable development.

Ms. Koetz has also held positions as Environmental Counsel for the Senate Energy and Natural Resources Committee, and Counsel to U.S. Senator Pete Domenici. She resides in Lower Manhattan, and was the Republican candidate for the 65th Assembly District in New York in 2014 against the now-disgraced Sheldon Silver.

Dr. Jonathan R. Peters

Associate Professor, College of Staten Island of the City University of New York

Jonathan R. Peters is an associate professor of finance in the Business Department at The College of Staten Island of The City University of New York and a Research Fellow at The University Transportation Research Center at The City College of New York. He received his Ph.D. in Economics from the City University of New York and his Masters in Economics from Hunter College.

Dr. Peters previously worked in the Finance Division of AT&T Corporation where he was a subject matter expert on immigration and international finance. He serves on the Economics of Pricing Subcommittee of the National Academies of Science Transportation Research Board and the Board of the City University Institute for Urban Systems. His work on public-private partnerships was published in 2006 by the New York State Department of Transportation. He has previously published in The Journal of Applied Finance, Transportation Quarterly and most recently in Public Works Management & Policy. He currently conducts research in the areas of regional planning, road and mass transit financing, corporate and public sector performance metrics, capital costs and performance management.

Michel Trudel

Urban Planner and Consultant, Kéroul

Former President, The International Association of Transportation Regulators

Michel Trudel is a geographer and urban planner.

He is a consultant in tourism and transportation, especially for Kéroul, an organization devoted to the development of inclusive tourism. He was in charge of the organization of the first World Summit Destinations for All held in Montreal in October 2014.

Previously, he worked for the Department of Transport of the Province of Quebec where he developed an expertise in transport regulation. From 1992 to 2000, he was member of the Board of Directors of the International Association of Transportation Regulators (President from 1992 to 1994).

He worked also at the Quebec Department of Tourism in regional development and then as director of the Tourism Promotion of Quebec.

It is in the course of his duties to the Government of Quebec, in transportation and tourism, he met André Leclerc, the founder and CEO of Kéroul.

About the Editors

Samuel Estreicher

Dwight D. Opperman Professor of Law, New York University School of Law

Director, New York University School of Law Center of Labor and Employment

Samuel Estreicher is Dwight D. Opperman Professor of Law at New York University School of Law, director of its Center for Labor and Employment and co-director of its Institute of Judicial Administration. He has published over a dozen books including casebooks in labor law and employment discrimination and employment law; written treatises in employment law and in labor law; edited global issues in labor law, global issues in employment law, global issues in employment discrimination law, and global issues in employee benefits law; edited conference volumes on sexual harassment, employment ADR processes, and cross-global human resources; and authored over 150 articles in professional and academic journals. He received his AB from Columbia College, his MS (Industrial Relations) from Cornell University, and his JD from Columbia Law School, where he was editor-in-chief of the Columbia Law Review**.** After clerking for the late Harold Leventhal of the US Court of Appeals for the DC Circuit, practicing for a year with a union-side law firm, and then clerking for the late Lewis F. Powell Jr. of the US Supreme Court, Estreicher joined the NYU faculty in 1978. He is the former secretary of the Labor and Employment Law Section of the American Bar Association, a former chair of the Committee on Labor and Employment Law of the Association of the Bar for the City of New York, and chief reporter of the new Restatement of Employment Law, sponsored by the American Law Institute. In 2010, the Labor and Employment Relations Association awarded Estreicher its "Susan C. Eaton Outstanding Academic-Practitioner Award." Estreicher has delivered named lectureships at UCLA, Chicago-Kent, Case Western and Cleveland State law schools, testified twice before Secretary of Labor Reich's and Secretary of Commerce Brown's Commission on the Future of US Worker-Management Relations, and has run over 100 workshops for federal and state judges, US Department of Labor lawyers, NLRB lawyers, EEOC lawyers, court law clerks, employment mediators and practitioners generally. Among his many teaching offerings, he has started NYU Law's Supreme Court Litigation Clinic.

He is also of counsel to Paul Hastings in their labor and employment and appellate practice groups. His practice focuses on the wide range of issues affecting the employment relationship, including designing ADR systems, training supervisors for

performance-based management and employee involvement initiatives, advising clients in OFCCP, EEO, and labor relations compliance, and representing clients in individual, global HR management, and class EEO and Wage and Hour litigation.

Estreicher's appellate practice includes victory in the Supreme Court in the *Circuit City v. Adams* litigation, broadening the availability of employment arbitration; victory in the Second Circuit overturning an interest arbitration award in the Daily News litigation; amicus representation of international law experts and oral argument in the Second Circuit's Talisman Energy, opening up the issue of corporate liability under the Alien Tort Statute and a similar representation of international law experts in the Kiobel litigation in the Supreme Court. He has also engaged in other amicus representation (before the NLRB and in the Supreme Court) of the American Civil Liberties Union, Cato Institute, the Center for Public Resources, DaimlerChrysler, Ford, GM, the US Chamber of Commerce, the Society for Human Resources Management, the National Association of Manufacturers, the Black Alliance for Educational Options, the American Jewish Committee, and the Council for Employment Law Equity. Estreicher is also a member of the arbitration/mediation panels of the American Arbitration Association and Center for Public Resources, and is a fellow of the College of Labor and Employment Lawyers. He has been recognized in Human Resources Executive**,** Superlawyers**,** and Best Lawyers in America publications.

Kate Griffith

Associate Professor of Labor & Employment Law, Cornell Industrial and Labor Relations School

Professor Griffith is Associate Professor of Labor & Employment Law at Cornell's Industrial and Labor Relations ("ILR") School and a Research Fellow affiliated with NYU's Center for Labor & Employment Law. Griffith's scholarship focuses primarily on the intersection of immigration and workplace law at the subfederal, federal and international levels. She has published in both social science and legal journals and is a co-author (along with Michael Harper and Samuel Estreicher) of the textbook Labor Law: Cases, Materials, and Problems, 8th Edition (Walters Kluwer). She teaches courses on labor & employment law, immigration law and legal issues affecting low-wage and contingent workforces. She has twice received a Cornell ILR MacIntyre Award for Exemplary Teaching and was selected by a Merrill Presidential Scholar in 2010 as the faculty member who had the most positive influence on his education at Cornell University.

Griffith joined Cornell's ILR faculty in the Fall of 2007 after completing a Skadden Fellowship as a Staff Attorney at the Workers' Rights Law Center of New York, Inc. in New York's Hudson Valley. Prior to the Skadden Fellowship, Griffith served as a Law Clerk for the Honorable Rosemary S. Pooler in the U.S. Court of Appeals for the Second Circuit. She is a cum laude graduate of NYU School of Law, where she was a Root Tilden Public Interest Scholar, received the Sol D. Kapelsohn Prize for highest excellence in writing in the field of labor law and served as the Editor-in-Chief of the N.Y.U. Review of Law and Social Change. Before earning her J.D. from NYU, Griffith conducted research on women workers and labor law in Mexico as a Rotary Scholar and in El Salvador as a Fulbright Scholar.

About the Contributing Researchers

Brook Taye

Economist, Ph.D. candidate at École Polytechnique, France

Brook is a PhD. Candidate at École Polytechnique in Paris, France, with a research area that focuses on High Growth Entrepreneurial Firms. Brook has a law degree from the University of London at the School of Oriental & African Studies in London, England; European Master in Law and Economics from University of Ghent, Belgium; Master in Economic Analysis of Law and Institutions from Université Paul Cézanne Aix - Marseille III, France; and Master in Law and Economics from University of Bologna, Italy.

Brook has extensive experience working as a legal and economic analyst in the transportation industry covering regulatory matters, including for-hire ground transportation logistics, planning, licensing, enforcement, technology implementation, operational issues and regulatory reform.

Jason R. Mischel

Former Commissioner & General Counsel, NYC Mayor's Office of People with Disabilities

Jason was Acting Commissioner and former Deputy Commissioner and General Counsel of the New York City Mayor's Office for People With Disabilities, and served as an Advisor to the Mayor on all disability-related issues for nearly a decade. Commissioner Mischel was responsible for advising the NYC Department of Transportation and the NYC Taxi and Limousine Commission on all disability related transportation law and policy issues.

During his tenure, Commissioner Mischel's accomplishments included the following projects, legislation and initiatives:

- Metropolitan Transportation Authority's (MTA's) pilot program that allows Access-a-Ride passengers to use yellow taxicabs for pick-up and drop-off using pre-paid debit cards;
- NYS Department of Transportation's successful grant proposal for Federal New Freedom grant money for the city's Taxi Smart Card Program;
- NYC Department of Transportation's Accessible Pedestrian Signal project and the installation of detectable warning strips at project sites;
- NYC Accessible Taxi Dispatch program that allows wheelchair users to reserve an accessible taxi in advance through a number of platforms;
- NYC Taxi & Limousine Commission's inclusion of critical accessibility features in the city's taxi fleet for people with different disabilities;
- Accessible Taxi Tax Credit signed into law in January 2012;
- NYC ferry legislation ensuring docks, piers, slips and terminals that receive and unload passengers are accessible for people with disabilities (2005);
- Legislation mandating that NYC increase the number of accessible taxis, implement an education campaign and annual information workshop, and requiring accessible taxis and for-hire vehicles to display accessibility insignia (2006);
- NYC Accessible Parking Education Program initiative;
- Disability Rent Increase Exemption signed into law in July 2005;

- Ensured accessibility in major city projects such as the new Yankee Stadium, the Barclays Center, the 9/11 Memorial and the 3-stage High Line project; and
- NYC's first Restaurant Access Program that highlights wheelchair-friendly restaurants (with NYC & Company, the city's official tourism bureau).

Commissioner Mischel has authored the following publications and resources:

- NYC's Official Accessibility Guide and the NYCGo Accessibility website (nycgo.com/accessibility), each containing critical accessible transportation information, resources and options for people with disabilities (in partnership with NYC & Company); and
- Inclusive Design Guidelines New York (http://shop.iccsafe.org/inclusive-design-guidelines-new-york-city-1.html), a comprehensive reference standard for architects, engineers and the construction industry that is now being utilized as a template by municipalities globally.

As an accomplished public speaker, Commissioner has served on Continuing Legal Education, housing, construction, transportation and cultural affairs panels, and frequently testified before the New York City Council. In addition, Commissioner Mischel has served as an advisor and member of the following boards and committees:

- MTA's Paratransit Advisory Committee and ADA Compliance initiatives; and
- Accessibility Committee of the 2008 NYC Building Code and its Revision Process;

Before joining NYC government, Mr. Mischel was a litigator in private practice, with experience in a wide array of areas, including, but not limited to, commercial lease negotiation and drafting, intellectual property, contract drafting and analysis, employment litigation, complex commercial litigation, state and federal appeals, Interstate Commerce Act litigation involving common carriers, copyright and trade secrets, warranties, eminent domain, choice-of-law and jurisdiction and consumer fraud.

EXECUTIVE SUMMARY

The proliferation of Transportation Network Companies ("TNCs") has had a profound effect on the way people make their transportation choices. What was once a traditional system involving the raising of a hand to hail a taxicab or a call to a dispatcher to pre-arrange a livery or black car trip has morphed into a fully technologically-based paradigm whereby the use of a smartphone app to match a passenger with a driver (who in some jurisdictions can operate completely outside a regulatory framework) has become the new normal. Equity implies giving as much advantage, consideration, or latitude to one party as it is given to another. Along with economy, effectiveness, and efficiency, Equity is essential for ensuring that extent and costs of funds, goods and services are fairly divided among their recipients.[1]

Companies such as Uber and Lyft utilize a business model that purports to provide an easy alternative "for all;" yet, when one pulls back the layers of what is actually occurring, it is apparent that the end result falls far short. In general, equity has is defined as fairness and impartiality towards all concerned, based on the principles of evenhanded dealing. In fact, it eliminates progress for equivalent service and quality of life improvements.

As this report will show, the playing field has been skewed in favor of TNCs to the detriment of the traditional taxicab and for-hire vehicle industry. The term "Leveling the Playing Field" (between TNCs and taxi companies) has developed into common parlance among the incumbent industry stakeholders, elected and appointed officials, the media, and academics when discussing the for-hire transportation industry. Transportation equity is a civil and human rights priority. Access to affordable and reliable transportation widens opportunity and is essential to addressing poverty, unemployment, and other equal opportunity goals such as access to good schools and health care services. However, current transportation spending programs do not equally benefit all communities and populations. And the negative effects of some transportation decisions— such as the disruption of low-income neighborhoods — are broadly felt and have long-lasting effects. Providing equal access to transportation means providing all individuals living in the United States with an equal opportunity to succeed.[2]

This new term of art seeks to address the uneven 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. In most jurisdictions, TNC are able to avoid licensing procedures and fees, commercial insurance costs, fingerprint based background checks, and a host of other requirements mandated for the taxicab and FHV industry. There are a variety of ways that a "level playing field" can be accomplished; with many jurisdictions nationwide implementing new legislation and many individuals looking to the courts for balance in the marketplace.

[1] http://www.businessdictionary.com/definition/equity.html#ixzz4ElO2sc2p
[2] http://www.civilrights.org/transportation/?referrer=https://www.google.com/

In many jurisdictions across the United States, stakeholders from the traditional FHV industry have filed lawsuits against their local governments, challenging whether unequal regulatory schemes violate their right to equal protection under the laws. The Equal Protection Clause of the 14th amendment of the U.S. Constitution, as well as similar clauses in many state constitutions, prohibit states from denying any person within its jurisdiction equal protection of the laws.[3] On a basic level, this requires that the government must treat similarly situated individuals in the same manner.

In an ongoing case, the Illinois Transportation Trade Association filed a lawsuit to challenge the TNCs ordinance in the City of Chicago.[4] The taxi operators said the ordinance should be illegal because it violates their right to equal protection, as it unfairly holds the TNCs to a lesser regulatory standard than their competitors in the traditional taxi business.[5] If equal protection lawsuits are successful, it would force jurisdictions to reconsider applying two different regulatory schemes for TNCs and traditional FHVs, and in doing so, have the effect of leveling the playing field. The lack of equal standards across all for-hire transportation industries has led to externalities and inequities among those in competition with TNCs, and the members of the public who rely on for-hire transportation.

Moreover, an alarming result of the proliferation of TNCs is the undeniable adverse impact on people with disabilities, underserved communities, the environment, social responsibility, and the labor force of the so-called "on-demand sharing economy." This report sets forth disturbing concerns of the unintended consequences for the accessibility and underserved communities due to the TNC business model, and demonstrates that the TNC template is nothing more than a privileged access model that operates to the detriment of those in most need of their services.

The methodology utilized in the report included: a look at the past and current climate of legislation and litigation, as well as the inherent shortcomings in the TNC business model, that has otherwise halted progress in achieving accessibility in public transportation for people with disabilities; statistical examination exposing the practice of TNC drivers not adequately servicing low-income, minority, rural, unbanked and technologically deprived communities; the effects that vehicle proliferation and surge pricing have had on carbon emissions and congestion; the social costs to taxpayers and governments resulting from TNC financial practices; and an overview of how the concept of the "sharing economy" does not, in fact, apply to TNCs despite their claims to the contrary.

As is fully explained in the report with concrete data and evidence, the following is a list of the unfortunate results and social consequences that continue to result from the continued proliferation and existence of TNCs:

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[3] *See* U.S. Const. Amend. XIV.

[4] http://cookcountyrecord.com/stories/510720143-judge-taxi-drivers-have-constitutional-beef-but-won-t-issue-injunction-regarding-city-regulation-of-uber-lyft. (Accessed on July 12, 2016).

[5] *Id*.

Wheelchair Accessibility Not a TNC Priority

- The proliferation of TNCs has greatly slowed, if not halted, progress being made to convert a large portion of taxicabs in New York City to wheelchair-accessible vehicles and creates challenges in jurisdictions throughout the United States and Canada;
- TNCs continue to argue that the Americans with Disabilities Act ("ADA"), a law designed to provide inclusiveness for all, does not apply to their operations in any way;
- TNC vehicles and drivers rarely have the capability to accommodate electric wheelchairs and scooters; and
- TNCs are not held to the same accessibility mandates as the traditional For Hire Vehicle industry.

Underserved, Low Income & Minority Communities Are Left at the Curb by TNCs

- One result of TNC "surge pricing" is that communities with limited or no TNC access, such as low-income and minority communities, may be "redlined" since drivers may choose not to operate in those areas;
- Rural communities, where low population density and a host of other factors dis-incentivize drivers from expanding service, will be largely excluded from TNC service;
- Unbanked and under-banked communities, in which individuals have little or no access to the financial institutions required to pay for TNCs, will be unable to access TNC services;
- Individuals without smartphone access, or who do not possess the technological expertise necessary to request TNC service, will also be unable to access TNC services; and
- A severe reduction in taxicab service, due to competition from TNCs, could exacerbate transportation disadvantages for those who do not have access to TNC services and had previously relied on taxi service.

TNCs Cause Traffic Congestion, Harm the Environment & Augment Negative Externalities

- TNC proliferation threatens cities' efforts to reduce the number of personal motor vehicles on the road, setting back decades of transportation planning and policy aimed at mitigating congestion and pollution, and encouraging shared mobility and mobility management;
- Unregulated TNC growth could cause congestion and harmful environmental impacts through the proliferation of nitrogen oxides, fine particulate matter, volatile organic compounds, carbon monoxide, sulphur dioxide, greenhouse gases and air toxics;

- In the United States, vehicles are responsible for 27% of hydrocarbon emissions, 51% of carbon monoxide (CO) emissions, 20% of nitrogen oxide (NOx) emissions and 18% of carbon dioxide (CO2) emissions;
- In the NYC FHV market, Uber's reported for-hire vehicle numbers were the basis of a modest assumption of various parameters the cumulative impact of Uber and other app based companies' growth in NYC's environment for some context, which produces estimates that 1,590,146 pounds of CO_2 are generated daily;
- Congestion has resulted in losses to local businesses and government taxpayers impacted by it, with additional time and public funds spent on road repair, while labor force activity, business and government operations are negatively impacted by traffic jams and gridlock;
- Congestion is further exacerbated by TNCs' usage of so-called "surge pricing" due to the incentive for all or most part-time on demand economy TNC vehicle drivers being fiscally rewarded by working already congested areas during peak business period (a/k/a rush hour in central business districts of urban environments);
- Urban areas are projected to continue growing at a rapid rate, and, as a result, policy makers must take into consideration how they will allow TNCs to continue to grow to avoid a "collision course" with environmental and sustainability policy; and
- Although TNCs and regulators have embraced the concept of "ridesharing" and TNCs have sought to capitalize on that term by promoting services such as UberPool and Lyft Line, the reality is that there is not much sharing going on—trip requests are generally one-to-one like other for-hire services.

TNCs Lack Social Corporate Responsibility & Ethics

- TNCs market themselves as socially responsible businesses when, in reality, they have built a highly sophisticated crafted web of tax avoidance depriving cities and nations out of hundreds of millions in tax revenue;
- Local taxicab and for-hire vehicle transportation providers are obliged to pay their local taxes, which increases their cost burden and forces them to charge higher fares than the TNCs are able to offer, putting the traditional industry at a competitive disadvantage for fulfilling its civic duty;[6] and
- Without the advantage of a TNC's tax structure, local taxicab and for-hire vehicle providers are forced out of business, further decreasing the tax revenue to the government.

[6] In some cases, TNCs pass along the tax burden to drivers while keeping the non-taxed portion of the bulk of the fare.

Not Sharing in the Sharing Economy – The TNC Gig Worker and Economic Disadvantage

- The use of the term the "sharing economy" to define the services provided by TNCs has led to a policy divergence in how these services should be regulated;
- TNCs have utilized this definitional mismatch to proliferate their vehicles and drivers in many cities arguing that their service is different from the traditional for-hire services by augmenting the rideshare concept to meet their marketing strategy;
- The source of the definitional mismatch is a deliberate advocacy by TNCs and in part by the media which finds its genesis in the Napster peer-to-peer file sharing model;
- TNCs service is best described as an access economy, where these companies facilitate access to FHV service through their app based platform;
- The cost of the misconstrued sharing economy model is exhibited on the dwindling driver income, where TNCs are inappropriately using the independent contractor model to extract maximum value of relationship with driver leading to driver unrest and multiple litigations;
- TNCs unregulated expansion has also impacted the environment and the labor market with cities being engulfed with thousands of vehicles;
- The continued expansion strategy by TNCs and the reduction of minimum fares has meant that average driver income may be reduced significantly; and
- Driver turnaround and the majority of TNC drivers being part-time has created a driver pool that is overly represented by inexperience, with a direct negative consequence on safety and quality of service on the long run.

In order to address these growing concerns, stakeholder organizations and representatives must be aggressive and act quickly in communicating the data in this report to governmental decision-makers and the public at large. TNCs must end their questionable practices so that all can enjoy the benefits of public transportation without the escalating costs to taxpayers and the environment. Without a focused attention on these issues, history may prove that the TNC proliferation movement will leave this world worse off – especially for the disabled, poor and underserved – than it was before Uber became known in the transportation lexicon.

Despite the negative consequences of the transportation technology disruption movement initiated by TNCs, there is an opportunity at hand to not only solve these problems, but to help create a new regulatory and transportation paradigm from the ashes, a sort of shared-eco-multi-modal mobility Phoenix which could bring together all of the recommendations and observations in this report to engage in both short and long-term planning as well as immediate corrective actions. Legislators, regulators and other policymakers must work together with various stakeholders, including both new entrant technology companies and incumbent private transportation providers, accessibility, environmental and equity advocates, as well as regional planning organizations, to develop a long-term strategic mobility plan that incorporates real ride-sharing, leveling

the playing field once and for all by having equal licensing standards for TNCs and taxis/for-hire vehicles, multi-modal integration, engage in environmental studies on the growth of all vehicles, identify mitigating measures, promote safety incentives and standards for our roads, ensure equal access for persons with disabilities as well as a "liveable wage" for TNC drivers. The future could involve more silo planning, with various modes and sub-modes operating independently, using politics, lobbying and special interests to manipulate grass roots political opinion, with the effect of usurping professional urban transportation and mobility planners, or everyone can work together to find solutions that benefit all, or most, in a fair and equitable manner to encourage competition, better and less expensive service. It is up those reading this report to share it with the right people and take action, not sit on our hands while an opportunity passes us by and let those with vested business interests plan our transportation future to the detriment of our most vulnerable passengers and citizens.

I. Transportation Network Companies' Failure to Adequately Serve Passengers with Disabilities

Transportation Network Companies ("TNCs") do not provide the same service to people with disabilities when compared to their service for those who are non-disabled. Any internet search of the terms "Uber" and "accessibility" reveals myriad news articles, blog entries, and litigation references supporting this proposition. Whether it be through litigation, legislation, or the flaws in the TNC business model, the issue of whether TNCs can or will provide equal service to the disabled community is one that continues to be fought vigorously by these parties.

The below analysis of the TNCs' widespread failure to provide equivalent service to people with disabilities will include a focus on substantial accessibility progress that has now been halted by the proliferation of the TNCs; litigation by disability stakeholders such as advocates for people with disabilities that attempts to hold TNCs liable for providing equivalent service; legislation enacted (or not) that further alienates people with disabilities; and an examination of how the TNC business model affects the plight of people with disabilities who desire access to TNC service.

A. Accessibility Progress Halted

Although this report will provide information regarding initiatives from around the United States and beyond, arguably the most relevant case example regarding how the proliferation of TNCs has disrupted much of the hard-fought progress made in providing wheelchair-accessible taxicab and for-hire transportation can be found in New York City, which contains over 60% of the passenger car service industry in North America, and over 30% of the industry worldwide.[7] An analysis of New York City's current progressive approach to accessibility has its roots in local human rights laws in addition to developments at the federal level.

The United States federal government enacted laws such as Section 504 of the Rehabilitation Act of 1973[8] and the Americans With Disabilities Act (the "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 United States Department of Transportation ("USDOT"), which contributed to the language in the ADA, acknowledges that accessible taxicab service is important to individuals with disabilities, and encouraged taxi fleets to offer accessible cabs, but stopped short of mandating a requirement for taxicabs to be fully accessible, since it concluded that it would be unreasonable to enforce such a requirement.[9] Mass transportation entities are required to make efforts to purchase or lease wheelchair-accessible vehicles, although this mandate does not apply to private entities providing

[7] *INTRODUCTION: A brief summary of the taxi and for-hire industry in the United States and New York City*. TLC Magazine, July 2014, Vol. XXIII, No. 7. http://tlc-mag.com/TLC_home.html.
[8] *Section 504, Rehabilitation Act of 1973*. United States Department of Labor. http://www.dol.gov/oasam/regs/statutes/sec504.htm.
[9] *Preamble—Transportation for Individuals With Disabilities [September 6, 1991]*. US Department of Transportation Federal Transit Administration. http://www.fta.dot.gov/12876_4058.html

taxi service.[10] However, the ADA is not completely silent on taxicab service for individuals with disabilities, and does, in fact, specifically address 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.[11] This is also true for private entities that provide other transportation services, such as limousines and car services.[12]

Although taxi drivers are not required to purchase wheelchair accessible vehicles, the ADA provides that when a vehicle is purchased for use as a taxicab that is not considered an automobile (i.e. a minivan), the vehicle must be accessible unless the provider can demonstrate that it is providing equivalent service under the "Equivalent Service Standard," which states that providers of taxi service will be in compliance with the ADA if individuals with disabilities are provided the following service characteristics in an equivalent matter to individuals who are not considered disabled:

Response time;

Fares;

Geographic area of service;

Hours and days of service;

Availability of information;

Reservations capability;

Any constraints on capacity or service availability; and

Restrictions or priorities based on trip purpose.[13]

As of October 2013, New York City's taxi fleet consisted of 13,237 vehicles,[14] of which only 231 taxicabs were wheelchair-accessible.[15] However, twenty-two (22) months earlier in December 2011, Governor Andrew M. Cuomo signed into law the Street Hail Livery Law (the "SHLL," upheld by the New York State Court of Appeals on June 6, 2013), which sought to address two key issues: (1) the lack of accessible vehicles for City residents and non-residents with disabilities, and (2) the lack of availability of yellow cabs in the four (4) boroughs outside Manhattan (or the "outer boroughs"), as well as the areas of Manhattan outside of its Central Business District ("CBD"). The law authorizes the TLC to auction 2,000 yellow taxicab medallions for accessible taxicabs, as well as 18,000 "green" taxicabs, 3,600 (or 20%) of which must be accessible, and which are permitted to pick-up street hails in all boroughs.

The SHLL vehicle outer borough permits are to be sold over the course of three (3) years, as follows: 6,000 permits each year to existing livery vehicle owners and/or

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[10] *Part 37—Transportation Services for Individuals With Disabilities*. US Department of Transportation Federal Transit Administration. http://www.fta.dot.gov/12876_3906.html.
[11] *Id.*
[12] *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.
[13] *Part 37—Transportation Services for Individuals With Disabilities*. US Department of Transportation Federal Transit Administration. http://www.fta.dot.gov/12876_3906.html.
[14] *Notice of Completion of the Final Environmental Impact Statement*. New York City Taxi & Limousine Commission, October 24, 2013. http://www.nyc.gov/html/tlc/downloads/pdf/feis_notice_of_nompletion.pdf.
[15] Goulden, Steven. Notice of Public Hearing and Opportunity to Comment on Proposed Rules. *New York City Taxi & Limousine Commission*, December 18, 2013.
http://www.nyc.gov/html/tlc/downloads/pdf/tlc_proposed_accessibility_rules_capa_certified_121913.pdf.

drivers who have been in good standing with the New York City Taxi & Limousine Commission (the "TLC") for one (1) year. Further, although the SHLL requires that a minimum of twenty percent (20%) of all outer borough livery vehicles be wheelchair accessible, the TLC has stated in its long term disability plan that this percentage will reach 50%, or 9,000 vehicles by 2020.[16] Purchasers of SHLL licenses will also be eligible to apply for grants up to $15,000 to either purchase a wheelchair accessible vehicle, or to retrofit their existing vehicle to make it wheelchair accessible.[17]

On April 30, 2014, the TLC adopted rules that provide that 50% of the City's yellow taxicab fleet be wheelchair accessible by 2020[18] pursuant to a settlement brought about from litigation by disability advocates against the City for lack of accessibility in the City's yellow taxicab fleet.[19]

Progress in providing accessibility in the taxicab industry has been made elsewhere. For example, in Philadelphia, all 150 medallions to be sold extra over the next ten (10) years must be accessible,[20] and a rule has been proposed that all taxicabs of retirement age are to be replaced by an accessible taxicab with an ultimate goal of a 100% accessible fleet by 2024.[21]

In San Francisco, there is an incentive program in its paratransit program that provides taxicab drivers with: i) $10 for each wheelchair accessible taxicab trip used for a paratransit trip; ii) a $10 per trip credit off the cost of a medallion down payment if 10 or more paratransit trips through wheelchair-accessible taxicab are made; and iii) an airport short line pass upon completion of two (2) wheelchair accessible taxicab paratransit trips per month in outlying neighborhoods.[22]

In Chicago, anyone who owns 20 or more taxicab medallions must have 5% of that fleet be wheelchair accessible, and by 2018, anyone who owns 10 taxicab medallions must have at least one (1) wheelchair accessible vehicle.[23] There is also a wide-ranging incentive program, including awarding its medallion owners $15,000-$20,000 for accessible conversions or purpose built vehicles.[24]

Other progress within the United States includes accessibility requirements in Miami (3% of its taxicab fleet must be accessible and must be connected to a fixed base call center operating 24 hours a day, 365 days per year)[25] and Washington, DC (all taxicab companies with 20 or more vehicles must dedicate 20% of their fleet to wheelchair-accessible vehicles by 2018).[26]

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[16] http://www.nydailynews.com/new-york/nyc-taxis-accessible-tlc-plan-article-1.1817161.
[17] *New York State Assembly Bill A8691A-2011*.
http://assembly.state.ny.us/leg/?default_fld=&bn=A08691&term=2011&Summary=Y&Actions=Y&Text=Y.
[18] *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.
[19] *Noel v. New York City Taxi & Limousine Comm'n,* 837 F. Supp. 2d 268 (S.D.N.Y. 2011).
[20] http://www.philapark.org/2014/05/ppa-committed-to-wheelchair-accessible-taxicabs/
[21] http://articles.philly.com/2015-07-04/news/64070927_1_cabs-wheelchair-accessible-vehicles-ppa
[22] https://www.sfmta.com/sites/default/files/PCC%20minutes%20March%2012.pdf
[23] http://www.cityofchicago.org/city/en/depts/bacp/provdrs/vehic/news/2014/sep/wheelchairaccessibletaxicabs.html
[24] http://www.cityofchicago.org/city/en/depts/mopd/provdrs/advoc/news/2016/april/Financial_Incentives_to_Increase_Number_of_Wheelchair-AccessibleTaxicabs.html
[25] http://www.miamidade.gov/business/taxicab-wheelchair-accessible.asp
[26] http://dfhv.dc.gov/sites/default/files/dc/sites/dc%20taxi/page_content/attachments/DC%20Taxicab%20Comission%20Disability%20Advisory%20Committee%20Comprehensive%20Report%20022014%20FINAL%20w%20Addendum.pdf

Canada has also embraced accessibility in its taxicab industry. In British Columbia, its stated goal is to have wheelchair accessible taxicabs in fleets containing eight (8) or more vehicles.[27] Ontario requires all municipalities to consult with their municipal accessibility advisory committee to determine the proportion of on-demand accessible taxicabs required in the community,[28] and the city of Toronto has mandated a fully accessible taxicab fleet by 2024.[29] Ottawa and Vancouver have steadily increased their accessible taxicab requirements resulting in both having 16% of their taxicab fleets wheelchair-accessible.[30]

Despite the above-described progress in transportation accessibility exhibited for taxicabs and the for-hire vehicle industry, the proliferation of TNCs (whether actually operating as a TNC or not) has begun to display signs that this progress may be halted. For example, in New York City, only 350 of the 2,000 yellow accessible medallions authorized in the SHLL and only 1,800 of the 3,600 accessible permits for the outer borough vehicle permits have been sold, and demand and policy decisions may have been affected by the unprecedented growth of Uber.[31] Although the New York City model is not a pure "TNC" model, New York City is an example of how a statute may be enacted to increase accessibility, yet the desired outcome is in jeopardy through the unchecked growth of the TNCs.

Further, Uber, for example, does not have a viable and real solution for motorized wheelchair users (or those who cannot be transferred from their wheelchairs to the car seat), in NYC or elsewhere, due to its business model, which, like all TNCs, is as follows: a TNC such as Uber provides a smartphone application platform for passengers to connect with independent contractor drivers who use their own vehicles in order to coordinate transportation from a place of origin to a desired location. Uber will also facilitate an electronic payment for the transaction, but does not allow for cash payments in the vast majority of cities it operates in. Electronic payments are exclusively accepted, and drivers are not capable of altering the Uber-dictated fare charged to the passengers, a percentage of which is collected by Uber with the remainder of the fare deposited in the driver's bank account.

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 transferred from their wheelchair to the car seat, rests with the "drivers who use their own vehicles." Unfortunately, there are so few TNC drivers who operate a wheelchair-accessible vehicle, and even those who do so are simply not properly trained to deal with the needs of a passenger with a disability – including, but not limited to, proper safety precautions with loading, unloading, and securing the passenger; maintenance of the equipment within the vehicle; and disability etiquette (it may be of concern that a wheelchair-user who would like to participate as an Uber driver would have some difficulty with the physical demands of assisting a wheelchair-user who is a passenger). Indeed, in a post on its own website entitled "Greater accessibility for riders and drivers," Uber, while making the general claim that

[27] http://www.th.gov.bc.ca/ptb/operational_policies.htm#IV_1
[28] https://www.ontario.ca/laws/regulation/r11191#BK35
[29] http://www.toronto.ca/legdocs/mmis/2015/di/bgrd/backgroundfile-79596.pdf
[30] http://documents.ottawa.ca/sites/documents.ottawa.ca/files/documents/otlrsr_accessibility_en.pdf
[31] http://www.amny.com/transit/only-350-of-2-000-wheelchair-accessible-cab-medallions-have-been-sold-letter-1.10963759.

"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 transferred from the wheelchair to the car seat. [32]

Further, in the seven (7) cities that Uber has entered into a pilot program utilizing its uberWAV or uberASSIST – app options to provide drivers who are "knowledgeable of accessibility needs" – only two (2) cities, Chicago[33] and San Diego,[34] claim that vehicles with ramps or hydraulic lifts are available for passengers who require them. Additionally, a closer look at the uberWAV option reveals that Uber itself does not provide wheelchair-accessible vehicles. In fact, it farms out the trips to operators of existing wheelchair-accessible green outer borough taxicabs in New York City,[35] wheelchair-accessible taxicabs in Chicago[36] and paratransit vans in Philadelphia.[37]

The TNC business model further challenges the regulations that face the traditional taxicab and for-hire vehicle industry, creating a disproportionate accountability mechanism between this industry and TNCs. For example, as stated above, New York City's taxicab industry is undergoing a mandated sea change whereby 50% of its fleet is to be wheelchair accessible by 2020, a goal that is being accomplished through a forced lottery for the conversion of medallions to require the operation of a wheelchair-accessible vehicle.[38] New York City's licensed for-hire vehicle bases, including licensed bases required of those companies operating as TNCs elsewhere, must have the capability to dispatch a wheelchair-accessible vehicle.[39] By and large, TNCs in other jurisdictions, where the TNC model is fully utilized, are not subject to these requirements.

Despite the progress that has been made in accessibility in the United States and Canada, the proliferation of TNCs and their increasing popularity threatens to derail this progress, as exhibited by the statutory accessibility mandates in New York City that are now threatened to actually become a reality. This trend that could repeat itself in the mandates described above in other jurisdictions within the United States and Canada.

The open question is how TNCs will address concerns from the members of the disabled community and offer their own wheelchair-accessible vehicles. One indication can be found in their settlement with Seattle, which allowed the legal proliferation of TNCs in exchange for, among other things, a $0.10 surcharge on every trip to provide funding wheelchair-accessible taxicabs.[40] This follows a similar solution in New York City that applies a $0.30 surcharge on each taxicab trip that is ostensibly funneled into an account that funds increased accessibility in the City's taxicab and for-hire vehicle industry[41] (albeit not otherwise funded by TNCs). However, throwing money at the problem, by TNCs even paying for wheelchair accessible service, is not the same for persons with disabilities, as these individuals would like to take TNCs as well.

[32] https://newsroom.uber.com/greater-accessibility/.
[33] https://newsroom.uber.com/us-illinois/uberaccess-expanding-transportation-options/.
[34] https://newsroom.uber.com/us-california/uberaccess-sd/.
[35] https://newsroom.uber.com/us-new-york/wheelchair-accessible-rides-with-uberwav/.
[36] https://newsroom.uber.com/us-illinois/uberaccess-expanding-transportation-options/.
[37] https://newsroom.uber.com/us-new-york/wheelchair-accessible-rides-with-uberwav/.
[38] http://www.nyc.gov/html/tlc/downloads/pdf/newly_passed_rule_accessibility_and_surcharge.pdf.
[39] http://www.nyc.gov/html/tlc/html/faq/faq_access_veh.shtml.
[40] http://www.geekwire.com/2014/seattle-legalizes-uber-lyft-operate-without-caps/.
[41] http://www.nyc.gov/html/tlc/downloads/pdf/newly_passed_rule_accessibility_and_surcharge.pdf.

Equivalent service applies on a per company basis, and the best solution is not to palm off responsibility to other related industries with different fare models and regulatory responsibilities.

B. Litigation Against TNCs by Disability Advocates

On November 12, 2014, the California chapter of the National Federation of the Blind ("NFB"), a not-for-profit organization dedicated to improving the quality of life of those who are blind, filed its First Amended Complaint (the "Complaint") in the United States District Court, Northern District of California, against Uber (a case entitled *National Federation for the Blind v. Uber Technologies, Inc.*), alleging: 1) violation of Title III of the ADA; 2) violation of the California Unruh Civil Rights Act ("UCRA"); and 3) violation of the California Disabled Persons Act ("CDPA"), as well as a request for declaratory relief.

The outcome of this case could have had far-reaching consequences for the ability of Uber to operate in other jurisdictions. NFB alleged a violation of Title III of the ADA, which, *inter alia*, prohibits discrimination on the basis of disability: 1) by owners of places of public accommodation (entities that are open to, and used by, the public);[42] and 2) in the full and equal enjoyment of public transportation services provided by a private entity that is "primarily engaged in the business of transporting people and whose operations affect commerce."[43] NFB also alleged that Uber violated Title III of the ADA by its failure to make reasonable modifications in its policies, practices or procedures when such modifications are necessary to afford its services to individuals with disabilities.[44]

The U.S. Department of Justice filed a Statement of Interest in this matter on December 23, 2014,[45] addressing the alleged ADA violations by Uber and its statement in a Motion to Dismiss stating that the Complaint should be dismissed "to the extent it is based on the allegation that Uber's app or website constitutes a place of public accommodation or that (Uber) own(s), lease(s) or operate(s) a place of public accommodation under the ADA." To wit, the United States government argued that it was irrelevant whether Uber is a "public accommodation" or not, as Uber's liability fell under NFB's allegation that Uber is discriminating against people with disabilities by preventing them from the full and equal enjoyment of public transportation services provided by a private entity that is "primarily engaged in the business of transporting people and whose operations affect commerce[46] and that does not have to be considered a "public accommodation." This was also explained by the U.S. Department of Justice that the applicable section of Title III applied to private entities primarily engaged in the business of transporting people that provide "demand responsive service," which is defined as "any system of providing transportation of individuals by a vehicle, other than…a fixed route system."[47]

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[42] 42 U.S.C. §12182(a).
[43] 42 U.S.C. §12184(a).
[44] 42 U.S.C. §12182(b)(2)(a)(ii); 42 U.S.C. §12184(b)(2)(A).
[45] https://www.ada.gov/briefs/uber_soi.pdf
[46] 42 U.S.C. §12184(a).
[47] 42 U.S.C. §12181(3).

Additionally, the U.S. Department of Justice explained its rationale that Uber was liable for ADA violations because the US Department of Transportation's ("DOT") regulations (which incorporate the tenets of the ADA) state that to "operate" a demand responsive service includes "the provision of transportation services by the private entity itself or by a person under a contractual or other arrangement or relationship with the entity."[48] Further, the DOT regulations specifically state that these entities "shall permit service animals to accompany individuals with disabilities in vehicles."[49]

The parties in *National Federation for the Blind v. Uber Technologies, Inc.* entered into a settlement before the court could rule, which, while providing some relief for passengers who use guide dogs, could otherwise have been the premier landmark case potentially mandating that TNCs provide accessibility for all people with disabilities.[50]

There is also litigation pending in federal court in Texas, entitled Salovitz v. Uber Technologies, Inc., whereby a wheelchair-user is suing Uber for failing to provide a wheelchair-accessible vehicle, thus "den(ying) Plaintiff and others similarly situated, because of their disability, the opportunity to participate in or benefit from a good, service, facility, or accommodation that is equal to that afforded other individuals."[51] Further, in New York City, a disability rights advocate has filed a complaint with the New York City Commission on Human Rights against Uber also accusing it of discriminating against people who use motorized wheelchairs, and alleging that the uberWAV platform is not a "reasonable accommodation" because it is both difficult to find in the Uber app and charges an extra $2.00 booking fee.[52] Each of these lawsuits may lead to a ruling that holds TNCs accountable for providing wheelchair-accessible vehicles and equal service to people with disabilities.

C. TNC Legislation Further Alienating Passengers with Disabilities

While people with disabilities continue to fight in the courtroom, they have been forced to open a second front within the confines of legislation being passed into law, or not, around the country that allows TNCs to operate while avoiding an accessibility mandate. For example, just months ago, the New York City Council proposed five (5) bills purporting to regulate the for-hire vehicle industry, including entities that use "any website, smartphone application, software program accessed through an electronic device, or similar publically-available, passenger-facing booking tool."[53] To the consternation and outrage of disability advocates, none of the legislative proposals addressed the issue of mandating an accessibility requirement.[54] Unfortunately, this lack of action mirrors the lack of legislative progress made in terms of mandating TNCs provide wheelchair accessible vehicles. For example, some municipalities, such as

[48] 49 C.F.R. §37.3.
[49] 49 C.F.R. §37.167(d).
[50] https://nfb.org/groundbreaking-settlement-end-discrimination-against-blind-uber-riders-who-use-guide-dogs.
[51] http://www.leagle.com/decision/In%20FDCO%2020141017C40/SALOVITZ%20v.%20UBER%20TECHNOLOGIES,%20INC
[52] https://www.buzzfeed.com/johanabhuiyan/disability-rights-advocate-files-discrimination-complaint-ag?utm_term=.ieb5D20k0#.dijqjKQ4Q

[53] http://legistar.council.nyc.gov/LegislationDetail.aspx?ID=2576131&GUID=C503B21D-F38E-47CA-AC4F-6BB21D575035
[54] http://www.nydailynews.com/new-york/disability-advocates-mad-pols-nyc-cab-regulations-article-1.2546966.

Portland, Oregon[55] and Minneapolis,[56] allow TNCs to simply contract with a permitted operator of wheelchair accessible private for-hire vehicles (thus permitting a farming out of the mandate), while others, such as Austin[57] and Seattle,[58] have simply decided that TNCs should be required to pay a surcharge to be put in a general "accessibility fund" in order for others to achieve some kind of vague accessibility mandate. These so-called "solutions," involving TNCs simply "passing the buck" on providing accessible service, simply do not mirror the many accessibility mandates that exist for the traditional for-hire industry.

D. Conclusions

The proliferation of TNCs has greatly slowed, and threatens to halt, actual progress being made to provide wheelchair-accessible vehicles in the for-hire industry throughout the United States and Canada, in the following ways:

- The proliferation of TNCs has greatly slowed, if not halted, progress being made to convert a large portion of taxicabs in New York City to wheelchair-accessible vehicles and creates challenges in jurisdictions throughout the United States and Canada;
- TNCs continue to argue that the Americans with Disabilities Act ("ADA"), a law designed to provide inclusiveness for all, does not apply to their operations in any way;
- TNC vehicles and drivers rarely have the capability to accommodate electric wheelchairs and scooters; and
- TNCs are, by and large, not held to the same accessibility mandates as the traditional For Hire Vehicle industry, and are allowed to either farm out accessibility requirements or throw money at the problem by paying into a fund that others would utilize to provide accessibility for passengers who require it.

[55] https://www.portlandoregon.gov/citycode/?c=28593#cid_562752
[56] http://www.ci.minneapolis.mn.us/www/groups/public/@regservices/documents/webcontent/wcms1p-129014.pdf
[57] http://www.austintexas.gov/edims/document.cfm?id=219353
[58] http://www.seattle.gov/business-regulations/taxis-for-hires-and-tncs/transportation-network-companies/tnc-companies

II. The Business Model of TNCs: Hiding Data and "Surge Price"

The pricing model that Uber and most other TNCs implement has been referred to as "dynamic pricing" or "surge pricing." Surge pricing refers to TNCs increasing their prices in certain areas, or at specific times, in response to local demand. Surge pricing has resulted in nightmares for many consumers who unknowingly agree to pay exorbitant prices for relatively short rides, and then only notice the steep charges until after the ride is complete. This occurs during peak demand times, with the greatest surges often following large events and holiday celebrations. For example, every year on New Year's Day a host of disgruntled consumers shares their stories of excessive surge price charges from the night before. Customer receipts show numerous examples in which the "surge" increased the rate to 9.9 times the normal fare, and what would have normally cost a rider $20.71, resulted in a $205.03 charge for the roughly 20 minute trip.[59]

In theory, surge pricing takes place when demand for service exceeds the number of available vehicles. TNCs argue that the higher fares incentivize drivers to providing trips when there are more ride requests than drivers looking for fares by encouraging drivers to be available in areas where they typically would not have been otherwise. Predictably, fares that surge to multiple times the average price can have the effect of pricing out certain population segments, resulting in drivers choosing not to operate in certain areas altogether, a practice known as redlining.[60] In other words, drivers may refuse to operate in communities where there is less of an opportunity to earn large fares, and thus discouraging drivers from providing services in what have traditionally been underserved areas. Because TNCs strictly control their data -- and much of the data they release to the public portrays them in a positive light -- it is difficult to definitively determine the net effects of surge pricing on the wider transportation industry, its consumers and stakeholders.

In January 2015, UberX announced that it would start sharing anonymized trip data with the City of Boston on a quarterly basis as part of the company's new national data-sharing policy.[61] This information could have potentially been very helpful in analyzing the net effects of surge pricing in the Boston community.[62] The goal of the agreement was to give Mayor Martin J. Walsh's administration unique insight into how people get around the City of Boston, and assist in the development of the City's transportation policy and planning goals.[63] Unfortunately, Uber's failure to provide useful data has made it difficult to conduct any worthwhile analysis.[64] Uber agreed to hand over all trip data on a quarterly basis, but in addition to failing to cooperate at times, the data handed over does not show specifically where riders' trips began or ended.[65] Instead, the pick-up and drop-off locations only provide the zip codes, not the actual

[59] https://www.buzzfeed.com/stephaniemcneal/uber-hangover?utm_term=.ehx3W62jqM#.woOg8a4yKN.
[60] "Redlining" refers to the formal or informal practice of establishing geographical borders where service will not be offered.
[61] Badger, E. (2015 , January 13). Uber offers cities an olive branch: your valuable trip data. *The Washington Post*.
[62] https://www.boston.com/news/business/2016/06/16/bostons-uber-partnership-has-not-lived-up-to-promise.
[63] *Id*.
[64] *Id*.
[65] Note: Emails show that the city agreed to the zip code limitations as the agreement was drafted in early 2015. https://www.boston.com/news/business/2016/06/16/bostons-uber-partnership-has-not-lived-up-to-promise.

address.[66] Because Boston's zip code areas are too large, the current data sets do not allow for analysis of how proximity to public transit affects Uber usage, how a new building affects transportation patterns, or how service in particular neighbors has been effected by surge pricing.[67]

On December 11, 2015, the Transportation Research Board officially released its report entitled "Between Public and Private Mobility – Examining the Rise of Technology-Enabled Services," which takes a deep dive in analyzing the effects of the proliferation of TNCs and will be cited throughout this report. [68] As mentioned in the report by the Transportation Research Board, the data and research currently available regarding TNC services, while increasing, is far less developed than is the case for other modes of transportation.[69] This is due, in part, to the fact that TNCs have been growing at a rapid pace, and, in doing so, sharing relatively little information with the public. Given the fast pace of TNC development and expansion, coupled with the lack of reliable public datasets, this analysis of TNCs' impact on underserved communities draws upon news articles and blogs from reputable sources for context and additional information.

A. Underserved Communities

Innovative mobility options, such as TNCs, while having the potential to increase access to transportation services, may also leave those who are already transportation disadvantaged even further behind.[70] Individuals who cannot utilize these new services due to affordability or lack of proximity to areas served will be relatively worse off. Furthermore, the rise of TNCs may reduce the availability of some existing services, potentially leaving those who cannot access or afford TNCs without the transportation services they previously relied on, thus, again, making the transportation disadvantage to an individual even worse than before the arrival of TNCs.

In analyzing the TNCs' impact on underserved communities, the following subsections will focus on communities that have been traditionally underserved (low-income, minority, rural communities), and those whose access has been restricted by the TNC business model (requiring the use of a smartphone and access to banking facilities).

The underserved communities our analysis will focus on include: (i) Low-Income Communities; (ii) Minority Communities; (iii) Unbanked Populations;[71] (iv) People Without Smartphone Access; and (v) Rural Communities.

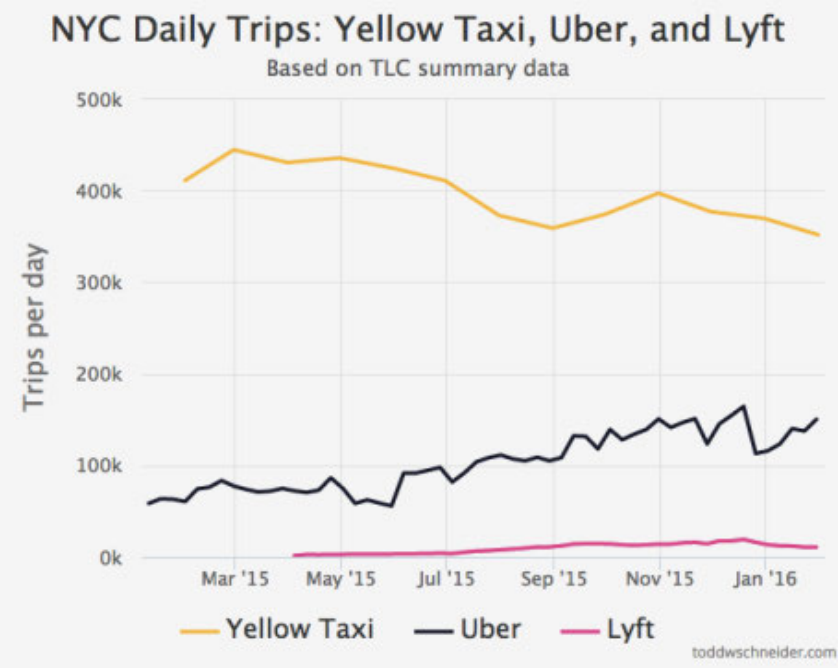
i. Low-income communities

Low-income communities were often already disproportionately transportation disadvantaged before the advent of TNCs, which has only appeared to exacerbate the issue. A study by the Brookings Institute found that only one quarter (25%) of low and

[66] *Id*.
[67] *Id*.
[68] Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services, Special Report 319, The National Academies of Sciences, Engineering, and Medicine, page 6, 2015.
< http://onlinepubs.trb.org/onlinepubs/sr/sr319.pdf >.
[69] *Id*.
[70] *Id* at page 81.
[71] The term "unbanked" refers to people who lack credit or bank accounts.

moderate-skilled jobs in America are reachable by public transit within 90 minutes.[72] This situation leaves those individuals with the option to take public transit over a very long commute; or to adopt a more costly but efficient means of travel, such as by car. Although personal vehicles provide the greatest ease and convenience of travel, the cost burden of owning vehicles is significant, especially for lower-income households.[73] For those who are unable to afford a personal vehicle, taxicabs and TNCs are commonly used to fill their transportation needs.[74] However, as TNCs continue to grow rapidly and infiltrate and disrupt the regulated for-hire industry in markets all over the world, traditional transportation services—particularly taxicabs—have been dramatically impacted.

Many cities with a significant TNC presence have already seen a stark decline in the number of taxicab trips, posing many challenges for transportation and regulatory policy makers. ***For example, since ride-hailing services began operating in Los Angeles three years ago, the number of taxicab trips arranged in advance has fallen by 42%, according to city data, and the total number of trips has plummeted by nearly a third.***[75] In New York City, data from the TLC reporting for-hire vehicle usage demonstrates that yellow taxicabs provided 60,000 fewer trips per day in January of 2016, than they did in the same period in 2015.[76] Uber's affiliated vehicles, by comparison, made 70,000 more trips per day in January 2016 than they had the previous January, as reflected in the below chart:[77]



[72] http://www.brookings.edu/~/media/research/files/reports/2011/5/12-jobs-and-transit/0512_jobs_transit.pdf.
[73] Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services, Special Report 319, The National Academies of Sciences, Engineering, and Medicine, page 87-89, 2015.
< http://onlinepubs.trb.org/onlinepubs/sr/sr319.pdf >
[74] *Id*.
[75] http://touch.latimes.com/#section/-1/article/p2p-86538324/.
[76] https://www.dnainfo.com/new-york/20160406/kips-bay/uber-is-eating-up-all-rides-yellow-cabs-are-losing-study-says.
[77] *Id*.

According to a study by Uber's head of policy research, Jonathan Hall, and Professor Alan Kreuger of Princeton University, 42% of UberX drivers are working, at most, 15 hours per week, and another 34% are working 16 to 34 hours per week.[78] The average taxi medallion, often used by multiple drivers who lease the taxicab, is in service 29 days per month, 14 hours per day.[79] This indicates that while taxicabs are being displaced because of a decline in ridership, the TNC drivers who are attempting to substitute for taxicab service are picking and choosing when they drive, often electing to work during peak price periods. As stated above, the likely result is a service gap in areas and communities that drivers view as potentially less profitable.

A decline in taxicab service in places where underserved communities rely on taxicabs for lifeline services and job stability could very well result in severe consequences and greater transportation disadvantage.[80] If TNCs do not provide service in these communities, and competition continues to squeeze out traditional taxicab services, underserved communities could be forced to endure even greater transportation hardships.

Some have questioned whether TNCs, such as Uber (and their drivers) have, in fact, taken up the practice of redlining, or excluding, certain geographical areas from their services.[81] A study commissioned by Uber reported that its UberX rides are available in 21 low-income neighborhoods at "less than half the price of taxis and arrive in less than half the time."[82]

The findings are from a sample of low-income neighborhoods in only one large city, Los Angeles, and should be viewed as preliminary and not definitive.[83] This type of study requires independent replication in other cities and different types of low-income neighborhoods to produce credible findings about the relative geography, service quality, and price of TNC and taxicab service. Further, some familiar with the for-hire transportation industry questioned both the authenticity of the data, as well as the analysis, as Uber has the resources necessary obscure any unfavorable results.

Additionally, while the study shows that Uber services are conceivably available in low-income neighborhoods, the data does not indicate whether Uber's services are actually utilized in the very neighborhoods analyzed.[84] Mark Kleiman, co-author of the study and Chairman of the policy analysis firm Back of the Envelope Calculations ("BOTEC"), admitted the utilization is "not very high" in those 21 low-income neighborhoods.[85] While he also stated that his researchers did not see any evidence of redlining in the 21 neighborhoods under study, he admitted there may have been redlining in other, possibly dangerous, areas that were no-go zones in the study.[86] For instance, although the neighborhoods in the study had average incomes of $50,000 or

[78] http://dataspace.princeton.edu/jspui/handle/88435/dsp010z708z67d.
[79] *Id*.
[80] Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services, Special Report 319, The National Academies of Sciences, Engineering, and Medicine, page 1, 2015.
< http://onlinepubs.trb.org/onlinepubs/sr/sr319.pdf >.
[81] http://m.cartalk.com/blogs/do-uber-and-lyft-redline-low-income-communities.
[82] *Id*.
[83] *Id*.
[84] *Id*.
[85] *Id*.
[86] *Id*.

less, the neighborhoods selected were not those with the highest crime rates.[87] The simple fact that Uber paid for a study to investigate its impact and availability in low-income areas, and then redlined certain areas from being considered in the study, is revealing; if certain dangerous areas were intentionally excluded from the study, the chances that Uber would encourage a driver to provide service in those areas, or a driver voluntarily doing so, seems unlikely.

TNC drivers determine their own service hours and the areas in which they will operate, and are incentivized by Uber's business model to service the safest and wealthiest areas in which ride requests are made. A 2014 study by Renne and Bennett found that taxicab trips by the lowest-income households in urban areas are the shortest compared with those of other income groups, averaging just 4.3 miles.[88] TNC drivers, who have an opportunity to increase their wages through longer trips and surge pricing, may not voluntarily provide services to low-income communities where they would likely earn less. TNC service in low-income communities is not monitored as carefully as it tends to be for taxicabs, and some are concerned that Uber's dominance may sap the political will of the public to improve taxicab service as they struggle.[89] If this trend continues, it will likely lead to substantially reduced and lower quality services for those who either do not have access (for any of the reasons discussed below) or cannot afford to use TNCs, and the expansion of luxury options for those who can.[90]

Without additional government oversight and consumer protection, there is little evidence that TNCs would adequately and affordably substitute for taxicab service or public transit (specifically, in low-income and other underserved communities), potentially leaving these communities further underserved and transportation disadvantaged.

ii. Minority Communities

Much like low-income communities have been underserved by TNCs, minority communities have also seen a dearth of TNC services. An analysis of one month of uberX data throughout Washington D.C. suggests that neighborhoods with better service -- defined as those places with consistently lower wait times -- have larger white populations.[91] Uber surge pricing and wait time data was collected via the Uber API between February 3, 2016, and March 2, 2016, covering 276 locations in Washington D.C. The map below indicates that wait times are generally shorter in the center of the District and longer in the outskirts.[92]

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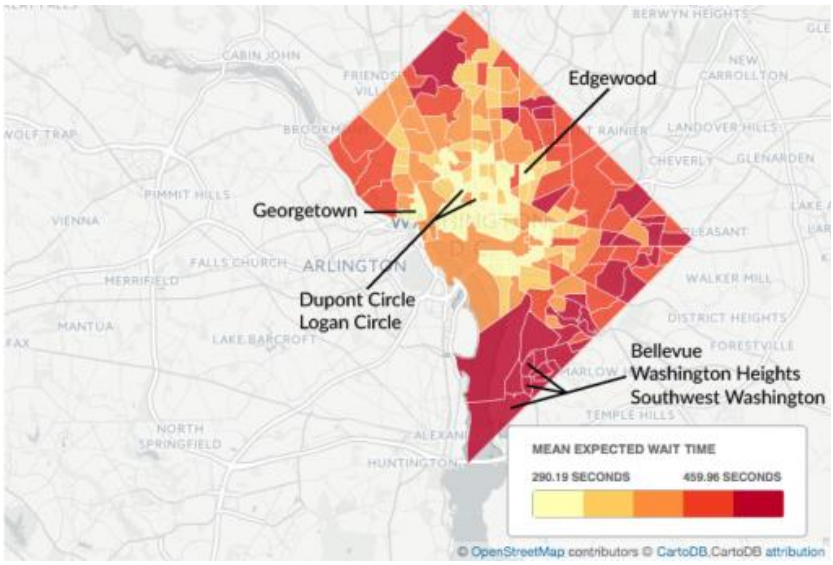
[87] *Id*.
[88] John L. Renne and Peter Bennett." Socioeconomics of Urban Travel: Evidence from the 2009 National Household Travel Survey with Implications for Sustainability." *World Transport Policy and Practice*. Volume 20.4, September 2014: page 7 – 25. < http://www.eco-logica.co.uk/pdf/wtpp20.4.pdf >
[89] http://mic.com/articles/124648/uber-vs-cabs-in-nyc-neighborhoods-in-one-chart#.XEl7RGQJ2.
[90] *Id*.
[91] https://www.washingtonpost.com/news/wonk/wp/2016/03/10/uber-seems-to-offer-better-service-in-areas-with-more-white-people-that-raises-some-tough-questions/.
[92] *Id*.



Census tracts with more minority populations (including Black/African American, Asian, Hispanic-Black/African American, and Hispanic/Asian) have longer wait times.[93] The analysis demonstrates, in short, that those living in neighborhoods with more minority populations will wait longer for an UberX vehicle because: 1) these areas typically do not surge price as commonly, drivers often neglect these areas; and 2) riders are forced to wait longer for a ride. In contrast, majority-white tracts, including Dupont Circle, Logan Circle and Georgetown, have the shortest wait times, averaging just over four minutes.[94] Additionally, these areas have surge pricing 43% of the time, thus attracting many drivers who want to earn more.[95] The correlation between minority populations and wait times holds true even when accounting for household income, poverty rates, and population density.[96] Accordingly, when comparing tracts where income, poverty and density are the same, the areas with increased minority populations will still experience longer average wait times. Uber also recently introduced a new delivery feature offered only in Northwest and Southeast Washington D.C., which ThinkProgress has called "*very selective in choosing whiter, more affluent neighborhoods*."[97]

In addition, poverty levels were shown to reinforce increased wait times in areas with a higher minority population. In areas with a higher percentage of minority populations ***and*** a higher percentage of poverty, passengers wait even longer for an UberX car.[98]

TNC drivers often use online forums to discuss how they "play the system" in order to optimize their earnings, including actively avoiding non-surge areas, and only going online in areas that typically surge. Some drivers even admit to strategically going

[93] *Id*.
[94] *Id*.
[95] *Id*.
[96] *Id*.
[97] ThinkProgress is a news blog founded in 2005 for the Center for American Progress, a progressive public policy research and advocacy organization.
< http://thinkprogress.org/economy/2014/08/19/3473323/uber-is-making-life-a-little-bit-easier-for-washington-dcs-white-people/>.
[98] https://www.washingtonpost.com/news/wonk/wp/2016/03/10/uber-seems-to-offer-better-service-in-areas-with-more-white-people-that-raises-some-tough-questions/.

offline in order to avoid receiving requests in certain areas, particularly if they are more dangerous, surge less often, or are lower-income. Both Uber and Lyft have no policies that prevent or discourage drivers from discriminating against individuals living in particular areas, which may be a contributing factor to the lack of available services in those neighborhoods.[99]

In Chicago, the taxicab industry filed a federal suit against the City in 2015 that included allegations that Uber is not serving the entire City, specifically alleging that its vehicles and drivers "*are heavily concentrated downtown and in affluent wards of the City, while neglecting poorer and minority wards*."[100] Chicago's taxicab industry also maintains that while the City has regulated it, requiring them to serve all of the City's wards, for close to a century, Uber and Lyft are exempt from these rules and monitoring.

Current anti-redlining laws apply to the taxicab industry, banks, mortgage lenders, and licensed contractors, which have been deemed necessary to avoid the result of low-income and minority communities becoming more isolated from the services benefitting wealthier and "whiter" communities.[101] In this vein, some argue that government regulation outlawing the type of redlining behavior displayed by TNCs is a necessary tool for reducing de-facto discrimination. Benjamin Edelman and Michael Luca, Assistant Professors of Business Administration at Harvard Business School, state that economies that rely on reputation and personal information built into business transactions may result in unintended consequences. To demonstrate this conclusion, Edelman and Luca co-published a study comparing African-American and non-African-American Airbnb hosts with similar apartments, photos and ratings. The study found that the non-African-American hosts tended to charge and earn 12% more than their African-American peers, suggesting that African-American Airbnb hosts were suffering from negative social selection and/or internal biases.[102]

Much like Edelman and Luca's case study of Airbnb, the facts suggest that race does play a role in predicting the service quality of TNCs in different neighborhoods.[103] Title VI of the Civil Rights Act of 1964 states that: "No person ... shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." These protections have since expanded to include additional protected classes, such as religion, age, gender, pregnancy, citizenship, familial status, disability, and veteran status.[104] Ensuring equity may also require a number of other groups, such as low-income individuals and communities, to be protected from discriminatory practices.[105] Title VI was amended in 1987 to apply the non-discrimination requirements to all recipients of federal aid, and not exclusively to programs and activities funded with federal funds. TNCs are beginning to receive more direct monetary and non-monetary support from local, state, and federally funded agencies (e.g., free or reduced cost parking

[99] http://www.dailykos.com/story/2014/05/27/1302417/-Ridesharing-and-Redlining-Uber-Lyft-Race-and-Class#.
[100] http://m.cartalk.com/blogs/do-uber-and-lyft-redline-low-income-communities.
[101] http://www.dailykos.com/story/2014/05/27/1302417/-Ridesharing-and-Redlining-Uber-Lyft-Race-and-Class#.
[102] Edelman, Benjamin and Michael Luca. "*Digital Discrimination: The Case of Airbnb.com*" Harvard Business School Working Paper, No. 14-054, January 2014.
[103] https://www.washingtonpost.com/news/wonk/wp/2016/03/10/uber-seems-to-offer-better-service-in-areas-with-more-white-people-that-raises-some-tough-questions/.
[104] http://www.ops.fhwa.dot.gov/publications/fhwahop16022/fhwahop16022.pdf.
[105] *Id*.

from public transit agencies), and extending non-discrimination requirements to TNCs could make significant strides towards ensuring greater transportation equity.[106] As Uber and other TNCs begin public-private partnerships with cities like Boston, regulatory agencies must further consider the steps that must be taken to ensure equitable access to these services.[107]

iii. Rural Communities

As private, for-profit businesses, TNCs have generally elected to enter large metropolitan areas where customer demand is greatest.[108] As discussed above, TNC drivers typically choose to operate in the most densely populated areas of cities with large numbers of potential customers who can financially afford the services.[109] Because the average trip distance is much longer in rural areas, residents of these areas must rely more heavily on private vehicles relative to urban or suburban residents.[110] Public transit is available to only about 13% of those in rural communities and to 37% of the small urban areas population.[111] Those living in rural areas without access to a public transit system or a personal vehicle, may ultimately find their ability to travel significantly restricted.[112]

While some have proposed that the TNC model could help meet a demand in very low-density areas, it is simply unlikely that TNC drivers would voluntarily expand service to rural residents,[113] as the incentive of lucrative surge pricing often solely occurs in a densely populated area. Uber drivers in rural areas such as Martha's Vineyard also complain about a lack of passenger demand, long drives between fares and trip revenue that does not cover gas or vehicle upkeep.[114] In addition, other factors such as unreliable cell service; Uber's resistance to small town regulations; local resistance to change, including a fear of exorbitant price hikes after Uber's elimination of any competition; and, most significantly, the lack of a reliable supply of drivers and customers, have been obstacles to TNCs' success in rural areas.[115]

An Uber spokesperson recently confirmed that the rural communities of upstate New York would be among the "last places" in the country Uber would be making a strong push.[116] In fact, while Uber claims to cover 75 percent of the U.S. population, it maintains its goal is to cover all Americans.[117] However, Harry Campbell, who hosts a popular website and podcast known as "The Rideshare Guy," postulates that Uber's true goal is to seek a growth in influence at the expense of providing transportation to the

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[106] *Id.*
[107] *Id.*
[108] Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services, Special Report 319, The National Academies of Sciences, Engineering, and Medicine, page 82, 2015.
< http://onlinepubs.trb.org/onlinepubs/sr/sr319.pdf >.
[109] *Id.*
[110] Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services, Special Report 319, The National Academies of Sciences, Engineering, and Medicine, page 90-91, 2015.
< http://onlinepubs.trb.org/onlinepubs/sr/sr319.pdf >.
[111] *Id.*
[112] *Id.*
[113] *Id.*
[114] http://www.nytimes.com/2015/09/06/travel/uber-marthas-vineyard.html?_r=1.
[115] https://www.thezebra.com/insurance-news/2140/uber-in-small-towns-the-good-the-bad-and-theinevitable/.
[116] http://www.theverge.com/2015/10/23/9603324/uber-coverage-rural-areas-dominance-plan.
[117] *Id.*

underserved by stating that "drivers aren't making a ton money in these small towns; the dominance effect is what they're really going after."[118]

iv. Unbanked and Underbanked Populations

A significant number of Americans are currently underserved by TNC services because of their lack of access to credit and/or bank accounts. The Federal Deposit Insurance Corporation (the "FDIC") has done extensive research on the so-called "underbanked" and "unbanked" populations, whom they collectively term the "underserved."[119] Nearly 33% of all Americans are considered unbanked or underbanked and are therefore unable to utilize TNCs.[120] The FDIC estimates that 17 million people, or 8%, of U.S. households are unbanked. Further, the percentage of unbanked households has remained fairly steady since 2009 (7.6% in 2009, 8.2% in 2011, and 7.7% in 2013), indicating that this rate is likely to remain consistent in the near term.[121]

The reasons for a population of unbanked or underbanked citizens are related to both income (i.e. insufficient funds, costly services for low-balance customers) and what the FDIC refers to as "attitude" (i.e. lack of trust in institutions and privacy concerns).[122] Low-income consumers using traditional banking services spend nearly three times as much on banking fees as their unbanked peers, discouraging many from continuing use of these services.[123] Should TNCs desire to expand their availability to all passengers that are willing to pay, alternative payment options for those without credit or bank accounts must be part of the solution.[124] TNCs have appeared, to date, to have put forth little effort into finding alternative ways to address the financially underserved.[125] However, Uber is launching a pilot project in India where passengers can pay in cash in the city of Hyderabad, which will be the first instance in which Uber will accept cash payments.[126]

It should be noted that there are, of course, drawbacks to the seemingly well-intentioned policy to increase access for the unbanked community that the taxicab industry can attest to, as it could inadvertently undermine TNC driver safety if not implemented with safeguards.[127] For instance, by requiring a credit card, TNCs eliminate passenger anonymity, thus increasing driver safety. In situations where passengers are permitted to use cash, identifying the passenger becomes more difficult should an incident, such as a robbery, occur.[128]

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[118] *Id.*
[119] Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services, Special Report 319, The National Academies of Sciences, Engineering, and Medicine, page 89-90, 2015.
< http://onlinepubs.trb.org/onlinepubs/sr/sr319.pdf >.
[120] http://www.americanbanker.com/bankthink/lets-start-from-scratch-in-designing-products-for-unbanked-1078311-1.html.
[121] Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services, Special Report 319, The National Academies of Sciences, Engineering, and Medicine, page 89-90, 2015.
< http://onlinepubs.trb.org/onlinepubs/sr/sr319.pdf >.
[122] *Id.*
[123] http://www.americanbanker.com/bankthink/lets-start-from-scratch-in-designing-products-for-unbanked-1078311-1.html.
[124] Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services, Special Report 319, The National Academies of Sciences, Engineering, and Medicine, page 89-90, 2015.
< http://onlinepubs.trb.org/onlinepubs/sr/sr319.pdf >.
[125] *Id.*
[126] https://news.slashdot.org/story/15/05/13/0159212/uber-drivers-in-india-will-start-accepting-cash.
[127] Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services, Special Report 319, The National Academies of Sciences, Engineering, and Medicine, page 89-90, 2015.
< http://onlinepubs.trb.org/onlinepubs/sr/sr319.pdf >.
[128] *Id.*

One such proposed solution would mimic how public transit agencies and bike share operators deal with alternative payment options, including acceptance of prepaid debit cards, working with nonbanking institutions such as check cashing services, or continuing to offer cash as an alternative payment while installing additional safeguards such as security cameras.[129] For example, Greyhound's 2011 partnership with PayNearMe (a private electronic cash payment service that allows members to pay for their membership using cash through a local convenience store in lieu of an online credit card) and 7-Eleven provides an option that allows for both secured cash payments and online purchases with applicable Internet discounts.[130]

v. People Without Smartphone Access

TNC services are app-based and operate almost exclusively through smartphones, which, in turn, means that individuals without a smartphone do not have access to such transportation services.[131] In 2015, 64% of Americans owned smartphones compared to 35% only four (4) years earlier.[132] Notably, smartphone access varies more by age than by income, with only 27% of American adults over age 65 using a smartphone, in comparison to only 18% in 2013, rendering smartphone use among the this age group at roughly 50% of the level of the next lowest age category.[133]

Elderly and low-income tends to drive down the rate of smartphone use, as demonstrated by the following chart:

[129] *Id.*
[130] *Id.,* <Greyhound.com (2011) >.
[131] Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services, Special Report 319, The National Academies of Sciences, Engineering, and Medicine, page 82, 2015.
< http://onlinepubs.trb.org/onlinepubs/sr/sr319.pdf >.
[132] *Id.*
[133] *Id.*

Smartphone Ownership, White vs. African American

% of adults in each group who have a smartphone

	White	Black	Difference
Total 18+	53	56	not sig
Gender			
Male	55	54	not sig
Female	51	58	+7
Age			
18-29	79	85	not sig
30-49	69	67	not sig
50-64	46	41	not sig
65+	18	18	not sig
Education			
High school grad or less	38	36	not sig
Some college	58	71	+13
College+	67	75	+8
Household income			
<$30,000	34	48	+14
$30,000-$74,999	53	64	+11
$75,000+	74	81	not sig
Other demographics			
Parents	70	68	not sig
Students	76	81	not sig

Pew Research Center's Internet Project July 18-September 30, 2013 tracking survey. N=6010 adults ages 18+. For results based on all adults, n=4,223 for whites and n=664 for African Americans.

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These statistics indicate that the elderly and those with low-incomes are most likely to not own a smartphone and therefore lack access to TNC services. Although general access to smartphones continues to increase on an annual basis, it does not appear that there has been a concerted effort to find ways to grant access to those in this currently underserved community.[134]

Cursory attempts have recently been made to address some of the issues faced by transportation disadvantaged communities, including a recent initiative by the Pinellas Suncoast Transit Authority ("PSTA"), which was awarded a $300,000 grant from the Florida Department of Transportation to provide free Uber rides to low-income individuals who require late night transportation.[135] As part of the program, the PSTA will utilize new technology called Uber Central, which allows riders who do not have access to a smartphone or credit card to call PSTA to have the agency 'e-hail" them a

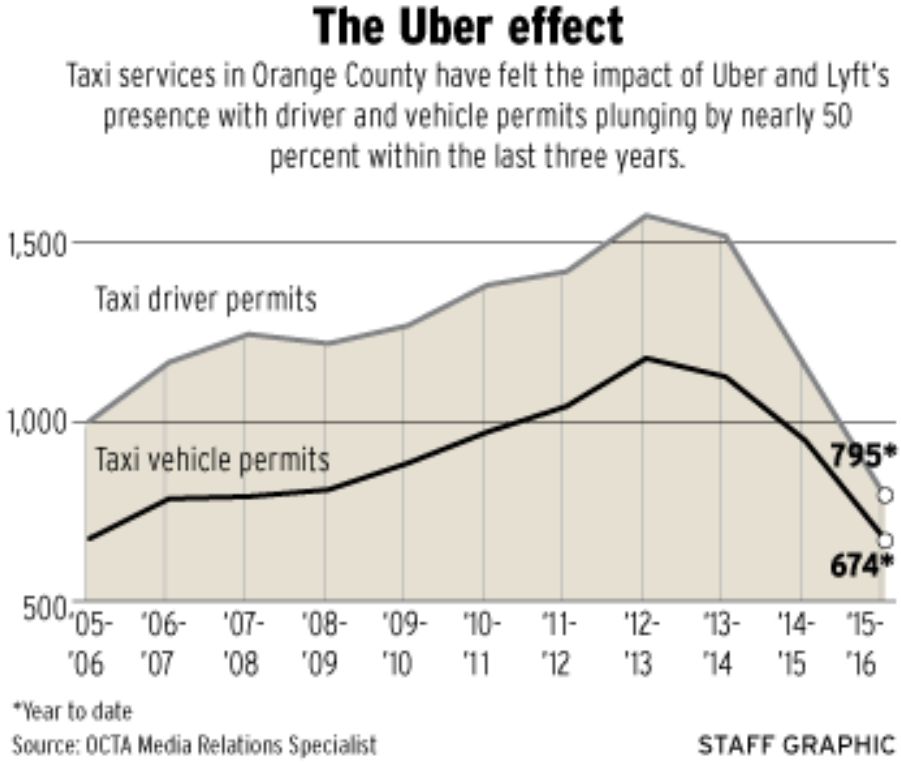
[134] *Id.*
[135] http://www.bizjournals.com/tampabay/news/2016/06/10/local-transit-authority-wins-grant-for-free-uber.html?ana=e_vert_st_20160613.

ride.[136] While this is an example of the type of progressive policy solutions that should be more thoroughly implemented in order to reduce the transportation disadvantage, this program is confined to a very limited geographical area, is only available at limited times, with limited funds, and includes various other restrictions. Moreover, the government is providing the TNC (Uber in this case) with the incentive to participate, and further, is required to implement an agency middleman to place the ride requests to Uber Central.[137] Outside the confines of this limited grant program, this initiative will do nothing to expand TNC access to the unbanked or those without smartphone access in the greater transportation market. Rather than independently searching for and implementing widespread alternative solutions to cater to the disproportionate number of low-income and elderly who lack access to smartphones, it appears TNCs may be satisfied with the ability to serve the 64% of Americans with smartphones until local governments fund access programs, or a combination of technological advances and social and economic market factors expand smartphone use to become ubiquitous.[138]

B. TNC Impact on the Taxicab Industry

In communities where access to public transportation is limited and few people have access to personal vehicles, many rely on taxicabs, a service which has been in severe decline in jurisdictions across the country. This is widely attributed to taxis having to compete against TNCs that operate under uneven regulatory schemes at significantly reduced costs. This has allowed TNCs to undercut taxis on price, and along with an oversupply of the market, has resulted in many taxis being driven out of competition.[139] For example, a fare from an Uber that would cost about $4 in Costa Mesa, California, would cost an estimated $20 in a taxi.[140] The graph below shows that before Uber and Lyft entered the Orange County market in 2013, there were 1,576 registered taxi drivers, but now only 795 remain.[141]

[136] *Id.*
[137] *Id.*
[138] *Id.*
[139] http://america.aljazeera.com/articles/2015/9/16/taxi-wars-uber-destroying-the-taxi-industry.html.
[140] http://www.ocregister.com/articles/uber-713672-cab-taxi.html.
[141] *Id.*



According to the San Francisco Municipal Transportation Agency, the number of trips taken by taxi in San Francisco plummeted 65 percent in just 15 months between 2012 and 2014.[142] The average number of trips per taxi has been on a steady downward trajectory, from 1,424 per month in March, 2012, to 504 per month in July, 2014.[143]

Perhaps the biggest impact of TNCs in San Francisco has been the severe decline in the number of taxi rides taken by people in ramp taxis, which transport people in wheelchairs.[144] As the number of TNC vehicles have grown, and the number of taxis has diminished, so has the availability of the costlier wheelchair-accessible taxis. The number of pickups in ramp taxis declined from a high of 1,378 in March, 2013, to just 768 in July, 2014.[145] As previously discussed, TNCs are not legally mandated to pick up people in wheelchairs in many jurisdictions, therefore further disadvantaging an already underserved community. Instead of imposing new requirements on TNC services, SFMTA officials have offered incentives to cab companies to keep more ramp taxis on the road.[146]

If TNC service is not offered as an alternative to taxi service in areas where taxi service has been displaced, then already underserved communities will suffer further. The

[142] http://www.sfgate.com/bayarea/article/Taxi-use-plummets-in-San-Francisco-65-percent-in-5760251.php.
[143] *Id.*
[144] *Id.*
[145] *Id.*
[146] *Id.*

dramatic decline in taxi service throughout San Francisco, and many other jurisdictions, indicates that those who were forced to rely on taxi service due to lack of proximity to public transportation, or any other number of reasons, would be further transportation disadvantaged if options were to be further reduced by the elimination or reduction of taxi service. If TNC competition drives out alternative modes of transportation, including taxis, and TNCs themselves do not find it profitable or worthwhile to expand services to the persons and areas previously serviced, there could potentially be little to no services remaining in certain underserved communities.

C. Conclusions

The focus in reducing the "transportation disadvantage" has been to reduce an individual's predominant reliance on private car use while shifting resources to expand the use and availability of public transportation, walking and cycling. A success in this initiative will lower the overall cost of transportation to society; eliminate the disadvantages faced by those not eligible for, or who do not otherwise possess, a driver's license; and ensure those without a personal vehicle will still have access to affordable transportation.

Many without personal vehicles also rely on taxicabs, a service that has been decimated in many jurisdictions across the country, including San Francisco. If TNC service is not offered as an alternative to taxi service in areas where taxi service was relied on but has now been displaced, then an already underserved community will suffer further.

With respect to TNC access, the elimination of surge pricing and the introduction and enforcement of regulatory oversight to prevent "redlining" would reduce TNCs' incentives to avoid serving certain communities, and could help to increase TNC affordability and access among certain transportation disadvantaged persons and communities. Expanding access to TNCs will require a variety of approaches including enhanced government oversight of the regulatory framework, more robust consumer protection initiatives (such as the elimination of surge pricing), implementation of alternative payment systems, and a combination of technological advances and social and economic market factors to ensure that the playing field is leveled for the following communities that may desire to utilize a TNC service, but currently have limited or no access, including the following:

- One result of TNC "surge pricing" is that communities with limited or no TNC access, such as low-income and minority communities, may be "redlined" since drivers may choose not to operate in those areas;
- Rural communities, where low population density and a host of other factors dis-incentivize drivers from expanding service, will be largely excluded from TNC service;
- Unbanked and under-banked communities, in which individuals have little or no access to the financial institutions required to pay for TNCs, will be unable to access TNC services;

- Individuals without smartphone access, or who do not possess the technological expertise necessary to request TNC service, will also be unable to access TNC services; and
- A severe reduction in taxicab service, due to competition from TNCs, could exacerbate transportation disadvantages for those who do not have access to TNC services and had previously relied on taxi service.

III. The Devolution of Sustainable Transportation Progress – Adverse Effects of TNCs on the Environment and Cities

A. The History of Policy to Reduce Public Motor Vehicle Usage

Over the last few decades, cities have been working hard to decrease the use of public motor vehicles ("PMVs"), including automobiles, while increasing reliance on mass public transportation modes such as subways, buses, and ferries. With the rise of TNCs, there is considerable concern that these efforts will be reversed with a deleterious effect on congestion and the environment.

PMVs are known to impact the environment in several ways. For example, road traffic is the most common source of community noise, causing no less than noise pollution. Noise disturbs the population's ability to work, relax and sleep, resulting in mental stress and, in some severe cases, chronic exhaustion, high blood pressure and heart disease.[147] PMVs also produce greenhouse gases such as carbon dioxide, nitrous oxide and methane, contributing to climate change and global warming. Environmental statistics demonstrate that 28% of greenhouse gas emissions in the United States are generated by transportation, 34% of which are generated by passenger automobiles.[148] Further, PMVs affect air quality by releasing pollutants[149] into the environment that cause negative health effects, especially for individuals with allergies or respiratory conditions, including asthma; hay fever; sinusitis; and respiratory and lung conditions commonly associated with the elderly, with research suggesting that certain pollutants are carcinogenic.[150]

Congestion is another major effect of the increase in the amount of PMVs on the road, especially as the design capacities of our roads have been exceeded. Although highway funding in the United States increased by 100% in the last 25 years, congestion has increased by 300%,[151] causing many negative effects, including extra travel time that may decrease productivity.[152] Congestion also increases business costs, as an increase in the amount of time a PMV is on the road leads to higher payments towards fuel and vehicle repairs.[153] Even worse, emergency services, such as ambulances, police cars and fire engines, experience a more difficult challenge to function effectively to provide their services to those in need, as they struggle to overcome traffic concerns caused by the increase in congestion.[154] Lastly, and most tragically, PMVs are responsible for

[147] https://www.racv.com.au/wps/wcm/connect/racv/internet/primary/my+car/environment/reduce-your-impact/impact+of+cars+on+the+environment.
[148] http://www.pubtrantravel.com/whyuse.html
[149] Nitrogen oxides (NOx); Fine Particulate Matter (PM2.5, formed both during combustion or in atmospheric chemical reactions post exhaust; Volatile organic compounds (VOCs); Carbon Monoxide (CO); Sulphur Dioxide (SO2); Greenhouse Gases (CO2); and air toxics such as benzene, 1,3-butadiene, formaldehyde, acetaldehyde, acrolein, polycyclic organic matter (POM), naphthalene, and diesel particulate matter.
[150] https://www.racv.com.au/wps/wcm/connect/racv/internet/primary/my+car/environment/reduce-your-impact/impact+of+cars+on+the+environment.
[151] http://www.pubtrantravel.com/whyuse.html.
[152] http://www.economicsonline.co.uk/Market_failures/Road_congestion.html.
[153] *Id.*
[154] *Id.*

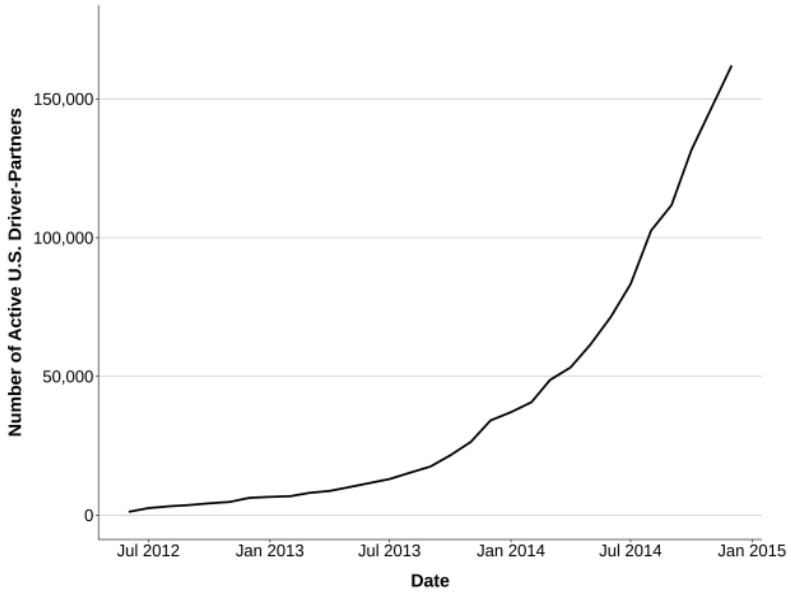
thousands of deaths each year. In the United States alone, 32,675 deaths occurred as a result of PMV crashes in 2014.[155]

As a result, cities around the world have come to realize that dependence on PMVs is neither beneficial to the environment nor society at large. Furthermore, increasing numbers of the populace are realizing that PMV dominance is not pre-ordained, and that alternative modes of transportation can be developed to decrease our reliance on PMVs.

B. Unregulated Uber-Growth – The Lack of a Vehicle Cap and Adverse Environmental Impacts

While cities are attempting to decrease the use of PMVs such as automobiles, TNCs have grown at a near exponential rate, adding a significant amount of automobiles on the streets of already congested cities. For example, Uber grew from zero (0) drivers in 2012 to 160,000 actively partnered drivers (defined as drivers that have completed more than four trips per month) by the end of 2014 in the United States alone.[156] As demonstrated in the graph below, the rate of growth has risen rapidly since July 2012:

Figure 1: Number of Active Driver-Partners in United States Each Month



[157]

In the past, municipalities considering the introduction of new taxi medallions to their respective markets would conduct environmental impact studies. For example, in 2012, New York City ("NYC") wanted to take advantage of the passage into law of the SHLL described earlier in this report that would increase the number of accessible taxi medallions by 2,000 to the NYC taxi fleet. However, before going forward with the initiative, an environmental impact study was carried out[158] that concluded that while the increase in medallions would have a significant adverse effect on congestion, solutions

[155] http://www.iihs.org/iihs/topics/t/general-statistics/fatalityfacts/state-by-state-overview.
[156] https://s3.amazonaws.com/uber-static/comms/PDF/Uber_Driver-Partners_Hall_Kreuger_2015.pdf.
[157] *Id.*
[158] http://www.nyc.gov/html/tlc/downloads/pdf/statement_of_findings_11_04_2013.pdf.

were available that would mitigate certain, but not all, intersections that could absorb the increase in traffic. One researcher from the Tri-State Transportation Campaign, estimated that the proliferation of the 2,000 additional medallions would cause a 12% decrease in travel speeds in NYC.[159] Armed with this information, it is puzzling that NYC did not conduct a similar study before allowing TNCs[160] open entry into the NYC market, in light of the City's most recent PlaNYC initiative publication determining that: 1) in 2012 transportation fleets decreased carbon emissions due to "fleet size reduction measures;" and 2) per capita vehicle miles increased between 2012 and 2013, resulting in an increase of 0.22 million tons in carbon dioxide emissions.[161]

This unregulated vehicle growth may have a detrimental impact on the environment, and may potentially increase vehicle related carbon emissions. Emissions may increase as vehicles spend more time in traffic, idling or crawling, and undergoing numerous acceleration and deceleration events.[162] Several studies have shown that vehicles contribute more to air quality problems than any other source in the United States. Between 1990 and 2014, greenhouse gas emissions in the transportation sector increased more in absolute terms than any other sector (i.e. electricity generation, industry, agriculture, residential, or commercial).[163] In the United States, vehicles are responsible for 27% of hydrocarbon emissions, 51% of carbon monoxide (CO) emissions, 20% of nitrogen oxide (NOx) emissions and 18% of carbon dioxide (CO2) emissions.[164] The number of active vehicles on the streets and the growth of vehicles for the sole purpose of providing for-hire transportation, which will inherently require longer than average vehicle miles, have been a concern for policymakers who seek to improve air quality, reduce pollution, and combat global climate change. Recent epidemiological studies have also shown elevated risks of non-allergic respiratory morbidity, cardiovascular morbidity, cancer, allergies, adverse pregnancy and birth outcomes, and diminished male fertility for drivers, commuters, and individuals living near roadways.[165]

The lack of sufficient data to correctly measure the impact of the expansion rate of Uber and other TNCs in many cities has exacerbated the problem. These companies do not provide data to substantiate the claims they make about their success in reducing the number of vehicles on the roads, despite the public representations that their core business is developed based on TNC claims of being "everyone's private driver." [166]

In New York City, the number of for-hire vehicles ("FHVs") has grown significantly over the past four years. Since Uber's entry in NYC, the Taxi and Limousine Commission has licensed over 37,000 new FHVs.[167] Even though it is difficult to accurately determine the impact of these new vehicles on NYC's environment and their direct contribution to carbon emissions without app companies' data, it is

[159] http://blogs.reuters.com/great-debate/2012/01/20/more-taxis-mean-more-traffic/.
[160] It should be noted that NYC regulations do not permit the TNC model of peer to peer rides, TNCs such as Uber and Lyft operate as black car and limousine bases licensed by the New York City Taxi and Limousine Commission.
[161] http://www.nyc.gov/html/planyc/downloads/pdf/NYC_GHG_Inventory_2014.pdf.
[162] https://sph.uth.edu/kaizhang/files/2014/02/Zhang-2011-AE.pdf
[163] http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100ONBL.pdf
[164] http://onlinepubs.trb.org/onlinepubs/sr/sr264.pdf
[165] http://www.euro.who.int/__data/assets/pdf_file/0006/74715/E86650.pdf
[166] https://medium.com/@felixsalmon/the-economics-of-everyones-private-driver-464bfd730b38#.orq4df9gv
[167] https://data.cityofnewyork.us/Transportation/For-Hire-Vehicles-FHV-Active-and-Inactive-Vehicles/8wbx-tsch

possible to make reasonable assumptions by utilizing various primary and secondary data sources. As such, this report will attempt to highlight the issue by utilizing the NYC FHV market, specifically Uber's vehicle numbers, as a case study incorporating available data.

First, in order to estimate the daily CO_2 emission of additional FHVs in NYC from app companies like Uber and Lyft one can utilize the U.S. Energy Information Administration (EIA) data that estimates 19.64 pounds of carbon dioxide are produced from burning a gallon of gasoline that does not contain ethanol.[168] Second, one can derive the total average distance traveled by new FHVs while providing transportation services. In order to determine average distances, one can use data from a report issued by SherpaShare[169] that estimated the average Uber trip length in the top U.S. cities is between 4.4 and 8.9 miles. This report took the average of this estimate to account for regional and city based disparities. For the purpose of calculating the average distance, this report conservatively estimates that the average Uber trip that will be used in this report is 6.6 miles. The report also incorporated the recent findings from New York City TLC T-PEP data that identified 44 average trips per driver per week for Uber drivers to derive the number of trips per day. For the purpose of this report, it is estimated that Uber drivers have performed an average of 6.2 trips per day.

Third, upon reviewing the current Uber vehicle fleet in NYC and taking a sample from 407 approved vehicles we calculated the average miles per gallon fuel usage ("AMPG"). The current NYC TLC rule permits any vehicle that passes inspection to be part of the FHV fleet.[170] However, Uber only accepts vehicles that are 2006 model year or newer to be part of its fleet.[171] This report has incorporated a cautious approach to derive AMPG cognizant of the fact that there are multiple vehicle types with different models and fuel consumption capacity. To account for any disparity, the report utilized the MPG reports of the sampled vehicles as reported on their marketing packages and, assuming most of the vehicles are new, with the maximum capacity to efficiently utilize fuel as advertised. Based on the sample of vehicles studied and their MPG fuel usage advertised when operated, it is estimated that the AMPG utilization of Uber vehicles in NYC is 18.7 per vehicle.

Therefore, the following formula was used to calculate the CO_2 emission of Uber vehicles in NYC per day.

Pounds of CO_2 per Day = ((Miles Traveled X Number of Trips)/ Average Miles per Gallon) X CO_2 per Gallon

Following the above formula and as shown below, it is estimated that an Uber vehicle potentially produces 42.97 pounds CO_2 per day in NYC alone.

42.97 = ((6.6X 6.2)/ 18.7) X 19.64

[168] https://nnsa.energy.gov/sites/default/files/nnsa/08-14-multiplefiles/DOE%202012.pdf
[169] http://www.sherpashareblog.com/2016/02/uber-trips-are-becoming-longer-and-faster-but-are-they-more-profitable/
[170] http://www.nyc.gov/html/tlc/downloads/pdf/proposed_rules_fhv_bills_package.pdf
[171] http://driveubernyc.com/vehicles/full-list/

As discussed above, there are currently over 37,000 new FHVs in NYC, with a majority of them operated by Uber. The cumulative impact of Uber and other app-based companies' growth in NYC's environment is estimated to generate daily emissions of 1,590,146 pounds of CO_2 in the atmosphere. Furthermore, when considering the millions of vehicles currently operating for Uber all over the world, the extent of the environmental damage caused by the company is evident. If the same moderate estimate of 42.97 pounds of CO_2 emissions per vehicle per day is applied to Uber's more than one million vehicles worldwide, the increased carbon footprint could be as much as 42,970,000 pounds of CO_2 emissions per vehicle per day produced by Uber's vehicles across the globe.

Uber has more than 35,000 affiliated vehicles in NYC as of February 2016.[172] Although Uber claims that only 1,900 vehicles are active at any given time, experts have projected that these additional 1,900 vehicles result in a 7.7% decrease in NYC travel speeds.[173] To put this into perspective, each additional mile driven by an Uber vehicle in the Central Business District ("CBD") in Manhattan adds an extra 10 minutes to all other vehicles on the road at the time.[174]

Numerous cities have been working to reduce emissions by converting taxi fleets to "clean" vehicles. For example, in 2013, San Francisco announced that taxicabs in the city were up to ninety-seven percent (97%) clean, which is up from fifteen percent (15%) in 2008.[175] Chicago, NYC and Los Angeles have also all made significant efforts to increase the percentage of taxicab fleets that use alternative fuels[176] due to incentives and regulations enacted for the fleets. Unfortunately, however, the unregulated rise of TNCs has countered these efforts. The TNC business model mostly relies on drivers using their own personal vehicles, which typically neither utilize an adequate number of alternative fuel vehicles nor wheelchair accessible vehicles. While the number of TNC trips is significantly increasing and, in turn, reducing taxicab market share, society at large is taking a step in the wrong environmental direction by substituting many trips that would have occurred in government mandated alternative fuel taxicabs for typically less environmentally- sustainable personal vehicles. Multiple cities previously experimented with a similar deregulation in allowing open entry of vehicles into the taxicab market in the last half-century; these attempts, however, proved to be unsuccessful, resulting in an oversupply of taxicabs and deterioration of vehicle quality, thus leading to the eventual re-regulation of the industry.[177] It remains to be seen whether history will repeat itself.

C. Surge pricing - Maximizing Congestion and Pollution

Surge pricing, or, as Uber describes it, "dynamic pricing,"[178] is the notorious TNC economic model that raises fares based on demand at a given time. As Uber admits, the

[172] http://www.theverge.com/2016/2/1/10888734/uber-driver-strike-nyc-fare-cut-february-2016.
[173] http://www.streetsblog.org/2015/07/22/ubers-own-data-reveals-it-slows-manhattan-traffic-9-percent/.
[174] http://www.streetsblog.org/2015/07/08/uber-and-manhattan-gridlock-are-rising-together/.
[175] http://www.environmentalleader.com/2013/10/28/how-green-is-your-ride/#ixzz45lO2aLyT.
[176] *Id.*
[177] *Id.*
[178] https://newsroom.uber.com/guest-post-a-deeper-look-at-ubers-dynamic-pricing-model/.

entire idea behind surge pricing is to increase the supply of drivers to match demand. Bill Gurley, a Board Director at Uber, explained that surge pricing was created as a model in 2012, when Uber noticed in Boston there was a gap in the supply of drivers at 1:00 a.m. resulting in unfulfilled requests. Uber then conducted an experiment to see what would happen if the company increased prices for that time. The experiment concluded that surge pricing increased the on-the-road supply of drivers by 70-80%.[179]

Thus, by Uber's own admission, the surge/dynamic pricing model is designed specifically to increase the number of drivers. By increasing the number of vehicles on the road by such large percentages, especially in highly congested CBDs, the results will invariably be increased travel times and emissions coupled with diminished air quality, altogether decreasing the quality of life and health of the populace.

D. A Collision Course between Urban Population and TNC Growth in Cities

Cities are rapidly growing in population, a trend that is expected to continue, resulting in an ever-increasing population density and demand on transportation needs. Currently, fifty-four percent (54%) of the world's population lives in urban areas; it is projected that by 2050 this will rise to sixty-six percent (66%), and with continuing population growth and the movement of people to urban areas, urban populations are expected to increase by another 2.5 billion people by 2050 and surpassing a total of 6 billion people by 2045.[180] As the United Nations Department of Economic and Social Affairs notes, "[m]anaging urban areas has become one of the most important development challenges of the 21st Century."[181]

The growth of TNCs will only cause more environmental problems, as an increase in demand will lead to an increase in traffic congestion. In order to avoid a "collision course" between urban populations and the growth of TNCs, city regulators must have a "well-managed" planning agenda[182] that takes into account the growth in population by focusing on mass transit solutions and the effect of TNC growth on the infrastructure.

To highlight the importance of this conclusion, John Wilmoth, Director of the United Nations Department of Economic and Social Affair's Population Division states as follows:

> "*Managing urban areas has become one of the most important development challenges of the 21st century. Our success or failure in building sustainable cities will be a major factor in the success of the post-2015 UN development agenda*."[183]

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[179] *Id.*
[180] http://www.un.org/en/development/desa/news/population/world-urbanization-prospects-2014.html.
[181] *Id.*
[182] *Id.*
[184] http://www.nyc.gov/html/onenyc/downloads/pdf/publications/OneNYC.pdf

E. Increased Congestion, Carbon Footprint and Reports

Despite the above narrative clearly demonstrating the negative impact of the proliferation of TNCs on the environment, there have been various reports purporting to demonstrate that this conclusion is not empirically true; rather, TNCs either cause no environmental impact at all or there is not enough information to draw a conclusion. A closer analysis of these reports, however, reveals that an ever-increasing TNC carbon footprint remains a highly likely scenario.

In 2015, New York City Mayor Bill de Blasio released his OneNYC sustainability plan which among other things established goals for improving economic and environmental sustainability. The report explained that the number of FHVs in the City has increased by approximately 53% between 2011 and 2015, and that the City will evaluate the impact of such a rapid increase on air quality, traffic congestion and parking.[184] As a result, the City commissioned a four-month study by McKinsey and Company to ascertain the effect of TNCs on traffic in the City. The study determined that TNCs did not increase congestion in the City. The reasoning was that the number of trips by all vehicles in the Central Business District (the "CBD") of Manhattan remained flat between 2014 and 2015. Moreover, trips by TNCs were alleged to largely substitute for yellow taxi trips in the CBD, so it was concluded that TNCs did not increase the total vehicle miles travelled in the CBD.[185] However, some have questioned the research model used for the McKinsey Study. Critics have noted that the $2 million report did not include links to spreadsheets or include additional data for the public.[186]

A report by the Transportation Research Board ("TRB") makes no conclusive determinations about the environmental impact of TNCs, but does hint at TNCs' causal connection to congestion.[187] The TRB report notes that TNCs may attract passengers who currently travel in more energy-efficient buses and trains.[188] Put differently, TNCs "may be increasing total travel, congestion, and emissions in the near term by replacing walking and transit trips[.]"[189] Thus, although the TRB Report makes the vague statement that TNCs "may…support the trend toward…broader environmental benefits," it also concedes the likelihood of "increases in vehicle-miles traveled ("VMT"), congestion and GHG emissions."[190]

In September 2013, the California Public Utilities Commission ("CPUC") adopted rules to allow TNCs to operate legally in a state of the United States for the first time.[191] During hearings before the CPUC, TNC loyalists argued that TNCs were, in fact, following "green" initiatives and would "reduce the negative environmental impacts of driving."[192] However, the CPUC has also noted that TNC drivers do not have a common or incidental purpose with their passengers. Rather, drivers transport passengers

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[184] http://www.nyc.gov/html/onenyc/downloads/pdf/publications/OneNYC.pdf
[185] http://www.theverge.com/2016/1/15/10774878/uber-nyc-bill-de-blasio-traffic-study-failure.
[186] http://www.nytimes.com/2016/01/16/nyregion/uber-not-to-blame-for-rise-in-manhattan-traffic-congestion-report-says.html; http://www.streetsblog.org/2015/07/22/ubers-own-data-reveals-it-slows-manhattan-traffic-9-percent/.
[187] Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services, Special Report 319, The National Academies of Sciences, Engineering, and Medicine, page 19, 2015. < http://onlinepubs.trb.org/onlinepubs/sr/sr319.pdf >.
[188] *Id.*
[189] *Id.*
[190] *Id.*
[191] http://www.environmentalleader.com/2013/10/28/how-green-is-your-ride/#ixzz4632WAPsY.
[192] *Id.*

entirely at the passenger's convenience.[193] In other words, there is no shared interest in so-called "ride sharing" trips since the passenger is unilaterally dictating terms just as they would in any other for-hire ride.

In what could be a landmark report, a widely-reported study will be released this fall by the Natural Resources Defense Council and the University of California Berkeley's Transportation Sustainability Research Center, with support from the Hewlett Foundation and the San Francisco County Transportation Authority (but no financial support from Uber or Lyft)[194] that will look into the climate impacts of Uber and Lyft using these TNCs' own data.[195] The study, however, will not be analyzing congestion or air pollutants.[196] Time will tell as to whether we will be closer to a definitive answer regarding the carbon footprint ramifications of the proliferation of TNCs.

Uber and Lyft started using the term "ridesharing" prior to launching their UberPool and Lyft Line services in 2015, neglecting what the term entails in its general usage. When both companies started their services, they were matching a for-hire vehicle transportation request of a passenger with a vehicle that was unoccupied and close to the request for service area. At the time, despite promoting themselves as ridesharing services the ride request and service delivery were one-to-one. The companies diverted inquiries into their models and used misleading by highlighting that their concept of ridesharing emanates from the fact that their less expensive services, such as UberX and Lyft, were being delivered by a driver who is part-time and traveling to a pre-planned destination that is not on demand, and the passenger is being matched with the driver to utilize an empty car seat that is available in the vehicle.

As a direct consequence of the confusion and misdirection that followed with the expansive use of the term ridesharing, many policy makers and legislative bodies have failed to delve into the working structure of these companies that permitted the proliferation of Uber and Lyft services. The misapplication of the term was further exacerbated by the media's embrace of the term without factually ascertaining if there is indeed any sharing occurring. As a result, finally after several years of widespread and inaccurate or careless reporting by journalists, the Associated Press issued a stylistic advisory by indicating that these services can be called ride-hailing and ride-booking services but not ridesharing.[197]

In 2015, when Uber and Lyft finally launched their UberPool and Lyft Line services, which conceptually can be categorized as ridesharing. These new services appear to be stagnant for now, with a very limited coverage and usage rates. For example, a recent study that utilized the data from the NYC market has found that, compared to medallion taxis and an app based company where its sole business model is based on transporting multiple passengers on a predetermined route, both Uber and Lyft perform poorly. As the study indicated, when measuring average trips per driver per week, Uber and Lyft had 44 trips and 23 trips, respectively. However, average trips per driver per

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[193] *Id.*
[194] https://www.nrdc.org/experts/amanda-eaken/nrdc-urban-solutions-lead-first-climate-analysis-uber-and-lyft.
[195] http://www.theguardian.com/environment/2016/jan/21/uber-lyft-helping-hurting-environment-climate-change.
[196] *Id.*
[197] *"Ride-hailing services such as Uber and Lyft let people use smartphone apps to book and pay for a private car service or in some cases, a taxi. They may also be called ride-booking services. Do not use ride-sharing"* https://www.apstylebook.com/ http://greatergreaterwashington.org/post/25405/the-ap-bans-the-term-ride-sharing-for-uber-lyft/

week provided by taxis compared to a company with service based on providing ridesharing service show that they provided 91 trips and 108 trips, respectively. Despite the limitation of the above study in failing to isolate UberPool and Lyft Line services from other services that the companies provide to appropriately show the disparity on vehicle and driver utilization rates per passenger, the significant contrast of utilization when compared to taxicabs and a true ridesharing service is a testament of the failure of the model of ridesharing implemented by Uber and Lyft.

Additionally, there have been multiple reports that show both riders and drivers may not desire to use UberPool, where drivers claim it is not worth the hassle to pick up two separate riders for a fare that will generate less income when compared to two entirely separate UberX rides. On the other hand, passengers may need to make economic decisions about the money they could potentially save. They would then weigh that cost against the likelihood of getting matched with someone else, as well as the uncertainty of being matched may bring in terms of personal safety, longevity of the total ride, and comfort of service.[198] Despite the continued push by Uber and Lyft to represent themselves as ridesharing companies and their attempt to move to deflect the inquiry as to the appropriateness of the use of the term, it is clear that these companies provide is a traditional for-hire service. This alignment of the ridesharing definition and the move to use the terms like ride-sourcing, ride-hailing, or booking services will permit a clear policy discussion on how to 1) regulate these companies and similar services, 2) identify what their role is in enabling improved mobility of city dwellers, and 3) remedy any imbalance of regulation that may negatively impact incumbent businesses.

F. Conclusions

Policy makers have been laboriously working to improve sustainable transportation to decrease pollutants and congestion within cities; however the TNC model threatens to negatively offset all such efforts, including:

- TNC proliferation threatens cities' efforts to reduce the number of personal motor vehicles on the road, setting back decades of transportation planning and policy aimed at mitigating congestion and pollution, and encouraging shared mobility and mobility management;
- Unregulated TNC growth could cause congestion and harmful environmental impacts through the proliferation of nitrogen oxides, fine particulate matter, volatile organic compounds, carbon monoxide, sulphur dioxide, greenhouse gases and air toxics;
- In the United States, vehicles are responsible for 27% of hydrocarbon emissions, 51% of carbon monoxide (CO) emissions, 20% of nitrogen oxide (NOx) emissions and 18% of carbon dioxide (CO2) emissions;
- In the NYC FHV market, Uber's reported for-hire vehicle numbers were the basis of a modest assumption of various parameters the cumulative impact of Uber and other app based companies' growth in NYC's environment for some context, which produces estimates that 1,590,146 pounds of CO_2 are generated daily;

[198] http://motherboard.vice.com/read/why-drivers-and-riders-hate-uberpool-and-lyft-line

- Congestion has resulted in losses to local businesses and government taxpayers impacted by it, with additional time and public funds spent on road repair, while labor force activity, business and government operations are negatively impacted by traffic jams and gridlock;
- Congestion is further exacerbated by TNCs' usage of so-called "surge pricing" due to the incentive for all or most part-time on demand economy TNC vehicle drivers being fiscally rewarded by working already congested areas during peak business period (a/k/a rush hour in central business districts of urban environments);
- Urban areas are projected to continue growing at a rapid rate, and, as a result, policy makers must take into consideration how they will allow TNCs to continue to grow to avoid a "collision course" with environmental and sustainability policy; and
- Although TNCs and regulators have embraced the concept of "ridesharing" and TNCs have sought to capitalize on that term by promoting services such as UberPool and Lyft Line, the reality is that there is not much sharing going on—trip requests are generally one-to-one like other for-hire services.

IV. TNCs' Lack of Social and Corporate Responsibility

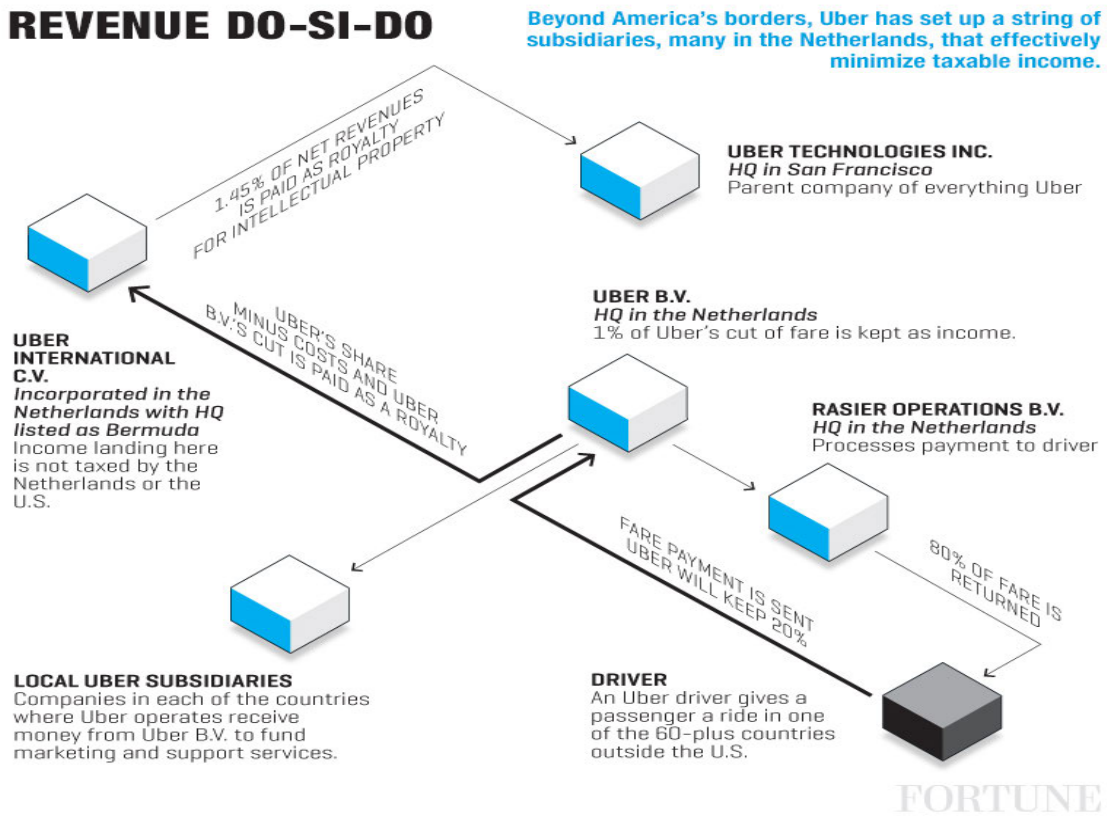
TNCs market themselves as socially-conscious brands that help boost the local economies in which they operate. For example, one of the pages on Uber's own website is called "helping cities" where it makes the overarching boast "Uber helps revitalize local economies."[199] However, as will be shown below, a closer analysis of Uber's tax practices reveals a highly sophisticated crafted web of tax avoidance with a far-reaching magnitude. Uber's business model and structure is built in such a way to allow it to minimize its tax liability by keeping hundreds of millions of dollars away from the markets it operates in while avoiding domestic taxes on foreign endeavors, all despite Uber being a domestic San Francisco-based company. Not only does this practice minimize its Value Added Tax ("VAT") and corporate tax liability, but in some jurisdictions Uber unfairly places its sales tax burden on its drivers alone with very little accountability.

Recently, the world's largest economies, through the Organisation for Economic Co-operation and Development ("OECD"), launched a project entitled Base Erosion and Profit Sharing ("BEPS"), acknowledging that large multinational corporations such as Uber, Google and Amazon are avoiding taxes through tax shells and havens, as well as through attempts to reform the international tax system to affect tax avoidance.[200] Conversely, local for-hire transportation providers such as taxicabs and black car services are not privy to these tax structures and are thus obliged to pay their local taxes, increasing their cost burden and forcing them to charge higher fares than the TNCs are able to offer, putting them at a competitive disadvantage simply because they are fulfilling their civic duty. An additional consequence arises as Uber's tax strategies deprive the localities in which they operate of significant revenue, resulting in a large potential loss of services to be offered to the public, including to those who require these services the most.

A. TNC Tax Avoidance Practices

Through the years, Uber has created a complex web of global subsidiaries, limited partnerships and holding companies, and has entered into separate and distinct agreements with these entities, in order to shield itself both from taxes in the foreign jurisdictions it operates in and domestic taxes on foreign income. The following diagram by Fortune Magazine depicts the tax minimization business structure utilized by Uber:

[199] https://www.uber.com/helping-cities/.
[200] http://www.oecd.org/ctp/beps.htm.



[201]

As is depicted in this diagram, most of Uber's foreign operations utilize a "double-dutch" tax structure in which the local branch of the company, such as Uber London, is actually owned by Uber International Holdings, B.V., located in the Netherlands, which is in turn owned by Uber International B.V. ("Uber B.V."), also located in the Netherlands.[202] All payments made by passengers in London go directly to Uber B.V., allowing Uber to escape both the 20% U.K. VAT and corporate tax. Uber B.V. then remits a small percentage to Uber London to cover the costs of marketing and support services, and forwards the rest of the income as a royalty payment to Uber International C.V. ("Uber C.V."), to yet another subsidiary incorporated in Bermuda[203] where the corporate tax rate is 0%. Uber C.V. pays 1.45% of its income as a royalty for intellectual property to Uber's San Francisco-located flagship company Uber Technologies Inc., while the remainder remains in Bermuda tax-free.[204] Thus, Uber only pays domestic taxes on the royalty fees its international subsidiaries remit.

Has anything been done as a result of Uber's tax avoidance scheme? The issue was raised by UK House of Commons Member of Parliament Margaret Hodge in a letter to the Mayor of London.[205] Additionally, the London Private Hire Car Association ("LPHCA"), representing 15,000 minicab drivers, submitted a letter to the to the Chief

[201] http://fortune.com/2015/10/22/uber-tax-shell/.
[202] http://www.48hills.org/2014/07/10/ubers-tax-avoidance-strategy-costs-government-millions/.
[203] Note that while the diagram states that Uber C.V. is incorporated in the Netherlands, additional research demonstrates that it is incorporated in Bermuda. See https://www.scribd.com/doc/232316997/Uber-International-CV-1-of-4.
[204] http://fortune.com/2015/10/22/uber-tax-shell/.
[205] http://www.bbc.com/news/business-28615392.

Executive and Permanent Secretary of Her Majesty's Revenue & Customs (the "HMRC") requesting a probe into Uber's tax structure, claiming that it is "tax avoidance on an industrial scale."[206] In a letter response, the HMRC explained that as of January 1, 2015, digital services are now taxed the VAT in the customers' Member State, rather than in the supplier's Member State, and that an electronic service must be conducted entirely automatically with little or no human intervention. The letter goes on to explain that in the case of a supply of transport the VAT is due in the Member state in which the journey takes place. [207] Accordingly, Uber should be collecting and remitting VAT for all services provided in the UK to the UK, yet it still seems to presume to not be liable for this tax. Additionally, the UK enacted a "Diverted Profit Tax" under the Finance Act of 2015[208] that taxes income generated in the UK but collected abroad (usually in a tax haven state); while Google and Amazon have both agreed to pay this Tax, there has been no mention of Uber's compliance.

Another method of tax avoidance employed by Uber is exemplified by its operations in Canada. Most goods and services in Canada are subject to the Goods and Services Tax ("GST"), and, in some provinces, the federal GST is combined with the provincial sales tax to form one Harmonized Sales Tax (the "HST"). Few goods and services are exempt from HST or have a 0% HST rate; a person or entity is, however, exempt from HST if it has "small supplier status," which is maintained as long as a person, partnership or corporation has gross sales that are less than $30,000 per any four consecutive quarters of a year, or in any one-quarter year. Once the $30,000 threshold is passed within one quarter or in a fiscal year, small supplier status is lost, and the person, partnership or corporation must register with the Canadian Revenue Agency ("CRA") and begin paying HST.

The CRA does not permit either a taxicab or a limousine provider to claim small supplier status, and each is required to register for GST/HST from the date it initially provides its services, and must remit the tax for each fare. The CRA defines a taxicab business as "a business of transporting passengers by taxi for fares that are regulated by federal or provincial laws."[209] Some provinces give the authority to regulate taxicab fares to local municipalities; however, the taxicab provider is still provincially regulated by the CRA, and therefore the HST applies. Even though they do not have meters, limousines are considered taxicabs by the CRA since the government regulates limousine fares.[210]

TNCs currently operate outside the law in Canada (except for Toronto, Edmonton and Calgary) as they purportedly contravene municipal and provincial laws by transporting passengers for hire without being properly licensed in most jurisdictions. However, as a registered business in Canada, Uber is still liable to pay the HST for the

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[206] http://www.ft.com/cms/s/0/c63f9500-1965-11e4-9745-00144feabdc0.html#axzz3tIGY9fuM.

[207] Letter from Lin Homer, Chief Executive of Her Majesty Revenue & Customs to Steve Wright, Chairman of Licensed Private Hire Car Association, dated January 28, 2015. Full quote:
"When digital services are supplied to a UK VAT-registered customer, they must account for UK VAT as a reverse charge. Electronic services are automatically-delivered over the internet or an electronic network, with little or no human intervention. A service that is not automatically-delivered electronically is not an electronic service, even if the supplier uses the internet or other electronic means to communicate or facilitate trading. The rule changes do not affect supplies of transport. VAT will still be due in the Member State in which the journey takes place. The VAT treatment of any commission payments will depend on a number of factors, including whether the recipient is based in the UK and whether an individual or a business is paying the commission."

[208] http://www.legislation.gov.uk/ukpga/2015/11.

[209] http://www.cra-arc.gc.ca/tx/bsnss/tpcs/gst-tps/txlmsn/menu-eng.html.

[210] *Id*.

services they provide. Under the CRA's definition, TNCs would not be considered taxicabs or limousines because the government currently does not regulate their fares. Therefore, the standard HST applies to a TNC's services if it earns more than $30,000 per quarter or per fiscal year.

Uber, for example, claims that it has factored the HST into the fares charged to each passenger and that it is the driver's responsibility to remit the tax to the CRA. Uber receives the full payment through its digital network, pays itself first, and then subsequently pays its driver the remainder, who is responsible for the HST. For example, if a passenger is charged $100 for a ride, Uber receives the entire fare ($100) and then pays the driver his or her portion. The driver is then required to pay the HST/GST rate on the total fare (13% of $100) even though he or she has only received a portion of the fare after Uber collects its own portion. Essentially, Uber's drivers are required to pay the full tax while Uber itself benefits from taking its percentage from an increased fare (because the fare was increased to factor in the HST/GST) while not paying the HST/GST on the percentage it collected.

Uber may argue that it does not provide transportation services in Canada, in that it is merely the platform based in the United States that is utilized to connect the drivers and the passengers, and to facilitate the transaction in Canada. Regardless, it is arguable that Uber is still liable to remit the HST for the revenue it collects for providing the income opportunity to its drivers in Canada via the platform. In the United Kingdom, for example, Uber has even experimented with calling the drivers "Customers" and stating that drivers are paying Uber to allow them to use the platform.[211] In Uber's own words, the portion of the fare that Uber collects is called a "service fee;" thus, Uber admits that it is providing a service for which it receives payment. Whether Uber's drivers are "Partners" or "Customers," it appears that Uber may have an obligation to pay the HST to the CRA for the portion of each fare received from Uber passengers.

Moreover, even though Uber claims that the HST is calculated into each fare charged to its passengers, Uber does not present this to its passengers in the fare estimates on its website[212] or within the mobile application, nor is it itemized on the receipts received after each transaction, possibly raising a transparency issue between Uber and its passengers. Additionally, Uber's claim that it enables "driver-partner-friendly economics" is puzzling. Since drivers are not provided the breakdown of taxes-to-income for each fare, they must calculate how much HST they have to remit for each fare themselves. Consequently, drivers may be left with the burden of having to pay more than their share of the HST, without any assistance from the TNC to calculate said share, or any mechanism of oversight to ensure that they are, in fact, remitting the proper amount of the HST.

It should be noted that drivers who operate as independent contractors are only liable to collect the HST if their own personal income reaches more than $30,000. According to Uber, the majority of Uber's drivers work less than 10 hours per week, therefore most drivers may never need to remit the HST to the CRA. The possibility exists that the HST may be calculated in the fare (which, as stated above, is neither paid by Uber directly to the CRA nor paid by an Uber driver because he or she has not reached

[211] http://www.theguardian.com/technology/2015/nov/16/uber-worlds-biggest-ride-sharing-company-no-drivers.
[212] https://www.uber.com/cities/toronto.

the $30,000 income threshold), thus exposing Uber's passengers to the risk of being overcharged to include a tax that is never remitted to the CRA.

B. Harmful Effects of TNC Tax Practices

Governments around the world are waking up to the reality that the largest, most profitable companies in the world are hoarding massive amounts of revenue in their jurisdictions without paying their fair share of taxes, robbing nations of billions of dollars of revenue annually. The Organisation for Economic Co-operation and Development ("OECD"), in collaboration with the Group of Twenty ("G20"), launched the Base Erosion and Profit Sharing ("BEPS") Project in 2013, and issued their final reports and recommendations in 2015 which concluded that national tax laws are outdated in today's interconnected world. The report explains that with the rise of the digital economy, global corporations and fluid capital movement the current national tax laws leave gaps and mismatches that could be exploited to generate double non-taxation undermining the integrity and fairness of tax systems. The practice of utilizing tax planning strategies to exploit the gaps and mismatches in tax rules, artificially shifting profits to low or no-tax locations despite little or no economic activity at said location, to achieve little or no overall corporate taxation is referred to as BEPS. [213] Further, the OECD estimated that global revenue losses from BEPS are between $100 billion and $240 billion annually, equivalent to between 4% and 10% of global revenues from corporate income tax.[214] To further highlight the destructive effects Multinational Enterprises' ("MNEs") use of BEPS (i.e. Uber's tax minimization business structure), the OECD/G20 further explained that BEPS is harmful to everyone; to the governments by reducing tax revenues and raising the cost of ensuring compliance; to the people because they must shoulder a greater tax burden on their own; and even the MNEs utilizing BEPS risk reputational harm from the public when they discover that their tax practice create an uneven playing field for competing domestic companies who are forced to comply with the taxes avoided by the MNE.[215]

For even more perspective, PricewaterhouseCoopers estimates that the so-called "sharing-economy" businesses generated $15 billion in revenue in 2014 and are expected to reach $335 billion in 2025.[216] Uber is currently valued at more than $62.5 billion[217] and has generated $1.5 billion in net revenue in 2015 alone.[218] In an opinion piece in *The Guardian*, Evgeny Morozov states:

> *"To put it bluntly: the reason why Uber has so much cash is because, well, governments no longer do." Instead, this money is parked in the offshore accounts of Silicon Valley and Wall Street firms…Compare this with the dire state of affairs in which most governments and city administrations find themselves today. Starved of tax revenue, they often make things worse by committing themselves to the worst of*

[213] http://www.oecd.org/ctp/beps-about.htm.
[214] http://www.oecd.org/ctp/policy-brief-beps-2015.pdf.
[215] http://www.oecd.org/ctp/policy-brief-beps-2015.pdf.
[216] http://www.bloomberg.com/news/articles/2016-04-06/the-sharing-economy-doesn-t-share-the-wealth.
[217] http://www.theguardian.com/commentisfree/2016/jan/31/cheap-cab-ride-uber-true-cost-google-wealth-taxation.
[218] http://www.businessinsider.com/report-uber-15-billion-revenue-in-2015-2016-1

austerity politics, shrinking the budgets dedicated to infrastructure, innovation, or creating alternatives to the rapacious 'platform capitalism' of Silicon Valley."[219]

The lost revenue to government translates into the public's loss in investment in infrastructure, and services such as health care. These losses are further compounded by TNCs through their increased vehicle usage causing road damage and increasing the carbon footprint to the detriment of the public's health. Not only are these actions causing harm to the public, the TNCs may not be paying their fair share of the costs of the repairs. Furthermore, TNCs may argue that their tax practices are legal, but one has to question if these practices are ethically and socially responsible.

C. Conclusions

In sum, not only does Uber's tax structure deprive nations of their fair share of tax revenue, but it allows Uber to charge lower rates than the native private for-hire service providers that operate in and from their local jurisdictions. These local taxicab and for-hire vehicle companies pay taxes to local governments benefiting their local economies; however, with the introduction of TNCs to the market and their implementation of the above-described tax schemes, these local companies are rendered at a disadvantage because the cost of compliance with the taxes results in an increase in their fares and granting TNCs an unfair competitive advantage. Without the advantage of a tax structure such as one employed by Uber, local taxpaying competitors are forced out of business, further decreasing the tax revenue to the government and denying important and critical services to the populace that rely on them, resulting in the following:

- TNCs market themselves as socially responsible businesses when, in reality, they have built a highly sophisticated crafted web of tax avoidance depriving cities and nations out of hundreds of millions in tax revenue;
- Local taxicab and for-hire vehicle transportation providers are obliged to pay their local taxes, which increases their cost burden and forces them to charge higher fares than the TNCs are able to offer, putting the traditional industry at a competitive disadvantage for fulfilling its civic duty;[220] and
- Without the advantage of a TNC's tax structure, local taxicab and for-hire vehicle providers are forced out of business, further decreasing the tax revenue to the government.

[219] http://www.theguardian.com/commentisfree/2016/jan/31/cheap-cab-ride-uber-true-cost-google-wealth-taxation
[220] In some cases, TNCs pass along the tax burden to drivers while keeping the non-taxed portion of the bulk of the fare.

V. Not Sharing in the Sharing Economy –The TNC Gig Worker and Economic Disadvantage

A. Understanding the Sharing Economy - What is Being Shared?

The sharing economy has a voluminous definition that impinges upon supply and demand of an asset and its variable access by unlocking the value of unused or under-utilized assets benefiting both agents that are party of the transaction. For example, the sharing economy is defined as "*an economic model in which individuals are able to borrow or rent assets owned by someone else*" with the underlying assumption that the transaction is one that originates from underutilization of an asset.[221] Another definition highlights the sharing economy as "a*n economic system in which assets or services are shared between private individuals, either for free or for a fee, typically by means of the Internet."*[222] However, the genesis of the term can be traced back to the early days of the internet and the peer-to-peer data sharing community.

Peer-to-peer exchanges of goods and services have been represented as an essential part of the new economic growth model in most economies, allowing an excess surplus of goods and services to be exchanged in an income-generating technology platform that circumvents the traditional market and are fueled by innovation and novice technological startups. The value proposition of this peer-to-peer model consists of creating a match, at the right time and absorbing reasonable transaction costs, between a peer *owning* a particular resource and a peer *in need of* that resource.[223]

The internet-based peer-to-peer model of exchange rose to prominence in the late 1990s with the advent and expansion of the music sharing platform, Napster, which allowed audio files to be shared by autonomous users. Napster's platform was designed in a way that would only serve as a conduit between two peer-to-peer file locations in order to avoid, at least for a short time, potential copyright infringements. The peer-to-peer model of audio file exchange came to an end following a United States District Court decision that found Napster liable for contributory and vicarious infringement of the plaintiffs' copyrights (A&M Records, Inc. v. Napster, Inc.), laying the groundwork for more elusive peer-to-peer sharing models to proliferate online in a decentralized manner and resulting in both the continued evasion of accountability and anticipated demise of the traditional music recording industry.

The concept of the current sharing economy derived its roots from the Napster type of peer-to-peer model of economic exchange; however, it is practical to conclude that the coining of the phrase "the sharing economy" is now more of a linguistic parlance to attach a social aspect of the peer-to-peer practice with the aim of distancing itself from the Napster debacle. In the past few years, several economic elements have driven the growth of the global sharing economy on the back of the economic downturn that resulted from the global financial crisis. For example, high unemployment rates that reduced the purchasing power of consumers and forced people to find new ways to earn

[221] http://www.investopedia.com/terms/s/sharing-economy.asp
[222] http://www.oxforddictionaries.com/us
[223] http://ec.europa.eu/DocsRoom/documents/13413/attachments/2/translations/en/renditions/native.

or save money led to an acceptance of peer-to-peer business models centered on consumer needs for suppliers and customers. Further, the necessary technology for hosting an online peer-to-peer market has, in recent years, become available at a more reasonable cost with a smartphone device that is capable of processing large amounts of date and location based goods and services offering.

The widely-utilized business model deployed by companies that identify themselves as part of the sharing economy features an online marketplace through which the demand for certain goods or services amongst customers is matched with those who own those goods and services. Differentiation strategies are based on the mechanism that drives matchmaking (matching supply and demand of these goods and services), which can be either demand-driven, supply-driven or a combination of both. However, the common characteristic of these companies is the actual *lack of sharing* and the presence of an exchange of goods and services. One factor for the non-existence of sharing of goods and services in this model is the customers' own disinterest in sharing goods or services they own in lieu of their preference to opt into purchasing rather than sharing. As such, companies that started out as part of a true sharing economy model requiring human interaction to share excess goods or services either depleted their seed funding or morphed into an odd menagerie of companies with little in common with how they initially promoted themselves and their initial focus on a sharing surplus.

In reality, a sharing economy model that is true to its essence successfully operates by enabling groups of individuals to co-own and share resources while enjoying their use based on pro-rated ownership stakes. The sharing dynamics also necessitate members of the group to share not only their resources, but their knowledge, decision-making responsibilities, and the abundance stemmed from the collective. For example, in agrarian societies, small farms may choose to purchase farming equipment by pooling their resources and sharing in both the equipment's maintenance costs and use throughout the year. The costs and benefits of the farming equipment are proportionally distributed among members, thus creating an equitable utilization. Similarly, a timeshare, whereby a group of individuals own shares in a piece of property, share the use and cost of the property under a timeshare agreement that will dictate the rights and responsibilities of the individuals. In these sharing models, the one absent component is the profit generated by the entities that facilitate either the sharing of the farm equipment or the ownership of the timeshare property. As such, real sharing models operate distinctly from profit-seeking entities that specialize in, for example, vacation rentals (i.e. Airbnb) or smartphone apps for widely unregulated for-hire vehicle services (i.e. Uber).

The sharing economy concept that resulted in the birth of entities such as Kickstarter (a platform that raises financing to fund various goals among many contributors), Airbnb (an advertisement website for homes that charges customers seeking lodging by the night, not unlike a hotel), and companies like Uber and Handy (that utilize the labor of "independent contractors" paid by the hour or mile to provide services), does not, in fact, emulate a true "sharing economy" like the models discussed above. These companies, while initially operating as platforms to encourage social interaction and create economic efficiency by reducing waste, have now morphed into businesses that profit from the facilitation of the exchange of goods and services, with less, or no, emphasis on sharing surplus. In short, there is nothing these companies share

in a "shared economy" model, and the transpiring of exchanges of goods and services are equivalent to the normal market economy setting where these goods and services are geared towards profit-generating customers that happen to be technology-savvy.

After an extensive review of the models of the current arrangements of what is referred to as the "sharing economy," Bardhi and Eckhardt,[224] in their analysis of the phenomenon, argue that:

> *"Sharing is a form of social exchange that takes place among people known to each other, without any profit. Sharing is an established practice, and dominates particular aspects of our life, such as within the family…When "sharing" is market-mediated — when a company is an intermediary between consumers who don't know each other — it is no longer sharing at all. Rather, consumers are paying to access someone else's goods or services for a particular period of time. It is an economic exchange...*[225]

The authors conclude that this economic exchange is one that should, in actuality, be termed the "access economy," where consumers are more interested in lower costs and convenience than they are in fostering social relationships with the company or other consumers. In other words, customers are paying to access goods and services that, in no way, contemplate sharing as a form of social exchange, and, in fact, evidence a disinterest by customers in engaging in sharing.

Furthermore, there are no conceptually identifiable "sharing" characteristics in the traditional market exchange platforms exhibited by most companies that identify themselves as part of the "sharing economy." For example, both a person paying for lodging at a hotel -- either by directly walking into the hotel or through a travel agent -- and an online platform that enables access to similar lodging (either at a hotel or a room that is made available by an individual) are facilitating the booking process of a room regardless of who owns the room. Essentially, a company that facilitates the booking process of the room in the realm of the so-called "sharing economy" (i.e. Airbnb) and a hotel in the traditional market setting provide a similar service utilizing different service-delivering mechanisms.

In the realm of transportation, TNCs claim they are a "ridesharing" platform and should not be regulated in the same way taxicabs and for-hire vehicles are licensed and inspected by government entities. However, an analysis of the so called "ridesharing" service provided by TNCs makes it clear that drivers are selling both their skills as drivers and a seat at the back of their vehicles, while passengers are simply paying to access the drivers' skills and the empty seats. In other words, drivers are renting out both the back seat of their vehicles and their time to implement their driving skills without any "sharing." Consequently, the above analysis of the current state of the sharing economy and its spurious supposition that companies that form the TNC model are facilitating "sharing" among people proves the supposition to be nothing less than a marketing ploy. For example, Lyft started out facilitating rides with a "suggested donation" economic platform while claiming a significant space in the "sharing economy" narrative, which

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[224] Fleura Bardhi and Giana M. Eckhardt. *Access-Based Consumption: The Case of Car Sharing*. Journal of Consumer Research, December 2012.

[225] University of Chicago Press Journals. "Sharing isn't always caring: Why don't consumers take care of their Zipcars?." ScienceDaily. <www.sciencedaily.com/releases/2012/07/120716191449.htm (accessed March 29, 2016)>.

lasted for only a few months; Lyft is now a typical for-hire vehicle company disguised as a smartphone app that competes with Uber and other TNCs on price, coverage area and driver participation. Similarly, Uber, which attempts to focus the conversation on how it is allegedly reducing the number of vehicles on the street while "providing transportation so inexpensive and reliable, people can actually sell their cars,"[226] is a company focused on the short-term car-ride market (which is a broader definition of a service provided by taxicabs or any other for-hire vehicles), and is driven by pricing and technological convenience that attracts customers (and not any vehicle "sharing" model, as, other than its UberPool service, Uber does *not* otherwise provide vehicle sharing).

As discussed in previous sections, the UberPool Lyft Line (Uber and Lyft's models, respectively) are the only two conceptually-accurate rideshare services that are currently provided by both companies. Both services were introduced in 2015, despite the companies calling themselves rideshare services 3 years prior to the launch of UberPool and Lyft Line. As such, it could be argued that the introduction of these new classes of services many years after the companies' portrayal of their core business as a "rideshare" service is nothing more than a misleading marketing scheme to silence critics of the companies' misuse of the term, rather than a holistic business strategy to create a for-hire vehicle sector that efficiently utilizes vehicles and ride requests by matching passengers with available vehicles to encourage "real-sharing." In fact, when Uber launched its first service, it claimed its car service was "everyone's private driver," and a luxury private car company, rather than a company that attempts to bridge the inefficiencies in the for-hire sector. To its core, Uber's utilization of ridesharing is a marketing convenience rather than a decision that was based on the reduction of disparities of service in the sector.

B. The Cost of the Sharing Economy

Unlike the free access the peer-to-peer model provides to customers, which managed to drive traffic to its web pages to generate revenue through advertisements, the current "sharing economy" has resulted in cheap pricing for access and the proliferation of ever-smaller jobs ("gigs" and "micro-gigs") where worker income is declining, with no safety net, while companies profit. In the process, small companies that pay taxes, employ a local workforce, and follow rules and regulations set out by local regulatory bodies to operate, may be decimated as a result of the imbalance that is prompted by the app based companies partially unregulated business activity and a simple market take-over.

The companies that have taken advantage of the new "sharing economy" approach have managed to reduce operating costs by utilizing workers under a contractual relationship that classifies these individuals as independent contractors, and not employees. This relationship, which is exemplified by TNC drivers as well as, for example, cleaners and handymen of the smartphone app Handy, has reduced the cost of doing business significantly and allows the companies to extract all the benefits from the relationship while burdening the worker and society at large with the externalities that emanate from the independent contractor model.

[226] https://newsroom.uber.com/announcing-uberpool/.

According to reports, the utilization of workers that are not employees lowers labor costs dramatically, often by 30 percent, as the company is not responsible for health benefits, social security, unemployment insurance benefits, workers' compensation, paid sick or vacation leave, and more.[227] Some workers in the current "sharing economy" model, who are barred from forming unions and have no grievance procedure, can be dismissed without notice. As far as the company is concerned, this is the most ideal operating strategy to drive up net revenue while providing the service at a lower cost, enabling it to attract new customers enamored by the low price for the service while stealing the customers of their competitors who utilize an employee-employer model.

The worker classification model is so integral to the success or failure of the business of these companies that are in the realm of the current "sharing economy" that the threat of litigation usually generates a concern from their investors and, at times, results in a complete closure of a company. For example, Homejoy, a cleaning company smartphone app with over $60 million in funding that relied on independent contractor workers, were forced to suspend its services after four employees filed a lawsuit claiming they were, in fact, wrongly classified as independent contractors. According to the CEO of the company, the "deciding factor" in the service suspension was the resulting litigation.[228]

The expansion of the current "sharing economy" model has also been cited as a significant factor in the decline of the quality of today's jobs as many employers are increasingly relying on a growing number of independent contractors, freelancers, temps and part-timers, collectively termed as "the disposable workforce."[229] Companies that benefit from this worker relationship arrangement argue that the jobs are being performed by individuals in their off hours to supplement income from a more stable position of employment. However, many of these workers, in fact, depend on these jobs for all of their income, whether from a single company or by attempting to piece together a living wage from several such positions.

In the TNC model, most drivers utilize both Uber and Lyft to receive trips in addition to dispatched trips from traditional limousine and black car companies with corporate clients. Some question if companies that fail to provide adequate protections for their workers should even be permitted to conduct business, considering the social cost generated by these companies is not being priced into their cost model and their activities do not reflect the existence of a market failure. This is clearly evident in the price war between TNCs to a level where drivers are forced to accept work below their optimum marginal cost and benefits. In reality, the fare that has been quoted by TNCs in their marketing ploy to attract passengers does not reflect the cost associated with providing the transportation service, which again raises the question as to whether these companies should qualify to exist at all without accounting for the total cost they externalize to drivers and society at large. One explanation for this distorted cost model utilized by TNCs is their founders' potential exit strategy through an Initial Public Offering[230] (IPO), which is misaligned from market realities and profitability. Essentially, current owners and investors of TNCs are more interested in increasing the

[227] Steven Hill (2015). Raw Deal: How the "Uber Economy" and Runaway Capitalism Are Screwing American Workers.
[228] http://www.forbes.com/sites/ellenhuet/2015/07/23/what-really-killed-homejoy-it-couldnt-hold-onto-its-customers/#5c54c117114c.
[229] http://www.zerohedge.com/news/2015-12-30/rise-temp-economy-more-us-employers-ever-want-disposable-workforce.
[230] An initial public offering (IPO) is the first sale of stock by a private company to the public.

number of their affiliated drivers and vehicles in order to push their company's valuation, which would strengthen their exit strategy through an IPO and drive their return on investment.

C. TNCs' Impact on the Environment and the Labor Market

The expansion of TNCs has come with a heavy cost affecting both the environment and the labor market, which both independently and holistically exacerbate the issues. For example, the reason TNC drivers arrive so rapidly in most cities - and passengers are exposed to multiple vehicles waiting to receive their call on TNC's smartphone app - is because these companies have literally flooded the streets with an excessive amount of vehicles resulting in severe traffic. According to a review of Uber data by a New York City-based transportation analyst, Uber-caused congestion has reduced traffic speeds in downtown Manhattan by around 8%.[231] This result is not surprising when one considers the rate at which TNCs are increasing the number of vehicles on New York City's streets. As such, there are now over 35,000[232] Uber cars operating in New York City than there are yellow taxis;[233] in fact, Uber vehicles and those of Lyft also now vastly outnumber taxicabs in several American cities.[234] For example, in San Francisco, Uber and Lyft have a combined estimated 15,000 vehicles on the streets, and according to San Francisco's Director of Transportation for the city's Municipal Transportation Agency, TNC vehicles are "contributing to the increased traffic" in the city.[235] The TNC growth model that relies on an expedited arrival time has resulted in TNCs having to increase the number of their vehicles expeditiously, affecting traffic movement and the environment while increasing the number of workers with no protection and benefits otherwise available to their counterparts in traditional transportation businesses.

With regard to labor issues, in addition to the possible misclassification of TNC drivers as independent contractor, claims by TNCs that their drivers generate significantly more income than taxicab and for-hire vehicle drivers are contradicted by reports that have analyzed TNC driver income. Previously, Uber claimed that the median annual income of a driver in New York City was $90,000 in "business income," without taking into account the real economic costs to drivers, such as vehicle loan payments, fuel, vehicle maintenance, car insurance and health insurance. Further, the Uber-reported "business income" earned by its drivers failed to include the number of hours drivers needed to work in order to generate this income. One report that reviewed Uber drivers' income and actual driving expenses postulates that Uber drivers do not, in fact, earn more than taxicab drivers.[236] However, it should be noted that Uber's surge price model has proven to be a significant incentive to drivers to boost their income at the expense of the passenger who is forced to pay more than that of a taxicab trip.

Furthermore, many Uber drivers complain that in addition to their failure to earn minimum wage or receive any benefits, their situation is hampered by the fact that they

[231] http://www.streetsblog.org/2015/07/22/ubers-own-data-reveals-it-slows-manhattan-traffic-9-percent/.
[232] http://www.theverge.com/2016/2/1/10888734/uber-driver-strike-nyc-fare-cut-february-2016.
[233] http://nypost.com/2015/03/17/more-uber-cars-than-yellow-taxis-on-the-road-in-nyc/.
[234] http://www.dailypress.com/business/dp-tidewaterbiz-ridesharing-20150724-story.html.
[235] http://www.sfgate.com/bayarea/article/S-F-traffic-Numbers-don-t-show-why-it-really-6268436.php.
[236] http://www.huffingtonpost.com/steven-hill/sharing-economy-american-workers_b_9018724.html.

can be disconnected from the Uber app platform at any time without any recourse, thus leaving them with expensive car loan payments. This is evidenced by Uber's recent disconnection of hundreds of drivers in California and claiming that the disconnected drivers' "acceptance rate" was too low.[237] It has also now dawned on many of Uber's drivers that began working for the company since its early days that, given the dramatic increase in congestion, they earn little to no income on short rides because they are stuck in traffic, and their subsequent refusal to accept short rides has resulted in Uber terminating many of these drivers without warning.

Driver turnover, according to Uber's self-reported numbers, reflects that about half voluntarily terminate their relationship with Uber within a year of registering as a driver with it, and new drivers, who initially were enamored with the promise of income-earning flexibility, burn out and walk away angered with frequent wage cuts and unfair treatment.[238] In January 2016, Uber continued its trend of slashing fares, this time by 30% to about 50% per mile, which resulted in less than the $0.54 reimbursement rate set by the government for wear and tear on a vehicle.[239] In sum, many drivers are simply unable to earn enough to reimburse their vehicles' depreciation, let alone making a living out of driving for Uber. This incident, combined with other Uber practices, demonstrates that the company exerts a certain control over its drivers that seems to support the legal claim by thousands of drivers who are suing Uber insisting they are indeed employees and not contractors.[240] This is evidenced by both Uber and Lyft's decisions to settle with drivers in California and Massachusetts who contended that they should be treated as employees and not independent contractors.[241]

The utilization of the independent contractor model in the for-hire vehicle sector is something that precedes the new app based technology companies use of the model. In the taxi sector where drivers are able to lease medallions or licenses from owners of these permits or fleet operators, the independent contractor model has enabled a clear demarcation of rights and responsibilities of the owners of the taxi licenses and the drivers in a clear method, where the legal relationship between the two has been limited to the lease and utilization of the license. In the for-hire sector, despite the existence of an employee-employer model preferred by some companies, most for-hire vehicle companies conduct their business under "a true" independent contractor model. For example, a driver may own his vehicle but enter into a contractual relationship via a contract with an FHV company that provides the driver a radio dispatch and other communication equipment. The driver is engaged with the FHV company to provide a service that is generated by the FHV company where the driver enjoys full control of his/her working hours, types of work, and the length and extent of his engagement with the FHV company.

As discussed above, drivers in the for-hire sector in most U.S. jurisdictions are considered independent contractors not employees. This has been well settled in many courts around the country. For example, in *Saleem v. Corporate Transportation Group*,

[237] http://therideshareguy.com/uber-deactivated-a-bunch-of-drivers-as-an-intimidation-tactic/.
[238] http://www.businessinsider.com/uber-drivers-say-theyre-making-less-than-minimum-wage-2014-10#ixzz3W1mRyYXC.
[239] http://www.tampabay.com/news/transportation/ubers-low-fares-spark-backlash-drivers-protest-pay-cuts-customers-may-face/2261405.
[240] http://www.reuters.com/article/us-uber-tech-drivers-lawsuit-idUSKCN0R14O920150901.
[241] http://www.reuters.com/article/us-lyft-lawsuit-drivers-idUSKCN0Y22PJ.

Judge Jesse Furman of the Southern District of New York held that drivers for a group of "Black Car" companies were properly classified as independent contractors, not employees.[242] The Court applied the "economic reality" test for whether the drivers were employees or independent contractors under the Fair Labor Standards Act (FLSA). The factors were: (1) the degree of control exercise by the employer; (2) the workers' opportunity for profit or loss; (3) the degree of skill and independent initiative required to perform the work; (4) the permanence or duration of the working relationship; and (5) the extent to which the work is an integral part of the employer's business.[243]

Judge Furman held that the factors overall weighed in favor of independent contractor status. He noted that the drivers:

- Were completely free to set their own schedule of work and were under no obligation to accept a particular job;
- Were free to—and frequently did—work for other car services and provide transportation to private customers;
- Made numerous decisions that affected their overall profitability, such as whether to rent or buy a franchise, whether to hire other drivers, whether to work for other car service companies, and whether to solicit private clients;
- Made substantial investments in their businesses through purchasing franchises as well as on their own private vehicles;
- Exercised a significant degree of independent initiative in order to be a successful driver; and
- Could terminate the franchise agreements at will.[244]

Although the New York Labor Law (NYLL) test required Judge Furman to assess several additional factors, he reached the same conclusion, that the drivers were properly classified as "all five NYLL factors favor independent contractor status."[245]

The issue, however, has not yet been resolved in the courts with respect to TNCs. Uber and the vast majority of TNCs are able to keep their costs low by classifying drivers as independent contractors and refusing to treat its drivers as employees. In addition to minimum wage, overtime pay and having expenses reimbursed, "employees" can also receive unemployment benefits if they are laid off, and have the right to unionize and collectively bargain for better contract terms.[246] TNC drivers are not eligible for any of these benefits, and have brought claims across the country to challenge their status as independent contractors, most notably in two class action suits brought by 385,000 Uber drivers in California and Massachusetts.[247] Plaintiffs argued that Uber drivers are required to follow a litany of detailed requirements imposed on them by Uber and therefore should be classified as employees rather than independent contractors.

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[242] *Saleem v. Corporate Transp. Group, Ltd*.,52 F. Supp. 3d 526 2014 (S.D.N.Y. 2014).
[243] *Id.*
[244] *Id.*
[245] *Id.*
[246] http://www.huffingtonpost.com/entry/legal-problem-could-crash-uber_us_5718d485e4b0479c59d714f6. (Accessed on July 18, 2016).
[247] http://www.nytimes.com/2016/04/22/technology/uber-settles-cases-with-concessions-but-drivers-stay-freelancers.html?_r=2. (Accessed on July 18, 2016).

Uber recently agreed to settle the class action for a total of $100 million, $84 million now and $16 million more if the company goes public.[248] Lyft is also seeking approval of a settlement with 163,000 California drivers who sued to be treated as employees.[249] The deal would pay driver $27 million but, like in the Uber class action, drivers would remain classified as independent contractors.[250] Similar lawsuits have also been filed in Florida and Illinois. If the lawsuits continue to pile on, it may cause TNCs to reconsider how they provide their services.

D. Conclusions

The current mainstream definition of the sharing economy has enabled TNCs to utilize the definitional gap to imprint the notion to the public at large that their service is reducing waste in the market place through allocative efficiency. There has been a widespread claim, under the banner of ridesharing, that TNCs are reducing vehicles on the street, creating new jobs, and servicing areas that suffered from the lack of taxicab service. Most of these claims emanate from self-fulfilling reports that are guided by the TNCs themselves,[251] or reports that misunderstood the nuances of the for-hire industry and, as a result, fail to record the market realities.[252]

As discussed in the preceding parts of this report, the service provided by TNCs is a transportation service where TNC vehicles transport a paying customer from point A to point B. This is exactly the same service that a taxi or an incumbent for-hire vehicle provides for a paying passenger. As such, TNCs are providing more access to the general for-hire market through a technologically-advanced platform than creating a market environment where vehicle owners and passengers are sharing a ride. The consequence of the definitional mismatch, therefore, has resulted in the public granting TNCs the proverbial commanding heights to misdirect the conversation and perception as to the true cost of the alleged sharing economy model. The consequence of the misdirected conversation has now resulted in a work environment in the for-hire vehicle industry sector where some TNC drivers are making less than $0.55 cents per mile,[253] which is less than the travel reimbursement the IRS determines to be the business travel deductible value for wear and tear of a vehicle, and a driver pool that is increasingly morphing into drivers that have a minimal training and past commercial driving experience. For example, in NYC, a survey conducted by the TLC has found that over 50% of new FHV drivers that are driving for Uber, Lyft, or similar apps, have no prior experience driving for-hire vehicles. This is compared to past driver pool composition where drivers were professionals who are not only licensed by the regulatory agency but also have amassed a lengthy experience.

The result of the decline in driver earning will have a long lasting impact on the industry by discouraging professional drivers from entering the marketplace, and attracting short-term and part-time drivers with very limited skills and experience transporting passengers. In the long run, this may create an environment where the

[248] *Id.*
[249] http://www.insurancejournal.com/news/west/2016/06/03/410814.htm. (Accessed on July 18, 2016).
[250] *Id.*
[251] https://s3.amazonaws.com/uber-static/comms/PDF/Uber_Driver-Partners_Hall_Kreuger_2015.pdf.
[252] https://newsroom.uber.com/wp-content/uploads/2015/01/BSG_Uber_Report.pdf.
[253] http://www.businessinsider.com/uber-drivers-say-theyre-making-less-than-minimum-wage-2014-10.

quality service provided by the industry could be undone to the detriment of the public at large and to the companies that operate their businesses through a legitimate business model.

In sum, the definitional challenge, exasperated by lack of well-formulated principles and policy from both the academic and regulatory side, has furnished TNCs and apps that rely on the sharing economy theoretical foundation to grow at a rate that outpace the regulatory agencies and the incumbent industry to understand and counter the false narratives propagated. Additionally, most of the success of these companies is enabled by the significant amount of capital they have managed to raise to defeat and counter any forms of discussion as to the merits and novelty of their services. Therefore, this report has attempted to disentangle the definitional gap and provided the correct representation of what is being provided by TNCs as the "access economy." As such, defining their services appropriately from the outset will permit to tackle all the residual externalities of TNCs and gain the support of the public and help policymakers to legislate appropriate measures that will create an environment where the market is not diluted by inexperienced and dangerous drivers, but will enable existing participants to compete in a market setting where new entrants are restricted from extracting only the benefit of the sector without sharing the cost of doing business. This approach could create an opportunity for innovation and technological changes to take place without creating a barrier that is artificially set as a result of TNCs capital intensive market disruption. This report finds the following:

- The use of the term the "sharing economy" to define the services provided by TNCs has led to a policy divergence in how these services should be regulated;
- TNCs have utilized this definitional mismatch to proliferate their vehicles and drivers in many cities arguing that their service is different from the traditional for-hire services by augmenting the rideshare concept to meet their marketing strategy;
- The source of the definitional mismatch is a deliberate advocacy by TNCs and in part by the media which finds its genesis in the Napster peer-to-peer file sharing model;
- TNCs service is best described as an access economy, where these companies facilitate access to FHV service through their app based platform;
- The cost of the misconstrued sharing economy model is exhibited on the dwindling driver income, where TNCs are inappropriately using the independent contractor model to extract maximum value of relationship with driver leading to driver unrest and multiple litigations;
- TNCs unregulated expansion has also impacted the environment and the labor market with cities being engulfed with thousands of vehicles;
- The continued expansion strategy by TNCs and the reduction of minimum fares has meant that average driver income may be reduced significantly; and
- Driver turnaround and the majority of TNC drivers being part-time has created a driver pool that is overly represented by inexperience, with a direct negative consequence on safety and quality of service on the long run.

Mitch Nuckles
Virginia Commissioners of the Revenue

Commissioners of the Revenue are utilizing the Registration information to ensure providers of TNC services are issued local business licenses. Elimination of this requirement would make business license enforcement much more difficult. The vehicle registration information is also a tool Commissioners of the Revenue utilize in determining if the vehicle is personal or business use.

Mark F. Courtney
Airport Director, Lynchburg Regional Airport (LYH)

Thank you for contacting me for comments regarding possible changes that may be pursued this legislative session by Transportation Network Company (TNC) interests to eliminate the current license plate decal requirement for TNC vehicles.

As I mentioned, Lynchburg Regional Airport (LYH) does not currently require permitting or access fees for TNC vehicles that drop-off or pick-up passengers at LYH, due mainly to the fact that LYH does not currently impose any permitting requirements or fees for taxicab companies. We have found that, as a small commercial service airport located in a lower-density region of the state, the majority of our passengers tend to drive to the airport themselves and park in LYH's main terminal parking lot when traveling by air. Consequently, the volume of any type of commercial ground transportation service is usually limited.

Nonetheless, with the growth in popularity of TNC services we are continuing to monitor their level of use as well as their impact on roadway and curbside traffic. Unlike their taxicab counterparts, however, TNC vehicles are not clearly marked as for-hire vehicles, and the only current method to identify them as such is through the DMV administered licensed plate decal identification system. As such, the decals permit airport police personnel to positively identify a TNC vehicle as being a commercial vehicle for curbside parking use. Of course, when the time comes that demand for TNC services has reached a point whereby the airport finds it necessary to establish a TNC policy and impose a fee for access, such a decal system will be crucial as part of the registering and compliance process.

While commercial airports like LYH are publicly owned, and operate as unique enterprises that are run like a business, they remain part of the public infrastructure while serving in the public interest. Consequently, our ability to control and monitor commercial activities such as ground transportation services, including TNCs, remains paramount in fulfilling our public interest responsibilities.

Troy M. Bell, C.M.
Director - Marketing & Air Service Development/PIO
Capital Region Airport Commission

I will gladly forward this to the RICPD chief. To be clear, RIC is 100% in favor of high visibility of vehicles operating in a for-hire mode. If TNC partners applied registration stickers and displayed trade dress as prescribed by law – no issues here.

You can clearly identify taxis, contract passenger limos/sedans, motor coaches, and even various courtesy vehicles operated by hotels, rental cars, off-airport concessionaires, etc., so why should TNCs "on app" be an exception?

Chief RJ Clark, Richmond International Airport Police Department

The Richmond International Airport Police Department (RICPD) is not in favor of eliminating the specially colored TNC decals currently in use. With the number of violations of Trade Dress, the registration stickers provide a common and visible theme for identifying TNCs.

Especially for us in a business and non-residential environment, the TNCs need to be identifiable to ensure compliance with Laws, Rules, and Regulations. This is no different for Taxis, Limousines, and other "people-movers." TNCs are business operators. We believe the current requirements are appropriate.

Michael J. Cooper, C.M.
State & Local Government Affairs Manager
Metropolitan Washington Airports Authority

You've asked that the Metropolitan Washington Airports Authority (MWAA) provide information to the VA Department of Motor Vehicles (DMV) regarding Transportation Network Companies (TNC's) operations at our airports in relation to the decal and trade dress requirements. In short, consistency in TNC vehicle license tag and rear window decal display and display of TNC trade dress is of particular importance to enforcement.

MWAA Police Department Officers use both the tag decal for in-state DMV-registered TNC vehicles as well as the black and yellow rear-window sticker for out-of-state TNC vehicles to easily identify whether a vehicle operating at our airports is registered through VA-DMV. Our experiences at both Ronald Reagan Washington National Airport and Washington Dulles International Airport is that window decals and the trade dress identifying these vehicles is particularly effective.

Placement of signage (trade dress) identifying the vehicle as a LYFT or UBER vehicle is sometimes more of a challenge due to the various locations the dress is located, the impact tinted windows have on an officer's ability to see the placard, and the common sight of the placards curling and failing to remain flush with the window glass. The benefits of having trade dress located in one or two easily identifiable and consistent location impacts our officer's ability to efficiently and properly take enforcement actions toward vehicles that are not operating within the established statutory requirements. Officers do not needlessly stop what appears to be a potential violator when the vehicle is properly and easily identifiable. TNC drivers and passengers are not needlessly delayed from their activities in our airports due to a consistent and easily understood expectation of identification.

A Lieutenant from MWAA described it as being similar to the license plate on your car. If an officer knows where to look for your license plate he or she may determine the vehicle's state of registration, if the car maintains a current registration, and failing this, what enforcement action may be taken. This trust and cooperation creates an environment where both the vehicle operator and law enforcement officer work in tandem under a set of known expectations.

David Suda
Chesterfield County Police Dept.

I handle the taxi permits for Chesterfield County Police Dept our codes are basically regionalized with Richmond, Henrico and Hanover. We use the decals on the back of the taxi not on the license plates.

The decals on the back of the taxi are easier for the officers to notice than having something on the license plate which lets them know if the company has applied for a permit in the regional area.

So in my opinion it is very important to keep the stickers.

L. S. Bailey, Chief Deputy
New Kent County Sheriff's Office

Our agency has had very few issues pertaining to the TNC. I do think some type of identifying decal is helpful for Law Enforcement. To my knowledge our agency has not had any contact with out of state TNC. If I can be of any further assistance please let me know.

Det. Kyle D. O'Keefe
Arlington County Police Department
Hack and Licensing Unit

In response to your recent inquiry regarding TNC vehicles displaying specifically designed decals, we strongly urge DMV to maintain the current requirements. While attending the recent Leadership Team Meeting, I did not hear any discussion of removing these decals, nor were the TNC companies requesting DMV to do so. Had I heard that, I would have certainly expressed my concerns at the time. It was my impression the only discussion was the specific placement of the "Trade Dress" identifier.

As you noted, the decals serve an important role in allowing Officers to identify TNC vehicles. Arlington has several high volume commercial districts, which see an influx in activity on evenings and weekends. The large volume of patrons has necessitated the Police Department to staff overtime shifts for these locations. One of the primary duties is to ensure the safety of patrons and pedestrians leaving the commercial businesses, and attempting to secure a taxi or TNC vehicle. The volume of taxis and TNC vehicles along these stretches of roadway is tremendous, causing traffic congestion and safety issues.

Having identifiable characteristics on the TNC vehicles greatly assists the Officers in identifying these vehicles and appropriately moving them out of travel lanes, or assisting the drivers in identifying safe areas to pick up passengers. Without the markings, the intentions of vehicles stopping in the roadway, or loitering in the area, would be unknown to Officers. There have also been documented instances of a passenger entering the wrong vehicle, which they believed to be a TNC, which poses many safety concerns. It should certainly be the goal of the State to do what is feasible to make these TNC vehicles identifiable, both for citizens, and Law Enforcement.

The latest number of registered vehicles (143,000) is clear evidence that the TNC business has become, and will likely remain, a large presence in our State. Particularly in our jurisdiction, where there is such a large number of out-of-state TNC's operating, abandoning the one system of identifying these vehicles would be a mistake. Our Officers are interacting with TNC vehicles on a daily basis, and enforcing the laws set forth by the Virginia General Assembly. This is possible, in large part, to the mandated decals.

I would be happy to discuss the matter further with you, or provide any additional resources you might need. I found the Leadership Team Meeting very informative and appreciate the invitation and opportunity to be involved. I look forward to working with you moving forward.

From: Whitham, Craig (DMV)
To: Hussey, Rena (DMV); Smoot, Janet (DMV); Harrison, Patrick (DMV)
Subject: FW: TNC Report
Date: Monday, November 28, 2016 5:44:59 PM

Response from Judy Swyston...

_____

From: Judy Swystun [judyswystun@hotmail.com]
Sent: Monday, November 28, 2016 5:26 PM
To: Whitham, Craig (DMV)
Cc: Charles R. Duvall Jr.; Charlie King; Trip Perrin; Robert Werth
Subject: Re: TNC Report

Craig,

Thank you for the report. It was well done - thorough and well researched. Also, the DMV has been very good throughout the years about including various stakeholders in the process of legislative changes and taking their concerns and recommendations into account. We commend this approach, which is again evident in this report.

My only comment is regarding the statement on Page 19 under Stimulus for Additional Regulatory Change: “The current classification system dates back to the days of heavy economic regulation, and the different authority types largely serve to segregate the marketplace and protect the different classes of service providers.” I feel that this does not accurately reflect the history of motor carrier regulations in the Commonwealth. Just as the TNC statutes may now be revised so have the other motor carrier laws throughout the years, with the focus remaining throughout on consumer protection, including satisfaction of the public’s interests in understanding and choosing among the different types of services provided, in preserving the benefits of fair competition, and in there being adequate enforcement to ensure the safety and reliability of those services. To ascribe all of this to economic protectionism risks diminishing the beneficial purposes for which these regulations have been developed and have evolved.

Again, thank you for the opportunity to comment on the TNC report.

Sincerely,

Judy Swystun

President

Black and White Cabs

6304 Sewells Point Rd.

Norfolk, Va. 23513

(757) 853-1844

please immediately delete it and all copies, and promptly notify the sender. Nothing in this communication is intended to operate as an electronic signature under applicable law.

_____
From: Whitham, Craig (DMV) <Craig.Whitham@dmv.virginia.gov>
Sent: Wednesday, November 16, 2016 4:09 PM
To: Whitham, Craig (DMV)
Subject: TNC Report

Stakeholders,

Enclosed is the TNC report which will be sent to the General Assembly members in accordance with the 2015 TNC legislation. The content of this report was discussed in our Leadership Meeting in September. You will note that the section regarding the compliance review and the contents of Appendix E are both pending. They will be included in the final report. The contents of Appendix F will be finalized once we have received any submissions you may want to submit.

If you would like to include a submission (memo or email), outlining your comments or feedback, you may do so and we will include it in Appendix F. We will need all submittals by close of business on November 28th.

Best,

Craig C. Whitham
Virginia DMV | Senior Policy Analyst | (804) 367-6701 |
craig.whitham@dmv.virginia.gov|<mailto:Richard.Holcomb@dmv.virginia.gov%7C>
www.dmvNOW.com<http://www.dmvnow.com/>

To: Craig Whitham

Re: TNC Report

Comments from J. Christopher LaGow

CC: Rena Hussey, Richard Holcomb, Janet Smoot

As one of the insurance industry participants in this study, please include these comments in Appendix F of the TNC Report.

My comments will be focused on the insurance aspects of the TNC law passed in 2015. I have been one of the stakeholders in the study process since the meetings began in 2014.

In just the first 15 months following the effective date of the legislation, DMV has registered over 144,000 vehicles to provide TNC services, with not quite half of them having Virginia license plates. That certainly makes the two authorized TNC's very large fleet operators, if not the largest in the state. Any fleet of vehicles of that size will certainly have its share of claim losses. Getting the insurance requirements for TNC's in the right posture is certainly important for insurers, the motoring public, as well as the TNC's themselves.

At the TNC leadership meeting held in late September, I suggested that one of the reasons for the successful implementation of the TNC legislation, had been the careful attention to detail in the insurance provisions laid out in the TNC Act. Everyone involved will no doubt recall the disdain for regulatory authority that the TNC's had in the lead up to the 2015 legislation, and their attempts to ignore the Livery Exclusion contained in the personal auto policies (PAP) of their TNC partners. Numerous attempts across the country were made by the TNC's to attempt to force the PAP insurers who had issued personal lines policies to their partner drivers, to assume responsibility for claims arising out of the TNC activities. That was the historical backdrop to the ultimate adoption of HB 1662.

One of the points raised on page 10 of the TNC Report needs to be reiterated here. Under the standard form PAP currently authorized for use in Virginia, "an insurer does not provide coverage for 'liability arising out of the ownership or operation of a vehicle while it is being used as a public or livery conveyance,' which <u>includes the commercial activities of a TNC partner.</u>" (Emphasis added.)

Please refer to the chart comparing the Virginia TNC law to the TNC laws passed in some 35 other states in Appendix C. With the possible exception of Maryland, (where it is unclear from the description given) every single state considers the "commercial activities of a TNC partner" to begin when the TNC partner <u>logs onto</u> the digital platform. That is the moment when commercial auto insurance is necessary to cover claims, until the driver logs off.

Without the partner vehicle, there is no TNC commercial enterprise. The vehicle is the principal instrument used in their commercial enterprise. Without the vehicle to provide the commercial service, the app is of little consequence. Virginia very wisely defined "operation of a TNC partner vehicle" as meaning "(i) anytime a TNC partner is logged into a TNC platform and is available to pick up passengers; (ii) anytime a passenger is in the TNC partner vehicle; (iii) anytime the TNC partner has accepted a prearranged ride request through the TNC platform and is en route to a passenger." The term "TNC insurance" is also defined in § 46.2-2000. It "means a motor vehicle liability insurance policy that specifically covers liabilities arising from a TNC partner's operation of a TNC partner vehicle." (Emphasis added.) Operation clearly starts with logging on under Virginia law.

So, when the TNC partner logs onto his app, the Livery Exclusion cited above applies and coverage will not be available under the driver's personal automobile policy (PAP) until such time as the driver has logged off of the digital platform.

The personal auto policy of the driver should never be called upon to pay claims arising out of the commercial context. It is not priced to pay for commercial losses. Business auto policies (BAP) are.

One big reason why the 2015 TNC legislation has been so successful is that great pains were taken to clarify the type of coverage responsible for paying claims, when that coverage would be initiated, and to spell out in clear and concise language the duties and obligations of all concerned. That was done for the benefit of the public and to protect innocent accident victims from being the object of legal fights between competing insurers over which one was responsible for paying their claim.

In the chart appearing on page 12 of the Report, I have two comments. With regard to the notation under the exclusive duty to defend, that "the insurer has exclusive duty to defend for the period after a ride is accepted, but no exclusive duty during period 1," I would offer that that may be technically correct because that language is not explicit in the statute, but from a practical point of view, the TNC insurer is the one and only insurer responsible for the exclusive duty to defend. You have to look to the definitions of "operation of a TNC partner vehicle" and "TNC insurance." As stated in this TNC Report, at page 10, a personal auto policy (PAP) providing coverage for some or all TNC operations—did not exist at the time Virginia's law was enacted. As of this writing, such a policy still is not available in Virginia…" The only "TNC insurance that specifically covers liabilities arising from a TNC partner's operation of a TNC partner vehicle," is that insurance policy maintained by the TNC partner or by the TNC, or some combination of the two. Since there is only one TNC insurance policy in play, all insurer obligations including but not limited to the duty to defend, fall on that one company.

The second comment I have with regard to the chart that appears on page 12 of the Report, is with regard to the statement that the TNC insurance was not dependent upon the PAP first denying a claim until after the ride request was accepted. Much the same analysis applies as above. Section § 46.2-2099.52(C)(5) makes the express statement that such would be the case in Periods 2 and 3. In Period 1, from log on to ride acceptance, again the only policy offering any TNC insurance coverage that specifically covers liabilities arising from TNC partner's operation is that which is maintained by the TNC. The PAP of the TNC partner is not in play as it does NOT specifically cover such TNC operations. From a practical point of view, the TNC insurance is not dependent upon a denial of coverage by the PAP in Period 1 either.

With respect to Appendix C, I would only note that all of the states included on this chart with the possible exception of Maryland which is unclear at best, begin their insurance requirements for TNC's at the point in time when the TNC partner logs on to the digital platform. It seems rather obvious that legislatures across the country deem that to be the moment when commercial activity, that would otherwise trigger the Livery Exclusion in the personal auto policy, would begin. This also demonstrates a near sacred respect for the Livery Exclusion and the particular pricing mechanisms of the PAP and the adverse implications to the PAP if commercial losses were included in the PAP. The time when commercial activity begins is important in the context of both transport for hire of passengers and the transport for hire of personal property. Losses arising before a ride request is accepted or when a driver is logged on but not yet engaged in a prearranged ride, are commercial losses covered by a commercial policy (BAP) and should never wind up in the paid loss column of any personal lines carrier. The exact same analysis applies to the transport of personal property, and for the TNC's to argue otherwise is ludicrous and inconsistent with the law in every state that has addressed this issue.