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Curb-sided: How Technology Disrupts the American Transportation Planning Process

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Abstract

The disruptive arrival of Uber, Lyft, and other transportation network companies (TNCs) into American cities ignited arguments on how policy-makers should regulate such entities. Policy debates started among policymakers, companies, and existing industries and interests. In attempts to persuade policy, actors adopted a variety of language and used different levels of government to achieve policy goals. In almost all cases, TNCs were able to gain favorable policy through image framing and venue shopping – the key components to Punctuated Equilibrium Theory (PET). This analysis looks at the policy process of three American cities: Chicago, IL, St. Louis, MO, and Austin, TX. Transportation network companies framed the issue favorably to their policy demands, winning over the public, drivers, and policymakers in most cases. However, when the political climate was harsher for TNCs, they sought sympathy from policy makers in different regulator institutions. Conversely, taxi interests were unable to use the same tactics to achieve their demands. I argue that this is due to TNC's ability to appeal to framing suitable for target audiences, mainly free-market, business-friendly, and tech-savvy language. This language appealed to mayors, city council members, and state lawmakers, making TNCs able to "shop" from one level of government to another to achieve lax regulation and company oversight.

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Chapter 1 – Ride-Hailing Technology on the Rise

Vehicle dependence undeniably defines transportation in the United States. Patterns of excessive vehicle use stem from decades of car culture, mostly trending upwards throughout the 20th century. After years of rising numbers of personal vehicles and highway building and repair, Congress and the Executive of the United States developed landmark legislation that envisioned a post-interstate, private vehicle centered transportation system (Schweppe 2001).

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 poised to shift transportation decision making to state and local agencies from federal bureaucratic institutions. Metropolitan Planning Organizations (MPOs) would engage all stakeholders in the transportation planning process. In doing so, emphasis on highways would shift towards different modes of transportation catering to specific needs of municipalities and thus erasing heavy dependence on cars. However, ISTEA failed to make critical changes in most urban areas.

Car culture persists. Although vehicle miles traveled (VMT) declined from 2008 to 2011, car dependence gained momentum again after 2012. VMT hit a new record in 2016 in the United States, reaching over 3.2 trillion miles in one year (Jiao, Miro, and McGrath, 2017). In 2016, private citizens, governments, non-profits, and business owned 269 million vehicles - almost one car for every citizen. Household vehicle ownership increased, reaching 1.88 vehicles per household by 2017. Privately owned vehicles make up most daily travel (Sprung, Chambers, and Smith-Pickel, 2018).

While not necessarily correlated, surges in vehicle use coincide with the introduction of two regimes: the prevalence of the sharing economy and the creation of technical companies catering transportation to this new economic form. The rise of the sharing economy of the 21st century manifested after the 2008 financial crisis and subsequent recession, when younger generations fell victim to stagnant wages and declining opportunities. The sharing economy provided a way to make extra money, while also paying less for services – including transportation. Technology is a crucial component of the sharing economy, as this type of economy relies heavily on using apps for on-demand amenities to distribute services (Posen 2015).

Sharing economy-based technology companies emerged mostly from Silicon Valley, including the two most popular transportation businesses, Uber and Lyft. These companies started operations in San Francisco, but quickly spread to other major American cities and eventually to most urban areas throughout the United States. Technology-based ride-sharing[1] transportation companies promised to connect drivers with passengers through smartphone apps, providing cheap and convenient rides. California first coined these companies legally as *transportation network companies*.[2] Transportation network companies (TNCs) are organizations providing "prearranged transportation services for compensation using an online-enabled application or platform to connect passengers with drivers using a personal vehicle" (California Statute, Art. 7). Using the concept of "sharing economy," ride-sharing companies sought to utilize idle time of private vehicles to capture the sharing economy of transportation.

Transportation network companies quickly eclipsed taxis as the dominating ride-hailing industry. For decades the taxi industry ruled ride-hailing in cities. The taxi industry leaders and transportation decisionmakers were isolated in a strong *policy monopoly*: a network of governments, bureaucrats, and special interest groups holding hegemony and containing certain policy areas by lessening the issue's scope and excluding outside interests over long periods of

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[1] Although the technical use of transportation network companies (TNCs) is both ride-sharing and ride-hailing services, many publications refer to these types of services as ride-sharing. In this text, ride-hailing will be used more prominently due to the comparison to existing industries, e.g. taxicabs. However, essentially ride-hailing and ride-sharing both refer to operations of Uber, Lyft, and other TNCs.

[2] Chicago, one of the cities studied in this analysis, legally calls transportation network companies "transportation network providers" (TNPs). For consistency, throughout this study, TNPs will be referred to as TNCs.

time. Taxis heavily influenced policy making decisions. Transportation departments and city officials passed and implemented beneficial policy for the taxi industry, generally closed off to outside influence and internalized the systems of information.

Introduction of transportation network companies expanded the scope of concern for ride-hailing (e.g. taxi) regulation in cities and states. Policymakers were now left with several questions considering regulation and safety versus convenience and innovation. Governments had to consider both the desires of citizens to want easy access to these new services, while also maintaining established transportation systems. *What were good regulatory practices? How would governments guarantee customer safety? How could all parties be satisfied while still appealing to the desire for innovation, cheap rides, and convenience?*

Most local governments responded to new ride-sharing technology by developing a two-tiered system of ride-hailing transportation policy solution. On one tier, local governments subject the taxi industry to more stringent regulation with strict government oversight. On the other tier, city and state governments set more lax regulation for TNCs and allowed companies discretion and oversight. Taxicabs kept their policy monopoly, but it was more open and severely weakened. Local taxi power diminished. Transportation network company policy monopolies put power into private hands – developing a *private* policy monopoly. Under this type of policy monopoly, private companies hold the largest share of power – leaving many other non-private transportation systems weak compared to the benefits private companies provide to urban transit.

Although taxis and transportation network companies provide essentially the same service, governments regulated both entities with entirely different regulatory approaches. *How did these two services become distinct categories of service across American cities, with one subjected to less regulation than the other?* By understanding the how, we can discern the effects of laxer regulation and oversight control have on transportation systems.

Transportation private policy monopolies have two important effects: the privatizing of the policy process and the eroding of a shared sphere. In privatizing the policy process, government agencies and law-making bodies tasked with regulation for the collective lose power in their ability to mitigate negative market externalities. In this way, the public can no longer trust institutions, creating a feedback loop of mistrust and inappropriate regulation. Privatizing processes erode the shared sphere, prioritizing private, individual use which is exhaustive and exclusionary. Transportation then becomes closed to marginalized and less powerful groups and individuals, diminishing their livelihood and power until private business interests control transit planning.

Technology as the Policy Problem

Quickly evolving technology is now a part of every facet of American life. Smartphones grew into a ubiquitous constant of every interaction involving school, shopping, family, friends, or work. New technology vastly shaped working life as staying connected to jobs and finding work requires constant connection to technological software. Now, new technology shapes the way which Americans commute to work, run to the store, or go to social events.

As technology became increasingly dominant, policy makers found it difficult to revise laws as technology advanced. The dissonance between policy and technology is visible in the uneven delegation of regulations. This difference prevails in local ordinances regulating taxicabs and transportation network companies. Technology companies came into cities and gained notoriety as being convenient, cheap, accessible, and “the next new technology” to appeal to residents. Before decision-makers could respond, technology companies already built up a base of support which preferred companies to continue to operate unchallenged. Then the two-tiered regulatory trend emerged as the solution.

These two-tiered systems produced vocal opponents of this new urban transportation order, most notably the taxi industry. Drivers, franchise owners, and other taxi interests argue that TNCs stifle competition by not complying with taxi regulation, consumer protection, and public safety regulations. Laxer regulations allow for transportation network companies to not sink resources into regulatory compliance, giving them the opportunity to offer a cheaper ride-hailing option compared to taxis. Losing revenue, taxi drivers hoped local governments would provide the same regulations to ride-hailing companies to establish fair competition (Posen, 2015).

Outside of the taxi industry, TNCs incited a new public debate as TNCs affected more citizens and their transportation. For example, three disabled people filed a federal complaint against ride-hailing companies citing the Americans with Disabilities Act (ADA), criticizing that vehicles are unable to accommodate wheelchair users (Gallegos 2017). The disability-rights group Access Living of Metropolitan Chicago also raised the issue with Uber on wheelchair access and other transit-access related issues (Billitteri 2016). Sets of private citizens fear lax standards for drivers, including DUI restrictions and other crimes, are putting passengers in danger (Mundahl 2016).

Changes in technology causing policy debates is nothing new to transit since transportation planning has a unique and interlinked relationship with technology. As more efficient systems and modes become available, mobility changes. The advent of cheap vehicles, street cars, and light rail all made their way into everyday urban transportation, paving over previous infrastructure. However, in lieu of the physical landscape, TNCs impacted the policy process structure, consolidating power to create a new policy monopoly through feedbacks.

Transportation network companies show the creation of a very different kind of policy monopoly, one centered on privatization, laisse-faire markets, and “competition.” In this *privatized* *policy monopoly*, government institutions step aside from stringent policymaking and allow for companies to control many avenues which government traditionally controlled. In turn, transportation governing agencies hand regulatory and oversight power over to companies and dilute their influence.

New TNC policy monopolies wall off other transportation policy creating institutions. Planning organizations and development agencies normally tasked with engaging with the public on matters of transportation planning have diminishing power in constructing policy benefiting public mobility. Further, regulatory agencies like bureaus or commissions traditionally tasked with vehicle-for-hire regulation cannot practice oversight as these organizations bend to the wills of privatized, free-market transportation. The portrayal of TNCs usefulness derives from this defense and appearance of free-market competition. Under this argument, consumer choice justifies any act or structure of the system. However, the privatization policy monopoly concentrates power in one modal type as the dominant system.

Amassed power of private transportation companies leads to the loss of actual mobility choice. By controlling the policy process, other transportation interest groups are unable to sway policy as effectively. In this sense, the policy process *is* the policy problem: the power lost through the manipulation of the process and economic power stifles the ability for other mobility interests to mobilize. Transportation network companies contradict choice in transportation as other modes - unable to offer convenient and cheap services - lose support and resources.

Significance of Understanding the Policy Process

Both supporters and proponents use the term “disruptive” to describe transportation network companies. Supporters speak of changing up a broken system; the ride-hailing status quo does not offer the type of service the public demands. Opponents describe the destruction of livelihoods as taxi drivers watch their paychecks dwindle, all while the government is at the pull of private interests. However, this disruption moves beyond just ride-hailing in urban transportation.

Transportation network companies usually utilize disruption as the means to changing transit systems, having a large impact on entire urban transportation systems. TNCs are not just replacing taxicabs but their entrance into urban areas impedes the function of the other modal components of transportation. In cities like Chicago, light rail, commuter rail, bike, and pedestrian modes of transportation work symbiotically with private vehicles and ride-hailing services. However, passengers began choosing transportation network companies over other mass transit systems, pulling resources from other modes of transit (Wisniewski 2017). Interested groups in other modes of transportation are unable to compete with transportation network companies. Systems that would otherwise be granted appropriate attention now fall behind in gaining capacity to capture resources to provide adequate service. This, in turn, creates a feedback cycle that snowballs the use of TNCs and their power.

From an academic perspective, looking into the building of modern policy monopolies around transportation gives new insight into the contribution of policy process theory, more specifically Punctuated Equilibrium Theory (PET). New transportation network company research focuses heavily on policy analysis, and while this is pertinent to understanding the effects of ride-hailing policy, it fails to address how policy feedback and process lead to the development of TNC policy in the first place. Instead of looking forward at the effects post-policy creation on the sociological, political, or economic outcomes, the policy process is rather reflective on what interest groups and actors could participate in leading to impactful policy.

Although new academic research touched on the effects of policy, and some does delve into the process, no new research conducted delves into a deep comparison case study through a policy process theoretical lens. Academics consider the merits of the two-tiered system through several disciplinary lenses including economics, labor, socioeconomic, and transportation management (Koopman, Mitchell, and Thierer 2015; Feeny 2015; Rogers 2015; Cohen and Kietzmann 2014; Biber, Light, Ruhl, and Salzman 2017). However, these articles never fully flesh out the institutions, location, power, or politics leading to setting these systems into place.

A few contemporary examples of transportation network company policy process provide fundamentals for understanding different levels of disruption technology has on transportation planning. Kathleen Thelen (2018) analyzes Uber's arrival across different countries: Sweden, Germany, and the United States. Thelen argues that institutional arrangements diverge the highlighted policy problem which then mobilize different actors and coalitions, along with adjusting the "terms" of the policy conflict (2018, 939). Ruth Berins Collier, V.B. Dubal, and Christopher L. Carter (2018) look across several American cities to study Uber's case of "challenger capture," in which the authors describe a system of undermining the existing regulatory regime and the "elite dominated model of contending incumbent versus challenger interests" (920). Zachary Spicer, Gabriel Eidelman, and Austin Zwick (2019) look across ten North American cities, concluding that regulatory responses by municipal governments shapes the *type* of TNC policy localities adopt (147).

Onesimo Flores and Lisa Rayle (2017) deviate from other contemporary work and focus squarely on one case study example of transportation network companies in San Francisco, California. Flores and Rayle use San Francisco as a case study for regulatory response to ride-hailing companies and analyzing the types of political and economic characteristics acclimatizing decisions by policymakers. The authors find that not just companies, but local political actors plan a critical role in the outcomes of modern transportation systems (Flores and Rayle 2017, 3757-8). Still, Flores and Rayle squarely focus on a singular political and policy narrative.

Academic research more focused on the “process” of governments develops a general overview of the effects of technology-based transportation companies on governments. Policy process theory, more specifically Punctuated Equilibrium Theory (Baumgartner and Jones 2009) addresses some of the gaps in the work by Thelen (2018), Collier et al. (2018), Spicer et al (2019), and Flores and Rayle (2017). Punctuated Equilibrium Theory (PET) describes a generalized policy process and combines the concepts of two important components of the policy process: issue framing and venue shopping. If an interested group frames the issue to a narrative that bodes well on their policy solution, policy wins are more likely. However, issue framing is only one tactic. Interested groups can also change “venue” or level of government or institution to attempt to find a sympathetic audience and gain favorable policy. Transportation network companies utilized both issue framing and venue shopping to their advantage to prevent stringent regulation in American cities.

Conceptual Framework for the Study

Punctuated Equilibrium Theory provides the theoretical basis for understanding the policy process of Uber, Lyft, and other TNCs. PET condenses complex moving components of the policy process while adding context of *how* certain interests prevailed. Punctuated Equilibrium accounts for gaps in previous research and provides a more holistic explanation for the political dynamic of new disruptive technology. Further, PET interprets periods of dynamic policy movement as well as stability. Events in the dynamic period can be part of a long “explosive process” alongside periods of constancy (Baumgartner and Jones, 2009: 280).

PET maps onto the TNC policy process through two of the theory’s main components: issue framing and venue shopping. Issue framing refers to the policy’s image, whether it takes on broader values or more technical as to only appeal to experts. Actors and interested groups with power to frame the issues, and thus the policy's image, have larger influence over policy. If actors and interested groups fail to pass policy through one level of government or institution, they have an incentive to "shop around," or appeal to other institutions that can decide on the policy issue.

The policy process of taxi regulation in New York City during the depression embodies Punctuated Equilibrium and helps formulate a basis for research of transportation network companies. At the beginning of the 20th century, growing ease of access to automobiles led to new taxi companies and drivers. Once the stock market crashed in 1929, many unemployed workers of New York City turned to ride-hailing to make ends meet. A variety of new policy problems arose including wage deflation, driver and customer safety, vehicle standards, and other such issues (Hodges 2009).

The subsequent events culminated into a robust policy process leading to the Haas Act of 1937 and the creation of the infamous New York City taxi medallion. Tension and a violent focusing event built the powerful NYC taxi regulation policy monopoly consisting of government, business, and labor. Taxi medallions established an impenetrable relationship among city officials, fleet companies, and taxi unions for nearly a century (Mathew 2005; King 2014).

This policy process and debates of the 20th century mirror those in the 21st: technological disruption of transportation network companies like Uber and Lyft changed the policy process around ride-hailing regulation. This historical example lays down a basis for studying the policy process leading to TNC regulation across cities in America. Punctuated Equilibrium Theory provides a blueprint for understanding the historical example and comparing to modern transportation ride-hailing policy processes.

However, PET does not account for transportation network companies sidestepping the existing taxi monopoly and the creation of parallel *privatized* policy monopoly. Because of this difference, Punctuated Equilibrium Theory needs to be adapted to modern case studies. Issue framing and venue shopping explain components of the transportation network company policy process, but I will adapt PET to explain the emergence of the parallel privatized policy monopoly for this specific case.

Purpose of Study

Every policy process has a multitude of key components that tell the story of how government officials enacted policy. Transportation network company regulation in American cities was no different. Although varying in many ways, each city had actors with certain motivations, discourse and discussion on the policy issues, and essential "rules of the game" (Allison and Zelikow 1999). Changing the policy process through technology is not a new phenomenon suddenly appearing after the turn of the century.

Importantly, historical examples for comparing new to existing policy processes highlights what components of power structures and rules of the game changed and what stayed the same. For this analysis, I examine the events leading up to the Haas Act in New York City in the 1920s and 1930s, when the taxi industry experienced its own form of Punctuated Equilibrium and change in policy. In doing so, we see the differences in policy monopoly formation, language, venue, and the changing role of private interests.

The main purpose of the study involves understanding current changes in the policy process in transportation with the advent of transportation network companies. For a holistic approach to understanding TNCs, I research three different urban areas in the United States: Chicago, IL, St. Louis, MO, and Austin, TX. Each case has unique and dynamic features both before and after the advent of TNCs. The setting of transportation planning before disruption gives a glimpse into how easily Uber, Lyft, and others changed the game.

I chronologically order events of the policy process for each city. Capturing the setting of the policy process creates a narrative of how one step lead to the next, resulting in different types of policy feedback during policy development. Timing and location are important to understanding how different actors played the political game, helping to decipher motivation. I investigate the role of language in influencing the policy process and capture several examples of phrases used throughout the policy process as examples of how competing sides appealed to government officials, politicians, workers, consumers, and the public-at-large.

I then conduct a content analysis for each city, attempting to understand a grander, more generalizable use of language at the city level. I measure frequency of mentions of several actors including TNCs and taxis. Frequency gives insight into the conversation: what is holding the most space in that area of discussion. Then, I measure the frequency of positive and negative language towards these same actors. Essentially, are taxis or TNCs bearing the brunt of criticism or universally praised? Is it a mix of both? More importantly, *does it even matter?*

Hypotheses

The historical example of New York City and the Haas Act provides insight into how the arrangements of urban transportation led to certain outcomes. Based on this historical example, I hypothesize how certain dynamics can lead to varying types of disruption. Using the example of the Haas Act policy process, alongside the Punctuated Equilibrium Theory, I hypothesize three outcomes for the working of the policy process of TNCs that involve the way power relates to PET.

This analysis takes two implications of the policy process from Punctuated Equilibrium: issue framing and venue shopping (Baumgartner and Jones 2009). Powerful actors shift narratives in the policy process, along with scope and attention. Amplified narratives change the language and the tone of a policy issues. Also, interested groups and actors shift influence towards another level of government or organization if narrative and other tactics are not enough to gain desirable influence over a policy. Again, powerful actors are more well equipped to change venue for policy outcomes because of their access to resources and having adequate capacity.

Language frames issues. The way actors present their arguments sway attention and opinions. Using “Level One” framing or “Big Ideas” such as freedom, security, and innovation, actors appeal to a broader audience. Considered hot-button issues, Level One framing draws audiences with core morals values. “Level Two” framing of issue types encompasses material issues, which are more specific than Level One; Level Two examples include the environment, transportation, and job security – language that narrowly focuses the issue and the scope of conflict. “Level Three” involves detailed, technocratic language; Level Three is single policy focus and often includes esoteric language (Frameworks Institute, 2002, 5). TNCs, consumer groups, government officials, taxi fleets, and drivers use their unique language to their advantage.

Controlling the framing and agenda essentially equals power to control policy. If transportation network companies successfully tied language of free-markets and the liberating effects of technological innovation as being an essential part of their platform style company, these companies could use some form of punctuation to rapidly transform urban transportation systems. Although, if opponents successfully frame the status quo in favorable terms, such as tradition, safety, and legality, transportation network company adversaries could successfully block power from TNCs. Successful opposition language would effectively frame TNCs as ill-willed actors that weaken alternative transportation forms.

Unlike the Haas Act of 1937 in New York City, states became more involved in the legislative process of TNC regulation. Some states took a “hands off” approach to urban regulation of Uber, Lyft, and other TNC companies – cities make their own policy with no interference from the state. However, other states forcefully supersede regulation at the municipal level. Power plays though federalism interlinks with theories of venue shopping: interest groups appeal to various "venues" or levels of government to sway policy (Baumgartner and Jones 2009). If transportation network companies use venues to their advantage, either at the state or local level, the governing body could benefit TNCs through favorable (in this case lax) regulation.

Research Impacts

Government institutions fail at addressing questions of technology with a rapid and comprehensive understanding of the disruption. In 2017 and 2018, two strong examples exemplify this failure. Facebook ties to Cambridge Analytica – which used data to influence the 2016 election unknown to voters – became the most salient example of government effort to oversee disruptive technology. Fraught with committee hearings and investigative reports, Senators spent most of their time trying to just understand the issues, let alone come up with a solution (Stewart, E. 2018).

The second failure of technology ignorance currently unfolds on city streets: effects of Uber, Lyft, and other TNCs on everyday American citizens. Customer concerns of safety and loss of profits from taxi companies became legitimate fears of TNCs, but the plight of the taxi driver eventually overshadowed these concerns. Experiencing reductions in wages, increases in working hours, "de-professionalization" of their occupation, and uncertainty of the future pushed cabbies to the brink. In New York City alone, five drivers committed suicide in five months due to the devaluation of the taxi medallion and thus ruining their retirement investment (Stewart, N. 2018).

The dissonance between policy makers and American citizens shows the gaps in the process which ignores stakeholders and misinforms decision-makers. It is fundamental to conceptualize the journey of how new policy on technology arrives at its destination. Perhaps policy fails constituents because they lack power, the relative avenues for information are closed, or decision-makers misconstrue and ignore messages. In studying the policy process of urban transportation with TNC disruption, policymakers, academics, and students of the policy process can better understand why the game changed and why it matters.

Moreover, previous research and theory building on the policy process in political science focuses on an agglomeration of different aspects of policy creation: different players and their power, rules and laws surrounding the ability to address policy alternatives, institutional settings of policy debates, and conflicts among actors and their compromises. TNC disruption of the policy process raise questions in fundamental areas of political science theory.

TNC technology disrupts the equilibrium of transportation policy creation. Punctuated Equilibrium describes policy making though disruptive dynamics (Baumgartner and Jones, 2009: 285-7). Policy monopolies remain contained within a small group of influencers, usually agencies, governments, and consistently persuasive interest groups, until a single or a series of focusing events breaks up control. TNCs threaten to disrupt existing monopolies.

The disruptive nature of this process and punctuation occurs within some form of structure of political actions. The broad, present process consists of multiple events, exchanges, and shifts in power. TNCs punctuate status quo systems of transportation planning into some other form of policy process model. As tensions rise among stakeholders, other focusing events shift conversations to other policy issues. Players change venues. New players join the game. The cycle continues.

Analyzing changes in the policy process from TNCs benefits scholarly understanding in two ways: historical parallels in the policy process and components that change the decision making. First, in comparing the policy process of the Haas Act of 1937, modern concerns of technological changes in urban transportation mirror policy problems of the past. Second, organizing the sheer amount of variety in players, power, and change proves useful when trying to build cases for understanding the policy process.

Chapter 2: Literature Review

"Policy subsystems are continually being created and destroyed in American politics…the American political system is a mosaic of continually reshaping systems of limited participation." Frank Baumgartner and Bryan Jones 2009, 6

Transportation network companies like Uber, Lyft, and SideCar developed narratives of innovation, business, and tech-friendly urban identity alongside strategic venue shopping to win political battles and – ultimately - favorable policy outcomes. American local governments do not subject TNCs to the strict regulations of taxi drivers but instead, ride-hailing companies abide by a separate, less stringent tier of local and state ordinances. Despite varying differences in identity, transportation, and political structure, American cities adopted this two-tiered system of taxi versus transportation network company regulation across the United States.

This research attempts to understand the core question of *how* local and state regulations of TNCs came to be different from that of other forms of ride-hailing and commercial driving. Both industries exist within their own policy monopolies but differ in involvement of local and state government and strength of regulation. Moreover, TNCs formed their own *private* policy monopoly separate from taxicabs and other ride-hailing services. In doing so, we must consider TNCs beyond the actual policy and its implications but grasp the effects of the policy process leading to such regulation.

The technology itself, the advent of companies as platforms for ride-hailing, and subsequent policy is new to the political process. A few comparative theories emerged in 2018 and 2019, showcasing attempts at understanding the policy process of TNCs. These analyses take a macro approach: looking at countries or at local responses across several municipalities. Although this approach grants a basis for insight, I argue it lacks the nuance to adopt a more accurate theoretical approach based on policy process.

Contemporary literature is much richer in transportation network company policy analysis.

A plethora of articles explore the cost to adopting regulation on TNCs separate from other commercial ride-hailing industries in multiple disciplines (Koopman, Mitchell, and Thierer 2015; Feeny 2015; Rogers 2015; Cohen and Kietzmann 2014; Biber, Light, Ruhl, and Salzman 2017). Much of the research comes from economics, with some in political science and public policy research contributing to policy analysis literature. However, policy analysis literature does little to contribute to *how* this regulation formed under different local and state governments.

Different venues have various funding mechanisms and institutional structures that allow the policy process to differ from city to city and state to state for transportation decision-making. Some cities have powerful mayors, or a special regulatory commission for taxis, or a more powerful taxi industry. Some states cooperate with cities and share transportation regulatory capacity, while other superseded local regulatory power. Structures of transportation decision-making antedate any policy decision on transportation network companies.

Transportation decision-making for TNCs embodies a political science theory known as *Punctuated Equilibrium Theory* (PET). PET highlights the importance of actors in the policy process using issue framing to set the agenda and venue shopping to find an “in” for favorable policy. PET offers a more nuanced take into how transportation network companies gained beneficial policy from local and state governments, contributing a better description beyond existing theories and explanations. PET ties together literature on process, analysis, and current policy-making structures.

I begin by analyzing the four articles on the TNC policy process in depth. These studies set the foundation for the research theory and methodology throughout this analysis. I then explore briefly policy analysis literature on transportation network companies since most contemporary research focuses on costs and benefits of TNC policy. Both the policy analysis and decision-making literature formulate the context in which the newly created two-tiered system resides.

Afterwards, I examine aspects of Punctuated Equilibrium Theory relating to decision-making process for TNC regulation, attempting to fill the gaps in the literature. I mainly focus on the two main components of PET: issue framing and venue shopping. I argue that PET helps to add nuance to existing research while better explaining the transportation network company policy process. I attempt to adapt PET to two new policy process dynamics arising from TNC policy creation: parallel policy monopolies and the new *privatized* policy monopoly. I end by summarizing my hypotheses based on PET, explaining *how* transportation network companies infiltrated American urban transportation planning.

Contemporary Theoretical Explanations for TNC Policy Process

Understanding *how* transportation network companies came to have their own regulatory system is a relatively unexplored area of study. The most prolific TNC, Uber, first became a company in 2009 and launched their services in San Francisco in 2011. The next largest company, Lyft, started operation a year later. The two largest companies now operate in most urban areas across the United States. With TNCs being so new, theoretical research of the policy process only surfaced after these companies operated in cities for an extended amount of time.

One of the first studies on the policy process of transportation network companies delves deep into a city as a case study. Onesimo Flores and Lisa Rayle (2017) conducted a deep dive into the transportation network company policy process in San Francisco – the first urban area experiencing the advent of ride-hailing technology. Flores and Rayle question the sole powerful force of companies and use a regulatory response approach to assess the actions of two political actors: the mayor of San Francisco, Ed Lee, and the president of the California Public Utilities Commission (CPUC), Michael Peevey. These two officials reacted in a way that reflected the shortcomings of the existing taxi system, rise of TNCs, and the "growing consensus…about the importance of forging a welcoming environment for new technology companies for San Francisco's prosperity and growth" (Flores and Rayle 2017, 3757).

Transportation network companies emerged in San Francisco during a time when the city focused on healing during the recession and a new push for safety in utilities. After the great recession, the progressive and moderate political factions put their feud on pause to coalesce around an idea of revamping the urban economic landscape. This concentration allowed for Mayor Lee to appeal to the development of San Francisco as technological center. Additionally, a gas line explosion in 2010 put safety at the center of the CPUC concerns – spilling-over into other utility regulation including transportation. Thus, CPUC President Peevey sought to work with and regulate any new technology (e.g. transportation network companies) quickly (Flores and Rayle 2017, 3761).

The advent of Lyft, Uber, and SideCar in San Francisco further highlighted the shortcomings of the existing taxi system. Taxis never showed up in Bayview – a neighborhood with the largest black population. Calling a taxi took notoriously long, and San Franciscans widely accepted that "you couldn't get a cab" in their city (Flores and Rayle 2017, 3760). Due to a ballot initiative in 1978, taxi medallions could not be sold or traded, and only drivers could own them. Medallion holders held significant power in the regulatory monopoly, and little could be done outside of the system to hold up the interest of passengers (Flores and Rayle 2017, 3761). Naturally, transportation network companies created their own regulatory apparatus.

Flores and Rayle (2017) found that the power of technology-based companies in San Francisco were only as strong as their circumstances and the power of cooperative political leaders. The importance of San Francisco to maintain a "tech-friendly" image and develop post-recession drove Mayor Lee to accommodate these companies into the transportation system. CPUC President Leevey wanted to show priorities in safety and worked with new companies to quickly regulate app-based ride-hailing technology. Flores's and Rayle's qualitative study into San Francisco first highlighted the importance of actors, setting, and process for TNCs to win advantageous regulation.

Further research into the policy process of transportation network companies took a macro-approach: comparing different countries and cities with much less depth. Kathleen Thelen (2018) compared the politics of the *platform economy*, or businesses that provide a technological platform to create value rather than producing goods or providing services. Thelen used Uber's influence on policy-making politics in developed, industrialized counties – Sweden, Germany, and the United States - as a marker for comparing these new types of business. The use of Uber as an example is meant to be generalized to the broader phenomena of platform business, such as Airbnb, Instacart, and Rover.

Thelen argues that the most important variations among countries are historical differences in political conflicts. Uber arrives in the same way in all these places: first offering high-end service, then taxi dispatching services through UberTaxi, and finally introducing UberX or some other variant on the budget option. From this point forward, the way different countries handle the tension between TNCs and long-standing transportation, including taxi companies, and Uber diverges and creates a learning environment for how different governments deal with technology. Although these nations experienced a similar "shock" with Uber, differences in policy problems diverge depending on aspects of a country. For the United States, the employment status of workers plays a central role, while countries like Sweden and Denmark, with robust social safety nets and welfare benefits, do not have this same political argument (Thelen 2018, 939).

Unlike Europe, debates in the United States framed Uber versus taxis as a debate of "stifling" regulation as opposed to "efficiency, innovation, and consumer choice" (Thelen 2018, 944-5). Proponents used safety as a means of support, such as reducing drunk driving. Even with several instances of bad press, Uber still found regulatory victories in the United States.

Although it does not capture the nature of the European case, the liberalization thesis as a component of the political economy approach fits the tactics of Uber in the United States. The liberalization thesis states new businesses exploit gaps in existing regulation and essentially drives deregulation. Unanticipated technology or businesses sidestep existing regulation that does not cover exactly their business model or product. Before policy makers can regulate new technological industries and business models, a whole consumer base devoted to the company mount legitimate pressure on decision makers (Thelen 2018, 940).

Liberalization thesis exemplifies the context of Uber moving through the United States with "decentralized battles" from city to city and state to state. Uber exploited competition among venues and used technology to mobilize supporters, ostracizing taxi monopolies as unable to match Uber in innovation and choice (Thelen 2018, 941). The United States welcomed Uber warmly as compared to other developed liberal democracies because Uber appealed to government officials' worry of seeming against technology and business innovation (Thelen 2019, 944-5). Uber framed deregulation as necessary for technological innovation and development across venues in the United States.

Ruth Berins Collier, V.B. Dubal, and Christopher L. Carter (2018) assess how regulatory battles between governments and Uber play out at the local, state, and judicial level. Collier et al. find that existing models of the politics of regulation do not fit in the case of Uber and develop their own model to explain patterns of regulation across the United States for TNCs. Described as "disruptive regulation," Collier et al. characterize this policy process in two ways. First, policymakers ignore existing regulation rather than deregulating or changing it. Second, the new "challengers" gain their own regulations, creating dual or systems of regulation (Collier, Dubal, and Carter 2018, 92).

Collier et al. highlight that different venues emphasized different regulatory issues of transportation network companies and categorize the regulatory agenda by the issue: safety, consumer protection, other competition, worker protection, and public goods. For each category, different groups and interests benefited from that policy issue being centered in regulatory debates. For example, promoting safety benefited consumers while worker protections helped drivers. Cities end up varying more on regulation related to consumer protection and safety. Collier et al. found that Uber succeeded in every city in breaking down price and entry controls by stamping out high priority issues and preventing stringent regulation of background checks, workers' rights, and driver limits (Collier et al. 2018, 925).

Collier et al. accounted for variation in city traits such as progressive cities as innovative hubs, cities with strong regulatory agencies, and cities with recent growth/low density. Timing determined the response to Uber rather than these city traits. Cities with Uber earlier did little to prevent operation, while cities where Uber launched later were more contentious (Collier et al. 2018, 923).

Uber also used both structural and instrumental power to proliferate favorable policy across cities and states. Uber's high-tech reputation gave the company large structural power; Uber threated to leave an area as leverage to gain favorable policy. Uber's access to lobbying firms and alliances with non-profits provided the company with large inside instrumental power. Outsider instrumental strategies included online petitions, public relations strategies, referenda, and manipulation of public opinion data (Collier et al. 2018, 929). This large network of power allowed for Uber to outlast large controversies.

California attempted to regulate Uber after the death of Sophia Liu in 2014 by an Uber driver. Since the driver did not have a passenger at the time of the accident, the California Public Utilities Commission (CPUC) only required private insurance to cover the accident. Susan Bonilla of the State Assembly proposed a bill which required commercial insurance whenever drivers were using the Uber app. Uber used structural power to oppose the Bonilla bill, showcasing an example of how Uber mobilized public opinion, lobbyists, public interest groups, and celebrities through financial and public relations resources. Although cities implemented several regulations, cities and states overturned TNCs law because of “extensive mobilization by Uber” (Collier et al 2018, 926-7).

Governments, taxi interests, and Uber used judicial venues to win regulatory battles. A third of cases were filed over the neglect of worker protections, culminating in lawsuits against Uber (Collier et al. 2018, 929). Workers’ rights surrogates brought income-based claims to court, but most lawsuits were settled out of court or dismissed due to worker’s statuses as independent contractors. Very few judicial cases resulted in new restraints on Uber (Collier et al. 2018, 930). Collier et al. show Uber’s ability to use structural and institutional power alongside strategic venue shopping to stop stringent regulation in many localities across the United States.

Zachary Spicer, Gabriel Eidelman, and Austin Zwick (2019) deviate from venue and focus on government relations strategies and local governments’ perceptions of transportation network companies and how they work in tandem. Using 10 North American “alpha” cities in a broad context, Spicer et al. identify patterns of behavior of political and regulatory leaders: whether governments are cooperative or confrontational, and perceptions of harm or benefit to existing marketplace structures. Built off a policy disrupter theory, Spicer et a. claim that policy disruption occurs when business innovation interrupts existing regulatory systems (Biber et al. 2017). Essentially, Uber’s business model caused local regulators to face difficult policy questions and come up with new policy responses (Spicer et al. 2019, 148).

Spicer et al. summarize Uber’s tactics and regulatory responses for each of the ten cities within their study, including San Francisco, Atlanta, Toronto, Mexico City, Chicago, and others. Uber launched extensive PR campaigns, engaged in feuds with other TNCs, and used mayoral support as a bargaining chip in city negotiations (Spicer et al. 2019, 157-8). Uber appealed to state governments if city officials were combative. Local prohibition was the most common regulatory response, with local mediation occurring after local politicians – mainly mayors – perceived Uber as beneficial (2019, 161).

Overall, Uber achieved legal status and cities created completely different regulatory regimes for TNCs. These companies would not influence policy makers so strongly if not for tactical narrative creation and venue selection for regulatory capture. Perceptions of political leaders ushering innovative business and development into cities led to lax regulation for transportation network companies (Spicer et al. 2019).

Most other literature on transportation network companies consists of the cost-benefit analysis of the sharing-economy versus traditional regulatory practices regulation. Research in business, law, and policy focus generally on the consequences of new platform technology and/or regulator systems adjacent to sharing-economy platforms. For example, Christopher Koopman, Matthew Mitchell, and Adam Thierer (2015) fault regulatory capture as a means for keeping old systems that stifle the benefits of new technologies to mitigate negative externalities. Their work takes a business centric approach to the policy efforts of technology and business

Others shift focus away from the dimensions of regulatory policy and focus generally on externalities of the operations of technology platform companies. Matthew Feeney (2015) approaches ridesharing from a safety perspective, challenging the lack of safety narrative for Uber and other TNCs. Brishen Rogers (2015) looks how Uber impacts safety as well as privacy, discrimination, and labor standards within the ride-hailing service industry.

Other work emphasizes the relationships between sharing-economy “disruptive” companies and regulators themselves. Boyd Cohen and Jan Kietzmann (2014) assess the optimal relationship between companies and government agencies to produce the best outcomes for mobile sustainability. Eric Biber, Sarah Light, J.B. Ruhl, and James Salzman (2017) create a three-step model based on historical policy disruption that policy makers can use to remain neutral between innovators and incumbents. Overall, studies and research pertaining to the policy process lacks in comparison to the policy analysis of transportation network companies.

Gaps in Literature

Transportation network company literature lacks substantially in research on the policy process leading up to the creation of municipal TNC regulation. In the few cases that attempt to describe the reasons for the creation of transportation network company policy separate from other vehicle-for-hire regulation, descriptions out shadow the components of the policy process. Descriptions of events and facts are incredibly important to the storytelling aspect of policy creation, however, neither Thelen (2018), Collier et al. (2018), Spicer et al. (2019) nor Flores and Rayle (2017) use policy process literature to delve deep into understand the *how* of TNC regulation across cities.

Most of these studies offer a broad overview of the policy process. Using policy problem divergence, Thelen (2018) recognizes that the U.S. was the only country where UberX survives and thrives, thus makes a good case to study American cities more in depth. Collier et al. (2018) attempt to do this by including three different city types in their analysis. However, these categories only highlight the urban identity – an important aspect – and do not account for taxi history, public transportation, transportation policy decision-making, or local power structure. Collier et al. (2018) do not account for medium to smaller sized cities that might not have the same experiences as increasingly popular urban areas or long-standing international cities. Thelen (2018), Collier et al. (2018), and Spicer et a. (2019) do brief description of the policy process, lacking depth into the narrative of policy creation. Spicer et al. (2019) recognize the need for rich, qualitative research into individual case studies for further understanding the policy process of transportation network companies (163).

Particularly, Thelen's analysis of the United States becomes problematic when looking at specific case studies in the United States since some experiences in the policy process do not fall into this broader narrative. For example, Thelen claims that the taxi market historically was highly regulated (2018, 944). This is true for some cities, like Chicago, but is untrue for smaller municipalities like St. Louis. Strong governmental oversight of the taxi industry did not occur in St. Louis until 2002, when Missouri created the Metropolitan Taxicab Commission (MTC) for St. Louis City and County.

Flores and Rayle (2017) provide a backdrop to a more narrative case study of the policy process in an American city: San Francisco. The authors provide a blueprint for studying technology and urban transportation in depth but lack the comparative angle to better understand how different cities and dynamics approach the advent of transportation network companies. Although Thelen, Collier et al., and Spicer et al. miss important nuance needed to understand the policy process, Flores and Rayle find nuance in their research but lack the comparative component.

Thelen summarizes the broad adaption of TNC regulation in America as one where most cities *deregulate* local transportation markets (2018, 939). However, to say that cities deregulated local transportation markets too broadly generalizes the conditions of new transportation policy. No other sector (with a small exception of some taxi regulation) experiences deregulation, but rather ride-hailing services experienced a form of privatization separate from existing industries.

Other modes of transportation find themselves at odds with private companies and vehicle use. Flores and Rayle discuss a "two-tier" system of the new transportation system but use this in context of the poor using public transportation and the rich using these new ride-hailing services

(2017, 3763). Here, power shifts away from public transportation interest since populations who traditionally support development no longer find use in public transportation. In this sense, deregulation of the entire system might be the goal, but it is not the current state of transportation systems in American cities.

More importantly, although other vehicle-for-hire regulators and industries are weakened, these policy monopolies are not necessarily destroyed. Thelen states that Uber broke up the taxi policy monopoly, but the structure of the taxi monopoly remains in American cities. Rather, local and state governments alongside TNCs developed a new policy arena and policy monopoly. Flores and Rayle (2017) best exemplify this tension of the two systems in their case study of San Francisco – showing how the taxi industry remains with the onslaught of TNCs.

This does not mean this analysis contradicts Thelen's analysis of cross-national differences of TNC regulation adoption, but rather building on local perspectives and adding nuance to urban differences in the United States. Adding nuance better clarifies the actual status of transportation systems and the policy process. In another example, Thelen de-emphasizes the effect of public transportation and the spread of Uber (2018, 940). However, public transportation plays an extended role in the on-going policy process, especially for Chicago. Using Punctuated Equilibrium Theory incorporates the roles that established systems play, while providing some measure of inclusion for the role unseen actors in macro-level analysis.

The limited yet wide scope of research precludes de-emphasizing or leaving out many key points to understanding the policy process. Collier et al. and Spicer et al. depreciate the timing in which Uber could thrive, mainly during economic downturn. Thelen, Collier et al., and Spicer et al. only looked at Uber, and not the role that any other TNC played in the policy process. Flores and Rayle lack a comparative study to put transportation network companies in a wider context. However, previous research taken maps the general terrain of the policy process, requiring a theoretical approach bring interlinking points of the transportation network company policy process together.

Punctuated Equilibrium Theory

Development of transportation network company regulation across American cities is a case study in the policy process: “a study of change and development of policy and the related actors, events, and contexts” (Weible et al. 2012, 3). Political scientists and public policy scholars placed several characteristics making up the policy process: large scope of actors, long durations of time, dozens of policies and levels of government, robust policy debates, and in many cases, deeply held beliefs and values not susceptible to persuasion. The policy process potentially involves hundreds of actors including lobbyist, government officials, politicians, interest groups, civic organizations, media, court and judges, and the public at large (Sabatier 2007, 3-4). Some base characteristics align with policy process theories; however, theories diverge and lend alternatives to different explanations for policy creation.

Punctuated Equilibrium Theory (PET) departed from other theories of policy processes in avoiding explaining only stasis or change in policy. PET attempts to explain both. Frank Baumgartner and Bryan Jones formulated Punctuated Equilibrium Theory out of the dissatisfaction of other theories failing to account for “policy change as oftentimes disjoin[ted], episodic, and not always predictable” (2012, 1). Observing both status quo resilience and incrementalism, PET accounts for large changes when events or crises occur. Punctuated Equilibrium Theory describes a policy process that is neither smooth nor seamless – punctuation sporadically interrupts the most stable parts of policy creation (True et al 2007, 155-56).

One component of PET emphasizes is the concept of agenda setting; new ideas feed instability for policy monopolies through multiple equilibriums acting simultaneously. New actors and institutions with different policy proposals force old institutions into obsolescence or competition (Baumgartner and Jones 2009, 4). However, to achieve a new institutional structure, policy makers must convince other actors that their proposed policy is a solution to a usually longstanding policy problem and cultivate a positive issue framing around that solution (Kingdon 2003).

Policy changes just as frequently as the status quo, and not just through the electoral process. Systems can fluctuate beyond the standardized, top-down approach (Baumgartner and Jones 2012, 3). PET deviates from previous approaches in not assuming the policy process occurs with smooth transitions, or that stasis/incrementalism and dynamic change are mutually exclusive. Many of these theories rely on the assumption that subsystems remained unchanged, political power is steadfast, and elections are the harbinger of change.

Before Punctuated Equilibrium Theory, policy process theories categorize policy progression into "stages" or "cycles" (Howlett, McConnell, & Perl 2015). Harold D. Lasswell (1956) was one of the premier scholars to set the policy process into seven distinct stages: intelligence, recommendation, prescription, invocation, application, appraisal, and termination. Each of the stages represents general behavior of policymakers at any given point in the process in some form of expected order. Under Lasswell's fundamental model, policymakers are expected to gather information, weigh alternatives, enact general rules and provisional policy, finalize policy, assess success and failures, then end policy if necessary (Lasswell 1956, 2). Charles Jones (1970) also stressed the process of policymaking beyond political resultants. Jones's approach sought to "describe a variety of processes designed to complete the policy cycle" (1970, 4). This suggested a seamless flow from one stage in the process to the next (*also see* Anderson 1975; Brewer and DeLeon 1983).

Charles Lindblom's (1959) "branch" process essentially provides the same stages explanation. The branch process has three distinct steps for policy process: setting the policy objective, outline alternatives, and select the policy. Setting the policy objective allows for the elimination of any issues not related to the main goal of the policy. Outlining alternatives rely on availability of alternatives, past experiences, and combining values to include trade-offs. Successful policy selection could best be described as approved and agreed upon solution (Lindblom 1959).

Other early policy process theories take a less systematic approach. The *garbage can* model of chaotic decision making visualizes the decision-making process as a disorganized and disordered series of decisions, much like trash randomly thrown in a can (Cohen, March, and Olsen 1972). The systematic process by which we are to believe decisions get made – presenting solutions, discussing alternatives and consequences, and final decision making – does not accurately describes the process by which actors make organizational decisions. Instead, these parts of the process, or streams, run independently of each other within a decision-making framework (Cohen, March, and Olsen 1972, 3).

Based on the *garbage can* model, John Kingdon (2003) developed the multiple-streams framework separating processes and actors into three distinct streams: the problem stream, the policy stream, and the politics stream. The problem stream consisted of information and definitions, and the proponents identifying a policy problem. The policy stream consists of supporters of solutions to the policy problem. The politics stream consisted of the components of the politics world: campaigns, elections, and elected officials.

Punctuated Equilibrium Theory does not comport to streams, cans, nor systematic processes. Rather, PET highlights the volatile system of policymaking: focusing events, shifting agendas, changes in venue, policy change, and status quo are all part of an intricate system. Two specific components of PET, agenda setting and venue shopping, illustrate the policy process of transportation network companies in a more complete way.

Agenda Setting

The limited nature of the policy making process forces policy makers to only make so many policy decisions from a restricted number of policy alternatives. Charles Lindblom (1959) introduced incrementalism theory, in which limitations set constraints on policy making. Bounded rationality confines policy makers and analysts, only allowing them to consider an imperfect number of policy alternatives. Individuals can efficiently look at alternatives that only sway slightly away from the status quo. In doing so, policy changes are incremental. Focusing on the individual, Lindblom (1959) emphasizes human inability to analyze all possible alternatives exhaustively leads them to take shortcuts in policy making and evaluation. Policymakers use several heuristics to reduce effort in decision making. Elimination-by-aspect allows decision makers to reduce the number of alternatives, until fewer options are available for consideration (Tversky 1972).

Similarly, Herbert Simon's (1957) development of bounded rationality explains how *organizations* operate within structural limits. Unlike an individual, who can devote attention to a single thing at a time, organizations can attend to multiple tasks or problems. Some organizations handle issues serially, making sure to focus on only one or a few issues at once. Other organizations work on issues in parallel, handling many issues at once (Simon 1957).

Simon (1985) later presents two main forms of human rationality of social science. One, rooted in cognitive psychology, describes administrative behavior: limited capacity to calculate all alternatives, leading to consideration of only selective alternatives, and thus incomplete search. The second, rooted in economics, describes decision-makers' use of choice: actors possess "utility function" that orders alternatives and they chose the one with the highest utility (Simon 1985, 295-6). Baumgartner and Jones (2009) use concepts of incrementalism and bounded rationality to describe moments of stability within the policy process. Without the influence of outside narratives, political decisionmakers are bounded by their cognitive ability remain within certain limits of the policy status quo.

Political systems share these organizational limitations. Since the number of subsystems in politics is so vast, subsystems work on many policy issues in parallel or simultaneously. Scholars often focus on budgets as primary source of incremental change, even when punctuation occurs, because incremental change dominate budget processes. Policy decisions are small, resulting from marginal change in the status quo of base expenditures. Previous year base expenditures tend to not be examined and stay much the same over the course of years of decision making (Breunig and Koski 2006, 364).

However, institutions live outside of a vacuum, susceptible to outside changes and pressures from media, interest groups, business, and the public. Decisionmakers may take new cues from the political environment, shifting attention to new problems and possible solutions (Jones 1994). When attention of decisionmakers shift to external cues, new policy images arise from decisionmakers mimicking images garnered from outside cues.

Images arise from any actor seeking to advance a policy agenda, vying for attention in the limited political sphere. Change erupts from the interaction between these images and institutions. When a stagnant image becomes questioned, the likelihood of mobilization and a breakup from a policy monopoly increases (Baumgartner and Jones 2009). The speed in which governments adopt “innovative” policy varies depending on political attention; shocks and federal mandates reveal new policy problems but cause diverging patterns of policy adaption by diffusion (Boushey 2012, 128).

At the core of agenda setting is the shifting in attention to certain policy problems or issue areas. Specifically, individuals primarily focus on one aspect of any given decision-making one decision at a time. Individual policy preferences, for example, usually only consist of a few policies at a time due to the cognitive capacity of individuals. However, attention can change rapidly if events or political leadership cues an attention shift (Jones 1994). Individual exposure to elite discourse influences individuals' beliefs if they receive the message and it aligns with previous beliefs (Zaller 1992).

Quick changes, or serial shifts, come from changes in attention (Jones 1994). Attention of individuals produces a serial focus of only one or a few things at time. Shift in attention has potential to dissolve change into well defined, preferred alternatives. Stasis and punctuation occur in differentiating periods of the policy process. An issue can focus consideration away from the policies of equilibrium in a subsystem to volatility, expanding the scope of attention. Small changes can cause large shifts in policy.

For example, technocrats and lawmakers keen on using nuclear energy held a strong policy monopoly for twenty years. Nuclear disaster events, especially the Three Mile Island accident, helped to change the image of the nuclear industry from positive to negative. Attention shifted to the negative effects of nuclear power, including environmental damage, health threats, and susceptibility to natural disasters. Negative attention and newly concerned actors destroyed the policy monopoly and stopped the proliferation of nuclear energy in the United States (Baumgartner and Jones 2009, 59). Conflict expansion brings attention to a policy problem, placing it on the agenda. Nationalized, expanded conflict is a tool for marginalized groups to increase the chances for policy to benefit groups otherwise ignored (Schattschneider 1975).

Expanding the scope assists in breaking up or shining a light onto policy monopolies since they rely heavily on policy images that support their legitimacy. A supported and widely accepted image maintains the success of a policy monopoly. However, when a descriptive image of a policy is in contention, opponents switch focus to another image or set of images to represent a policy. Outsiders use image shifting during a window of opportunity: when the problem, policy, and political streams of the policy process meet, generating a moment in which policy can transform

(Kingdon 2003).

Changing images of policy is one component that determines what triggers policy feedback processes. Punctuated Equilibrium classifies two sets of policy feedback loops in the policy process: positive and negative. Positive feedback occurs when changes, even when small, perpetually build future change. Accumulation of micro changes lead to macro shifts in policy. Negative feedback preserves the status quo in a system (Baumgartner and Jones 2002).

Policymaking systems alternate between two opposing systems: one of negative feedback, the other of positive feedback processes. The negative feedback process maintains equilibrium and stability; actors manage disruption. In the positive feedback process, change only produces more change, leading to more powerful disturbances (Baumgartner and Jones 2009). Previous theories emphasize the difficulty for disadvantaged groups to become a part of the policy making process (Cobb and Elder 1983; Cobb and Ross 1997); however, positive feedback loops garner attention and image shifts from outside influence the policymaking process.

Venue Shopping

The many arenas in which policy creation can play out further complicate the policy process. Federalism in the United States fractures the policy process over several level of government: national, state, and municipal legislation all develop government programs, set ordinances, create legislation, and develop committees and institutions. Interrelated policy areas can involve many policy subsystems, institutions, organizations, departments, with many different policy debates occurring simultaneously. Policy making systems in the United States tend to favor established policies and norms, where change often relies on enormous amounts of work and effort (True et al 2007 157).

The explanation for both status quo salience and the occurrence of abrupt policy change is the interaction of multilevel political institutions and the behavioral decision-making. Separate institutions, sometimes overlapping in jurisdiction, and ease of mobilization in the United States create a system of large scale and subsystem level politics that reinforces or welcomes change. In a political system meant to curb change, American institutions make mobilization vital to policy change. This results in a system where institutions reinforce status quo with intense episodes of change (True et al. 2007, 156-7).

One tactic for garnering policy change for interest groups vying for attention to their issues is to change in venue to gain support. Venue shopping – moving to different venues to gain attention from promising and powerful supporters – allows for interest groups to “shop around” for favorable policy (Baumgartner and Jones 2009, 276). Since policy monopolies spring up from interest groups, policymakers, and politicians in a single venue, moving outside of the policy monopoly venue can put pressure on the existing policy monopoly.

Venue shopping may include expanding to the wider public as an attention-seeking option. Decisionmakers can possibly shift focus from one policy issue to another, depending on the consequences of greater attention on one issue over another (Jones 1994, 5; Baumgartner and Jones 2009). Those interested in keeping the policy within their venue value the scope remaining small, much like with agenda setting.

For some actors, venue shopping can be “experimental,” rather than something premeditated. If one venue fails to produce favorable outcomes for an interested group, these actors may change venue on a whim rather than a calculated response to the political and policy dynamics. For organizations or private interests, this choice might not be based on the venue itself, but rather the organization or needs of the group (Pralle 2003, 234). Group needs and venue change center the policy discussion around a new definition of the policy problem. In this way, venue shopping is more than just a tactic of changing location or even audience, but shapes policy problem perception alongside agenda setting to frame the issue.

Closing Policy Process Literature Gaps

Punctuated Equilibrium Theory closes the gaps on existing literature on transportation policy process in three fundamental ways: PET pays special attention to the use of agenda setting and issue framing as a tactic by policy process actors to gain favorable policy. Although previous literature does highlight how discourse and issue framing shape the policy process and the power granted to private interest, PET places agenda setting into established institutions and norms while contextualizing the process in terms of feedback. TNCs make use not only of images and discourse, but also hone positive feedback to propel ride-hailing into the spotlight. Once favorable policy outcomes are achieved, TNCs then use negative feedback to isolate the ride-hailing policy narrative and close off other interests from the new *privatized* policy monopoly.

Transportation network companies work within settings ripe for punctuation: localities, states, and counties. Decisionmakers at different levels of government vary in their understanding of ride-hailing policy consequences and might not fully understand the issues at the center of policy problem and the regulation needed to protect the community (McNew-Birren 2015). Here, venue and strategy (or lack thereof) become so important. Since vehicle-for-hire regulation either has a strong history, lack of salience, or both in American cities, TNC exploited venue vulnerability to question where these new technologies should be regulated. By confusing the categorization of TNCs, companies sought venues sympathetic to their cause. Likewise, as taxi representatives took to the courts.

Policy debates involving different levels and actors inflames tensions over strongly held beliefs and values both from organizations and the public. Stakes are high for many individuals and groups, leaving many to use unsavory tactics to gain an edge in the policy debate: selective evidence use, discredit opponents, or distort information (Riker 1986). A story of policy process through the lens of agenda and venue better highlights the use of manipulation from interest actors. In this case, especially transportation network companies used roundabout ways to gain policy favors or move into cities and avoid regulation. Here, transportation network companies challenge preferences, information, and even established institutions.

Comparative politics research assembles three variables – preferences, institutions, and information – to interpret the dynamics of policy change. Frank Baumgartner, Bryan Jones, and John Wilkerson (2011) argue that policy change stems from new information or changes in social or economic aspects of society (Baumgartner et al 2011, 948). Baumgartner, Jones, and Wilkerson (2011) suggest that if in a political system of bounded rationality, we need to understand the information that begets preferences of decisionmakers. In doing so, we better understand how images and venues, through information and audience, inform decision making for transportation network company regulation in American cities.

One fallback of punctuation equilibrium theory is that it does not account for two fundamental outcomes of the TNC policy process. First, transportation network companies created a parallel policy monopoly alongside the existing taxi monopoly. In PET, the old policy monopoly breaks up and is replaced by a new policy monopoly. Although the taxi policy monopoly depreciated, it still exists. However, this devaluation of the taxi policy monopoly is still some form of "breaking up," and the weakening of the policy monopoly may lead to eventual collapse. We cannot know if the parallel existence of two ride-hailing policy monopolies is sustainable until more time passes.

Second, transportation network companies create a new kind of policy monopoly: one that is heavily privatized and exists mostly from the existence and power of private companies instead of public utilities or monopolies. This is not the first instance of this type of policy monopoly: private industries have always made their way into the policy making apparatus. However, it is beneficial to delineate private policy monopolies from the traditional definition as it provides clarity to the types of power dynamic and influence on policy within the policy monopoly. This new addition to Punctuated Equilibrium Theory encapsulates more types of policy processes, including TNCs policy monopoly.

Chapter 3: Theory and Methodology

Challenging current urban transportation models, the rise of transportation network companies prevails as a “disruptive innovator” (Dudley et al. 2017, 492). The invasive approach of TNCs seeking to bypass regulation created new tensions among governments, existing taxi industries, and new app-based ride-hailing companies. Cities challenged TNCs over compliance with local regulations using cease-and-desist orders and proposals banning operations (Posen 2015, 423). Taxi interests lobbied government officials and turned to lawsuits for authority over fair regulation. In some cases, states proposed legislation to set state-wide regulatory power over transportation network companies as a new service.

Local and state regulations vary. Some governments largely let TNCs operate with some standards, but mostly uninterrupted. Others, like Chicago, taxed fares to raise city funds, or New York City, where governments passed minimum-wage requirements for drivers (Byrne 2017a; Coberly 2018). However, much of this policy difference is small in terms of the overall trend: government stringently regulate and oversee taxi service, while loosely regulating TNCs and giving oversight largely to companies themselves.

A central research question emerges from this difference: *how* did transportation network companies persuade various parties to support their efforts to garner lax regulation? One hypothesis focuses on the ability of ride-hailing companies to frame the issue. Policy influence and image framing - through ability to conduct favorable discourse - assist stakeholders’ attempt to steer policy to support their interests. TNCs and the taxi industry, for example, use language that appeals to higher societal values or sympathy towards their regulatory struggle.

Punctuated Equilibrium Theory (PET) maps best on the policy process of transportation network company regulation across American cities. Using the two main constructs of PET, issue framing and venue shopping, this analysis explains the consistent outcome of the two-tiered system in cities despite variation in governmental structure and power, previous regulation, and different urban transportation systems. Although a variety of theories approach a collective answer for components of the policy process, Punctuated Equilibrium offers a wholistic description for *how* technology changed the policy process.

Studying the policy process through PET requires a set of qualitative research tools to understand components of language and venue, but also to tell a narrative story of dynamic and stagnant policy alongside the use of positive and negative feedback. Qualitative methodology allows for nuance and detail in analyzing language and changes in venue during the construction on TNC policy. The qualitative approach used in this study pulls from Baumgartner and Jones' (2009) Punctuated Equilibrium Theory are applied to TNC policy development (Thelen 2018; Collier et al 2018; Spicer et al 2019; Flores and Rayle 2017).

Discourse and content analysis attempts to conceptualize issue framing in the policy process by highlighting the power of language used in the broader public sphere. Those welding power over language shape the dialog in a positive direction or mitigate negative discourse around their policy desires. Power can be measured through language: frequency and perception of brand and message in both government and media. In this case, Uber, Lyft, and taxi industries exemplify efforts to control language.

Theoretical Basis

Contemporary literature informs the policy process analysis by establishing blueprints for how to approach understanding transportation network companies in the U.S. These blueprints consist of using comparative politics (Thelen 2018; Collier et al 2018; Spicer et al 2019), language and discourse (Thelen 2018; Collier et al 2018), venue (Thelen 2018), tactics by private companies (Thelen 2018; Collier et al 2018; Spicer et al 2019), decisions by key government officials (Flores and Rayle 2017), and a deep-dive into the narrative of policy creation (Flores and Rayle 2017). However, contemporary literature fails to account for the creation of a whole new policy monopoly (despite the persistence of the existing taxi monopoly), negative/positive feedback, and important dynamics of the policy process.

Rather than dismissing previous work, this analysis builds upon previous work – taking suggestions from these authors for further research while also fostering the theoretical framework. This study takes cues from Thelen's discourse work, Collier et al. and Spicer et al. urban comparative work, and the nuanced work of Flores and Rayle to build a singular study incorporating the necessary components for understanding the policy process of TNCs. I use this new approach to map on a singular theoretical basis that explains the policy process of three cities and the previous research on TNC: Punctuated Equilibrium Theory.

Hypotheses on the Policy Process

PET explains the policy process through image framing and venue shopping: two actions paramount to different interested parties in the policy process. Essentially, this study asks two fundamental questions: *how* was the agenda set to establish favorable policy for transportation network companies, and *how* did different actors use venues to secure favorable policy? The outcome is already clear: American cities developed a two-tiered system of policy with one for TNCs and one for the taxi industry. The hypotheses in question elaborate more on the *how* of transportation policy.

The how of agenda setting relies on understanding the tactics used within discourse around both transportation network and taxi industries. Establishing a narrative that either allows for negative or positive feedback of the policy process highlight who controlled that narrative. Negative feedback – which maintains the status quo – would favor the taxi industry, while positive feedback produces change, benefiting transportation network companies. Which type of feedback occurred? How was language used? How was discourse controlled?

The how of venue looks at the strategic “shopping” of interested groups as they navigated among state, local, country, and judicial institutions. How, if at all, were interested groups able to change venue? What sort of power dynamic played into the choice of venue? Once a new policy emerged, did venue even matter?

Data

To bridge the gaps of current literature, this analysis strives for both nuance and comparisons. For this reason, this study concentrates on three American cities, varying in transportation, governmental power structure, and identity. By choosing three, I can produce a comparison among cities while still being able to grasp in detail the policy process narrative. I chose three cities along the center of the United States: Chicago, IL, Austin, TX, and St. Louis, MO. Each one has many unique components.

Residents refer to St. Louis as a “large town,” a mosaic of neighborhoods and municipalities sprawled across the city. Public transportation, like many cities in the United States, lacks access and convenience. Two light-rail lines run parallel, east-west through the middle of city, leaving the north and south of the city to be serviced by sporadic, slow bus lines. As of 2018, St. Louis faced an increasing looming budget deficit due to declining sales taxes (Sczensny 2018). While trying to attract residents, St. Louis has long struggled with brand but tried to become a hub for innovation (Grant 2006; McKissen 2017).

With a robust mass transit system and the identity as a major United States and global city, Chicago deals with a different set of issues. With the second largest public transportation system in the United States, servicing over one million passengers per day, Chicago’s transit is often at the center of discussion in governance (CTA 2017). To make matters more complex, Chicago also is one of the worst cities in the United States for traffic congestion (Matousek 2019). In recent years, the coalescing of traffic issues, public transit demands, and budgetary issues lead to policy decision-makers to turn to inventive ways to use TNCs to raise funds, like charging per-ride fees (Byrne 2017b).

Like Chicago, Austin's identity is clear: known for its large, cultural festival every year - South by Southwest - Austin is a "hip" hub in America. Like any other attractive, large US city, affordability is a large concern, being large enough to be one of the main focuses of the 2018-2019 city budget (Reading, Flores, and de Leon 2018). It is also one of the country's most congested cities in America alongside Chicago, and ride-share use, exacerbating the issue, continues to grow (Herrera 2018a).

To encapsulate the scope of the policy process since the advent of technology catered to ride-hailing via mobile devices, I chose a narrow yet meaningful timetable to study the language of TNCs versus taxis. Uber officially launched in 2011 in San Francisco after a successful beta test in the previous year (Huet 2014). This encouraged the decision to make 2011 the start of the analysis. In 2011, Uber was new enough to be relevant, but also to not have started to fully infiltrate the cities case studied in this analysis. This allows for a clear picture of the language of taxis before TNCs propelled into these cities. The latest full year, 2018, serves as the study periods end because this year was past the peak of initial policy conflicts involving TNCs.

Within this time period, I gathered relevant newspaper articles from each city's largest newspaper based on circulation to represent the public facing discussion around transportation network companies. For Chicago, I used newspaper articles from the Chicago Tribune, with supplemental articles from other publications when relevant. I used the St. Louis Post-Dispatch for St. Louis and the Austin American-Statesman for Austin to tell the public facing stories in those cities. In some situations, I supplemented the policy process narrative with articles from other local newspapers or national newspapers.

I looked for articles on topics related to the policy conflict for transportation network companies and included articles with terms related to the vehicle-for-hire industry. For related topics and terms, I focused on both TNCs and the taxi industry. I included "ride hailing" and "ride sharing" as terms used when referring to taxis and TNCs, respectively. I also included taxi, cab, or any other variation on the taxi industry. I looked for articles of TNCs top companies: Uber, Lyft, and SideCar. I incorporated articles with refer to transportation network companies themselves.

I selected a set of words relevant to understand discourse of policy creation which would provide an expansive set of newspaper content. I searched for newspapers articles by the name of the top three TNCs: Uber, Lyft, and SideCar. I sought for any article with the legal term "transportation network companies," ride-hailing, and ridesharing.[3] For news on taxis, I simply scanned articles for the word "taxi," which included taxis, taxicabs, and taxi commission. I gathered newspaper articles from the leading newspaper in each city from 2011 to 2018: the *St. Louis Post Dispatch* in St. Louis, the *Austin American-Statesman* in Austin, and the *Chicago Tribune* in Chicago.[4] Using the language listed above, I collected several hundred examples of articles which mostly centered on regulation fights, transportation network company offers and gimmicks, and even "American Dream" stories.[5]

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[3] Much of the discourse – especially out of newspapers – miscategorized ride-hailing technologies as ridesharing or solely ride-sharing. Even though TNCs are not solely, and some are not, ride-sharing companies, I did include this term so that these articles and hearing were not left out of the study.

[4] St. Louis Post-Dispatch and the Austin American-Statesman were retrieved from the Nexis Uni (formally Lexis Nexis) database. The Chicago Tribune was retrieved from the ProQuest database.

[5] Just mentions on any of these terms did not result into them being a part of the content analysis. For example, if an article mentioned a person being an Uber or Lyft driver as information, the article was not included in the analysis. However, if the fact that the individual was an Uber or Lyft driver had some effect on the story – positively or negatively – it was included. For example, if an article mentioned refugees driving Uber or Lyft to sustain themselves after fleeing persecution, these articles were included.

I used the same language scope in searching for government related documents, meeting minutes, and hearings on transportation network company or taxi policy. For Chicago, I looked through the city council archives to find council meetings with mentions of TNCs and taxis to find language related to debates over policy; I did the same for Austin but included extensive records of committee hearings related to the topic as well. Both Chicago and Austin kept record of actual city council meeting transcripts. St. Louis, however, did not archive transcripts of Board of Aldermen (BOA, St. Louis's city council) that are readily available to the public. However, in St. Louis vehicle-for-hire policy is passed through the Metropolitan Taxicab Commission (MTC), which keeps record of meeting minutes. These meeting minutes include both comments of support or opposition from aldermen and public comment. I supplement both news articles and government documents with interviews from several actors to support events and language, including those within government institutions, the taxi industry, and private actors.

Methodological Approach

This analysis takes a three-stage approach to understanding the policy process of transportation network companies in context of the overall transportation policy process: historical comparison, content/language analysis, and narrative "story-telling" of events. The first stage, the historical comparison, relies on an example from the past where technological advancement coupled with economic stress changed the ride-hailing industry. I closely examine the policy process of the 1937 Haas Act, the ordinance in New York City which led to the regulation of taxicabs through medallions.

The story of the Haas Act fits well into Punctuated Equilibrium Theory, as the policy process centers focusing event(s), agenda setting, and venue shopping. Although slightly different than the transportation policy process of today, the Haas Act shows how changes in technology and economic landscape molded the vehicle-for-hire industry for decades. Using an historical example shows that the policy process of TNCs is not necessarily something *new*, but rather something repeated from history. The Haas Act provides proof that researchers can rely on existing theories that best explain a policy change phenomenon rather than creating whole new theories.

The second stage is "story-telling," delivers narrative nuance. In telling the story of the policy process, I offer specific examples of language used in newspapers, governmental meetings, and interviews. The narrative of the policy process gives both the point in time of specific focusing events and when actors used venue shopping for favorable policy. This storytelling is key to how Baumgartner and Jones (2009) describe Punctuated Equilibrium Theory within the policy process.

The final stage is a content and language analysis to obtain a generalized overview of the discourse around taxis and TNCs in the wake of companies operating in American cities. The content analysis considers aspects of discourse, both *frequency* and *tone*. *Frequency* is the sheer amount of times one of the actors in the transportation conflict occurs in either the news or in government meetings. These terms include taxis, TNCs, Lyft, Uber, and in some cases other relative words such as "ride sharing." Frequency highlights when the peak of conflict occurred while also presenting the dominant player in the policy process. For example, if "Uber" occurs far more often than "taxi" and its variations, we assume that Uber is at the center and controlling the narrative.

Tone is harder to assess because it involves interpreting positive versus negative language and what that means for motive. Most content analysis gauges sentiment by coding of perceived positive and negative words to ascertain tone. However, after reviewing newspaper archives and conducting interviews, I found the vehicle-for-hire transportation policy processes involved its own unique positive and negative language. For TNCs like Uber and Lyft, positive words involved “innovation” and “technology,” while the taxi industry promoted “legality” and “safety” of taxi use. This research looks at the use of these words in proximity to the occurrence of specific actors. Like frequency, this research uses tone to construct who had general control over the narrative while providing for more nuance.

This analysis builds off the work done Kathleen Thelen (2019) and Ruth Berins Collier et al. (2018) on transportation network company policy creation. Thelen (2019) uses newspaper articles for revealing the context of discourse surrounding Uber across different countries. Like Thelen’s work, I use large publications of the specific case study area, but instead I only use the largest newspaper for each city instead of a variety of sources. Thelen also emphasizes not only frequency, but *tone and content* to highlight the importance of *valence* variation across case studies (2018, 493). Collier et al. (2018) also use a variety of primary qualitative sources including news coverage and judicial regulation. Creating an original database, Collier et al. look for instances where Uber’s presence leads to regulation (2018, 921). I look at newspaper coverage to find mentions of various related words: Uber, Lyft, SideCar, taxis, transportation network companies, ridesharing, ride-hailing and anything related to these categories.

The model bases frequency on the sheer count of mentions of the various relative words. The model details the number of mentions within the articles of these terms, accounting for the repetitiveness of certain entities. The content analysis measures perception using defensive or opposition terms of competing actors drawn either repetitive use in newspapers or in interviews. Uber and Lyft defend their business models using words such as “innovation,” “convenience,” “affordable,” and “efficient.” I use these words to measure positive mentions of Uber and Lyft in media. Positive language for taxis centers largely on “safety,” “fairness,” and “tradition.” Negative language usually used against their rivals. Both industries tend to be viewed negatively through words like “inconvenience” and “inefficient,” while TNCs are specifically called “illegal” as a negative jab. To measure language use, I look at the frequency at which positive and negative language is used within text within a 10-word proximity to words like Uber, Lyft, SideCar, and taxis.

Table 1 – Words Used for Sentiment

	TNCs	*Taxi Industry*
Positive	Convenience/Convenient, Just, Efficient, Cheap, Safe, Fair, New, Business, Predictable, Friendly, Legal, Accessible, Professional, Technologies/Technology, Just*	Convenience/Convenient, Just, Efficient, Cheap, Safe, Fair, Predictable, Friendly, Legal, Accessible, Professional, Traditional, Just*
Negative	Inconvenience/Inconvenient, Inefficient, Expensive, Unfair, Unpredictable, Unsafe, Illegal (Legalize)	Inconvenience/Inconvenient, Inefficient, Expensive, Unfair, Unsafe

**Just was included as it is a stem word for words like "justified" and "justice"*

Limitations

The largest limitation when conducting qualitative research is the inability to have perfect data collection: some archives are not available, some of those involved in the policy process will not or cannot be interviewed, or there are human errors in constructing an archival repository. This research is no different in being susceptible to the pitfalls of qualitative research.

For one, I rely heavily on one newspaper publication from each city. In using fewer publications, this analysis has a higher risk of being vulnerable to biases of those newspapers. Also, some of the events and/or discourse of actors are in jeopardy for being excluded for the analysis. The high dependency on one publication assists in reducing overlap and the workload for the researcher, but it does mean recognizing the potential for bias.

Additionally, some of the actors involved in the policy process I did not interview for several reasons. Some simply could not be reached due to changes in contact information or moving away from the city. Others never replied to multiple attempts to contact either due to unwillingness or missed communication. However, those willing to be interviewed provided much needed additional information to the language use or the series of events.

Chapter 4: Déjà Vu and the Case of Depression Era Taxi Regulation in NYC

At the beginning of the 20th century, growing ease of access to automobiles led to new taxi companies and drivers. Once the stock market crashed in 1929, many unemployed workers in New York City turned to ride-hailing to make ends meet. A variety of new policy problems arose such as wage deflation, driver and customer safety, vehicle standards, and other such issues. The subsequent events culminated into a robust policy process leading to the Haas Act of 1937 and the creation of the infamous New York City taxi medallion. Tension and a violent focusing event *built* a policy monopoly: the powerful NYC taxi regulation policy monopoly consisting of government, business, and labor. New regulation established an impenetrable relationship among city officials, fleet companies, and taxi unions for nearly a century.

The modern-day local transportation policy process is not an anomaly nor new. Ride-hailing app technology shook transportation planning systems in cities, but earlier shocks provided a prelude to contemporary policy process changes in response to TNCs. Historical precedent provides insight into the anticipated process and outcomes, as well as offers another case for reinforcing theory. Here, history informs our expectations of the TNC policy process.

Like TNCs, the policy process of taxi regulation in New York City during the depression embodies Punctuated Equilibrium Theory. Urban transportation experienced punctuation, leading to the creation of a powerful taxi monopoly. Government officials developed taxi industry policy during a time when no taxi regulation existed; there was no policy example decisionmakers could mimic to regulate taxis. New taxi industry regulation created a taxi policy monopoly, like how transportation network companies formed another new policy monopoly.

The New York City examples hint at how the contemporary policy process could unfold, explicitly through image framing, expansion of scope, agenda setting, and venue. The chapter elaborates on the policy process of taxi regulation at the beginning of the 20th century. In laying the foundations of the policy process leading to the Haas Act and subsequent taxi regulation, we examine the significant parallels between the 1930s taxi policy creation and transportation network companies of the 2010s.

Taxi Service in New York City Before the Depression

In the decade leading up to the depression, car manufacturers controlled several large taxi fleets, increasing the demand for their product. Companies like General Motors created subsidiary companies with the sole purpose of dumping their cars on New York streets for ride-hailing. These large automobile manufacturer-owned fleets dominated the industry (Vidich 1976, 68). Simultaneously, there were no laws limiting who could become a cabbie, the number of drivers on the road, nor obligating companies to protect drivers and customers. The cost-of-entry became low for anyone wanting to make money from ride-hailing and the number of taxis on the street soared.

Taxi owners had discretion to choose whatever terms deemed necessary for business. Many taxi companies operated what New York City Mayor La Guardia called “horse hiring”: drivers renting vehicles for a certain duration of time, while the owner of the taxi set a base amount the driver paid at the end of use, and the driver kept whatever exceeded this amount (Mathew 2005, 49). Working under these conditions led to fewer worker protections and restricted the ability to form unions in many situations (Anderson 2014, 1310-1). Three taxi fleets dominated the market: Parmelee, Terminal, and the Keystone Transportation Company. Demonstrating the power of fleets, Parmelee used a vertical system of control which emphasized “preventative maintenance”: keeping the drivers satisfied to a point of preventing rebellion (Hodges 2009, 51).

Since no laws existed for ride-hailing, mob leaders found it easy and lucrative to start taxi services through financing and running fleets. Mobsters gained more control and increased their illegal activities: bootlegging liquor, burglaries, bank robberies, and creating loan shark operations through the taxi business (Mathew 2005, 50). Mob activities engulfed drivers, making cabbies synonymous with criminals even if they operated a legitimate service.

Mobsters gaining control of taxi fleets drew concern of city law enforcement. Under the direction of Chief City Magistrate William McAdoo scrutiny of the taxi industry activities increased. McAdoo rightly assumed that some taxi services facilitated criminal activity. However, when the police department stepped in to attempt to eliminate delinquency, police quickly profiled taxi drivers. A new criminal narrative started framing taxis as distrustful, maniacal, and other descriptors synonymous with the mafia and crime. Taxis-as-criminals frame drove police to distrust and discriminate drivers, impeding the lives of cabbies.

In addition to becoming implicated with mobsters and losing the trust of law enforcement, competition among taxi drivers became fierce. In 1924, large fleets started “rate wars” to curb competition: halving rates for the first mile, using false advertising, and gouging prices to stopple independent drivers. Riders were unsure of the fare they would pay at the end of a trip, making ride-hailing less desirable. However, since prices dropped to that of a subway trip, taxi hailing become more widespread. These two contradictions proliferated a push-pull narrative of distrust versus convenience – with convenience overriding the concerns of distrust. Eventually, riders replaced trips made by mass transit and taxi service essentially developed into public transportation without regulation (Vidich 1976, 69-70).

Post-Depression Taxi Policy Process

The 1930’s Great Depression led many Americans to seek informal work in what today would be called the *gig-economy*. Some worked temporarily in the fields or as house cleaners at ages young as 7 or 9 years old. Many made homemade goods and sold them street side to earn extra cash. Some became self-employed in industry such as truck driving, often working under operations controlled by the mafia (Wadler 2009). With no market unscathed in the Great Depression, ride-hailing services had their own set of woes. Becoming a taxi driver was a way poor, unemployed people sought financial relief. The taxi workforce filled with a variety of drivers seeking to make ends meet.

The New York City government recognized the need for regulation. Fleet owners cut commissions and continued to lower costs to deal with the stagnation of the depression, independent drivers and fleets faced enormous competition and falling profits. In 1930, Mayor James Walker announced a plan to franchise all cabs to one vendor. However, the taxi industry widely rejected his proposal and it never came to fruition. The Board of Alderman planned legislation to set a minimum rate for taxi service, but the mayor vetoed this bill. Any policy proposed by government officials failed to move any further than the proposal stage.

Policy stagnation led Mayor Walker to create a committee to research the industry and make policy recommendations. Research committee members cautioned policy makers on several industry mishaps: unlicensed drivers obstructed traffic, drivers lacked liability for accidents, and poor service. Cab cruising increased congestion and noise throughout the city. Consumers felt unsafe in taxis, as passenger protections were non-existent. Committee researchers recommended that the industry be classified as a utility under government control, safeguarding NYC from massive negative externalities from private taxi operation.

In the wake of this recommendation, Mayor Walker formed The Taxicab Control Bureau. In 1932, the bureau suggested no taxi operate without a license, upsetting independent drivers and small fleets unable to afford licensing. However, this fight did not last as reporters exposed Mayor Walker's ties to the largest taxi fleet company, including charges of bribery. This scandal brought down the mayor and the Taxicab Control Bureau. As the depression continued, the number of drivers kept increasing (Hodges 2009, 47-8). The further saturation of drivers into the ride-hailing market caused an even more pronounced reduction in rates due to competition.

The New York Board of Alderman proposed and passed the *nickel tax* in hopes to help mitigate stifling taxi competition, declining fare rates for rides, and possibly raise additional revenue for the city budget. City officials required companies to pay a nickel tax per trip but failed to mandate cost sharing. Instead of passing the cost to consumers or out of the company dime, companies passed the tax onto drivers. Drivers confronted government officials about their lost pay and demanded action. After confrontation with drivers, government officials passed a mandatory payback to drivers from companies. Taxi fleets opposed the pay-back to drivers from the nickel tax, but not the nickel tax itself since companies passed the burden of cost to the drivers or customers. The nickel tax failed to fix any of the underlining problems in the industry itself; cabbies still suffered. Here, under a loosely regulated system, companies used what was at their disposal to not hinder profits – placing the burden on the workers to adhere to regulation.

After the fall of Mayor Walker and the nickel tax controversy, taxi regulation and fares became central to the subsequent 1933 election. Fiorello H. La Guardia, a then-candidate for mayor of New York City, turned his attention to the plight of the taxi driver. Interviewing representatives of taxi drivers through his campaign, La Guardia found that drivers overwhelmingly wanted the nickel tax repealed, claiming it hampered tips and "depressed business" (Hodges 2009, 53). Throughout the election, La Guardia championed the cabbie. He attacked opponents for their support for the nickel tax and stood by drivers on these issues. After winning the mayoral election, awful conditions for drivers sparked Mayor La Guardia to call for an end to so-called "horse hiring" (Mathew 2005, 51).

Starting on February 3, 1934, conditions were so dire from stiff competition and loose regulation that 12,000 taxi drivers went on strike (Mathew 2005, 51). On the third day of the strike (February 5th), riots lead to injuries of dozens of people and a shutdown of the city. Most drivers worked for large company-owned fleets. They protested the unfairness of the market and mistreatment by companies. However, the peaceful protest turned into a violent riot after strikers clashed with police.

Taxi drivers were not a cohesive unit actor but fragmented into factions. During the 1934 driver strike, part time drivers and independent taxi owners opposed the strike, citing the need to continue working to make ends meet. Independent drivers had barely enough income to survive because most of their income was absorbed by the costs of operation. Owner-drivers dismissed the policy proposal to give a percentage of the fee back to them, stating that it did not do enough to address their economic concerns (Hodges 2009, 54). The protest and strike brought attention of the plight of the driver.

Mayor La Guardia tasked his National Recovery Act deputy with negotiating a minimum weekly wage, and soon a bargain day was set. Negotiation continued throughout February following the strike. Proposing a minimum wage of $12 a week that was previously rejected, city negotiators angered drivers: a new group of 10,000 drivers called the Taxicab Emergency Council formed to combat the mayor (Hodges 2009, 57).

New strikes could not be stopped. The Taxi Workers Union of Greater New York called for another strike on March 18th, 1934. Drivers would no longer meet with city negotiators. Mayor La Guardia called on the police to break up strikes that continued, but the strikes gained sympathy from passengers (Hodges 2009, 57-8).

During this time, major fleets, including Parmelee and Terminal, refused to negotiate with drivers. They did not win the sympathy of the mayor, causing La Guardia to urge conciliatory action from fleets. Soon, he attacked the communists, condemning their influence on drivers. Even after the early 1934 strikes, the average driver still supported the mayor and wanted to work together. Eventually, many striking drivers found themselves jobless (Hodges 2009, 59-60).

On March 22, approximately 200 striking drivers marched onto City Hall, leaving taxis stranded in the road and the police were ineffective. Mayor La Guardia declared that gangs took over the strike. Later that day, protesters surrounded the mayor on his way home from lunch when he urged them to avoid “rough stuff” (Cornell Daily Sun 1934). The protest would continue for several months following the initial strike. In this time, demand for regulation increased (NYC Taxi and Limousine Commission).

During the strike, the Communist Party crucially adopted a policy of organizing everyone under a single union, one shop at a time. Using a “concentration” method, the party gained ground in the movement, but was always at odds with Mayor La Guardia’s – claiming that his sympathy towards drivers was insincere (Hodges 2009, 55). Soon, they found comradery with the head of the Taxi Workers Union, who also found Mayor La Guardia to be deceptive.

Soon, taxi drivers became the center of debate. Artists and activist -including Hollywood - created entire works dedicated to the voices of taxi drivers in New York City (Hodges 2009, 63-4). Protests continued for several months; Mayor La Guardia made a point to bring all actors to the table, especially drivers. Public officials, drivers, companies, and newly strengthened unions spent a few years bargaining over policy to counter the negative externalities.

In the end, politics defeated the strike. Internal political dynamics among Communists, Socialists, and the Taxi Workers Union soured internal support for the strike, and soon Mayor La Guardia enticed more drivers to side with him in negotiations. Strikers expelled the head of the Taxi Workers Union and Communists, and eventually declared willingness to settle (Hodges 2009, 59). However, the collapse of the strike weakened the union, and leaving room for other actors to influence the future of the taxi industry (Stamm 1934).

Even after the strikes, drivers lacked unity and suffered from low wages, lack of job security, and long hours were still a part of the working life of cabbies. Aldermen Lew Haas proposed the Haas Act at a time when another fare war was threating drivers and fleets into a race to the bottom. Major fleets supported the act, urging company unions to announce their support, claiming it would solve the problems plaguing the taxi industry (Hodges 2009, 66).

In 1937, Alderman Haas proposed the Haas Act to regulate taxi permits and barriers-to-entry. The Board of Aldermen and Mayor La Guardia approved the Haas Act and a new system of taxi regulations came to fruition. Large fleets supported the new law and rallied unions to support it as well. Large companies used their economic power to stay steadfast on this issue. La Guardia supported the Haas Act and used his platform to gain favorability for the new law.

The Haas Act required taxi owners to obtain permits and cab companies to obtain a medallion for every employee driver. The permits took the form of the now-famous medallion, issued at an initial price of $5 - either to corporate fleets or private owner-operators. A taxi company or garage would operate a fleet medallion and employ drivers, while a private owner-driver medallion could only be used by the owner (Mathew 2005, 52). The Haas Act limited the number of franchises to calm the “taxi wars”; medallions acted as “a physical shield” from reduced quality that burdened drivers and passengers (King 2014, 1314).

The Haas Act and Punctuated Equilibrium

The taxi policy process resembled a somewhat traditional-styled *Punctuated Equilibrium*: a focusing event causing the change of image and agenda (Baumgartner and Jones 2009, 37-8). The punctuation of the violent strike changed the image of the taxi driver from the policy perception as content criminals to workers struggling in the depression. Cabbies brought attention to their story of helplessness, highlighting the lack of power against the free-market and large companies (Stone 2012, 165-7). Additionally, drivers changed the venue of policy to pressure Mayor La Guardia to deregulate the taxi industry.

The medallion system forced equilibrium into a narrow group, walled off from interfering interests (Baumgartner and Jones 2009, 15). This “walled off” group consisted of the taxi industry – companies, drivers and unions, policymakers, and government officials. The agreement among government and special interests created an iron triangle of policy creation with little interference from outside actors and organizations (*see* McConnell 1966; Quick 1981). The jurisdiction over the policy area made these groups more powerful in keeping policy restricted to the interests of companies and unions. Restricting the number of medallions caused steep rises in the value of a NYC medallions. In 1947 an individual medallion was valued at $2,500; by 1981 that same medallion was worth $62,000 (Gilbert and Samuels 1982, 92). Restricting the supply of medallions increased the value, creating a powerful economic interest in maintaining the policy monopoly.

Agenda Setting and Issues Framing

Events during the policy process framed issues and set the agenda. Kingdon (2003) separates events into three different streams: problem, policy, and political. The problem stream identifies the problem; the policy stream generates a solution; the political stream highlights pressure on policymakers for certain decisions. Break out of fighting between taxi drivers and police focused attention to the plight of the depression-era cabbie, exemplifying the problem and political stream. The violence brought attention to the plight of taxi drivers while simultaneously pressuring city officials to do something about low-wage cabbie work. The policy entrepreneurs (Kingdon 2003) bringing the streams together (including the political) were Mayor La Guardia and Alderman Haas. Mayor La Guardia negotiated and kept the peace; Alderman Haas created a policy solution and led its adoption.

Beyond the actual narrative of power play within the policy process, discourse of the time framed the policy problem. During the reign of taxi companies, mobsters, and police, public framing of taxi drivers focused on crime and distrust. Any attempt to pass policy related to relieving the pressures on drivers could not muster the unsympathetic image of cabbies. However, after the strike and subsequent media attention to the lowly life of taxi drivers, policy more easily passed; the public and politicians – mainly Mayor La Guardia – sympathized with cabbies and made efforts to pass policies with the taxi industry's interest at the center.

Expanding the Scope and Venue Shopping

The scope of conflict expanded, and venues changed. E. E. Schattschneider (1975) argues that expanding the scope of conflict brings attention to a policy problem, placing it on the agenda. Drivers expanded the scope to include national media and Hollywood, creating sympathy towards drivers. Nationalized, expanded conflict as a tool for marginalized groups (like cabbies) increases the chance for policy to benefit groups otherwise ignored (Schattschneider 1975). However, sometimes expanding the scope of conflict fails to benefit these groups.

Lisa L. Miller (2007) argues that localized conflict is one of the few arenas in which marginalized citizens – and citizens generally – have a chance to have their voice heard on policy issues. By nationalizing issues, politicians can neglect public opinion. The disenfranchised cannot control the narrative once it gets so large where the media can use misrepresentation to present a negative frame of a marginalized group (Miller, 2007: 310-1; Schlozman et al 2015).

However, in the case of the taxi driver, national attention through movies, music, and theater propelled public sentiment to align with cabbies. Taxi drivers used the messaging of the protest to construct a broadly compassionate narrative: the economic downturn left little for the hardworking taxi driver. Perhaps telling of the time, the new technology of the private vehicle did not participate in the narrative as essential for the taxi driver; nor did much of the legislation reach beyond the urban landscape.

The Haas Act passed at the urban level in New York City, without interference from the courts or the state legislature. Taxi drivers used the expansion of scope to gain a fruitful image but did not appeal to national level intervention. However, this is not to say that other venues were left unaffected. Rather, the Haas Act set a precedent which other local areas mimic: virtually every major urban area in the United States passed taxi regulation based off the New York City model.

What Old Regulation Means for New Players

After the Great Depression, taxi regulation spread throughout America leading up to World War II. In 1930, Massachusetts legislature limited the number of taxis allowed in Boston. Maryland regulated taxis in Baltimore starting in 1931. In Chicago, an ordinance restricted the number of drivers in 1934, and further limited the number of taxis to 3,000 in 1937 (Gilbert and Samuel 1982, 70-1).

Both major cities and states in the US increasingly regulated the industry. In 1932, 35 percent of cities with populations over 100,000 regulated taxis as a utility with licensing ordinances. Simultaneously, eight states enforced these requirements. There was no regulation at the federal level and only a few states enacted laws on taxi services, making taxi regulation mostly a local affair (Gilbert and Samuel 1982, 71-2).

Spread of regulation throughout the US was surprisingly uniform. Regulation fell into five distinct categories: entry controls, financial responsibility, fixed rates of fare, assurance of service, and condition of vehicles. Entry controls sought to limit the number of drivers on the road and control the number of licenses an entity/person could hold. Financial responsibility regulation pertained to the amount of cash reserves or insurance that a driver holds in the event of accident or injury. Cities and states set rates to assure a reasonable rate of return on public transportation investment. Ordinances and regulation pushed for organization and guarantee of service with taxis on the road, dispatching, and available taxi stands. Officials set regulation of vehicle conditions through inspection programs to assure safety (Gilbert and Samuel 1982, 72).

During World War II, the taxi industry came under federal regulation. The Office of Defense Transportation (ODT) implemented new regulations nationwide, including prohibitions on cruising, trip length and distance outside of a service area, use of taxis for recreation trips and delivers, and excessive speeds. Most detrimental to the industry was the ban of building new taxi vehicles. Federal law confined drivers and companies to what they already had, paying for lofty repairs and having difficulties keeping up with local regulation. In 1943, the ODT required taxis to implement ride-sharing operations in 45 cities to provide additional rides (Gilbert and Samuel 1982, 76-8).

After the end of the war, the federal government relinquished control over taxis to local and state ordinances and regulations. Most of the involvement from the federal government in the 60s and 70s came from indirect action. Most federal action to the taxi industry came as part of broader urban transportation system effects or other competition to the taxicab (Gilbert and Samuel 1982, 86). Taxi regulation historically runs under the auspice of state permitting or requiring municipal governments to regulate the taxi industry. Some disagreements on constitutionality of various taxi ordinances and laws made their way through the court system, almost all rules upheld local statutes (Dempsey 1996, 77). By the 1970s, municipalities were largely responsible for vehicle-for-hire law (Posen 2015, 409-10).

With the exemption of a few states, municipalities regulated taxicabs. Some state laws defined taxicab and set minimum insurance coverage, but regulation stayed largely at the local level. These regulations varied as widely as the number of cities in the US. Some localities had provisions on meter use, others had nuisance provisions that seek to control driver behavior, and everything in between (Dempsey 1996; Bacache-Bauvallet and Janin 2012; Schaller 2017).

The taxi industry historically failed to unionize due to the sheer nature of the work. First, taxi driving attracts workers because of the independence and flexibility of the work. Earnings derive from revenue generated independently, so other drivers even in the same fleet, are potential competitors. The taxi industry is highly dispersed, operating in just a few small firms at the local level. Some taxi drivers also work in other industries where they benefit from union dues and benefits (Gilbert and Samuel 1982, 95).

Fears of private monopolization, decreased wages, safety of both driver and passengers, and crime were paramount concerns during the beginning of the 20th century. The taxi industry reflected these concerns as a mirror to universal depression era woes. When motorized vehicles became readily available in the early 1900s, many unemployed workers turned to cab-driving for economic relief. This only worsened conditions for workers. Wages tanked for many taxi drivers, to the point where earning livable income was nearly impossible. Taxi drivers faced occupational hazards, including injury, income uncertainty, and negative health effects (Anderson 2014, 1309-10).

Consumers, city administrations, police departments, taxi companies, crime syndicates, and politicians joined to the policy process of taxi service regulation during the 1930’s depression, calling for standards and regulation. Taxi regulation continued to develop and change in New York City throughout the rest of the 20th century. Some cities made “street hails” illegal, while in New York City street-hailing was the only way to hail a cab. Because of the potential for discrimination through hailing, New York drivers are required by law to pick up all passengers (King 2014, 1313). Today, almost all larger localities regulate local taxi companies. Regulation normally involves barriers-to-entry, non-discriminatory fares, service standards, and financial accountability (e.g. reporting) from companies and drivers (Dempsey 1996).

The rise of transportation network companies (TNCs) like Uber and Lyft challenges the old regulations of the taxi industry. Uber came into cities, disrupting the taxi industry through technological innovation (Dudley et al. 2017, 492). Taxi interests and companies argue that TNCs compete unfairly by not complying with taxi regulation. Losing revenue, taxi drivers hope governments enforce the same regulations to ride-hailing companies to establish fair competition (Posen 2015).

Lessons from History for New Policy Processes

There are many parallels between the history of taxis and what happened with app-based ride-hailing. Early in the policy process, increased number of drivers led to cost-saving for passengers: riding public transportation become more expensive than taking a cab. However, customers were unsure of their fares due to false advertising. We expect this push-pull of distrust versus convenience in early 20th century New York City to prevail in American cities with the advent of TNCs: riders weigh whether the distrustful practices of new companies outweigh the convenience of hailing a ride through them. In the historical case, convenience won.

Simultaneously, before any distinct “punctuation,” NYC officials saw the need for and attempted to develop some sort of policy for taxis. However, regulatory attempts stalled, and nothing came after the proposal stage. The mayor appointed committees to oversee research and development of policy solutions. Transportation network company policy process should have these same sets of features: initial policy failures and development of committees to research policy solutions, likely to no avail.

The local government loosely regulated the nickel taxi, making it easy for companies to pass the cost down to taxi drivers themselves. We can expect looser regulatory systems for transportation network companies, leaving discretion and oversight to companies to adequately hold private actors accountable. If we see the same lax regulation on transportation network company policy, companies will take advantage of the lack of oversight and potentially burden workers.

Historical events and happenstances of the policy process provide a blueprint for what the policy process of transportation network companies may have in store. For example, local campaigns may utilize the state of upheaval in urban transportation to gain political support for popular causes. La Guardia centered the taxi issue in his campaign, using the heightened attention of the taxi industry policy problems to politically capture the situation. There may be instances were mayoral, city council, or other local elections respond to policy tensions caused by transportation network companies.

Further, points of punctuation and expansion of conflict may occur throughout the process, some more prevalent than others. Leading up to the Haas Act, the violent strike and cumulative protests centered the policy problem of unregulated taxis. We should expect other types of punctuation during the policy process of TNCs – protest, public involvement, company stunts, or other such incidents. We can also expect some interest groups or individuals – keen on having their policy prevail – attempt to expand the scope of the ride-hailing policy problem. However, venue did not change much leading to taxi regulation in the early 20th century.

Many of these points could become paramount in the policy process of TNCs. Using the policy process of the Haas Act as an example, there are a few components that could become relevant to the policy process of transportation network companies: image, expansion of conflict, and venue. These components provide a blueprint to some likely occurrences in contemporary urban transportation policy processes.

Chapter 5 – St. Louis: Capacity, Venues, and Political Loses

Overall discourse trends show the policy process cases have several marks of positive and negative language *battles,* with a singular peak of policy tension marking the climax of the regulatory *war*. In St. Louis, several moments stir the policy debate as companies try different tactics to gain favor, courts hand down rulings, and regulators weigh the policy alternatives. Policy action peaks in 2015 as tensions coalesce around the future of transportation network companies.

Eventually, the process returns to equilibrium as the status quo experiences hefty political defeats. The Metropolitan Taxicab Commission (MTC) relinquishes regulatory control over transportation network companies as the taxi industry is defeated in several legal and political battles in St. Louis. Institutional capacity of the MTC and the taxi industry to counter the agenda setting efforts of TNCs and their use of venue shopping by incoming companies define the transportation policy process in St. Louis post-advent of TNCs.

Current TNC Regulation

In 2017, the state of Missouri intervened in the debate over TNC regulation. Bypassing pending legal questions of the MTC and the taxi industry, the Missouri legislature superseded local regulations on TNCs at the end of the summer in 2017. The statute allows Uber, Lyft, and other TNCs to conduct their own vehicle inspections and background checks. Companies pay a $5,000 annual registration fee and are exempt from local and municipal taxes. When the measure passed the house, Uber guaranteed ten-thousand new part-time jobs if the house bill became law (Kormann 2017a). The bill passed by the Missouri House supersedes local rules, even those in St. Louis set by the Metropolitan Taxicab Commission.

Policy Creation in St. Louis

Citizens of the city of St. Louis elect several offices directly, many tasked with policy creation. St. Louis is unique in that the city is independent from any residing county; St. Louis City operates the offices normally controlled by the county. St. Louis is also a “home rule” city – meaning that it operates under a city charter for local self-governance; home rule limits but does not eliminate interference from the Missouri legislature (St. Louis City Charter, art. 1).

The Board of Aldermen (BOA) – St. Louis’s city council – is the legislative body in charge of developing and approving city laws and ordinances. Twenty-eight elected aldermen from the city’s twenty-eight wards serve four-year terms alongside a citywide elected President of the Board of Aldermen. A citywide elected mayor serves as the city’s chief executive officer with the power to appoint department heads and members of city commissions and holds authority over twenty-two city departments. The mayor does not have voting power in the BOA but can veto ordinances (City of St. Louis 2011-20a). Unlike the Chicago mayor, a St. Louis mayor cannot directly submit policy proposals, nor does the mayor hold any voting power within the BOA.

However, the mayor may introduce bills through chairmen of specific committees to sponsor a bill. Bills go for review before the entire board, sent to a standing committee for study and recommendation, and in turn, submitted back to the BOA for a second reading. This can be done a third time if necessary. A simple majority of fifteen can pass a bill to become an ordinance, however, the BOA needs a two-thirds majority overturn a veto from the mayor. If the mayor does not sign the bill or veto it, then the bill automatically becomes law (City of St. Louis 2011-20b).

Before the creation of the Metropolitan Taxicab Commission (MTC), city officials only lightly regulated taxis, while no governments outside of the city regulated taxis at all. Taxis metered fares but were rarely inspected. Fleets could determine the number of vehicles on the road. This made taking a cab frustrating for hotel managers, airport officials, and customers because of cost and the poor condition of cab rides (Mundy 2015, 3).

The Missouri State Legislature created the St. Louis MTC in 2002, aiming to address taxicabs and other ground transportation services. *Missouri Statute 67.1804* established a political body with the powers to grant recognition of taxicab service as a public utility, with the power to license and regulate taxis. Compared to other urban areas, St. Louis's MTC is a relatively new agency for taxi regulation.

The chief executive of the city and the county appoint four members each; each alternate in appointing the chairperson. At least four of the members must be representatives of the taxicab industry. Of those four, at least three must be an owner of a taxicab company with less than one hundred taxicab licenses, an owner of a taxicab company with more than one hundred taxicab licenses, and a taxicab driver. The other five members cannot represent the taxi industry or be a spouse of some who represents the taxi industry or have direct financial interest "in such industry" (Missouri Statute 67.1806).

The commission held the first meeting on November 2nd that year, appointing various positions, calling for appropriate funds, and discussing a permanent headquarters. In its first large order, the MTC drafted the initial Vehicle for Hire ordinance for both the city and county. The ordinance required a Convenience and Necessity certificate, vehicle standards, conduct guidelines, drivers' license requirements, appeal procedures, and vehicle dress. The MTC grandfathered in existing companies, which continue to operate (Mundy 2015, 3).

In its mission statement, the MTC seeks to "ensure safe, reliable, high-quality transportation to the citizens and visitors of the St. Louis area…proving fair and equitable authority over the provision of licensing, regulation, and enforcement of vehicle for hire services that will contribute to the growth and image of the St. Louis Region" (St. Louis Metropolitan Taxicab Commission 2011).

TNCs in St. Louis – A Policy Process

From 2011 to 2013, when new ride-hailing companies introduced services to San Francisco and other large American cities, St. Louisans still relied mainly on taxis for vehicle-for-hire services. Much of the media discourse of taxicabs and the taxi industry was not out of the ordinary for the time: an occasional positive story on being reliable rides for disabled persons, a squabble between cab companies and the city's airport, the occasional accident, or the push for a fee for passengers who vomit in cabs (Leiser 2011; St. Louis Post-Dispatch 2011; Leiser 2012; Leiser 2013).

In 2013, however, the Metropolitan Taxicab Commission had its first inkling of the growing presence of Uber in St. Louis. The first mention of Uber occurred at the April 23rd meeting when Raja Naeem from the Harris Cab Company expressed concern over MTC regulations for new "dispatching services" like Uber. Chairman Hamilton reiterated the duty of the Commission to keep the public safe, and that Uber would need licensing to operate (St. Louis MTC 2013). The policy process at this time remained solidly in the taxi industry policy monopoly – the scope of conflict remained contained and the venue stayed stagnant.

St. Louis in 2014 saw a shift in narrative as Uber and Lyft began service in the city. Uber, which is the umbrella for both UberBlack and UberX, started operations in St. Louis slowly. According to the Executive Director of the MTC, the commission reached out to Uber and invited them into the city back in 2012, but the company never responded (Klein 2019). It was not until 2014 that MTC regulators worked with Uber to start servicing UberBlack's premium sedans. Since UberBlack luxury car service equates more to some mix between taxi service and limousine service, the MTC welcomed the potential for licensing this service (Leiser 2014c).

Uber worked with the MTC from the onset. Later in 2014, after negotiations with the MTC, the Commission approved Uber's application for its premium sedan service, UberBlack, to operate in St. Louis.[6] Francis Slay, the then-mayor of St. Louis, praised Uber for their amical approach to operating in the city (Nicklaus 2014a). Seemingly by the book, the approval of Uber's dispatch service clashed with taxi drivers: The Independent Taxi Driver Association were upset that the MTC violated a commission moratorium barring new companies to enter the St. Louis market (Pistor 2014b). Uber's competitor, Lyft, began operations without any relationship or discussion with city officials.

Lyft first started operations in St. Louis in April 2014 with a contentious start. Before Lyft planned start to operations on Friday, April 18th, the MTC filed a cease and desist order. The Commission stated that any operation without regulatory approval was illegal, and any service offered without going through driver and vehicle standardization would only put passenger safety at risk (Leiser 2015a). MTC Executive Director Ron Klein addressed the issue of Lyft launching in St. Louis at the April 17th, 2014 Metropolitan Taxicab Commission meeting. Director Klein said more enforcement agents would be patrolling since Lyft was "an illegal operation … using a vehicle for hire for point to point transportation in St. Louis City and County" (St. Louis MTC 2014a). Lyft argued that they were "not a taxi service," and that only a suggested donation was an option for payment instead of a metered fare (Leiser 2015a).

The following Monday, the St. Louis Circuit Court Judge David Dowd handed an order to Lyft to shut down services in both the city and the county, including disabling the mobile application. Police ticketed Lyft drivers who continued offering rides after the injunction (Pistor 2014a). Like taxi service, ride-hailing remained a policy problem dealt with at the local level in both St. Louis and elsewhere (Leiser 2014b). In June of 2014, Jim Fleming, the head of the vehicle-for-hire company St. Louis Transportation, expressed concerns to the MTC about Uber's impact (St.

[6] *UberBlack* is separate from *UberX* – the operation that allows for drivers to use their personal vehicles for rides. *UberBlack* provides luxury chauffeur service, with premium vehicles and licensed drivers.

Louis MTC 2014b). In a July 22nd MTC meeting, several members of the public expressed concerns about Uber. Even Kim Gardner, St. Louis City Circuit Attorney, showed up to address surge pricing (St. Louis MTC 2014c). Now not only was the MTC involved, but Mayor Slay, the courts, and police were working to stop the budget options of private vehicle ride-hailing in St. Louis.

At a time when taxi regulators clashed with ride-hailing company Lyft, independent taxi drivers filed a lawsuit claiming the MTC upheld unfair practices in issuing permits. Independent drivers argued that the MTC restrained trade, interfered with business relations, failed to comply with rule-making procedures, violated the Missouri constitution, did not pay earnings taxes, and public officers and employees conducted themselves illegally in public. In May of 2014, a dozen Independent Taxicab Driver Association members protested downtown, attempting to draw attention to the lawsuit (Leiser 2014a).

Heading into 2015, local narratives competed for attention in a muddled vehicle-for-hire policy scene. On one end, transportation network companies fought with city officials to legitimize their service as these same officials toiled with the legality of these services. On the other end, taxi drivers found their own battle with local officials over claims of unfair practices while bringing up concerns that TNCs have for the future well-being of drivers and customers in St. Louis. All the while, a new report showed that trips with Uber tripled since January of 2014 and Uber overtook taxis for business travelers (Mayerowtiz 2015). Policymakers could not ignore TNCs much longer.

The June 2015 Metropolitan Taxicab Commission meeting focused on the future of transportation network companies in St. Louis. At the center of debate was the tensions over driver requirements: background checks, fingerprinting, and drug-testing. Before UberX could operate, commission members wanted drivers to undergo the same drug-testing standard as licensed taxi drivers, Missouri Highway Patrol background checks, and FBI fingerprinting checks (Thorsen

2015a). The General Manager for Uber in St. Louis, Sagar Shah, addressed the Commission and asked to amend the code to allow UberX to operate in St. Louis. General Manager Shah defended Uber's background checks, claiming the company does a more thorough job than the Missouri Highway Patrol or the FBI (St. Louis MTC 2015a). Sager Shah claimed Uber's background checks were better than the Missouri Highway Patrol's background checks, citing their checks into vehicle and background records at the county, state, and federal level, Social Security numbers for previous addresses, global terrorist watchlists, and sex-offender registries. Shah also argued that drug-tests only provided a "snap-shot test," and that their GPS tracking and customer feedback provided better insight to driver behavior (Thorsen 2015a). The Commission's attorney, Neil Bruntrager, countered Uber's background check argument stating the police have access to closed court records.

Residents and representatives came out both in support and opposition of TNCs. One of the commissioners, Chris Sommers, expressed support for Uber. Representatives from St. Louis Transplants and from the Show Me Institute spoke in favor of UberX (St. Louis MTC 2015a). Commissioner Kim Tucci spoke in opposition to the request from Uber to bypass background check criteria set by the MTC. Someone from the Harris Cab Company spoke in opposition to UberX, while someone representing the St. Louis Airport Taxi Drivers welcomed the competition but wanted "a level playing field for all companies and drivers" (St. Louis MTC 2015a).

Meanwhile, Uber planned to recruit two-thousand drivers in St. Louis if the commission allowed the company to operate in the city and county. With the vote expected to take place later in the month, Uber held a recruiting event with the St. Louis City NAACP, Ferguson 100, and the St. Louis Agency on Training and Employment (STLATE). The vice president of the NAACP, Cedric Clarkson defended Uber, stating Uber would help minority households earn income, leading to reduced crime and improved neighborhoods: "Transportation options can be few and far between, which creates additional barriers to employment… [traditional taxis] have for years failed to adequately serve" (Thorsen 2015e). Some attending the Uber recruiting event showed strong interest in driving full-time or driving to supplement another job, especially with general manager Shah telling drivers they keep 80% of their fares, with UberX estimating driver would earn up to $15 to $20 an hour (Thorsen 2015f). Uber was also courting the general public and non-profits. Uber offered up enticements to the St. Louis public through free rides and ice cream socials. Over Fourth of July weekend in 2015, UberX gave free rides to both the city and county. They also donated $1 for each trip to Mothers Against Drunk Driving (MADD), and assured residents that their drivers went through proper background checks. Mayor Slay approved of Uber's form of background checks and the assistance with mitigating drunk driving (Thorsen 2015b).

However, a day before the company slated to offer free rides, it withdrew the offer citing the MTC ordering them to get temporary permits. This surprised many - even Mayor Slay - since drivers would not charge passengers for their service. The MTC attorney, Neil Bruntrager, accused Uber of using the free rides as a ploy to garner public support for Uber and put pressure on the commission to relax demands of the ride-hailing company. Bruntrager went as far as to question the no-money-exchange: "Why would there be any 'transaction' if it's a free ride?... Don't tell me it is going to be a free ride and then tell me there's going to be a transaction." Bruntrager defended the commission's jurisdiction, citing state law giving the MTC authority over vehicles carrying passengers even if there is no hire for compensation. The MTC waived registration fees for the generous gesture, but also requested a list of drivers, their licenses, insurance cards, and asked that Uber issue background checks to get temporary permits (Thorsen 2015c).

Yet, before the July 29th meeting, the commission gave up their demands for Uber X to drug-test drivers – the first concession from the MTC seemingly to help gain some of their more important demands; the commission still wanted Uber to fingerprint drivers and run background checks through the Missouri Highway Patrol. The MTC was optimistic about coming to some sort of agreement with UberX. Even though the commission and Uber were at an impasse with certain policies, the MTC again stressed that the fingerprint background checks were Missouri law, and wasn't up to the commission or TNCs (Thorsen 2015d). Many within the commission sided with Uber and other TNCs. One commissioner, Chris Sommers, supported UberX and did not support the necessity of fingerprinting. Larry Satz, another commissioner, still had not made up his mind as of mid-July (Thorsen 2015d).

During the amendment and code drafting process, Uber provided the MTC with 15 legislative demands, including changing the commission's stance on insurance coverage and fingerprinting. Uber stated its disappointment if the commission required the fingerprint requirement, stating that is what stalled them from operating in St. Louis. Also, St. Louis County Executing Steve Stenger and Mayor Slay wanted Uber to start launching after the July 29th meeting; both the city and county leaders even offered local police to compare background checks and change policy if there was any discrepancy. St. Louis seemed eager for TNCs (Thorsen 2015d). Pressure mounted for the taxicab commission and ride-hailing companies to come to some sort of agreement.

The July meeting failed to meet expectations. Several members of the public came in to comment on their support or opposition of UberX, with Uber supporters outnumbering opponents. General Manager Shah spoke again in favor of UberX and claimed that commissioners were just delaying. The Chief of Staff to the Mayor, Mary Ellen Ponder, asked that the commission not vote on anything and have another meeting to work out the differences between the MTC and Uber (St. Louis MTC 2015b). By the end of the July 29th meeting, the commission made no decision on allowing ride-hailing companies to operate in St. Louis. A stalemate evolved out of commission members' concern the Uber's background checks were not stringent enough while simultaneously accommodating the ride-hailing business model. The MTC already gave up requiring drug-testing UberX drivers. Uber claimed background checks and fingerprinting were onerous, while Lou Hamilton and other commissioners cited that state law does not allow Uber to be exempt from these requirements (Thorsen 2015g). The commission would not take up debate again on vehicle-for-hire code for creating and regulating UberX and Lyft until September.

Tension only heightened between Uber and the Metropolitan Taxicab Commission before the September meeting. By September, commissioners did not move on their dedication to keep some of the same requirements for TNCs as the taxi industry. On Friday, September 18th, 2015, the commission voted to allow UberX's services in St. Louis with a fingerprint requirement for background checks in compliance with state law. However, Uber claimed that these requirements were burdensome and filed a lawsuit against the MTC, claiming the commission acted in violation of federal antitrust law (Brown 2015). That same day UberX lunched in St. Louis in insubordination of the commission. A federal judge denied a temporary restraining order requested by the company that would allow for operation. Despite legal challenges, UberX operated its first weekend without law enforcement interference (Brown 2015).

According to tweets by locals, the reaction to Uber starting illegal operations in St. Louis varied. Some opposed Uber's start without the MTC's blessing, with one resident comparing Uber use to the black market. Others praised Uber's arrival as a better option than cabs, and even as the culmination of St. Louis becoming "a real American city" (St. Louis Post-Dispatch 2015). Uber boasted community use of Uber and defined their operations as distinct (and better) than the existing taxi industry (St. Louis MTC 2015a). Taxi companies opposed Uber's view of itself and its operation, stating that without TNCs paying fees taxis are at a "competitive disadvantage" (Brown 2015). By December, the taxi industry seemed to prevail: in the December 2015 meeting, the Metropolitan Taxicab Commission approved adding transportation network companies (TNCs) into

Vehicle for Hire code, classifying these types of businesses (St. Louis MTC 2015c).

However, at the beginning of the Missouri Legislative session in 2016, lawmakers proposed new legislation that would regulate ride-hailing services statewide rather than allowing local control. Tom Reeves, the chairman of the MTC, defended the work of the commission as a vital in keeping passengers safe. The commission also revised regulation several times just to slightly loosen restrictions for cabdrivers so they could compete with TNCs (Thorsen 2016b). Chairman Reeves also lamented the power of Uber, as the company hired lobbyists to challenge the authority of policymakers (Thorsen 2016a).

Since St. Louis City and County, especially through the taxicab commission, made persuasion difficult for TNCs to gain favorable regulation, Uber shifted focus to Missouri legislators instead. Uber found legislators very willing to work with Uber and other TNCs to write bills with favorable regulation at the state level (St. Louis Post-Dispatch Editorial Board 2016a). Missouri Representative Mark Parkinson (R-St. Charles), sponsored a bill for state control of ride-hailing, dissolving the taxicab commission (Thorsen 2016a). Rep. Parkinson defended his bill as purely the free-market deciding which vehicles-for-hire stay in business. Other representatives proposed bills that would require Missouri Department of Revenue approval for transportation network companies operating in-state (Thorsen 2016b). This bill would essentially give Missouri power to regulate TNCs independently of the Metropolitan Taxicab Commission, but would exempt the companies and employees from any local taxes (St. Louis Post-Dispatch Editorial Board 2016a).

In March 2016, Missouri lawmakers and Uber representatives held a joint press conference touting the working relationship between the company and the state, and the benefits app-based ride-hailing would bring to Missouri. Uber proposed its plan to hire 10,000 “driver partners” if Rep. Parkinson’s bill passed. TNCs would benefit from this bill by controlling its own background checks and no fingerprint requirements (St. Louis Post-Dispatch Editorial Board

2016b). Coming into the last week of the legislative session, regulations on ride-hailing at the state level stalled because of legislative quarrels over fingerprinting for background checks (Erickson and Suntrup 2016). By the end of the session in May, the bill that would strip local governments of control over transportation network companies and give power to the state – and any other TNC bill – failed (Suntrup 2016).

The Metropolitan Taxicab Commission took this legislative failure as a signal to ticket UberX drivers not following regulations. St. Louis City police brushed off action to ticket Uber drivers citing larger concerns, while St. Louis County police said they would ticket drivers. This coincided with Mayor Slay's opposition and County Executive Stenger's support for fingerprinting – the regulatory concern at the center of the ride-hailing law debates. Uber pushed back at the MTC's effort to ticket drivers, arguing that the commission "will stop at nothing to take transportation options and work opportunities away from St. Louisans… to benefit their own interests... Customers deserve choice and the commission's illegal efforts to block competition and banish ride-sharing are a disservice to the public" (Thorsen 2016c).

Later that year, debate over TNC access to the airport also made it into the spotlight. Negotiations began among TNCs, the airport, and the MTC. The existing regulation charged taxis $4 for every airport pick-up, with $3 of that fee going to the airport and $1 to the taxicab commission. Uber did not agree to accepting fees and instead went to the state legislature to exempt them from airport fees. The negotiations broke down. In August, six cab companies along with St. Louis Mayor Slay called for St. Louis's international airport, Lambert, to enforce local vehicle-for-hire laws. For nearly a year, UberX drivers picked up passengers illegally at the airport. Being a supporter of Uber in the past, Mayor Slay switched gears and asked the company to begin abiding by existing law (Thorsen 2016d).

At the start of the 2017 Missouri legislative session, the Senate President Ron Richard expressed a pro-business agenda, including tasking house committees with revisiting state regulation and licensing for transportation network companies (Bott, Erickson, and Huguelet 2017). Locally, St. Louis mayoral candidates for the upcoming March primaries debated various support for TNCs with candidates largely continuing Mayor Slay's hands-off approach. City Treasurer Tishaura Jones, one of the candidates, wanted transportation network companies to be regulated at the state level; many other candidates agreed (Addo and Thorsen 2017).

Support for statewide regulation bolstered proposals in the Missouri Legislature. On April 12, 2017, after three years the Missouri Senate finally passed a transportation network company proposal. Under the new legislation, companies and drivers would be exempt from most fees and rules, including taxicab commission regulation. Uber and Lyft both claimed the bill as a victory for drivers and riders, while taxi companies saw the legislation as unfair to the taxi industry. Adam McNutt, the president of a large St. Louis cab company, Laclede Cab, argued taxi companies need to be treated the same to "foster fair competition" (Huguelet 2017).

The taxi industry voiced the potential damage from the new Missouri law. MTC Chairman Reeves said that the new law puts the MTC in a catch-22 with weighing the responsibility to protect both people and drivers. The executive officer of ABC/Checker Cab told the commission that their company has "been dying for two years now," while the owner of Chesterfield Taxi and Car Services expressed difficulty in keeping drivers from switching to Uber to avoid licensing fees (Schlinkmann 2017a).

After losing control of transportation network companies, Executive Director Klein wrote an editorial on rethinking the mission of the taxicab commission. Klein admitted that the state "ultimately decided to set different and less stringent standard for [TNCs]" which caused the commission to cut staff by more than half, reduce license fees, and gave companies options to not staff offices around the clock (Klein 2017). The MTC hoped the changes would increase the likelihood taxicabs can compete with Uber and Lyft without lowering safety and professional standards. Klein reiterated that their priority was the safety of the public and that it is open to consider other changes (Klein 2017).

The city still had to settle the matter of fees for transportation network companies regarding airport pickups. The first proposed-fee was $6 - $2 more than the taxi pick-up fee. Airport Director Rhonda Hamm-Niebruegge said that fee was meant to create a level playing field between TNCs and taxis and that companies should pay a price from being able to pick-up their customers in areas open to the general public. Companies rejected the larger fee after the second straight month of failed attempts at addressing airport access fees, but an Uber spokeswoman was looking forward to a “fair agreement” (Schlinkmann 2017b). Eventually, Uber and Lyft negotiated only a $3 airport pick-up fee (less than taxis) along with $15,000 payment to the airport every other year. The airport agreed to put a designated curbside area for TNC pick-up, much like airport taxi stands. This announcement, along with the Missouri state law going into effect, drew new concerns about the airport favoring TNCs over traditional taxis (Bott 2017).

Since statewide legislation passed at the state level, with the exceptions of some policy debates over airport access, the transportation network policy process settled. The taxicab commission relinquished control over regulating TNCs, while taxicabs still faced more stringent – although more laxed than before – regulation. MTC Executive Director Klein described it as “losing the political fight” (Klein 2019).

Although the larger political fight calmed, there were still issues and debates over ride-hailing. One large controversy that hit St. Louis involved an Uber driver live-streaming passenger pick-up. One Uber and Lyft driver live-streamed passenger pick-ups without their consent, sparking a public uproar (Heffernan 2018b). Other controversies plagued companies including an investing by the Missouri Attorney General of Uber over a massive data breach (St. Louis Post-Dispatch

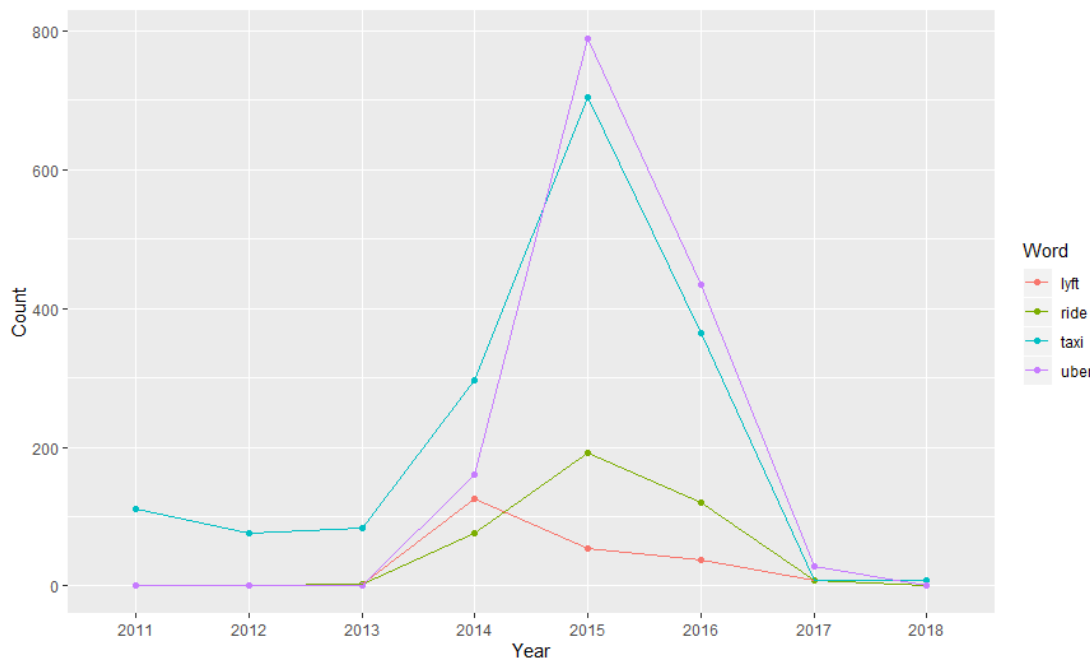
2017). However, beyond peaks of controversies for transportation network companies, the larger policy debate settled into a regulatory routine.

Issue Framing and Venue Shopping

In 2011, St. Louis's largest newspaper hardly mentioned taxi cabs, with only benign mentions like a car crash involving a cab, or sporadic positive mentions such as how the disabled use these vehicles for transport. The next couple of years remained the same: a handful of articles about general taxi happenings with no mention of Uber, Lyft, or TNCs. Uber nor Lyft appeared in the St. Louis Post-Dispatch until after Uber made an appearance in the St. Louis market in 2014.

By then, articles referring to taxis increased dramatically, and the St. Louis Post-Dispatch published several articles on Uber, Lyft, ride-hailing, and ridesharing. The frequency of taxi mentions reached a fever-pitch in 2015, when the Metropolitan Taxicab Commission (MTC) filed a lawsuit to block Uber, filed an FTC complaint against the ride-hailing company, and attempted other such measures to stymie Uber from operating in St. Louis (Thorsen 2015h). After initial action from the MTC, mentions of taxis start to decline, leaving many mentions relating to crimes committed against cab drivers and the Missouri legislature's considerations around taxis and ride-hailing (Erickson 2017). Steadily, articles about events like New Year's Eve or beer festivals begin telling the public to "order an Uber" instead of "hailing a cab." In 2018, the most notable article in the *Post-Dispatch* about taxis was the declining rates of taxi airport pick-ups after Lambert airport opens for Uber and Lyft (Schlinkmann 2018).

Figure 1 – Number of Word Mentions in St. Louis Post-Dispatch

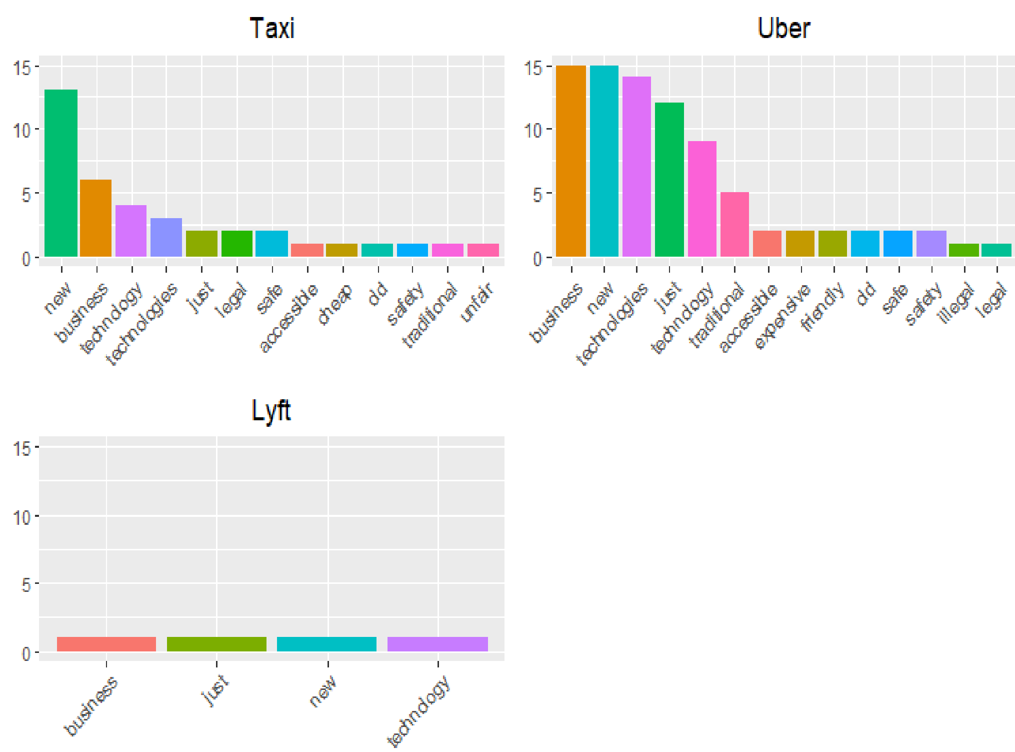


However, this new-found attention to TNCs in St. Louis is not all positive publicity. Several scandals, from unwanted video recording of passengers to governmental indecision to crime in ride-hailed vehicles all plague the reputation of Uber and Lyft (Heffernan 2018a; Thorsen 2015e). Much of what is coming out in newspapers continually grew more negative of the ride-hailing company and taxis alike. The squabble and back and forth of lawsuits between the taxi commission and Uber resulted in sporadic compromises. This pattern of frequent, negative headlines persists in later years, with few, infrequent "feel good" stories from taxis and TNCs.

In 2011, 2012, and 2013, no frequent words in proximity to taxi in the news stuck out as being overly positive or negative considering the word list nor context; language stayed relatively neutral. In 2014, a few mentions of the proximity words started to crop up in articles mentioning taxis, Uber, and Lyft. "New" was the most occurring word for both taxis and Uber, most likely due to the recent introduction of TNCs into St. Louis. Taxis next largest mention was "traditional." while both Uber and Lyft were in proximity to “business.”

In 2015, Uber had far larger number of positive proximity words, with language such as “business,” “new,” and “technologies” being of the highest used. Taxi mentions also were close to some of these words but at a much lower extent. Simultaneously, Lyft mentions declined sharply as Uber mentions surged. In 2016, “new” by far the most used word next to Uber while all other words were sporadically mentioned. This could be because articles continued to refer to Uber as new, new features of the app, but also new regulation. In 2017 and 2018, mentions of taxis, Lyft, and Uber all declined sharply.

Figure 2 – Proximity Word Count for St. Louis Post-Dispatch 2015



For St. Louis news, Uber and taxis were by far the most mentioned entities, peaking in 2015. Around this peak was the battle around the legality of Uber in St. Louis, and much of the infighting between taxi interests and TNCs. Of that year, “new,” “business,” and “technologies” were the words in most proximity to the entity words. This can easily be construed as St. Louis giving priority to business and technology as wanting to become a hub of innovation, and thus favoring TNCs.

Punctuated Equilibrium Theory highlights the use of issue framing and venue shopping as tools used by interested parties to gain favorable policy. In the case of the policy process in St. Louis around TNCs, both taxi interests and TNCs attempt to garner favor using these tactics. However, Uber was more successful – especially in terms of venue shopping – than taxis in persuading officials to support their policy preferences.

While UberX and the MTC negotiated the parameters of legalization of ride-hailing services in St. Louis city and county, nationwide conversations shifted towards concerns of the gig-economy. Fears of gig-style freelance work replacing traditional jobs raise concerns on safety nets that full-time traditional employment provides, including workers’ compensation and health insurance (Nicklaus 2015). However, local discourse lagged these national fights, as it was still focused on the benefits of TNCs.

When Uber and Lyft began operation in St. Louis, many beyond regulators repeated the benefits that these companies said about themselves. The St. Louis NAACP said that the background and fingerprint requirements debated in the MTC would disparately impact minority communities, citing the documented discrimination against young men of color with the justice system and the negative externalities of having their fingerprints in the system (Thorsen 2015f). During his time in St. Louis, Edward Domain - a prominent start-up businessman - became a vocal critic of the Metropolitan Taxicab Commission and praised Uber for their operation in St. Louis. In an editorial in the St. Louis Post-Dispatch in the summer of 2015, Domain called for reform of the MTC: “the MTC is a broken, failing institution endangering the lives of the public they are entrusted to protect through negligence and dereliction of duty" (Domain 2015).

The taxi industry attempted to flip this narrative. In an editorial in the St. Louis Post-Dispatch, Co-owner of St. Louis County & Yellow Cab Debbie Rudawsky argued the innovation and the benefits of the taxi industry. Customers can hail a cab online, by text message, or through an application – which take credit cards. Taxi drivers are professionals that do not quit for holidays, bad weather, and are non-selective on service area. Further, taxicab prices do not rise and fall, and are made public. As a public transportation service, Rudawsky argues, the MTC regulates cabs to ensure public safety and confidence (Rudawsky 2014). However, these arguments failed in combating the prevalent *tech-first* narrative of TNCs.

Uber also successfully used venue shopping to their advantage: seeking out surrounding areas and state legislators sympathetic to business interests in the state. TNCs also benefited from appealing to surrounding governments to push similar legislation in St. Louis. While pushing for St. Louis city and county approval, Uber courted surrounding counties in Missouri and the metro east. Uber started operations in the metro east as of March of 2015, an important market due to the 24-hour adult attractions in the area. In the summer of 2015, the St. Charles city attorney Michael Valenti addressed the concerns of the taxi ordinance barring ride-hailing, while some officials argued no laws needed change. Concerns of taxi companies in St. Charles mirrored that of companies in the city: regulations are more stringent for cabbies and ride-hailing companies do not require as stringent guidelines (Schlinkmann 2015). Since much of the St. Louis metro area relies on cars and commutes to and from the suburbs, these markets are a prime money-maker for ride-hailing services. By the summer of 2015, UberX operated legally in Illinois and most of St. Charles county, pressuring St. Louis City and County to get on board (Thorsen 2015a).

Lobbying in Jefferson City, Uber recruited state representatives and legislature willing to look at the investments and business positives of TNCs. In 2014, Uber collected $1.2 billion from venture capitalists, making it the biggest single investment since at least 1995, making their ability to raise revenue appealing to legislators (Nicklaus 2014b). This strategy paid off: Missouri regulation of transportation network companies is far more laxed than any regulation or proposals at the local level.

In sum, the St. Louis case shows that transportation network companies used issue framing and venue shopping strategies to get favorable regulatory policies. Public debate of TNCs tended to feature terms that referred to the positive aspects of transportation technology that TNCs use. When transportation network companies failed to get their preferred regulations from the Metropolitan Taxicab Commission, they moved to the state legislature. There, a law passed exempting TNCs from the same key taxi regulations.

Chapter 6 – Chicago: Agenda, Venue, and Power

Like St. Louis and Austin, Chicago's TNC policy process showed overarching themes of Punctuated Equilibrium Theory. However, in Chicago the policy process differs in one fundamental way: the role of venue shopping. Venue shopping had a larger effect in St. Louis and Austin, where states ended up with regulatory control. Venue shopping had some effect in the policy process in Chicago, but narrative control held the most sway. Chicago's two-tiered outcome relied on the power structure of policy creation in the city – an urban area with a strong political machine and a powerful mayor led to favorable outcomes for TNCs because of favorable predominant narratives.

Transportation network providers (TNPs – what Chicago legally calls transportation network companies) won over politicians, TNC drivers, and the public with an appealing narrative. Policy makers saw companies like Uber and Lyft as *innovators* for the municipality, providing an image of welcoming new technology, growing companies, and a hipper economy. TNC drivers saw Uber and Lyft as a beacon of financial stability in a time of economic ruin. Post-Great Recession left many Americans underemployed or unemployed; driving for one of these companies filled that gap. The public favored transportation network companies as an alternative to expensive taxi rides and vehicle ownership in Chicago. Even with a robust public transportation system, Chicagoans found convenience in hailing rides via smartphones.

TNCs framed the issue as one of convenience, affordability, job creation, and innovation. Mostly, transportation network companies argued that the issue was not their unwillingness to comply with existing regulation in Chicago and Illinois, but that the old way – taxis – had little positive impact compared to their new, innovative technology. Their offer of a better way of transportation meant the taxi industry criteria could no longer thrive in the post-smartphone world. Companies successfully structured their reputation around innovation and business, appealing to the development that local leaders seek.

Different from Austin and St. Louis, governmental forces outside Chicago only had a minuscule effect on policy making. Illinois passed statewide regulation, but Illinois's law did not supersede urban regulatory power – Chicago could continue to pass and enforce ordinances. The taxi industry sued the city of Chicago, propelling a federal court battle that ended in success for ride-hailing companies. The policy process remained somewhat contained, which ended up benefiting transportation network companies.

Current TNC Legislation

Chicago in its legal definition calls Uber, Lyft, and other ride-hailing platforms *transportation network providers* (TNPs).[7] Effective September 2nd, 2014, the first Chicago ordinance focused on safety and customer protections with a series of licensing requirements, background checks, driver training, inspections, insurance, surge pricing regulation, and car dressing requirements for transportation network companies (Chicago BACP 2010-20a).

On June 22nd, 2016 the Chicago City Council passed a proposal to rework regulation for Uber and Lyft. In a 36-12 vote, the council approved new rules that came into effect on January 1st, 2017. These included that drivers take an online course yearly to renew a special chauffeur's license, semi-annually inspection, and enacting a rule that drivers display a 311 sign, so customers know where to report complaints. City official removed ordinances for drug-testing and physical exams for all for-hire drivers and operators (Berg 2016a).

Illinois has separate laws for ride-hailing companies. Illinois law requires TNCs to provide minimum liability insurance and financial responsibility requirements but does not explicitly prevent localities from passing other laws pertaining to ride-hailing companies (Transportation Network

[7] This chapter will still use the term "transportation network companies" and the acronym "TNCs" in place of "transportation network providers" and "TNPs" even though this is the legal term used in Chicago.

Providers Act 2017, sec. 10). Illinois legislators specifically cite that TNCs are not taxicabs nor a for-hire vehicle owner, but something else altogether. This section on definitions is set to be repealed on June 1st, 2020 (Transportation Network Providers Act 2017, sec. 5).

Over the course of four years (between 2014 – 2018), real contention for ride-hailing services focused on fees and access. First, Mayor Emanuel and the City Council implemented and continued to hike the per-ride fee for ride-hailing services. The most recent hike would see an increase from 52 cents per ride to 72 cents over two years (Spielman 2017a). In 2016, Chicago opened airports and other spots of interest exclusive to taxis to Uber and Lyft. As it stands, Chicago TNCs and their drivers obey weaker regulations than taxis and have access to the same points of interests as taxis but have fee-per-ride charges tacked onto each trip.

Policy Creation in Chicago

In Chicago, the mayor is the chief executive tasked with appointments to certain departments and enforcing ordinances. Mayors appoint city officials, department commissioners, and members of boards and commissions. Chicago mayors have the power to submit proposals on their own accord or through city departments to the City Council. Although the presiding officer in City Council meetings, the mayor can only vote in certain instances.

Under Illinois law, the city council – consisting of the mayor, city clerk, and 50 elected council members – has legislative powers in accordance with the state constitution. These powers include regulation, licensing, taxing, and incurring debt. City council needs to approve legislation for it to be enacted into law. Any legislation passed by the City Council can face a veto by the Mayor. The committee may accept this veto or override it with a two-thirds majority vote (Chicago Office of City Clerk 2020).

The legislative battle occurs within city council meetings and is ultimately decided by the council members, with strong influence from the mayor. Like the council members or citizens, the Mayor or executive departments can introduce legislation. According to Rule 41, legislation is automatically referred to a committee for consideration. All committee meetings are open to the public and the city council welcomes citizens to testify (Open Meetings Act 2010). Committees then debate and discuss proposals during the committee review. Committee members can submit amendments or changes.

Some cities delegate a single department for regulating taxis, transportation, or commercial vehicles. Chicago regulates and monitors both taxis and ride-hailing companies under the Department of Business Affairs and Consumer Protection (BACP). The BACP licenses and regulates business, receives consumer complaints, and enforces rules for public chauffeurs, public passenger vehicles, and transportation network providers (Chicago BACP 2010-20a). Unlike St. Louis, the BACP regulates and oversees many other industries and issues beyond vehicles-for-hire, including small business licensing and consumer protection. The BACP abides by local and state regulation passed through the city council or state legislature for licensing.

TNCs in Chicago – A Policy Process

The Uber private car service introduced in Chicago in 2011 was widely different than the private vehicle ride-hailing as it is known today. Launching with just 40 drivers, Uber's first venture – *UberBlack* – consisted of professional drivers and premium SUVs and sedans. The company priced rides at 1.75 times taxi fare and catered mostly to more affluent residents seeking a premium service. Focusing on lowering wait times, Uber's engineers statistically modeled predicted demand times and deployed drivers. Throughout the ebb and flow of demand, prices adjusted seamlessly with changing supply and demand (Wong 2011).

At this same time, the taxi industry remained somewhat stagnant in Chicago, with frequent stories of crimes committed in cabs, or car accidents involving taxis (Meisner 2011; Curry 2011). In 2011, city officials increased taxi rides by 50 cents, citing sustained high gas prices. One taxi driver expressed concern that the increase would put off commuters from using taxis (Schlikerman and Dardick 2011). Larry Nutson, also known as the "Chicago Car Guy," called for taxis with better fuel economy and engine stop/start technology, updating their fleets (Nutson 2011). These events and opinions were not out the ordinary for the taxi industry and operation. The status quo policy monopoly of the taxi industry in Chicago remained stagnant.

In Spring of 2012, Uber prepared to launch a new platform for service in Chicago: *UberTaxi*. UberTaxi, unlike UberBlack, partnered with selected cab drivers and paired drivers and passengers at a regular cab fare plus a twenty percent charge to cover service fees and gratuity. Uber told *The Verge* that this arrangement was meant for drivers to make better use of their downtime, guarantee them tips, and enhance safety (June 2012). Uber ensured that most of the fees went to the driver, and Uber kept only a low, single digit percentage of the cut (Rao 2012).

Many local taxi companies already offered a similar service through an app called *TaxiMagic*, which allowed online booking, GPS tracking, and paying with phones without the fee (June 2012). Simultaneously, *Hailo*, a new company and app that started in London, offered lower wait times, no exchange of cash or credit card - and the peace of mind of a highly monitored list of professional taxi drivers. This convenience came at a price: $1.50 off-peak and $2.75 peak hour charge above what a normal taxi meter charged (Hilkevitch 2012). With UberTaxi, passengers now could hail cabs or luxury town cars without ever calling a dispatcher or curb-side hailing. However, in 2012 theses services were only available to those who had smartphones and a credit card to prepay for a ride (Rodriguez 2013a).

UberTaxi arrived in Chicago without consulting or asking for approval from the city of Chicago. Uber CEO Kalanick argued that smartphone GPS-use did not meet the definition of a meter and did not have to abide by city code. Uber already had devout customers and drivers who signed a petition to City Hall in November of 2012, stating opposition to new regulations that would affect UberTaxi (Harris 2012). With already popular opinions of UberTaxi, Uber started out in Chicago with a positive image for their company and industry.

Tension arose between taxi drivers using these apps and taxi operators. Taxi drivers using UberTaxi or Hailo promoted the apps, saying it reduced their time looking for passengers and cut payment hassles. Taxi operators saw Uber as a threat (Baker 2013). Taxi operators in Chicago began their push against Uber in Chicago, getting owners of various Chicago taxi brands like Yellow Cab and Blue Diamond working together. Taxicab owners Pat Corrigan and Michael Levine hired and retained a team of personnel and firms to assist in their defense, including lobbyists and public affairs firms (Harris 2012). To fight back against the taxi industry, Uber acquired a dispatch license, and hired famous Chicago lawyer Michael Kasper as a lobbyist. The head of Uber, Travis Kalanick, also said the company planned to let customers choose the amount of gratuity they want to pay to a driver to circumvent city code making it illegal to collect fares that are not established by ordinance (Harris 2012). Uber also continued to engage with the public through various social media campaigns, including their #OnDemandJobs campaign (Chicago Business 2014).

In October 2012, taxi companies and some passengers filed suit against Uber, alleging that the company violated both state and local laws. The city cited that UberTaxi violated multiple ordinances including false price advertising after complaints of UberTaxi charging customers a mandatory twenty percent gratuity. The issue came on the radar of the city's Business Affairs and Consumer Protection (BACP) Bureau after Alderman Anthony Beale (9th) broached concern about Uber's practices (Dizikes 2012).

Chicago made millions in annual fees from taxi operations in the city, while simultaneously regulating the industry. The city tried to guarantee that Uber followed the rules and competed fairly, while also wanting it to flourish – even Mayor Emanuel saw Uber as showcasing Chicago as a hub of entrepreneurship and innovation (Harris 2012). This drive to become a “tech savvy” city became part of the mayor’s larger support for TNCs. Emanuel's policy chief, David Spielfogel, pushed the administration’s desire for Uber to stay in Chicago although admitting a few things had to change. However, Spielfogel said the city found no significant regulatory issues. According to Spielfogel, city officials wanted “…to preserve the innovative nature of Uber, which makes it much easier to get around the city, while also respecting federal and local laws” (Chicago Tribune Editorial Staff 2013).

By the end of 2012, Uber benefited from public and executive support in Chicago. Beginning operation in Chicago (without city approval) developed a devout base to what Uber had to offer insofar as hailing rides. Taxi drivers using their UberTaxi app also supported the company to make extra cash. The support from Mayor Emanuel helped to solidify the narrative that Uber can help modernize Chicago into a “tech friendly” city.

Surprisingly, SideCar arrived in Chicago before both Lyft and UberX. Launching in March of 2013, SideCar had more than 50 drivers on the road before Uber announced a plan to launch UberX in Chicago. Lisa Frame, the community manager for SideCar Chicago, made it clear: SideCar was not a taxi service since there are no taxi drivers nor dispatchers (Bernot 2013). The app offered a “suggested donation,” and drivers were ordinary people who could be friends or neighbors. SideCar stressed their rules on safety to protect both drivers and passengers with what is now typical for TNCs: a vehicle in good condition, insurance, a driver’s license, passing a background check, GPS tracked rides, and a rating system.

Shortly after turning sights to expanding UberBlack to the suburbs, Uber announced plans to roll out private vehicle ride-hailing in Chicago. Lyft launched in Chicago that May, only a month after Uber announced a plan to launch UberX in the city (Wong 2013a; Rodriguez 2013a). These services were different from what was available through UberBlack or UberTaxi at the time. Using a smartphone app, users call a driver to their location for a ride, this time serviced by a driver in their own personal car. Uber looked to experiences of Lyft and SideCar in Chicago and other cities; Uber's then-chief executive Travis Kalanick argued that city authorities appeared to turn a blind eye to TNCs, which the company then took as indirect approval (Wong 2013b).

Ride-hailing services began gaining traction with good press and narrative. News outlets touted the benefits of these mobile apps helping commuters hail a ride: SideCar, Lyft, and UberX were potentially less expensive than taxis and allowed a unique experience in meeting new people (Baker 2013). Companies advertised private ride-hailing through an app as an update to the previous taxi system in Chicago, which faced criticism for high priced medallions from restricted competition, underserved neighborhoods beyond the Loop, and issues in vetting reckless drivers (Chicago Tribune Editorial Staff 2013). Many supporters of TNCs praised these services for their benefits not easily measured. TNCs had interesting and a diverse set of drivers that were enjoyable to talk to. The ride experience was pleasant, with some drivers having nicer cars, snacks and gum, and customizable playlists. In addition, the price was low (Rodriguez 2013b). Proponents of ridesharing touted the system as self-policing. Companies required drivers to have insurance, a clean driving record, and a background check. Proponents argued that the rating system of both drivers and passengers kept bad behavior at bay (Chicago Tribune Editorial Staff 2013).

When private ride-hailing launched in 2013, drivers and passengers benefited from the sharing economy – or collaborative consumption – which for many Americans to turn to often part-time, flexible work to make extra cash while consumers saved money. Drivers of these services expressed the ability to make extra money in the sharing economy by driving with TNCs. Commuters hyped the ability to not own a car in Chicago – and these services were making it cheaper to get around the city (Blevins 2013). Interestingly, ride-hailing apps were starting to replace services offered by taxi cabs, along with other services like getting to the emergency room (Sachs 2013).

TNCs riddled the ride-hailing service landscape in Chicago with rate wars and gimmicks to keep up with competition. The three major competitors in Chicago began a rate war, much like taxi companies did before regulation in the early 20th century. On November 7th, 2013, Uber announced a price drop in Chicago. A day later, SideCar announced a similar move (Wong 2013c). To attract additional riders, Uber offered a $15 discount to customers who used PayPal as their method of payment, with the exclusion of the UberTaxi option (Chang 2013). TNCs would offer free rides or perks to drivers to gain favoritism from the broader public and drivers.

Along with the benefits of ride-hailing, companies also became familiar with controversy. Closing in on the 2014 New Year, Uber faced dispute on surge pricing on high-demand taxi nights including New Year's Eve. To keep ahead of customer complaints, Lyft even announced a switch to a set-prices payment model. UberX felt compelled to do the same after a series of complaints in Chicago. The popularity of these tech firms seemed tongue-in-cheek, as gimmicks from CEOs and the company itself would be ironic. For instance, before the 2013 new year, Uber CEO Travis Kalanick provided advice as to what time to call an Uber to avoid surge pricing (Samuelson 2013). Still, the industry remained largely unregulated.

Drivers for Uber, Lyft, SideCar, and other TNCs required no special license or training in Chicago. Companies handled and had discretion over fingerprinting and criminal background checks of drivers. No rules existed for vehicle condition and age, disability access, citywide servicing, nor for regulating rates for consumers. Most drivers only carried regular personal auto insurance with no liability protection if involved in a crash. In fact, many insurance companies dropped customers and denied claims when finding out that their personal vehicles are being used for commercial purposes (Hilkevitch 2014a).

In 2014, Mayor Rahm Emanuel stated that it was time for Chicago to regulate TNCs, presenting a draft ordinance from his administration. Senior Advisor David Spiefogel said the administration would introduce the ordinance to the city council in March (Hilkevitch 2014a). Emanuel's regulations were far less strict for TNC drivers than taxis, echoing his early support for Uber and other companies. TNC drivers would not be required to pay for the taxi license medallion which, as of 2014, could cost as much as $350,000. TNC drivers would not need a chauffer's license (Chicago Tribune 2014). Meanwhile, Chicago City Council sent subpoenas to UberX, Lyft, and SideCar to turn over copies of their insurance policies to city government (Hilkevitch 2014d). The regulatory process was underway.

Although touting the benefits of innovation and entrepreneurship that TNCs brought to Chicago, city officials called for enforcement of these companies for the safety and financial protection for passengers. Officials claimed companies enjoyed advantages that taxis do not, and these advantages did not always benefit the public. The draft ordinance required companies to conduct criminal background checks, drug tests, and driving record checks on drivers. Drivers also required training. Vehicles must pass a 21-point inspection and companies must carry insurance to cover the vehicle. The ordinance contained a $25,000 license fee for companies, $25 per driver fee, and companies must pay the city's ground transportation tax. Companies providing these ride-hailing services argued they were "middlemen" and opposed regulation. They saw their technology as a tool to connect drivers to passengers, but not to provide transportation directly. Critics of TNCs still questioned why the city allowed for these services to operate without regulation in the first place (Hilkevitch 2014a).

Displeased with government response, critics of UberX and Lyft said the proposed ordinance was too lax and showed concern for the intentions of city officials. CEO of Yellow Cab Company Pat Corrigan warned of the two-tier systems of transportation that excludes underprivileged, disabled, and persons without credit cards. Yellow Cab and other taxicab companies sued UberX in the Federal District Court in Illinois for “bypassing local regulation of the taxi and livery industries and committing deceptive trade practices, including false advertising” (Hilkevitch 2014a). At the same time, the Illinois Department of Insurance (IDI) warned new private ride-hailing drivers of the coverage risk drivers take when carrying passengers, including covering any injuries and damage from an accident. UberX provided “excess insurance” valued at one million dollars, but this policy would be invalidated if the driver did not carry commercial insurance warned IDI Director Jim Stephens. Uber defended the insurance policy, stating the excess insurance becomes the primary insurance when a driver’s personal insurance is denied. However, this was already met with doubts. UberX denied coverage for a fatal crash in San Francisco involving a pedestrian; Uber responded by deactivating the driver’s account (Byrne 2017a).

TNCs operated in Chicago for more than a year before the city government proposed regulations. The delay angered both taxi owners and the Illinois Taxi Transportation Alliance (ITTA). When Mayor Emanuel and Ald. Emma Mitts (37th Ward) submitted the proposal to City Council, both supporters and opponents criticized the proposal for leaving out some of the most egregious customer complaints: taxi owners claimed it didn’t go far enough while the ride-hailing companies stated it hurt customer choice. Some aldermen demanded a more stringent crack down on TNCs, arguing ride-hailing operation violated the law. Two of these aldermen, Edward Burke (14th Ward) and Anthony Beale (9th Ward), called for an immediate enforcement on TNC operations (Hilkevitch 2014c).

Determination of fares would still be left up to companies, whether pricing is set based on distance, time, a flat rate, or suggested donation. The largest complaint inciting anger from customers and government officials in 2014 was the use of surge pricing by ride-hailing companies. Many costumers would be hit with rates far exceeding the normal rate based on time of the day or not. On New Year's Eve night, prices surged and fluctuated unpredictably, raising and falling from three times the normal rate to as high as eight times the normal rate. The new ordinance did not address this concern.

Within a few days of Mayor Emanuel proposing new TNC regulation, the Chicago taxi industry filed a federal lawsuit in the U.S. District Court for the Northern District of Illinois against the city for failing to govern TNCs with the same regulations as taxis. Since taxis require expensive medallions, city service mandates, and have regulated set rates, cab companies argued that freedoms awarded to ride-hailing companies created a "shadow taxi system," or a "taxi caste system" (Geiger 2014). The lawsuit claimed these companies specifically target affluent customers who could own smartphones and credit cards to access service – allowing for services to discriminate against low-income and disabled persons.

From the displeasure of local government to act on regulating TNCs, taxi interest changed venue: looking to the courts to push local ordinances to regulated transportation network companies. However, the taxi industry met opposition. On March 25th, 2014, three ride-hailing drivers each from the three TNCs operating in Chicago – Uber, Lyft, and SideCar – filed a motion in federal court which stated the lawsuit filed in February threatened their livelihood and liberty. Working pro bono, attorneys from the Institute for Justice - self-described as "the national law firm for liberty" - represented the drivers calling for the lawsuit to be dismissed. The attorney representing the drivers, Anthony Sanders, argued that "there is no constitutional right to be free from competition" (Manchir 2014a). In response to the motion, The ITTA said that taxi owners welcomed innovation and competition, but that the lawsuit was about "customer well-being" (Manchir 2014a). One driver who drove for Lyft and UberX for several months said that they are regulated, praising the rating system and pointing out that Lyft checked their driving record, background, current registration, driver's license, and required insurance.

The next day, an Illinois House committee approved a ride-share bill that would regulate TNCs like taxi companies. This bill required regular vehicle inspections, limit driving hours, require disability access, prohibit surge pricing, and require TNC drivers to obtain a chauffer's license. A lobbyist for Lyft and other opponents testified at hearing saying the bill would "stifle business growth" (Manchir 2014b). In a City Council Committee hearing on March 27th, ride-hailing advocates applauded companies as alternatives to taxis and pressed city officials to not implement too strong of regulations on TNCs. Narratives included an elderly woman who gave up her car and used TNCs to get around Chicago, single parents who drive to make extra cash, and a dozen of ride-hailing drivers making supplemental income by working as a driver. Both the taxi industry and TNCs kept their narratives: unregulated drivers are unfair to traditional taxis and TNCs only provided a platform, respectively (Manchir 2014b).

Taxi owners and drivers built a narrative on the uneven regulation that promoted the expansion of TNCs while making taxi service more difficult. Calling out the relationship between Uber lobbyist Michael Kasper and Mayor Emanuel, the taxi industry accused Emanuel of stopping private ride-hailing regulation at the behest of Kasper. Uber defended the city executive, claiming that the city is interested in what is best for customers, especially younger Chicago residents (Hilkevitch 2014a).

By the end of March 2014, the battle over TNC regulation was not necessarily if there would be new rules and regulations set, but rather a question of which institution would set them. Both Chicago City Council and the State Legislature currently had proposals in the works. The Illinois proposal had the stricter set of rules: a chauffer's license requirement, special plates, four-year old vehicle restriction, prohibition from airports, convention centers or taxi stand pick up, and requirement that TNCs do not charge more than taxis. At this point, it would benefit TNCs for regulation to stay local (Chicago Tribune Editorial Staff 2014).

In April, the Illinois House of Representatives approved regulations on TNCs 80-26, sending the bill to the Illinois State Senate. Representative Monique Davis (D-Chicago) dissented, arguing that companies should be allowed to grow and be available for passengers when needed. The bill's sponsor, Representative Mike Zalewski (D-Riverside) insisted the goal was to protect passengers and hold drivers accountable (Long 2014a). Mayor Emanuel's revised proposed ordinance to regulate TNCs advanced to the full City Council vote the following week. The revised bill restricted drivers from working more than ten hours in a day, banned street-hail or taxi stand pickups, and restricted access to pickups and drop offs in important locations like airports and McCormick Place. The ordinance also capped surge pricing and mandated companies to publicly announce any surge in price. Like the Illinois state bill, the city ordinance now included a rule requiring any driver working more than 20 hours per week to obtain a chauffer's license, a city conducted background check, and drug test. The revised ordinance also laid out rules for insurance and vehicle dressing (Vivanco 2014). Subsequently, the vote was put off until at least late May after four aldermen used council rules to delay action (Byrne and Dardick 2014).

Simultaneously, representatives from cab unions in New York City and Philadelphia met with Chicago taxi drivers at City Hall to appeal to Mayor Emanuel for better wages and working conditions. Chicago taxi drivers announced an attempt to join a national labor union and become an affiliate of the AFL-CIO (Byrne 2014). The United Taxidrivers Community Council - the group spearheading the creation of a Chicago taxi union - reported that UberX picked up passengers at O'Hare and Midway in violation of local regulation. On May 6th, 2014, government officials from the Department of Business Affairs and Consumer Protection (BACP) mandated that Uber stop picking up passengers from the airports since they did not pay the city taxes that allow airport access like taxicabs and chauffer services (Hilkevitch 2014e).

One of the last bastions of sole service for taxis and limousines, airports in Chicago became the center of heated debate. In May 2014, UberX told drivers that both O'Hare and Midway were open for pick-up and drop-off for private ride-hailing. Providing airport maps and tips for airport pick-up (including how to blend in with regular drivers), Uber made it seem like the city changed the airport access policy. Despite this announcement, the rules did not actually change: TNC drivers were prohibited from airport access in Chicago. At this time, the city council was on its final read of Emanuel administration's proposed ordinance. After three readings, the proposal still banned TNCs from airports but kept open future change (Hilkevitch 2014e).

Illegal activities from Uber continued to mount. A Chicago Tribune investigation exposed that Uber did not conduct criminal background checks on some drivers – allowing them to take passengers for months without knowing of if these drivers had felony convictions. Afterwards, Uber immediately made a public statement, acknowledging a new effort to expand background checks to include federal and county level reviews and redo thousands of screenings. Uber's global public policy head, Corey Owens, said the company had a new background check policy due to gaps in multistate searches as the company expands (Vivanco and Dizikes 2014). While the company's background checks came into question, The Illinois State Senate brought up the Chicago subpoenas and the "insurance gap" of ride-hailing companies in a Transportation Committee hearing in mid-March. The committee's then-Chairman Martin Sandoval, a Chicago Democrat, criticized these companies' efforts to stop transparency into providing information. No representatives showed up to the Transportation Committee hearing, even at policy makers' request. At this point, TNCs were not required to submit insurance policies to the city or state and did not voluntarily submit this information (Hilkevitch 2014d).

During this same hearing, insurance experts cautioned law makers about the gaps that private insurance would not be filled for TNC drivers. Experts argued that personal policies, even alongside excess coverage from companies, are not applicable to passengers; passengers are only covered through commercial policies like the ones required for taxi cabs. All three TNC companies denied this claim, arguing that their excess coverage is specifically for covering passengers and would be enough. Immediately following the Transportation Committee hearing in the Illinois Senate, Uber and Lyft both announced they would expand coverage to drivers and the public when passengers are not in the vehicle. This did not address the question of whether a drivers' personal insurance along with companies' excess insurance would be legally applicable in the event of an accident (Hilkevitch 2014d).

Illinois then-Governor Pat Quinn vetoed the bill that would place TNC regulation at the state level and block any city – including Chicago – from passing their own regulation. The governor argued statewide regulation would be premature and counterproductive: "It would be more prudent to carefully monitor the city of Chicago's experience and the success and challenges it faces in enforcing its new ordinance" (Leiser 2014b). Chicago Mayor Rahm Emanuel supported the governor as Chicago set to implement their own rules for Uber, Lyft, and other companies. Simultaneously, the Illinois House advanced a measure that would require TNC drivers who work more than thirty-six hours within two weeks to abide by more stringent regulations that more mirrored taxi regulation (Long 2014b).

Taxi drivers disparaged Quinn's veto stating that it was a win for TNCs, arguing that Chicago's regulations of TNCs was not stringent enough for fair competition. Uber Chicago opposed the statewide measure, stating it would lead to "red tape" and restrict ride supplies (Leiser 2014b). Uber ultimately embraced policy at the local level, keeping the venue that would favor the opposition to Uber. Like the courts, the taxi industry relied on the state to intervene where the city took little to no action. However, this attempt at venue shopping failed, favoring Uber, Lyft, and other transportation network companies.

However, this did not mean that TNCs had full support in Chicago. In 2014, two Chicago aldermen called for more stringency towards TNCs. Alderman Ed Burke (14th) and Alderman Anthony Beale (9th) called for enforcing the existing taxi code rather than have Emanuel's administration's proposal to establish a new license for TNCs separate from taxicabs and limousines. Beale appealed to the legitimacy of the regulations already in place, arguing that ride-hailing companies should not operate outside of current rules (Hilkevitch 2014b). However, the City Council of Chicago approved Emanuel's proposed ordinance of new sweeping regulation for transportation network companies. The new regulations capped "surge pricing," enacted insurance and inspection standards, a licensing fee, background check requirements, and compulsory driver training. Mayor Emanuel's proposed ordinance required vehicle inspections, comprehensive commercial liability insurance, driver training, and driver drug tests. It also set a $25,000 license fee with an additional $25 fee per driver and compelled TNCs to pay the city's ground transportation tax for using public roads for profit (Dardick and Hilkevitch 2014).

In Chicago, activity to promote the taxi industry was underway. During the Mayoral Election in the fall of 2014, opponents of Mayor Emanuel sought support from labor unions working with cabbies as Emanuel supported the universal taxicab app development. Chicago launched a universal app to hail a cab in Chicago. In hopes of fairer competition with ride-hailing companies, the app would hail a cab from any company in Chicago instead of customers having to choose. Sponsored by the city government, the BACP solicited bids from companies to develop the app (Hilkevitch 2014f). Taxi drivers also took matters into their own hands when promoting the wellness and livelihood of drivers. On August 1st, 2015, Chicago taxi drivers formed a union for the first time in 30 years. In their inaugural meeting, drivers vowed to stand up "for a level playing field" with TNCs as one of their first pledges (Kreisman 2015).

After the 2015 New Year's Eve celebrations, surge pricing again became a hallmark customer concern in Chicago, as some passengers saw fares well over $100 (Chapman 2015).

Uber already experienced incidents of passenger assaults, privacy concerns, and pedestrian safety. In less than three weeks, shortly after UberX started operating in Chicago, police charged two separate Uber drivers with sexual assault. One occurred on November 16th, 2015 after a male driver picked up a female passenger, assaulted her, took her to his apartment and continued to assault her there. The second incident occurred over the previous summer, when a male driver picked up a male passenger, assaulted him and took him to an unfamiliar neighborhood and continued to assault him there (Chicago Tribune 2015).

Alderman Edward Burke proposed a $1 surcharge on fares for both cabs and TNCs. In a public budget meeting in September 2015, Mayor Emanuel was skeptical (Byrne 2015a). However, in revealing his budget plan later that month, Mayor Emanuel included several new fees: a rise in the ride-share tax from 30 cents to 50 cents each trip (also applies to taxis who use mobile apps) and a proposed 15 percent hike in overall fares for taxi trips. Included in his proposal was TNC access to Midway Airport, O'Hare Airport, and McCormick Place, which had been exclusively served by limousines and taxis (Briscoe 2015).

In part of the 2016 budget process, Mayor Emanuel proposed to the city council that in the case of passengers using the online application to call a taxi, taxis can charge surge prices. Under this budget, the Mayor also wanted to increase fares for cabs by 15% and raise fees from rides. Cab drivers were most upset about the proposal to open access to airports and convention center markets to Uber, Lyft, and other TNC drivers (Byrne 2015c). Taxi drivers reacted unfavorably to the idea of a proposed hike to overall fares after fighting for roughly a decade for an increase. However, now times were different as ride-hailing companies compete with cabs for customers (Briscoe 2015).

On Friday October 2, 2015, City Council budget hearings reached a fever pitch over the tensions between taxis and ride-hailing companies. The hearings filled will supporters on both sides, with waves of applause and boos over regulations proposed in Mayor Emanuel's 2016 budget plan. Business Affairs Commissioner Maria Guerra Lapacek thwarted complaints from taxi drivers that the uneven regulation is forcing them out of business, citing that the two are in practice different: passengers cannot street-hail an Uber or Lyft, and customers expect higher standards on safety (Byrne 2015b).

The city council approved the budget vote on October 28th, 2015. Uber, Lyft, and other TNCs gained access to major pickup/drop off points usually only open to traditional taxi services. With a required $5 fee per pickup, access to O'Hare, Midway, and the Navy Pier would open for these services (Byrne 2015d). In just a week after the approval, the mayor's office was ready to open airports and other points of interest to ride-hailing services for a $5 per ride fee. Aldermen fighting alongside taxi drivers argued that opening these places for TNCs would decimate the taxi industry, decrease security, and worsen traffic (Byrne 2015e).

Chicago city government took steps to try to assist the taxi industry with the economic blow from TNCs. Chicago city officials promoted two taxi hailing apps, Arro and Curb, to compete with the smartphone use of ride-hailing companies. In early 2016, city hall also increased fares by 15%, and added a fee and lowered credit card transaction fees to accommodate credit card use. The city also made other reforms, including eliminating the taxi medallion transfer tax, a late fee for drivers when companies do not send credit payments to them within a day, and a requirement for taxi companies to share ad revenue with drivers. However, some cab drivers left the business for Uber or Lyft. One driver said he was happy without the extra costs of driving a cab and although Uber is cheaper, there was a guarantee of getting rides (Vivanco 2016). By March 2016, income for taxi drivers dropped by half according to a LOCAL 2500 representative. Values of taxi medallions plummeted, and idle cabs filled parking lots (Chicago Tribune 2016). Some cab drivers left the business for Uber or Lyft (Vivanco 2016).

Aldermen looked to reform TNC regulation in 2016 to help relieve the stressors of taxi drivers. Spearheaded by Alderman Beale, the city council called a joint committee to propose a reform ordinance. Mayor Emanuel opposed stricter regulation on TNCs and hoped to negotiate a compromise with Alderman Beale. However, subsequent talks failed, and Beale's version of the ordinance passed the committee. According to Chicago Tribune reporters Mary Wisniewski and John Byrne, the swift break down of talks shows just how strong the cab industry lobby was in City Hall and the weakening of Mayor Emanuel's political strength over the past year due to several crises (Wisniewski and Byrne 2016).

However, after a meeting on Monday June 20th, following the joint committee on transportation and licensing vote for the new Rideshare Reform ordinance, government officials lightened the proposed rules. This change came after another meeting involving Mayor Emanuel's administration officials, Alderman Beale, other aldermen, and lobbyists for Uber and Lyft. Alderman Beale told reporters he was dropping the fingerprint background check and the handicap accessibility requirements from the proposed ordinance. With Uber and Lyft threatening to pull out of Chicago, Aldermen agreed to conduct a six-month study of fingerprint effectiveness instead. Gary Arnold for the nonprofit Access Living said their organization opposed removing the clause requiring accessibility for disabled persons (Dardick and Byrne 2016).

The joint committee approved the Rideshare Reform ordinance in Chicago in the summer of 2016 with no dissent. The proposed rule changes required drug tests, city debt checks, and obtaining a restricted public chauffeur licenses for drivers. The ordinance also required 5 percent of TNC fleets to be wheelchair accessible with equivalent service for disabled persons. The new rules required around 90,000 TNC drivers to get a special chauffer's license and conduct an online training. Instead of the fingerprinting, the city appointed a task force to study the effectiveness of fingerprinting as a component of background checks (Wisniewski and Byrne 2016).

Later in 2016, the court case where taxi companies sued the city – that started in February of 2014 – ended on October 7th. Ride-hailing companies claimed a victory before the Chicago 7th Circuit Court of Appeals when Judge Posner ruled against taxi owners. The judge rejected that taxi companies' argument of anticompetition and acknowledged that regulations could be different because TNCs were different from taxis. The judge referred to contract law, citing that when Uber customers sign up for the service it "creates a contractional relationship specifying such terms as fares, driver qualifications, insurance, and any special need of the potential customer owing to his or her having a disability" (*Ill. Transp. Trade Assn v. City of Chi.* 2016). Judge Posner claimed there were enough differences to merit difference in regulation not only by his judgement, but by the judgement of customers.

Judge Posner also rejected the argument that by devaluing the medallion, the city took away the property of taxi owners without compensation. The judge chalked it up to merely exposing taxi drivers to new competition by allowing Uber, Lyft, SideCar, and other TNCs to operate. He also compared TNCs as competition to taxis like buses, trains, or bicycles and cited the 1963 law that entitles medallion owners to operate a taxi exclusively, "but not to exclude alternatives to the service they offer" (*Ill. Transp. Trade Assn v. City of Chi.* 2016). Uber praised Judge Posner's ruling. An Uber spokesperson said in a statement: "When there are multiple players in the marketplace competing for business, consumers win" (Vivanco 2016).

As of December 2016, Chicago had 9,500 licensed taxi drivers – the lowest in a decade – and value of a medallion plummeted from $349,000 in 2013 to about $66,000. By the end of 2016, cab drivers were struggling to make ends meet. One cab driver took off only three days a month and worked 70 to 80 hours a week to account for the decreased number of passengers, stating that some days were "a nightmare" (Vivanco 2016).

The separate system created a taxi medallion foreclosure crisis in Chicago. According to

Cab Drivers United/AFSCME Local 2500, small owners – about 2 in 5 taxis in Chicago – suffered greatly from the introduction of weaker rules for Uber and Lyft in Chicago. Many medallion owners finance loans through lenders and since average income declined 39% since 2014, many drivers could not make the loan payments. While taxi owners are looking to credit unions to modify loans for relief, they also took their case to the city to find relief from inspections, the transportation tax, and stronger foreclosure protections. The city, however, stated that the local government could not get involved in a legal contract between the credit union and taxi owners (Channick 2017).

As of May 2017, Lamto Federal Credit Union (LFCU) brought twenty-eight lawsuits against cab companies in 2017 alone in the Cook County Circuit Court because of driver loan defaults. The lawsuits claimed that since the advent of transportation network companies in Chicago, medallions lost their value. One lawsuit filed stated the medallions would continue to drastically lose value. Lawsuits were filed against Chicago cab companies, including Durrani Enterprise, Future Cab Company, Nanayaw and Vali Trans, and Modan Enterprise, and others (Yerak 2017).

Many other credit unions and banks tied to Chicago's taxi industry attempted to prepare and account for the decline of taxi medallion value. Capital One cited taxi loans as a part of its rising loses. Federal regulators seized Montauk Credit Union – a credit union who offered taxi medallion loans in Chicago – because of unsound conditions. Signature Bank set reserves aside for each Chicago medallion loan and charged off $108.6 million in taxi loans (Yerak 2017).

On July 18, 2017, roughly 2,000 medallion-owning taxi drivers protested outside of the LOMTO Federal Credit Union's legal representatives' offices in the Fulton River District citing the foreclosure crisis as the cause of their grievances. Protesters even showed up in front of the offices of the LFCU's lawyer Frank Andreaou's office to show displeasure with the credit union. The head of the Cab Drivers United local union, Nmamdi Uwazie called upon LOMTO to turn their attention away from the drivers as the cause and look at the competition – Uber, Lyft, and other TNCs. The union blamed unfair competition, stating the taxi industry is over-regulated compared to ride-hailing operators, halving taxi wages since TNCs came to Chicago (CBS-Chicago 2017). Drivers believed their decline was due to the two-tier system of regulations for TNCs and taxis (Channick 2017).

Under this new system, the way Chicago raises revenue from taxis versus TNCs is also tiered. The city makes money directly from taxi medallions, either by putting them up for sale or charging a renewal fee. The city also charges $98 for ground transportation and $2 to improve wheelchair accessibility per cab monthly (Byrne 2017a). City statute also charges 45 cents of the first 10 fares of the day for cab companies' workers compensation insurance, 40 cents for the first five fares for ground transportation tax, and 10 cents for wheelchair accessibility.

In October 2017, Mayor Emanuel presented a proposal to increase fees for Uber and Lyft by 15-cents, an increase from the current 52-cent fee on all TNC provided trips to raise more revenue from TNCs. The city administration argued that ride-hailing companies siphoned off $40 million from the city and local government as commuters used the TNCs in place of CTA services (Dardick and Byrne 2017). Excluding surge pricing, after the new proposed per fee hike it still was cheaper for passengers to use a ride-hailing service than take a cab for the same ride (Byrne 2017a).

By 2018, city fees on TNC trips were 67 cents per ride, with an additional 5 cent increase planned for 2019. Money raised from these fees funneled to the CTA, poised to leverage $179 million in bonds for track improvements, and security cameras/lighting updates according to CTA President Dorval Carter (Wisniewski 2018b). In this same period, ride-hailing business increased drastically: "vehicles that provide four or more ride-share trips a month almost quadrupled over the past three years, from 15,078 in March 2015 to 68,832 in December 2017, according to city data" (Wisniewski 2018c).

Adjacent municipalities passed similar laws around Chicago. Evanston, a wealthier municipality just north of Chicago, approved a 20-cent tax on all rides provided by ride-hailing companies through their own Transportation Network Provider Tax (Bookwalter 2018). Lake County, just north of Cook County where Chicago resides, was still questioning how Uber and Lyft would fit into the transit public system in 2018. The confusing transit services, including TNCs, hindered mobility for seniors and disabled persons (DeVore 2018).

Media narratives on Uber, Lyft, and their effects on people's lives in Chicago became mixed. Positive stories on immigrants getting a foothold in the American dream lead to a perception of these companies as opportunity creators in the city. For instance, two immigrants touted that working for Uber and Lyft assisted in them learning their way around Chicago and practicing their English (Oritz 2018). DMK property co-owner Michael Kornick said companies like Uber and Lyft shorten times to get to certain neighborhoods, opening businesses to customers from various neighborhoods (Hernandez 2018). However, a commuter from Naperville complained about the high costs of Uber and Lyft. Matt Beck, a Chicago entrepreneur, launched Squire as a luxury minibus for commuters between Chicago and Naperville (Baker 2018). Other stories included using ride-hailing as a backup plan for starting your own business (Dakota 2018).

By the time the city council received the report on fingerprint safety, TNCs were already a staple in Chicago. A University of Illinois at Chicago report found police arrested TNC drivers slightly less than taxis and had fewer crashes. However, TNC drivers made only a third as many trips as taxis. However, the study came about a year later than requested and did not include anything about fingerprinting. Some city officials were satisfied. Mayor Emanuel was pleased with the report because it addressed the initial concern: safety. Alderperson Mitts (37th Ward), who was on the task force, said the studied showed that regardless of criminal background process, customers' safety outcomes were comparable. Alderperson Beale (9th Ward), displeased with the outcomes, complained that the study did not address fingerprinting like the city requested (Byrne

2017d).

By the end of 2018, the taxi industry's biggest supporters in the City Council – Alderman Beale (9th) and Edward Burke (14th) – still fought for reining in TNCs. The two Chicago aldermen considered capping the number of TNC vehicles allowed to operate in Chicago to ensure better pay for drivers, after the number of drivers quadrupled in three years, and average hourly wages fell below Chicago's minimum wage (Wisniewski 2018d). Cab Drivers United supported the cap; however, much of the aldermen's efforts by this time only minimally assisted the taxi industry. TNCs came out of the policy process with an upper hand.

Issue Framing and Venue Shopping

Even as early as the introduction of UberTaxi, Uber used issue framing to gain support with positive language. The company claimed that UberTaxi would "enhance" safety while also raising tips for taxicabs since drivers kept most of the fees (June 2012; Rao 2012). With an already devout following and high popularity, Uber could push against any new legislative attempts. The popularity of UberTaxi in Chicago was only possible with the narrative that Uber offered a service that satisfied all parties. The popularity of UberTaxi also helped transportation network companies garner support for their budget-option when introduced in Chicago.

Before Lyft or UberX launched in Chicago, Mayor Emanuel already leaned heavily into the idea that these new tech companies operating in the city would present Chicago as friendly to innovation and entrepreneurship. Mayor Emanuel's Chief of Staff Spielfogel pushed the narrative of preserving the "innovative nature of Uber," and perpetuated Chicago as a tech friendly city (Chicago Tribune Editorial Staff 2013). Now, Uber had support from the same taxi drivers, the public, and the mayoral administration.

Conversations on ride-hailing technology and companies in Chicago sprung up before

Austin or St. Louis: Uber started operations in Chicago in 2011 as one of the first cities with TNCs. However, they were still fairly off the radar until “light” discourse started in 2012: boasting of new technology, on-demand service, and how these companies are flourishing (Hilkevitch 2012; Wong 2012; Shih 2012). At the same time, conflict between city officials and taxi drivers boiled over: cabbies in Chicago went on strike since taxi companies raised lease prices and profit margins shrunk for drivers (Byrne 2012).

In 2013, except for discussing surge prices around New Year’s Eve, Uber and Lyft discourse remained much the same: conversations on investments and making extra money (Reuters 2013; Blevins 2013). Taxis benefit from positive stories like Syrian refugees finding their way in America in Chicago (Sullivan 2013). However, articles mention taxis often alongside Uber, Lyft, and TNCs as an alternative to the service they provide. The only exceptions being a few feel-good and crime related stories about taxis.

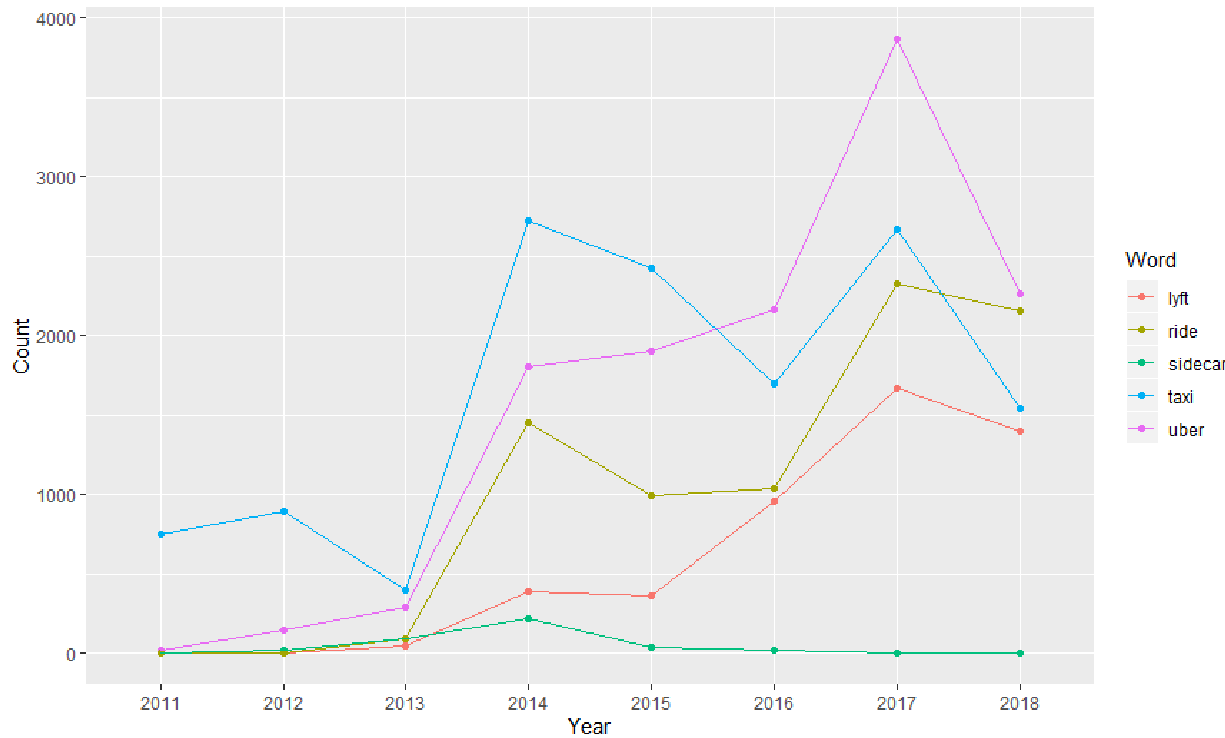
Tension increased and competition between TNCs and cabs rose over the course of 2014. Chicago considered regulation for Uber, while cab companies start filing lawsuits (Chapman 2014). Mentions of Uber began to steer towards the industry as a threat (Rosenthal 2014). The tensions between taxi and ride-hailing drivers started a back and forth of lawsuits (Manchir 2014b). By 2015, perceptions turned into a mixed bag: Uber was associated with crime and bad behavior, while stories on investment and profitability continued. Journalists started critiquing the practices of Uber, not embracing the disrupter narrative, even within the industry (Jackson 2015). Mentions with taxis and Uber increasingly overlap with tones of sympathy for taxi drivers emerging.

2016 brought positivity back to ride-hailing services as Lyft became a beacon of competition against its rival, Uber (Bader 2016). This caused a decline in complaints from cab business and the industry seemed to level out to some sort of equilibrium: ride-shares became a steady business and cabs stabilized. At this time, very few instances of news articles mentioned a “taxi or Uber”; most lexicon turned to “catching an Uber” rather than a cab.

This “peace” abruptly stops in 2017 with government, TNC, and taxi action. Aldermen begin to call for stricter background checks on for Uber drivers and raising city funds through fees for per-ride “tax” from ride-hailing companies (Byrne 2017b; Byrne 2017c). Lyft’s sentiment as being Uber’s competitor started waning while Uber’s CEO controversy became front and center (Elahi and Romanyshyn 2017). Positive sentiment for ride hailing began falling even into 2018. Concerns over ride-hailing causing congestion and lowering public transit use became prominent topics (Wisniewski 2017; 2018a). Controversy even pulled Chicago taxis into the national spotlight as Michael Cohen’s taxi endeavor plagued the industry (Briscoe and Malagon 2018). By the end of 2018, Uber, Lyft, and taxis are on par with negativity/positivity, each falling prey to negativity of crime committed around these industries, but similar feel-good stories of personal vigor and competition.

Frequency of conversations about Uber, Lyft, and taxis take a different pattern in Chicago than St. Louis. Mentions of taxis increase before Uber, but then continue into a downward trajectory. Lyft and Uber mentions continue to increase until 2017. In 2018, all mentions decline as the conversation around TNCs in Chicago simmer down. Uber’s prominence could be due to the pattern of Uber being synonymous with ride-hailing and its welcoming into common lexicon. To be the “Uber” of another industry, or to say something is “Uber-ing” became common.

Figure 3 – Number of Word Mentions in Chicago Tribune



Uber become a topic of discussion in Chicago as early as 2011, unlike St. Louis which really did not have much to say about the company until a few years later. In 2012, there was an increase in mentions for taxis and TNCs in the news; 2013 was the low point for any mentions. Over the course of 2014 to 2016, mentions of taxis began to decline as Uber mentions began to shoot upward. All mentions came to a boiling point in 2017, as tensions flared between taxis and TNCs. In 2018, mentions declined again, but still stayed high relative to early years of TNCs.

In 2011, words in proximity to taxi included “business,” “service,” and “public,” suggesting discussions of service being the norm. Uber’s mentions were frequently closer to words like “cab,” “first,” and “service,” suggesting that much of the conversation focused on Uber being akin to taxi service and testing out their platform in Chicago. There was an increase in mentions for taxis and TNCs in the news in 2012. Most of the proximity mentions included the tone around taxis in comparison to Uber, and the use of apps in ride-hailing. For taxis, words like “new,” “Uber,” and “service” were highly mentioned. Uber also had close mentions of “service,” “gratuity,” and “tech”, but was most frequently mentioned in proximity to “taxi.” So far, tone in early years of TNCs in Chicago involved the comparison between taxis and ride-hailing technology as new service.

In 2013, proximity words like “technology,” “business,” and “new” dominated being mentioned alongside Uber. These words represent the up-and-coming company and the positive spin that TNCs had in their early years. After “new,” news mentioned taxis with words like “traditional,” “safety,” and “fair,” also reflecting the discourse that taxis found desirable to their cause. Chicago continued this pattern in 2014, with Uber in proximity to words like “new,” “business,” and “technologies.” Taxis followed next with the most proximity words “new,” “traditional,” and “business.” Traditional stands out as being unlike Uber as high mentions, most likely due to the traditional use of taxis versus TNCs. There continues to be this same pattern of word proximity in 2015, especially in terms of “new” being alongside Uber. Mentions of Lyft and SideCar decrease dramatically.

Figure 4– Proximity Word Count for Chicago Tribune 2014

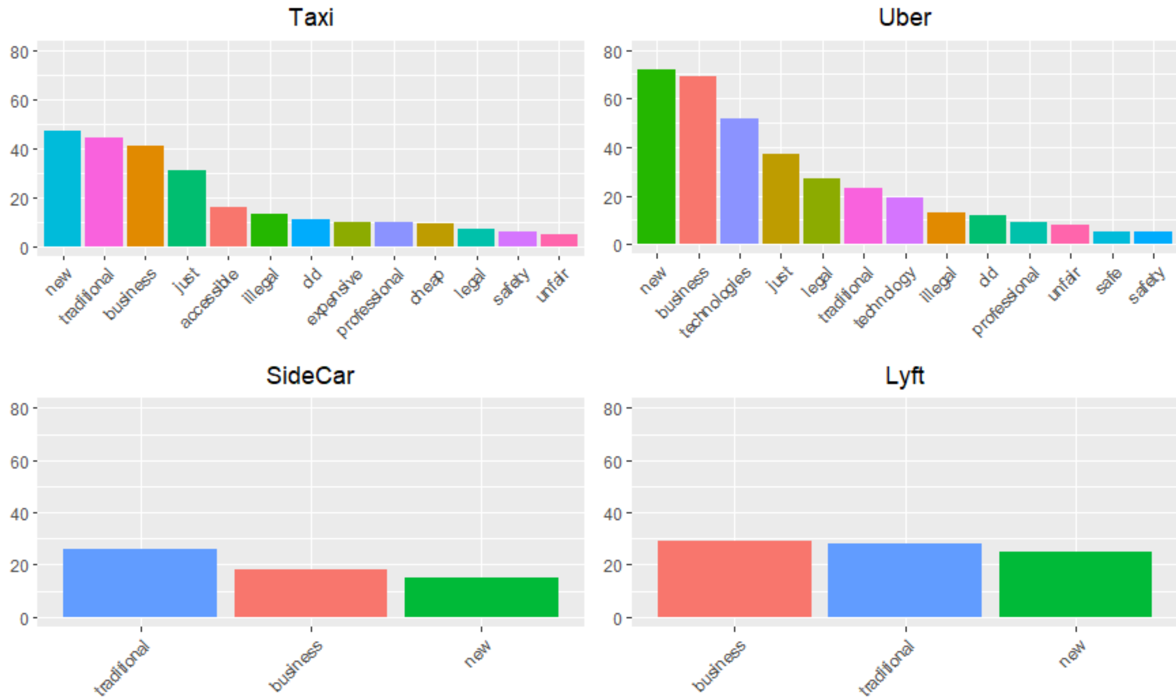
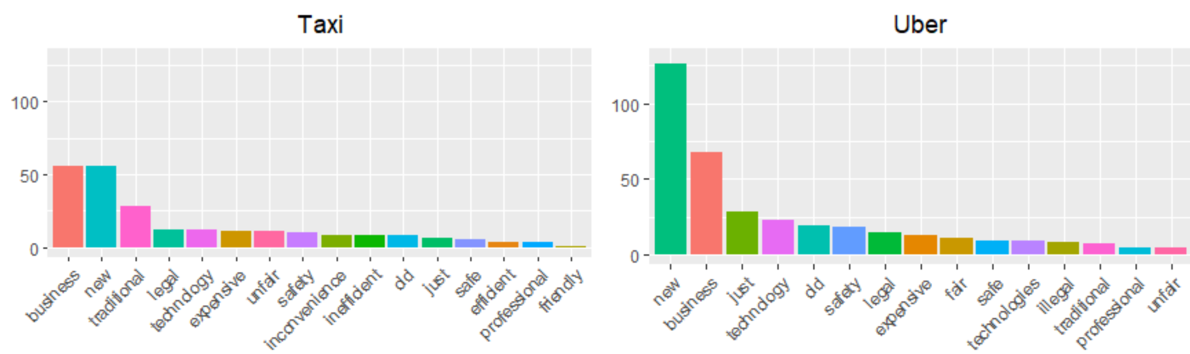
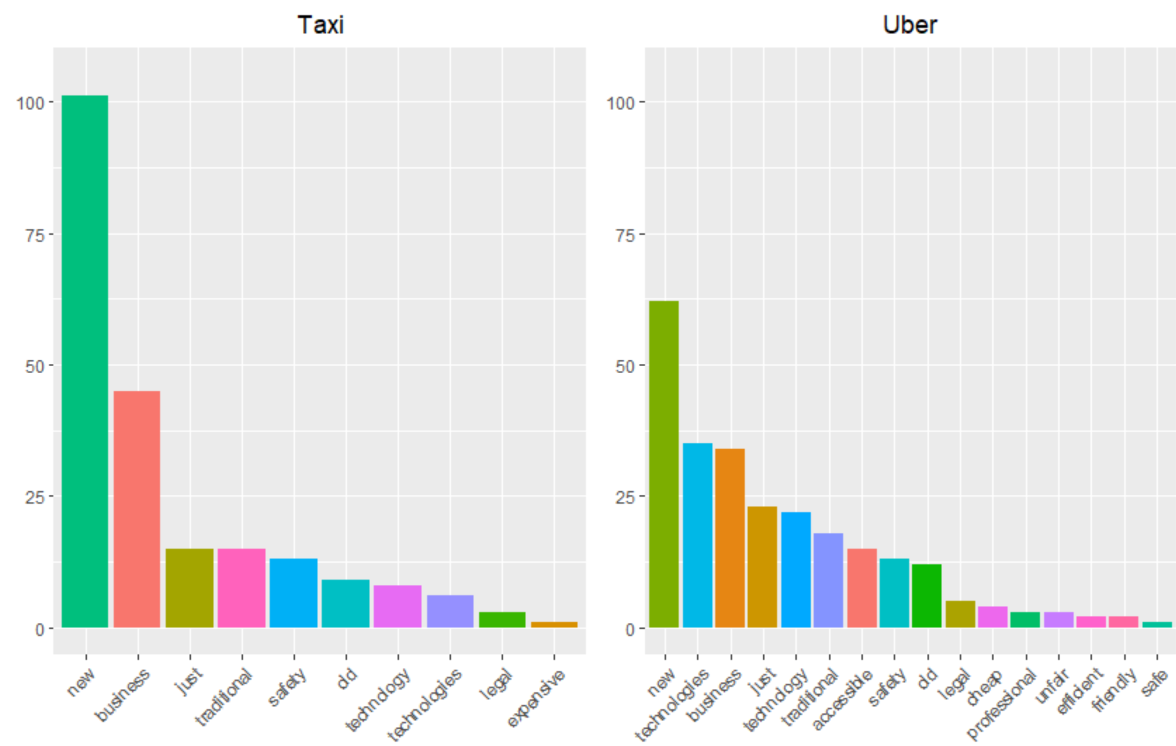


Figure 5 – Proximity Word Count for Chicago Tribune 2015



Much of the same pattern continues in 2016, apart from the rise of "accessible" for Uber and the rise of "safety" for Lyft. Behind "new" and "business," "accessible" becomes a dominating proximity word close to mentions of Uber. This is a change in discourse from accessibility not being mentioned alongside TNCs at all in previous years. Although "safety" has made an appearance previously, it significantly dropped for Uber. In 2017, we see an increase around "new," alluding to the discussions of new regulation for both taxis and TNCs. Uber continues to be mentioned alongside technology(ies) and business, while taxis appear closer to words like "just," "traditional," and "safety." This pattern continues into 2018, as Uber stays consistently high in news and taxis become less common. "New," "business," and "technology" associated with Uber and taxis suggests that TNC framing succeeded.

Figure 6 – Proximity Word Count for Chicago Tribune 2017



Through the policy process, transportation network companies evoked several of these sentiments around the benefits of app-based ride-hailing through successful public relations and appealing to universal values. When SideCar entered Chicago, the company advertised drivers as ordinary people, friends and neighbors. Companies hyped their affordability compared to taxis and the potential to meet new people. Supporters of TNCs told others of their good experiences, such as custom playlists, snacks, or nice vehicles (Chicago Tribune Editorial Staff 2013).

Further, the inaction of the Chicago government solidified many of these narratives. Since local officials took over a year to respond to illegal operations of transportation network companies, companies and consumers perceived TNCs to be *de facto* legal to operate. During this time, Uber, Lyft, and other companies appealed to customers with money-saving deals and convenience; TNC drivers favored these companies for the money they made hailing rides. By the time government officials wanted to enforce regulations on transportation network companies, regulators received pushback from companies.

Transportation network companies in Chicago still had their share of controversies that plagued their public image. In December of 2013, social media outrage targeted Uber and the pricing policies that result in enormous fares. However, following Uber CEO Travis Kalanick's message on New Year's Eve pricing, people generally had fewer complaints about pricing (McBride 2014). Uber was compelled to respond after criticism of raising prices during public emergencies and Lyft changed pricing policies to be more transparent and opted for more positive language. Uber dropped the term "surge pricing" for a more the more palatable "dynamic pricing" (Reed 2017). Steven Chapman, a member of the Chicago Tribune Editorial Board, came to the defense of TNCs on multiple occasions. In 2015, Chapman argued the case for regulating Uber was flimsy considering that much of the criminal activity from drivers – including rape – also occurs from taxi drivers and that Uber will learn slowly from the bad publicity and is held accountable by smartphone records (Chapman 2015).

Controversies and opposition narratives of safety and fairness did little to affect policy outcomes. After a year without TNC regulation, city officials called for enforcement for the safety and financial protection for passengers. Insurance regulators warned of the gaps in coverage that would end up hurting customers. The taxi industry warned of the "taxi caste system" created by the freedoms given to transportation network companies (Geiger 2014). However, none of these narratives could combat the already framed issue in TNC's favor: innovation, business, tech, convenience, and cheap fares outweighed opposing narratives of safety and fairness.

Both the taxi industry and transportation network companies used venue shopping to gain favorable policy outcomes in Chicago. Taxi industry representatives used U.S. District Courts to file a lawsuit against the city for their inaction on transportation network companies, changing venues in hopes of TNC regulation. The three largest TNCs – Uber, Lyft, and SideCar – filed a motion that this lawsuit threated their livelihood and liberty. The court eventually struck down the lawsuit. Transportation network companies also successfully persuaded Governor Pat Quinn to strike down legislation that would highly regulate transportation network companies while overriding Chicago's regulatory power. Eventually, Illinois did pass weak regulation on transportation network companies that still allowed for Chicago to add additional regulations. Unlike St. Louis and Austin, venue shopping was not as dominant in the policy process and regulatory power remained largely contained within Chicago.

Ultimately, not only did the transportation network companies themselves influence the transportation system in Chicago, but their ideals of business and modernization shaped and changed the entire city. This is how the TNC narrative won in Chicago: successfully persuading urban leaders and regulators of the benefits of business and technology in urban planning without sparking concern around their many controversies.

Chapter 7: Austin – Voters, Venues, and Regulatory Power

Civic turmoil surrounding transportation network companies in Austin departed from the regulatory battles between lawmakers and companies in St. Louis and Chicago. Not that Austin did not have these types of conflicts; on the contrary, Austin experienced two years' worth of regulatory tension. What set Austin's policy process apart was Proposition 1: voters decided on regulation for transportation network companies in a special election.

Proposition 1, a ballot measure supported by TNCs to strip the fingerprint background check for companies, lost with 57 percent of Austinites supporting stricter regulation. This loss lead to the two biggest companies, Uber and Lyft, leaving Austin and changing the landscape of ride-hailing momentarily. Eventually, Uber and Lyft appealed to the Texas legislature and the state passed HB 100, giving regulatory control to the state and superseding urban regulatory powers.

TNCs in Austin used both venue shopping and image framing to their advantage. When transportation network companies failed to gain favorable regulation from city officials and Austin voters, TNCs switched venue and audience. Texas legislators were sympathetic to the narrative of "innovation," "entrepreneurship," and "business," and sided with transportation network companies. Once Austin lost the ability to regulate transportation network companies, city officials changed how they handled new technology and transportation options to not lose that power again. TNCs changed both the structure of transportation policy and the policy process in Austin.

Current TNC Regulation

The Texas government regulates transportation network companies at the state level. Like Missouri and St. Louis, Texas regulatory power supersedes Austin's ability to pass ordinances and regulate TNCs at the local level except for airports; airport owners still have power to impose regulation including levying fees (Texas Department of Licensing and Regulation 2017). Texas law regulating transportation network companies does not change local oversight or other state law pertaining to other vehicles-for-hire such as taxis and limousines.

HB 100 – the Texas TNC bill – went into operation after Governor Greg Abbott signed House Bill (HB) 100 on May 29, 2017. After HB 100 passed, TDLR Executive Director Brian Francis said the department was "…working diligently to create a regulatory program that everyone can be proud of" (Texas Department of Licensing and Regulation 2017). Starting in December 2017, the Texas Department of Licensing and Regulation (TDLR) accepted new applications for transportation network companies to operate in Texas.

HB 100 amended the current Texas Occupations Code to include a new chapter for transportation network companies. The code requires that TNCs require a permit for rearranging rides on a digital network and retain records of operation for at least one year. Drivers must be properly insured, provide identification and receipts to passengers, maintain a valid driver's license, and pass a natural background check (Texas HB 100, 2017).

Policy Creation in Austin

Unlike Chicago and St. Louis, Austin city government operates under a council-manager system. The elected city council appoints a city manager who acts as chief executive overseeing municipal operations and implements legislation, regulation, and ordinances. The city manager holds executive power including planning and implementing the operating budget and appoints the directors of the governmental departments. The mayor in Austin behaves more as the head of the city council: the mayor is a member of the council and presides over meetings. Although the mayor represents the city on state, national, and international levels, he or she do not have executive power (Austin City Government 2020).

The city council in Austin is the main legislative body for the city. The city council approves and adopts the budget, collects taxes, and makes laws and ordinances. Interestingly, before November 2012, Austin elected council members at large. Two propositions passed which included creating districts where council members hold seats (Fechter 2012). The mayor is still elected citywide. The council appoints advisory boards and commissions which advise the council; boards and committees review, comment, and make recommendations on legislation and ordinances.

The Austin Transportation Department regulates ground transportation services throughout the city, including car-share, limousines, and taxis. The ground transportation division of the transportation department receives applications, administers tests, and oversees background checks for chauffeur's permits. The Austin Transportation Department's self-described mission is to regulate services in Austin "to enhance safety and provide access to service for all users" (Austin Transportation Department 2020).

TNCs in Austin – A Policy Process

The city of Austin was familiar with the concept of vehicle sharing in rental schemes before ride-hailing with private cars became ubiquitous in major cities. Car sharing companies allowed drivers to pick up cars without a reservation and return them anywhere within a designated area. The car sharing company *Car2Go* started their pilot program in Austin in November 2009. In 2011, ZipCar, another car sharing company, launch in January (American-Statesman Staff 2011).

Meanwhile, the taxi industry faced tension over an election controversy and a new measure meant to increase taxi permits. In June 2011, donations from top taxi executives, owners, and relatives to three city council members and one council candidate raised concern about taxi interests (Wear 2011b). Donations from taxi interests, including large taxi companies Yellow Cab and Lone Star Cab, led one driver to file an ethics complaint, citing Austin City Charter prohibiting council members from receiving "directly or indirectly any wage, commission, fee, gift, favor or payment" from a franchise holder (Austin City Charter of 1909).

Furthering tensions, Austin City Council weighed a proposal to allow 75 new taxi permits, splitting taxi drivers for and against the new measure. With a packed agenda and serval items up for discussion, taxi drivers and owners waited an entire day to have their voices heard at city council. One driver claimed that the City Council favors staffers and lobbyists and does not have the same consideration for constituents (Toohey 2011). In an already difficult year for taxis, tension sparked again in city council over new possible regulation to allow for electric low-speed vehicles to pick up passengers and take them short distances (Wear 2011a). Chris Nielsen, who operated the Electric Cab of Austin company, blamed influence exerted by taxi companies for the three-year battle to get electric low-speed vehicles licensed and operating (Toohey 2012).

The following year, smartphone-based ride-hailing technology started cropping up in Austin. Surprisingly, the new company was not Uber, Lyft, nor SideCar, but an app developed locally. In 2012, Josh Huck created HeyRide, an app for Austin to connect passengers needing a ride with drivers willing to give them one. HeyRide worked like Lyft or UberX, except the driver and passenger negotiated a price and HeyRide collected 20 percent of the agreed fare. City officials argued that Huck operated an unlicensed taxi company and filed a cease-and-desist order.

Once new technology companies started in Austin, city officials questioned the safety of these schemes. Background checks, public safety, health, and protections became focal points of discussions at City Hall. City Spokeswoman Karla Villalon said that HeyRide should have to go through the same regulatory steps as taxis like passing a criminal background check. Huck, much like his ride-hailing successors, argued that HeyRide was just a platform: “We just provide the platform…we are not a cab company” (Toohey 2012).

SideCar was the first of the California transportation network companies to attempt to start operating in Austin. Since having dealt with HeyRide, city officials had some idea what to expect from TNCs coming to Austin from outside the city. In May 2013, Austin City Council members began discussions on what to do about “ride-sharing.” The city council was divided on what regulations would be best for both TNCs and Austinites (Wear 2013). The taxi industry vehemently opposed the legalization of TNCs in Austin, especially with very limited regulation. Edward Kargbo, the president of Yellow Cab Austin, called for TNCs to be regulated the same as taxis: "You have companies trying to provide a service that already exists, but they want to provide it their way and ignore all the knowledge, wisdom and history of rules meant to protect the consumer” (Dinges and Grisales 2014).

In the August 2013, the Austin City Council approved rules allowing for SideCar and other TNCs to operate under a “ridesharing” provision (Toohey 2013). The new ordinance set new definitions for ride-sharing, while also setting fare limits to only equal the cost of tolls and vehicle maintenance (Austin Ordinance NO. 20130822-081). No policy existed explicitly for transportation network companies, however, TNCs were regulated through the “rideshare” definition. Austin allowed carpooling with compensation; a private driver may charge for rides, if the total payment stays below the Internal Revenue Service (IRS) mileage reimbursement rate (58 cents a mile) (Wear and Rockwell 2014). This restriction limited companies’ ability to pay wages to drivers, making the TNC business model as-is illegal.

Starting in 2014, the City Council wanted to take steps to legalize TNC operations in Austin. In May 2014, the council agreed in a meeting to put together a wide-ranging group of stakeholders - including both taxi and TNC interests – to come up with recommendations for allowing app-based ride-hailing to legally conduct business within the city. Some council members, like District 9 representative Chris Riley, saw it as a step forward for Austin to be a tech savvy city. Some Austin residents without cars, students, and those with disabilities went to the city council chamber to show support for TNCs, claiming buses and taxis were slow and sometimes too expensive. Taxi industry owners dismissed ride-hailing companies, saying TNCs disrupt their livelihoods and put passengers at risk (Rockwell 2014a).

Even after the city council voted for a pilot program, a couple weeks later Lyft launched illegally in Austin and officials cracked down on drivers. Police pulled over drivers for operating a taxi without a license and issued tickets as well as impounded vehicles. Lyft offered legal and financial assistance to drivers in Austin subjected to these practices, claiming the company never saw such strict crackdowns in other cities. Lyft wanted to keep drivers loyal and on the road in Austin even if doing so was illegal. The launch in Austin was the most successful weekend launch in Lyft's history, solidifying Austin as a viable market (Rockwell 2014b).

Throughout the summer, City Council meetings consisted of discussions of costs and benefits of ride-hailing companies. Council member Ryan Black supported SideCar, saying these companies would "provide a lot of service and benefit to the citizens of Austin" by expanding innovation to cater to the higher demands for ride-hailing (Austin City Council 2013a). At the June 6th meeting, Council Member Chris Riley expressed the concerns around offering a similar service to taxis that is not regulated with the same stringency and fairness (Austin City Council 2013b).

Meanwhile, Austin issued more than 100 citations and impounded more than 40 cars since May. Police ticketed TNC drivers for driving without insurance, driving with expired plates, open alcohol containers in the vehicle, as well as other offenses (Dinges and Grisales 2014). City officials responded by defending their actions. The Transportation Department spokeswoman, Samantha Alexander, said that officials worked with police to crack down on illegal chauffeuring before ride-hailing, with some drivers soliciting rides through websites like Craigslist (Rockwell 2014b).

Taxi drivers and owners also packed the city chambers defending taxis over TNCs, wearing bright yellow T-shirts that said "Licensed. Insured. Legal." Drivers told council members that transportation network companies put passengers in danger due to the lack of regulation and put drivers at danger by putting their livelihood at risk. Ed Kargbo, the president of Greater Austin Transportation Company, called TNCs start-ups funded by “the one percent” and claimed that these companies do not want regulations to engage in price manipulation (Rockwell 2014b).

Many Austin residents had negative feelings about taxicabs, having poor experiences with taxi service in the past. Council Member Riley compared ride-hailing in Austin as the “Wild West” since many companies operated illegally, but also defended their service, stating that residents’ and visitors’ experiences with taxis “don’t tend to go smoothly” and that “it is very clear that [app-based ride-hailing] is a popular service” (Wear 2014a). Residents complained that during big events in the city, taxis often took too long or were not available. Some residents called for alternatives for those who had too much to drink following fatal car crashes of suspected drunk drivers (Wear and Rockwell 2014). One resident supported legalizing transportation network companies as their top issue; another wanted the city to work on a comprehensive transportation plan for the city that included Uber and Lyft (Rockwell 2014d).

However, transportation network companies had their own controversy: surge pricing. During high times of demand, Uber and other TNCs multiplied ride premiums, sometimes to excessive costs. One resident arrived at their destination, only to find a $150 bill from Uber. An Uber spokeswoman said that the app communicates the surge pricing clearly to passengers before they accept the ride; surge pricing is meant to not be a punishment to passengers, but to entice drivers during peak times. At that time, ride-hailing companies still operated illegally in Austin, skirting regulation, and making city enforcement of surge pricing difficult (Dinges and Grisales 2014).

The City Council continued to debate legalizing transportation network companies, but moved towards legalization. TNCs were not leaving Austin or abiding by existing regulation, so council members attempted a compromise. A new ordinance proposal required companies to report data on pick-up/drop-off locations, length of trips, disability services and pricing. The ordinance also required commercial insurance, but the proposal did not have the same regulations and laws carried by the taxi industry including background checks and vehicle inspections (Rockwell 2014d).

Transportation network companies rallied against the amendment that required them to pay for commercial insurance for drivers with or without passengers. Council member Kathie Tovo argued for commercial insurance coverage, promoting the insurance gaps it could cover. The opposition from companies stemmed from their claim that drivers do not actually "work" for them – rather they are a mere app that pays for accidents if one occurs (Rockwell 2014d).

TNCs and the City Council compromised: Austin would allow for transportation network companies to operate in the interim until both parties worked out agreed-upon regulation. The new interim ordinance allowed for companies to conduct name-based background checks, gave the airport authority to negotiate access, and required commercial insurance for drivers provided by the company (Austin City Ordinance NO. 20141016-038). Uber and Lyft both touted their safety processes through name-based background checks as a company priority, attempting to reassure council members. Uber Policy Advisor Chris Johnson told Austin officials in September 2014 that the company had "very stringent" background checks and their "core business revolved around safety" (Hicks 2016a). Lyft Public Policy Manager April Mims told the council that they believe that Lyft drivers "are the safest on the road because of the process [Lyft has] in place" (Hicks 2016a).

In the fall of 2014, companies like Uber and Lyft won city approval, but debates over insurance, background checks, and fingerprinting would continue throughout 2015. Insurance policies and background checks grabbed local regulators' attention and many expected new bills for TNC drivers from the Austin City Council in 2015 (Eaton 2015). Texas also began exploring the possibility of TNC regulation under state law.

On March 4th, 2015, Republican State Representative Chris Paddie filed HB 2440, which would put transportation network companies under exclusive authority of the Texas Department of Motor Vehicles. Filed just after San Antonio passed a new restrictive TNC ordinance, HB 2440 would override any more stringent local ordinances on background checks, fingerprinting, insurance, and prohibit localities from charging fees from TNCs.

Additionally, the law specified that TNCs are not taxicab companies, upsetting taxi industry representatives. Ed Kargbo, the president of Yellow Cab Co., argued that people consider Uber and Lyft to be a taxi service since they connect a passenger to a driver. Yellow Cab had four lobbyists at the Texas Capital in 2015 valued at $40,000 maximum, Uber hired 25 lobbyists costing between $310,000 to $730,000, and Lyft had four lobbyists valued from $160,000 to $260,000 (Wear 2015b).

Meanwhile, the Airport Executive Director Jim Smith negotiated a one-year pilot program for Lyft drivers with some restrictions. The airport permitted Uber to service the airport just a few days later. The new temporary agreement was for 45 days, as the companies and the airport hashed out the details (Jankowski 2015). One of the concerns raised was how transportation network companies would pay a fee for operating in the airport. Since the city would not require Lyft drivers to obtain a transponder to keep track of drivers, Kargbo of Yellow Cab questioned how the city will know how many drivers are in and out of the airport so that Lyft can pay the 10% fee (Wear 2015c). The airport and companies came to an agreement where Lyft and Uber would pay $2,500 each to the city of Austin for access to the Austin-Bergstrom airport, but no fare revenue (Wear 2015d). Transportation network companies started reaching agreements, appealing to elected leaders, and courting local organizations.

Uber made crossroads with local businesses, chambers of commerce, and even the local

NAACP chapter with planned partnerships. In September 2015, Uber announced recruiting effort plans with the Greater Austin Hispanic Chamber of Commerce, the Greater Austin Black Chamber of Commerce, the Austin Urban League, the Austin Area Urban League, Dress for Success, and NAACP Austin. Uber's general manager for Austin, Marco McCottry promoted Uber's focus on "community," with Uber bringing East Austin equal economic opportunity and providing transportation options to areas historically underserved by other transportation options (Grisales 2015). Uber's focus as an equal rights crusader in these neighborhoods mirrored their appeal to residents in Chicago's Southside.

Just two years after the first fight over TNCs between Austin government and SideCar, now app-based ride-hailing drivers were ubiquitous around the city. At Austin's largest festival, South by Southwest, Lyft became the official ride-booking company in 2015. Uber also delegated drivers to the festival as well, with both companies participating in one of their most controversial policies: surge pricing (Wear 2015a). In at keynote speech at the event, Lyft co-founder and CEO Logan Green spoke about the quick rise of TNCs. Green stated that Lyft's goal is for people to skip out on owning cars, claiming that in that lens, the company does a social good. He failed to address concerns about the lack of full-time employees with benefits and skirted the potential for autonomous vehicles to put people out of work (American-Statesman Staff 2015).

By the end of 2015, Texas legislature failed to pass regulation on TNCs while the city of Austin passed a more restrictive measure. In May, the Legislature rejected statewide regulation of transportation network companies (Wear 2015f). HB 2440 died in the Texas State House when the deadline for initial approval on legislation expired. Uber had 28 lobbyists during the house session while Lyft had 10, making it an expensive failed bill for the two major ride hailing companies (Wear 2015e).

The original 2014 regulation in Austin allowed for transportation network companies to conduct name-based background checks, with the assurance from companies that safety was a priority. Two lawsuits in California alleged that Uber and Lyft mislead consumers about the strength of their background checks; Uber agreed in the settlement to no longer use phrases like "best available," "gold standard," "safest," and more than a dozen other words to describe their background checks (Hicks 2016a). These two lawsuits led Austin City Council members to reconsider stronger background checks for transportation network companies. Council Member Kathie Tovo stated if she "had the information now that [she] did then, [she] would have focused more on security issues" (Hicks 2016a).

In December, the city council approved rules for overhauling regulations for transportation network companies. The December ordinance mandates that transportation network company drivers undergo fingerprint-based background checks (Wear 2016a). By February 2017, Austin required drivers to be compliant with the fingerprint-based background checks. Mayor Adler, however, gave grace to TNCs saying the ordinance has "nothing…that says TNCs need to comply with fingerprinting or that can't operate in the city…I'd say it's incomplete" (Wear 2015h). One unresolved issue was how the City Council would enforce the new requirements, but the ordinance stated that the council would come up with some way to "incentivize drivers to become compliant" (Wear 2015h).

In January 2016, the city council proposed an ordinance that would encourage ride-hailing companies and drivers to comply with city regulation: an earned "badge" from the city to post in their profile if a driver completed a fingerprint-based background check. Driver with a "badge" would also have access to the airport and be given pick-up/drop-off spots at big events like South by Southwest. Mayor Adler supported the "badge" initiative as it would provide incentives, and satisfy both supporters and opponents to the new city ordinance. Uber opposed the proposal, questioning who the regulations were meant to protect, hoping Austin lawmakers would "work to empower Austinites who are trying to avoid drinking and driving, instead of restricting their access to a safe ride home when they need it the most" (Wear 2016a).

The council approved the "badge" ordinance 7-4, taking effect immediately. Mayor Adler claimed that the "badge" idea was innovative and "Austin-like," and claimed it will drive-up the number of drivers getting fingerprinting background checks. Council members who opposed the "badge" ordinance argued that the language was confusing and that this measure will only lead to lawsuits from ride-hailing companies. Lyft Spokeswoman Chelsea Wilson argued that separating drivers into different groups will create inequality among drivers without ensuring public safety (Wear 2016b).

After the city council approved regulations for transportation network companies in December, companies Uber and Lyft began a petitioning process to get a ballot measure put to a public vote to overturn the new ordinance. The petition initiative put forth by Uber and Lyft did not include fingerprint background checks; companies would instead use third-party firms to conduct background checks instead of local government (Wear 2016d). Mayor Adler made one last effort to convince the city council that Austin can reach a compromise with Uber and Lyft. Trying to avoid an expensive election to put ride-hailing regulations up to a vote, Mayor Adler tried to convince the City Council to instead use funds to incentivize drivers to get the legally required fingerprinting background checks. However, no council member endorsed this proposal (Wear 2016c).

For many of the members, cooperation with Uber and Lyft seemed futile and too much of a stretch. Council Member Delia Garza said that "It has been very clear that (Uber and Lyft) don't want to cooperate. They took the nuclear option in this case… Respect that. We either adopt the ordinance or call the election" (Wear 2016c). Lyft and Uber spokespeople pushed for the City Council just to pass the initiative they put forth and spare the city a special election. However, the City Council rejected the initiative and the proposal went to voters.

The ballot measure – Proposition 1 – let voters chose whether to let the existing Austin ordinance on transportation network companies stand or replace it with regulation offered by a political action committee (PAC) *Ridesharing Works for Austin*. Uber and Lyft funded the PAC *Ridesharing Works for Austin*, designating the ballot measure as the "Uber/Lyft ordinance" (Wear 2016g). The new ordinance would prohibit the city from performing fingerprint-based background checks on drivers, which Uber and Lyft said was expensive and burdensome for drivers. The new law also allowed for ride-hailing drivers to pick up in regular travel lanes and streets and companies would be mandated to report less data to Austin City (Wear 2016g).

Proposition 1 opposition and support messaging pitted the benefits of ride-hailing against regulatory power. *Ridesharing Works for Austin* kicked off a campaign with the message that TNCs get drunk drivers off the road. *Our City, Our Safety, Our Choice* – an opposing political committee – raised funds and enlisted volunteers in hopes to get out the message that losing regulations for TNCs would set a "dangerous precedent that corporations can dictate how Austin regulates them through the petition process" (Wear 2016d).

Fingerprinting-based background checks – the most contentious issue – also drew contrasting arguments. Opponents also argued that fingerprinting is necessary to check criminal records and that the law in no way would discourage ride-hailing services from operating in Austin. Uber Spokeswoman Jaime Moore said that Uber objected to fingerprinting, claiming these types of background checks would have "discriminatory impacts on minorities communities" and that they rely on incomplete databases, while also touting that many other states and cities trust their safety practices (Wear 2016l).

Ridesharing Works for Austin and Uber/Lyft used several misleading tactics to promote Proposition 1. *Ridesharing Works for Austin* aired a misleading ad claiming that one-third of taxis and chauffeur drivers failed Uber's background check process (Wear 2016i). The pro-Prop 1 campaign told undecided voters that the Austin Policy Chief Art Acevedo supported the proposition since the DWI task force found that ride-hailing services reduce drunk driving. Chief Acevedo had not taken a side, and the campaign removed his name from the canvassing script but still claimed they did not deceive voters. The Police Chief supported both the alternative ride-hailing services offer but also the importance of fingerprint background checks, counter to what the campaign described (Wear 2016f). Before the May 7th election, Lyft and Uber started offering discounted rides. Although these companies claimed that the discount was unrelated, opponents and Austin election law expert Buck Wood questioned the legality of the discounts. Wood claimed that these actions were "in effect…trying to influence the outcome of the election through your pricing" (Wear 2016e).

On May 7th, residents of Austin voted in a special election for Proposition 1 with Uber and Lyft – the two biggest app-based ride-hailing companies – threatening to leave Austin in the measure failed. Fifty-six percent of voters rejected the proposal, siding with the city over ride-hailing companies (American-Statesman Staff 2017a). Regulations for TNCs went back to the City Council approved ordinance required fingerprint-based background checks. Both Uber and Lyft announced plans to pull out of the city. Two days after the election, both Uber and Lyft voluntarily shut down their apps in Austin due to the regulatory dispute (Wear 2018g).

The Proposition 1 campaign was the largest in Austin's history, showing the seriousness of TNCs to pass more lax regulation (American-Statesman Staff 2017a). Uber and Lyft spent more than $10 million to help promote and pass Proposition 1 (Findell and Jankowski 2018). This amounted to seven times more than the largest amount spent in Austin for a city election, and 57 times bigger than the political action committee *Our City, Our Safety, Our Choice,* which ran the campaign against Proposition 1. Dean Rindy who worked for *Our City, Our Safety, Our Choice*, said that the money spent by the large companies showed the opposition was right:

"…corporations were trying to buy City Hall" (Wear 2016l).

After the loss of Proposition 1, compromise appeared to be the only step forward for both transportation network companies and the city council. Although most of the city council opposed Proposition 1, the image of the two biggest transportation technology companies leaving the city loomed overhead. In an editorial written by the Austin American-Statesmen Staff, the newspaper staff encouraged city council to work to find a solution with companies while still realizing that the free-market would only lead to chaos (American-Statesman Staff 2016b).

Some state Republican lawmakers warned they would move on legislation to override city voters. State Senator Schwertner (R-Georgetown) claimed that Texas business can no longer operate with "anti-competitive regulations…as a state with a long tradition of supporting the free market, Texas should not accept transparent, union-driven efforts to create new barriers to entry for the sole purpose of stifling innovation and eliminating competition" (Philips 2017). Jim Henson, the Director of the Texas Politics Project at the University of Texas, said after the loss in Austin, TNCs "gain[ed] political capital with Republicans who have not traditionally been sympathetic to what its residents want" (Hicks 2016c).

During the absence of Uber and Lyft in Austin, several other ride-hailing companies offered services including Wingz, Fare, RideAustin, Fasten, and Get Me. These companies take different approaches to ride-hailing to remain appealing to passengers need. Wingz is appointment-based only, RideAustin is a non-profit ride-hailing service, and Fasten charges a flat 99-cent fee to drivers instead of a percent. These companies indicated meeting the city's fingerprint background requirements and displayed confidence in being able to compete against Uber or Lyft if these companies returned to Austin (Rockwell 2016a).

While many former drivers went to work for one of these companies, many former drivers struggled. One driver still picked up outside Austin in zones where Uber still served, but offered off-the-app rides from Austin; that driver said they “miss the infrastructure terribly… I was really happy with the way things were going” (Gallaga 2016). One driver switched to Arcade City, but said the new system was a lot more unwieldly and a lot more work, requiring constant refreshing of the app. Others attended a Drivers Fair with three ride-hailing companies certified by the city, which had long lines as many drivers tried to get in business with these companies (Wear 2016j).

When the two biggest app-based ride-hailing companies, Uber and Lyft, left Austin, the companies did so without giving federally required notice to their drivers. A lawsuit filed after their departure showed one of the first labor issues with TNCs in Austin. Attorney Michael Slack, the lead attorney of the case, stated that the “political theater” of the TNCs versus Austin dispute muted the consequential effects policy and implementation had on Austin workers who abruptly lost their incomes. Uber claimed that drivers did not “engage in a distinct occupation or business,” citing that drivers are “independent contractors” (Hicks 2016d).

Some Austinites depended on Uber and Lyft, and were at a loss when both companies pulled out of the city. Regular customers had to rely on social media or advertisement websites to try to find former drivers to get them around town. One customer lamented on how city hall attempting to achieve safety backfired since many turned to finding anonymous drivers. Some passengers with disabilities felt isolated since it was more difficult to go out at night, in bad weather, or generally. Many of these same customers did not turn to cabs or other ride-hailing companies after bad experiences (Findell 2016a). One Austinite said if he lived in Austin, he would have voted for Proposition 1 since “… the taxicab companies take longer to arrive and change more, so that’s why I started using Uber” (Hicks and Wear 2016b).

Other tech industries responded to strict TNC regulation by trying to get involved in city politics. Austin Technology Council CEO Barbary Brunner said the actions by the council give a “perception that City Hall doesn’t support innovation,” while BuildASign CEO Dan Graham argued that the tech community failed to kindle any policy creating a policymaking relationship with local leaders (Rockwell 2016b). Relationships became more about image than business interest, as the tech industry became synonymous with rising housing costs and inequality. A serial entrepreneur and founder of a medical software company, Richard Bagdonas, said “the City Council is telling the entrepreneurial community that if you would like to innovate and potentially disrupt an existing industry, you should do it elsewhere” (Hawkins and Rockwell 2016). Mike Maples, a Silicon Valley capitalist with ties to Austin described the local government as “too hostile” and fostering safety through the government “needs to innovate and evolve” (Hawkins and Rockwell 2016). However, Mayor Adler spun the departure of Uber and Lyft from Austin as a good way to maintain technological innovation and foster competition; Adler said that Austin is unique in that it offers and open market for ride-hailing app solutions, and is the only city to do so (Findell 2016b).

State lawmakers felt differently about the rejection of Proposition 1. Texas State Representative Joe Pickett (D-El Paso), who chairs the House Transportation Committee, expressed sympathy for voters rejecting the proposition: “We have to deal with what the public has been saying, and so far the public has been saying we want it a little different way than Uber and Lyft have presented it” (Hicks Wear 2016a). Representative Larry Philips (R-Sherman) believed that the lack of openness to ride-hailing companies was detrimental to the image of Austin: “It wasn’t seen like a progressive city at the time… It was kind of an embarrassing thing for the people from Austin” (Wear 2017a).

Uber and Lyft, seeking a new supportive venue, saw the Texas Legislature as a place to find sympathetic lawmakers. Just like the 2015 legislative session, Uber and Lyft hired at least $1.2 million worth of lobbyists to make a case for statewide regulation for transportation network companies rather than local government regulatory control (Wear 2017a). One pro-TNC State Senator, Charles Schwertner (R-Georgetown), argued against a “patchwork” of local regulations which make it more difficult to take ride-hailing services from one jurisdiction to the next. Senator Schwertner also used drinking and driving as a defense, stating that “drunk drivers don’t stop at city limit lines” (Wear 2017b).

Uber and Lyft’s gamble on the state legislature paid off. House Bill (HB) 100 was signed by Governor Greg Abbott in May of 2017. HB 100 overrode local regulations on transportation network companies, giving the state entire control over regulation and revenue raising from TNCs. Stringent local regulation was no longer valid. TNCs which left cities with fingerprint-based background checks could return without drivers having to do these types of checks (Texas HB 100, 2017).

Uber and Lyft returned to Austin on May 29th. The two major transportation companies notified their former drivers of their return to the city, while local company offices worked to recruit new drivers. Uber Texas spokesman Travis Considine expressed excitement on behalf of the company returning to Austin, as did Lyft Austin General Manager Aaron Fox: “…the response has been overwhelmingly positive” (Dinges 2017a). Governor Greg Abbott praised Austin as being an “incubator for technology and entrepreneurship” and touted the return of TNCs to the city (Dinges 2017a). Austin City Mayor Steve Adler expressed disappointment in the Texas State Legislator for overriding principles of limited government by imposing regulation on Austin, which voters rejected, while Council Member Kitchen criticized the bill for failing to protect the public and local government’s ability to defend their citizens (Wear 2017b).

While losing regulatory control of transportation network companies, both the city and taxis took a revenue hit. Austin raised more than $900,000 annually from ride-hailing companies before state control. According to Council Member Kitchen, the city is unable to levy fees from companies “even though Uber and Lyft are using … [the] city streets” (Philips 2017). After Governor Greg Abbott signed HB 100 and TNCs returned to Austin, taxis rides decreased 70 percent between October 2016 and October 2017 (Wear 2018g). Taxi drivers and companies found it difficult to make a living wage or even profit.

Austin residents saw House Bill 100 as the Texas legislature overruling the wishes of voters who wanted more accountability and transparency from TNCs, and that the new state law lowers protections for Texans (American-Stateman 2017b). Austin rejected the Uber and Lyft backed ordinance that would strip requirements for fingerprint-background checks and Uber and Lyft left the city. However, this culminated into the creation of RideAustin – a ride-hailing non-profit – and brought several smaller ride-hailing companies to the city (Jankowski 2018b).

Uber and Lyft returning to Austin fractured competition in ride-hailing service that built up while they were gone. The two major companies started pushing out smaller companies which were compliant to local regulations. Within a month of returning, Lyft Austin General Manager Aaron Fox said Austin “welcomed Lyft back with open arms” and that the company and community had only positive responses to each other (Dinges 2017b). Customers and drivers using Lyft and Uber surged over the course of 2017. Since Uber and Lyft returned to Austin, smaller ride-hailing companies such as RideAustin reported decreasing numbers in ridership (Herrera 2016). Just a month after Uber and Lyft returned, ride-hailing service Fare pulled out of Austin due to declined business. Austin Transportation Department Spokeswoman Marissa Monroy said that “transportation network companies have always been welcome in Austin so long as they follow the laws applicable for operation,” like Fare and RideAustin (Gallaga 2017). However, with Texas overriding local regulations, companies that previously did not follow local ordinances came to Austin and pushed smaller, compliant companies out of business.

Transportation network companies also gained access to the Austin-Bergstrom Airport – a heavily lucrative pick-up/drop-off spot once reserved for taxis. By mid-2018, the four biggest ride-hailing firms in Austin – Uber, Lyft, RideAustin and Wingz – all signed agreements to operate at the airport. The agreements vary, but all include rules for standard fees paid to the airport, data collection, and driver-passenger interactions at the airport. Airport officials wanted to "create a long-term strategy" with all TNCs (Herrera 2018c). Customer demand for these services were high and the airport could raise revenue through TNCs through compliance.

After losing regulatory control over TNCs, local government officials took steps to help the taxi industry compete with these companies. In 2018, the city council voted unanimously to let taxi franchises set their own rates. The Transportation Department Directory Robert Spiller said he believed that if taxi companies could control their rates like all other transportation companies in the city, the franchises can cut costs and fees and attract customers (Wear 2018g). Taxi franchises were skeptical of this proposal. Ron Means of Austin Cab argued that ordinances should not change because the system is not broken. John Bouloubasis of Texas Taxi wanted for less flexibility on fares than what the proposal offered (Wear 2018e). City officials lost to transportation network companies; loosening taxi regulation was a way of adapting to the new transportation landscape.

City officials continued to adapt, using the debacle with TNCs as a lesson learned in new transportation policy. When Austin was questioning whether to allow dockless bike service, the city council settled on a one-year test driver. Council Member Kathie Tovo cited the broken policy promises made with ride-hailing, advocating for test runs before making permit changes to regulation (Wear 2018b). Council members were also not comfortable with the sudden arrival of electric scooters, showing distress with how companies will introduce their products in cities before pilots or ordinances (Wear 2018d). The action from the city council prompted scooter company Bird Rides to take their scooters off the road until an ordinance was worked out (Mulder 2018).

Ground transportation fundamentally changed in Austin. Young residents prefer not to drive – using public transportation but also hailing rides instead (Silver 2018). Traffic congestion surged at Austin-Bergstrom Airport with Uber and Lyft drivers, and 100 to 200 taxis waiting for low-demand, yet lucrative airport trips (Wear 2018h). Companies started offering new kinds of transportation services, like Lyft's cars-for-rent, where customers are only stuck paying for gas and Uber's electric-powered dockless bikes called "Jump Bikes" (Dinges 2018; Herrera 2018a).

Mayor Alder stated that he wished he handled disagreements with Uber and Lyft better, to not encourage the Texas Legislature to overturn Austin's regulation (Findell 2018a). Now that transportation network companies are out of the control of local government, city officials are weary of losing control of any regulatory power over new transportation technology and business. TNCs not only fundamentally changed the transportation policy process within the moment, but compelled Austin to reconsider their priorities and tread lightly when contemplating regulation for new, "innovative" transportation companies.

Issue Framing and Agenda Setting

Austin's attempt at employing a new app-based transportation approach eventually lead to two years of civic turmoil, loss of regulatory control of TNCs, and "hit to the city's reputation" (Wear 2018a). The taxi industry diminished, with a thousand permitted cabs splitting a very weakened taxi-use market (Wear 2018g). In 2018, the new Chief Executive Officer of Capital Metro Randy Clarke lamented the state of the transit industry stating the negativity of Uber trips replacing taxi trips, but also recognizing that transit will evolve rapidly (Wear 2018c).

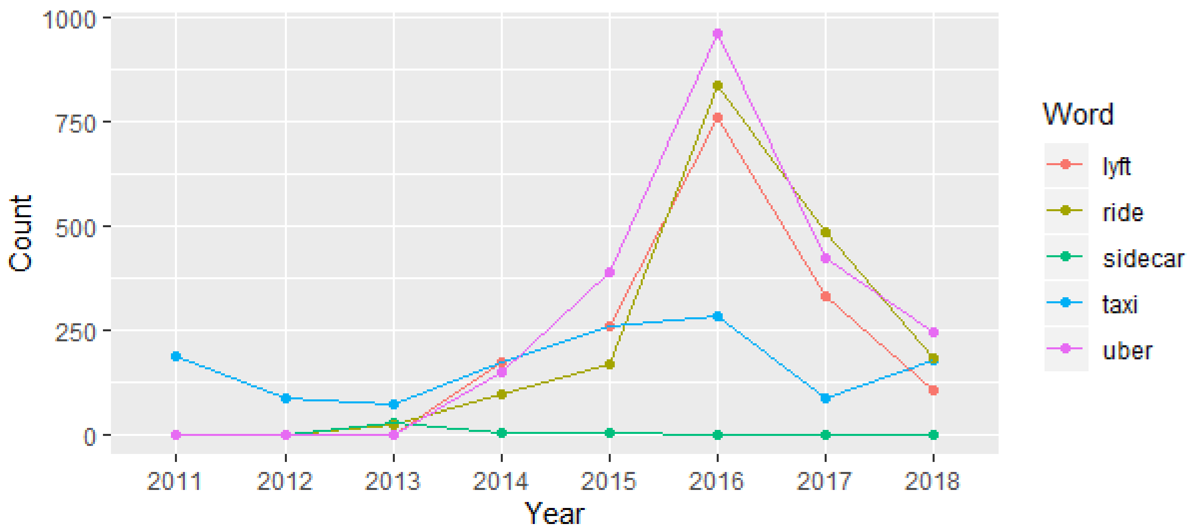
When SideCar started business in Austin, local regulators could not foresee the regulatory battle unfolding. Tension between Austin's first Silicon Valley app-based ride-hailing company and local regulations reflected the upcoming battles of over narrative. SideCar summed up the narrative perfectly in 2013: if the city protected "old-economy industry like taxis at the expense of a new-age, sharing model, Austin would be sending a devastating anti-innovation message to the high-tech world?" (Wear 2013).

Austin had its own unique discourse pattern with taxi, Uber, and Lyft: low amounts of mentions until a spike in 2016, and a rapid decline back to a low level. For Austin and ride-hailing transportation, 2016 was an active year: A ballot measure was up for taking away finger-print and other requirements for TNCs. Here, there were a lot of activity around promoting Proposition 1 and arguments on the pros and cons. After the ballot failed, conversation around Uber and Lyft lowered again.

From 2011 to 2012, mentions of taxis remained mostly simple: an obituary of a taxi driver, uses of taxis to prevent drunk driving in New Year's events, crimes in which a taxi was somehow involved peripherical, or the occasional band with the word "taxi" in its name. First mentions of Uber and SideCar in Austin appear in 2013 in an article about South by Southwest, where these TNCs tried expanding their business through presence at the nationally recognized annual event (Gallaga 2013). SideCar started operations in Austin that same year; however, SideCar sued Austin over a cease and desist order from the city for operating a taxi service without a license (Mashhood 2013).

Increasing mentions in 2014 coincided with Uber starting to operate in Austin (Rockwell 2014c). At the same time, the city council toyed over to let ride-share companies operate within the city. With vote stalls and complaints of strict rules for TNCs, Uber and Lyft began getting heightened attention in the city Rockwell 2014d). The trend continues in 2015, when taxis being bargaining for permits and TNCs vie for airport access (Wear 2015g; 2015d). Meanwhile, the newspaper articles touted TNCs' many positives, like showing an "untapped" workforce, or how Uber has Spanish-speakers available (Zehr 2015; Valenzuela 2015).

Figure 7 – Number of Word Mentions in Austin American-Statesman



Activity spurred around TNCs in 2016, as Proposition 1 became a ballot measure for May elections. Proposition 1 would loosen restrictive requirements for TNCs in the city of Austin, loosening finger-printing, car dressing, and drop-off/pick-up requirements. After Uber and Lyft invested $10.5 million for promoting Proposition 1, Austin residents shot down the proposal 56-44 (Wear 2016l; American-Statesman Staff 2016a). A field of negative op-eds touting the benefits of keeping these requirements in place were frequent in 2016, and as were many articles highlighting TNC mishaps. Coincidently, positive articles about taxis came up at the same time, some touting the benefits of loosening restrictions for taxis right after the loss of Proposal 1, for example (Hicks and Wear 2016c).

The negative headlines for TNCs do not end after the failure of Proposition 1: due to the restrictive regulations in Austin, Uber and Lyft stop operating and appealed to Texas for TNC lax regulation. The Texas Legislature passed House Bill 100, superseding regulation of cities allowing Uber and Lyft to return to Austin (Wear 2017b). This negative press brought headlines such as “Will Riders Snub Uber, Lyft?” (Findell 2017). However, the frequency went as quickly as it came: in

2018 headlines and mentions were back to the regular sometimes-positive, sometimes-negative conversation of TNC innovation, driverless cars, and crimes committed by passengers and drivers (Dinges 2018; Huber 2018).

The drastic peak in 2016 of mentions in Austin showed a culmination of debates leading up to that year. Taxi mentions were flexible, but generally remained steady compared to TNCs. In 2017, taxi mentions declined alongside SideCar, Lyft, and Uber, but evened out in 2018. Uber and Lyft mentions steadily increased starting in 2014, until they reach a peak in 2016, only to decline rapidly after that year.

Mentions of taxis from 2011 to 2013 stayed consistent, without much of the sentiment words in proximity to taxi mentions. Uber and Lyft were mentioned hardly at all until 2014, when questions arose of the role that TNCs would play in Austin's transportation system. In 2014, many of the proximity words around mentions consisted of the stem word "legal," showing the discussion around the legality of transportation network companies' operations in Austin. Although none of the proximity words were highly occurring that year, these terms outnumbered even more common words like "old" and "new." For Uber and Lyft, "illegal" was one of the most mentioned higher proximity words, while "traditional" and "business" outdid these words for taxis.

Figure 8 – Proximity Word Count for Austin American-Statesman 2014

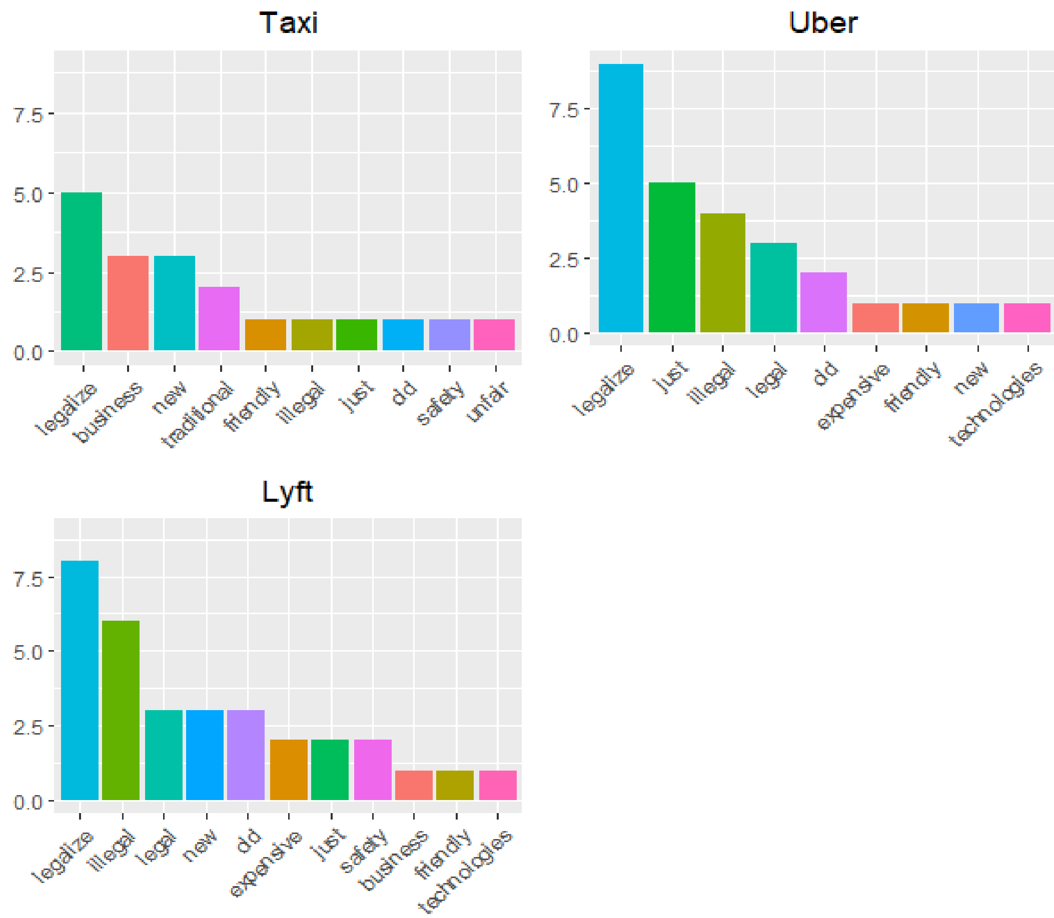
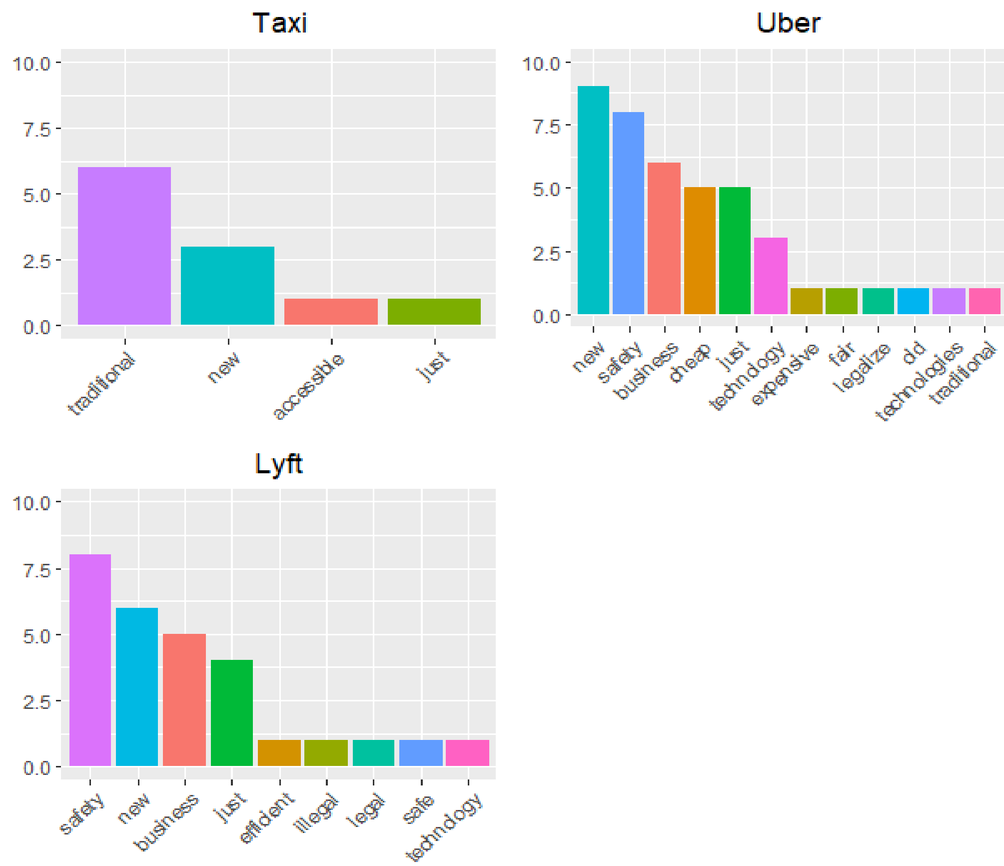
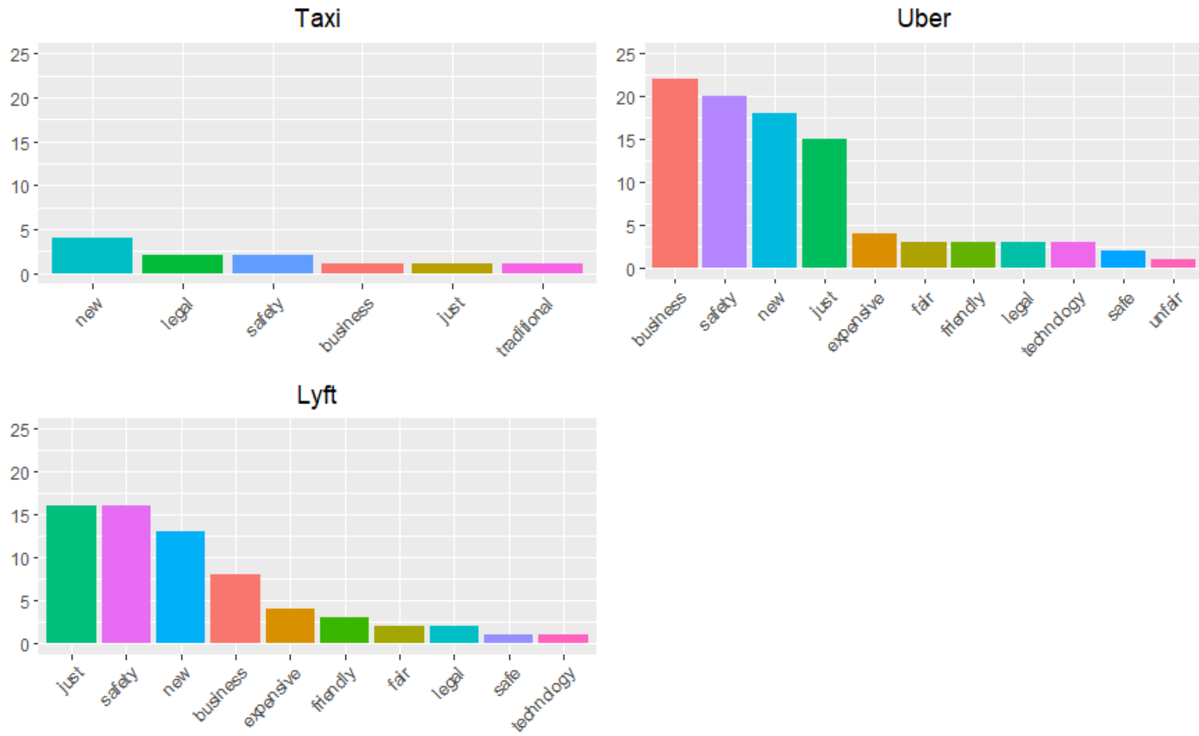


Figure 9 – Proximity Word Count for Austin American-Statesman 2015



In 2015, the language around legalization shifted. “Traditional” became the most dominant word for taxis (although proximity words were not high for taxis generally). Uber and Lyft top three proximity words were now “new,” “safety,” and “business,” with “cheap” being one of the more highly occurring words for Uber. Surprisingly, 2016 saw relatively little proximity word dominance for it being the year with the most frequency. Proximity words were very low for taxis. Uber continued to have high showings for “new,” “safety,” and “business.” However, even in 2014 and 2015, frequency was quite low for all these topics, with few news stories comparatively to Chicago for the same period.

Figure 10 – Proximity Word Count for Austin American-Statesman 2016



2016 was the height of policy activity for transportation network companies in Austin. Taxis were mentioned little to proximity words, while Uber and Lyft had more mentions around “business,” “safety,” “new,” and even “just.” The proximity words of positive and negative sentiment for taxis and TNCs are mentioned at a much lower rate than compared to Chicago or St. Louis. Perhaps this is indicative of the policy debate in Austin around Proposition 1. Safety was a more common term in Austin than compared to St. Louis and Chicago. This suggests that TNCs were less successful in issue framing in Austin than in the other two cities.

In 2017 and 2018 saw an overall decline of mentions and proximity words in the news. New still was dominant for Uber and Lyft, while proximity words declined sharply for taxis. Much of the conversation around TNCs and taxis calmed down with Austin’s news media following the spike in 2016. Much of the proximity words pattern the early questions about the legality of TNCs in

Austin, while the subsequent years pulled towards positive sentiments for each entity. Uber was by far the most mentioned among TNCs and taxis. This again highlights the dominance of Uber and their ability to agenda set.

The narrative of the policy process was about safety versus being tech friendly. Council Member Kathie Tovo argued against allowing Uber, Lyft, and other TNCs into Austin, claiming these companies hurt customers with surge pricing and other practices (Coppola et al. 2014). Ed Scruggs, one of the mayoral candidates in 2014, argued that the government fighting against new ride-hailing services undermined the city's reputation as tech savvy (Toohey 2014). However, Scruggs ultimately lost the 2014 mayoral election. Safety narratives won out at the local level when residents rejected Proposition 1. However, statewide lawmakers found pro-business, pro-innovation, and pro-tech arguments persuasive.

Three unique aspects of Austin's experience shaped the role of issue framing and venue shopping in the policy process. First, Austin had other ride-hailing companies – some local businesses – besides the major three that did relatively well in the city. Although much of their success was due to Uber and Lyft pulling out of Austin for nearly a year, they still thrived and continued to exist alongside larger nationwide companies. General Manager Fox praised the new, smaller ride-hailing companies in Austin: "It's good that we have competition…It's better for the city. Everybody wins" (Dinges 2017a). Austin, unlike other cities, could claim true market competition.

Second, Austin put it to a public vote whether TNCs would be subjected to the most controversial regulations: fingerprinting-based background checks. Before the May election in Austin, Uber threated to pull out of Houston over fingerprinting laws. Houston Mayor Sylvester Turner wished for Uber to stay in Houston, but prioritized public safety and emphasized how many app-based ride-hailing companies operate in Houston and follow the law. Uber's opposition to

Houston's ordinance centered on the "time-consuming" and costly process of fingerprinting. Lyft already left Houston in 2014, and Uber wanted lawmakers in Houston to mimic other cities, so it does not do the same (Wear 2016h).

Uber and Lyft made the same threat to Austin, and kept their promise and left the city. This boded negatively for the city's image, as many customers were left without the ride-hailing companies they were used to using for service. At the 2017 South by Southwest, one of the most discussed issues was the lack of Uber and Lyft. Since services stopped in Austin in May 2016, conference goers could not rely on the big named app-based ride-hailing (Herrera 2018b).

Finally, like St. Louis, Uber and Lyft successfully appealed to the state for regulatory favorability. Uber Texas General Manager Sarifraz Maredia praised the statewide legislation, touting the ride-hailing law as aiding in better economic opportunities, increased safety, and more reliable transportation options for Texans (Wear 2017b). State lawmakers, mostly Republican, saw local regulations as impeding on business and innovation – parroting the narrative of transportation network companies. Finding sympathetic supporters at a different venue was paramount for TNCs to gain favorable policy.

Like other cities, TNCs had their fair share of controversy in Austin. Austin became part of a federal investigation into Uber's use of the software Greyball, which is used to avoid police and code enforcement officers, trying to bypass local regulations. Former Council Member Laura Morrison, irked with Uber's action and company policy, described Uber as "the kind of company that is just unfortunate that it exists" (Jankowski 2018a). A PAC tried ousting Council Member Kitchen for her effort to require fingerprinting for TNC drivers (Findell 2018b). Austin4All targeted Council Member Kitchen because of her leadership role in the December 2016 regulation which required TNC drivers to get fingerprint-based background checks. The PAC claimed that Kitchen "purposefully hurt businesses that employ citizens of Austin" echoing the narrative that eventually won TNCs lax statewide policy (Wear 2016k).

The tension around transportation network companies in Austin highlighted a duality of identity. Austin, with a defined nightlife, relied heavily on TNCs and the two largest companies, Uber and Lyft, were widely popular. However, Austin has neighborhood-centric, liberal politics that reject big money, corporations, and outside influence. Reactions to Proposition 1 ranged from Austinites who could see life in Austin without it, to others that “don’t think a multibillion-dollar corporation has any damn business telling the people of Austin how to run their city” (Hicks 2016). The inability to reconcile this tension, however, lost Austin transportation policy control and the fight with transportation network companies.

Chapter 8: Conclusion

The urban ride-hailing regulatory apparatus originated from a variety of policy processes across American cities and states, where legislatures and cities councils implemented one set of rules for transportation network companies and one for taxis. This research answers the question of *how* various cities with different policymaking structures end up with similar types of policy. Similarly, this research categorizes the unique type of policy structure which sprouted from the policy process – the *privatized* policy monopoly.

App-based ride-hailing fundamentally altered the transportation policy process through issue framing and venue shopping. Transportation network companies harnessed language of business, technology, advancement and growth – concepts that local policymakers revere as essential for urban development. TNCs also utilized consumers demands, emphasizing this new technology's value in providing cheap, efficient, and arguably safer transportation. When local governments moved to regulate TNCs, companies sought supporters outside of local government in courts and state legislatures.

Further, transportation network companies challenged traditional definitions of policy monopolies. Groups in a policy monopoly dominate an understanding of a policy problem. Much like the traditional definition of a policy monopoly, technology-based ride-hailing policy monopolies still hold power over the policy problem definition. In this case, the policy problem is inconvenience, expense, and "old-ways." However, the *privatized* policy monopoly is not institutionalized in the same way. Instead of the resources and rules coming from government departments and policymaking bodies, transportation network companies manage their own oversight and rules. TNCs define the policy problem, come up with a solution (their operation), define rules, and regulate themselves.

Usually people use technology to find solutions to existing or imagined problems; however, technology in transportation systems can itself be the policy problem. Policymakers overlooked many of the externalities of transportation network companies when weighing policy alternatives. Government officials and policymakers struggled to reconcile the desire to be a tech savvy city while also taking into consideration the concerns and safety of residents and workers.

How transportation network companies shaped the transportation policy process has been misunderstood. Contemporary research on ride-hailing technology focuses heavily on cost-benefit and policy analysis of legislation and the logistics of using technology for commercial driving services. Although there are contemporary attempts at understanding the policy process, these recent studies lack either the detailed understanding of urban policymaking or comparative concepts explaining the consistent policy change across many different jurisdictions.

Flores and Rayle go in depth to the nuances of a city, but miss the comparative approach. Kathleen Thelen (2018) provides an exemplary method for understanding TNC policy creation but treats the United States as a monolith. Since Thelen recognizes the shortfalls of this approach, it is fruitful to expand her work through a micro-level approach using a policy process theoretical basis. Without details of the discourse, actors, power dynamics, and venues of policy creation within cities, it becomes difficult to grasp how immensely different places came to the same policy "solutions." This macro-level of analysis provides a general baseline for understanding government and technology-derived law but fails to give a deeper understanding of how vastly different places can come up with the same outcome (Thelen 2018; Collier et al. 2018; Spicer et al. 2019).

Collier et al. (2018) research constructively builds on the importance of existing institutions, most importantly taxi regulation, and recognizing that TNC regulation adopted in the United States varies across policy specifics. The authors also account for Uber's strategy in using different institutional venues to gain favorable policy outcomes. Collier et al. clarify the possibility of the power dynamics that granted Uber a seat at the table but leave out other components of the policy process.

Like Thelen (2018), Spicer et al (2019) take a macro-approach to studying Uber, using ten different North American cities as case studies. The authors describe the outcomes of Uber policy creation and give a framework based on strategy and existing institutions. However, their work only looks from a government relations perspective excluding perceptions of the public and governments. This approach excludes many otherwise important actors and narratives while deemphasizing the role of venue.

Flores and Rayle (2017) construct an excellent image of power dynamics, actors, narratives, and venue in one city: San Francisco. In addition to the importance of Thelen's work, Flores and Rayle provide an insightful backdrop on how to study transportation network company policy process. Though lacking comparison, the work of Flores and Rayle define a specific approach to doing an urban case study that can be mapped to other cities for this analysis. However, even their analysis lacks theoretical approach needed to fully grasp the significance of the advent of technology driven ride-hailing.

In this study, I attempted to fill in details of the policy process while understanding how transportation network companies almost unanimously won in the United States. I relied heavily on Punctuated Equilibrium Theory (PET) which emphasized the role of interest groups to be able to frame issues and "shop" to different levels of government, or venue, to gain favorable policy (Baumgartner and Jones 2009). I emphasize the role of policy image and how transportation network companies used appealing narratives to garner support for lax regulation.

However, my findings do not fall neatly into all areas of Punctuated Equilibrium Theory. In previous examples of PET, the scope of conflict expands and issues framing changes cause the breakup of a policy monopoly. The taxi industry policy monopoly is not broken up but rather sidestepped as the primary broker of vehicle-for-hire regulatory control. Like previous examples, the TNC policy process does create a new policy monopoly, but it is different from the traditional definition. Here, a *privatized* policy monopoly emerges, where transportation network companies manage much of their own regulatory oversight.

The Haas Act policy process presents a blueprint for understanding the changes in policy creation and how it relates to PET. In the early 20th century, the taxi industry was unregulated and in turmoil; the tension between the usefulness of a new technology (motorized personal vehicles) and economic degradation fostered a debate for taxi regulation. The Haas Act policy process had all the trappings of a traditional example of PET: a focusing event, then expanding the scope of conflict, and finally the creation of the taxi industry policy monopoly. *Could we expect the same for a modern policy process of transportation and technology?*

In some ways, yes. Issue framing remained highly determinative of the outcome for TNCs as it did for the taxi industry in the early 20th century. The content of popular discourse in the transportation network company policy process highly favored TNCs – “new,” “technology,” “business,” and other such buzzwords often described these companies. While “traditional” and “safety” often accompanied taxis, they lacked frequency and sustained attention to garner sympathy for favorable policy. Transportation network companies framed the issue to appeal the desires of urban policymakers: to be “tech-savvy” and business-friendly.

However, the historical example and contemporary policy processes different in one major way: the use of venue. Taxi drivers in New York City during the depression received national attention through the arts, but not much else. Policy debates occurred entirely on the local level. Regulatory debates for transportation network companies moved beyond the city into court houses and state legislatures. Taxi interests often used the courts to fend off TNCs. In the case of St. Louis and Austin, Missouri and Texas took away local government’s ability to regulate TNCs, stripping regulatory power from the St. Louis Metropolitan Taxicab Commission and the Austin Transportation Department. The Illinois legislature passed legislation for TNCs, but did not strip Chicago's ability to pass and implement more stringent regulations or raise fees.

The policy process of transportation network companies pitted governments, companies, and taxi interests against each other. Uber and other TNCs faced several legal and regulatory obstacles. Local ordinances stopped Uber from entering some cities: Miami, Austin, and Vancouver all had local regulation that barred the company from operating. Several taxi companies filed lawsuits against the company or lobbied local officials to change laws to keep out ride-hailing mobile app services. In Chicago, taxi companies filed a federal lawsuit stating that many of Uber's practices were illegal. However, the company won their case there and in other cities such as Dallas and Denver (McBride 2014). Although to a different extent, transportation network companies won fights against taxi interests, governments, and - in the case of Austin - even voters.

I find that language of transportation network companies often overtakes taxis in news media, but both TNCs and taxis surge in media attention around times of policy issue debates. In newspapers, when taxis are mentioned, they usually involve some quarrel with Uber. Taxis are often mentioned alongside "tradition" – often referring to their place as quintessential to city life - but are often overshadowed by positive words for TNCs in news. News mentions often pair TNCs with words like "new," "business," and "technology," highlighting a positive narrative. Eventually, transportation network companies divulge into popular lexicon, from replacing "catching a cab" with "calling an Uber" to the very public controversies with these companies.

Language use is crucial to the policy process, as it has the power to frame the issue and set the agenda. Expanding the scope of conflict and catching the public's attention are ways to gain public trust, but also get the attention of policymakers. Examining public discourse can pinpoint efforts at narrative control from interested groups, individuals, and organizations that can lead to favorable policies.

Appealing to policymakers and the public at large requires understanding the different incentives of these stakeholders. Urban policymakers focus largely on development and increasing the taxation pool (Peterson, 1981), doing so by appealing to concepts like livability and innovation. However, this sweeping reliance on development from local officials fails to include the individual residents' focus on a city's unique problems, forms, and "identities," e.g. what does it *mean* to be *city X*, *Y*, or *Z*. Further, the rational official has different incentives and goals than that rational resident, especially in differences in self-interest.

Language use, in this sense, must capture the attention and favorability from a variety of different actors in the policy process. This content analysis produces a generalized narrative of the competing parties – TNCs versus taxis – and how they appealed to both policymakers and citizens during the policy process. Much like with the insight gained from the historical comparison, we gain an overview of what to expect from the policy process of different cities individually by constructing a broad overview of issue framing across cities. I construct this narrative overview through language by analyzing speech across media through *frequency* and *tone*.

Expanding the scope is how frequent conversation sways policy; the ability to frame the issue is how tone persuades (*see* Baumgartner and Jones 2009; Schattschneider 1975). If a certain actor appears frequently in stories in the local newspaper, we can assume that policies related to that actor are on the agenda. Further, negative versus positive press shapes both public opinion and the perception of policymakers on certain issue areas. By reviewing perception alongside frequency, we measure which matters more: *power over resources or power over narrative.*

Overall trends

Recurrent changes in frequency and perception are staples in each case study city in this analysis. Tensions among governments, taxi companies and drivers, and TNCs flare, controversies occur, questions on the benefits and efficacy of each industry crop up, but all seem to dwindle to low mentions of ride-hailing generally. The same can be true for the actual policy process for ride-hailing companies in cities: eventually, after tensions rise TNCs become common place and the dust settles. Uber, Lyft, and other companies alongside taxis become the new normal. Does this mean that perception necessarily lead to policy change? Does it matter if new is positive or negative, or is it irrelevant?

In the local news media for TNCs, three apparent patterns occur. First, there is a spike in mentions of both taxis and TNCs (usually Uber) around heightened points of policy tension. Usually when the regulatory future of transportation network companies was in question from policymakers and politicians, frequent mentions of the interest groups cropped up in the media. Frequency shows the level of attention this policy problem attained and how the vehicle-for-hire policy issue arena expanded. In more nuanced case studies, we expect that the higher frequency years have increased political and policy action.

Second, positive language for both taxis and TNCs outweighed negative word proximity. Taxi tended to fall in frequently in proximity to words like “traditional” and “safety,” making their mark as the safe and ever-present option. Uber, Lyft and SideCar often fell into proximity around words like “innovation,” “technology,” and “new,” showcasing their argument for advancement and appeal to tech-friendly cities.

Lastly, all cities fell back into somewhat normal patterns of news post-TNC policy debates and hype. In Austin, mentions of TNCs and taxis sharply declined, returning to a policy state where policy around vehicles-for-hire was no longer on the local news stage. St. Louis saw a similar pattern, with sharp declines of all mentions after 2017. Chicago by far had the most articles going into 2017 and 2018, reflecting the ongoing nature of Uber as a behemoth in Chicago. In the detailed case studies, we expect that there will be not necessarily be a defined event, but rather smaller punctuations that culminate into a year or so of action. Generally, these policy debates settle after increased attention, a policy debate climax, and back to off the agenda.

However, news articles in St. Louis, Chicago, and Austin vary in their own way. In St. Louis, newspapers frequently refer negatively to taxis after the launch of ride-hailing: the fight of the taxi commission against Uber and succumbing to the pressure to compete with these new companies (Toler 2015; Kirn 2017). Uber and Lyft start out with innovation and positivity, but after a couple years fall in into critique and problems. Chicago's patterns of language for Uber/Lyft follows much of the same pattern, but plagued with more mention of lawsuits, surge pricing, and fees imposed by the city (Harris 2014; Associated Press 2014; Byrne 2015d). The declining stories around taxis include crime like St. Louis, but much of the language is around rising prices and lawsuits for TNCs. Austin has some components of St. Louis and Chicago, but a much larger focus on action from the city council and government involvement to regulate TNCs (Batheja 2015). Overall, discourse around taxis is down and TNCs dominate ride-hailing discussion.

However, discussions on narrative leave one question unanswered: was it the power of resources or the power of narrative that really benefited transportation network companies? Uber and Lyft ran at a loss to keep their prices low to compete, while also spending enormous amounts on public relations campaigns, lobbying, and legislation efforts (e.g. Proposition 1 in Austin). We could easily reduce the political wins of transportation network companies to financial power; however, this conclusion does not account for the places where companies failed through financial power. After all, Uber and Lyft spent a combined $10 million on the campaign in Austin to reduce restrictions for TNCs only to lose the vote. It was their appeal to Texas legislators that, in the end, got them a favorable policy outcome. Transportation network companies were strategic in their narrative, learned important lessons, and adapted. Business and tech-friendly narratives could only get them so far in certain localities – when these efforts failed, they turned to business-friendly policymakers to appeal with those same narratives. It was narrative that held the power, not the purse.

Recommendations

Transportation planning requires cooperation since no one agency overseas any entire system. Road, rail, bus services, vehicle-for-hire, cycling, and pedestrian commuting systems all cross over multiple jurisdictions. Metropolitan Planning Organizations (MPOs) are responsible for establishing participation in the planning process including state legislators and agencies, while state Departments of Transportation (DOTs) are accountable for all transportation needs outside of metropolitan areas. Although there is a clear distinction of who develops, improves, and creates content of plans (USDOT 2015, 8-9), cross over inevitably coerces agencies of the system to work together.

Transportation planning in regional governance institutions varies, with some systems dominated by elected officials, some by policy professionals and other are a combination of the two. Some structures require regional input from the state to establish agencies to oversee transportation issues. For example, since St. Louis County and City in Missouri are separate, the Missouri Legislature created the Metropolitan Taxicab Commission (MTC) to oversee vehicle-for-hire regulation across the county and state. Other regions have powerful city governments which regulate public transportation and vehicle-for-hire institutions. City Councils tend to have transportation boards that influence transportation ordinances within cities. Cities raise their own transportation funds through ground transportation taxes, ride-hailing fees, parking meters, property taxes, and other means.

Today, by and large local governments regulate taxis and vehicles-for-hire either within a city or county, while state legislatures permit or require localities to conduct such regulation. Most cities are similar in the types of ways they regulate taxis and vary only on the margins. The most ubiquitous taxi regulations are restrictions to entry, mostly done through stringent qualifications and licensing. In the United States, local medallion systems constrain most taxi service with strict numerical limits on taxi licenses awarded to drivers. Usually licenses are quite expensive, and entry is strenuous when cost is paired with other restrictions like background checks or "knowledge" tests (Schaller 2007). As a staple of urban transportation, taxicabs operate on public roads with no fixed routes. Taxis provide service to individuals or a very small number of passengers, contact happening between driver and passenger. Fares are normally determined by distance or duration of the ride based on regulation (Dempsey 1996, 87).

However, transportation network companies challenge local transportation systems while fundamentally changing transportation planning in urban areas. Not only are policymakers confronted with the types of policy considerations in transportation planning, but also their roles themselves as regulations. Transportation network companies upended modal and decision-making decisions, giving companies decisive power. Urban policymakers must grapple both the institutional power of decision-making as well as the process.

The policy process of transportation network companies raises an intrinsic question about policy outcomes. Policy alternatives are not weighed evenly depending on the outcome through a rational cost-benefit analysis, but rather to exposure of alternatives and conceivable outcomes. Policymakers cannot rationally consider all solutions and have disproportionate attention to certain issues. *How*, then, did policymakers devote considerable amounts of time on TNCs and come up with policy solutions so different from existing regulations?

The easiest and most obvious answer to this question would be that power played a significant role in the policy process. Investors interested in technology firms often offered significant amounts of money to these companies. In May 2013 alone, Lyft raised $60 million from one venture capital firm, Andresseen Horowitz. The firm backed the revenue to push Lyft ridesharing globally. Investors and Silicon Valley spectators viewed Uber as having high potential for massive growth. Other companies offering similar services, received investments from capital firms: SideCar with Lightspeed Venture Partners and Google Ventures, and Uber with Benchmark Capital (Reuters 2013). It would be no surprise that Uber or any similar company would look to track in high investments. If a company raised $1 billion or more in funds, it would join an elite group of 10-figure valuations like SurveyMonkey, Pinterest, and Square (McBride 2013).

In the form of financial resources, transportation network companies used resources to lobby governments and set up elaborate social media campaigns to the public. Investments into Uber and Lyft allowed them to take losses, especially in providing higher pay to employees, getting drivers' unmitigated support. Yet, this explanation leaves out one source of power: the power of value persuasion.

Urban policymakers and political leaders strive for development, technology, and schemes which attract taxpayers (Peterson 1981). In the modern city, leaders attempt to appeal to younger adults with technology friendly cities. So, when technology companies arrive with promises of convenience, affordability, and improvement all through their new app or device, urban decisionmakers are bound concede. The power of TNCs is not just in their financial resources, but in the technological resources – using technology to convince policymakers and governments to hand over power because technology will solve the problem.

Instead of solving the problem, it led to the devastation of the taxi industry without a safety net to catch those made worse off by the policy outcome. Additionally, TNCs led to lowered ridership of public transportation modes like light rail or bus. Some industries become obsolete because of technology (e.g. typewriters), and with automation on the rise, work displacement will only rise. Without fully grasping all negative externalities of technology, many workers are vulnerable. Understanding the policy process helps to shed light on how the power of technology puts people at risk.

Future Work

Automation technology has already started, albeit much slower, to spread across American cities. Transportation network companies were just one step towards the goal of replacing not only all vehicles-for-hire but all drivers on the road. Major car manufactures began discussing bringing self-driving cars to market within the next five years with some companies already having vehicles on the road. Waymo, Uber, and Toyota all have self-driving cars in Arizona. In some cities in Pennsylvania, passengers can hail rides from automated vehicles. However, the public seems to be less than intrigued with the idea of everyday use of autonomous vehicles, and transportation planners are stumped about the intermediate period when automated and human-driven vehicles share the road (Wear 2018f).

Much like transportation network companies, arguments of safety contend with ideals of technology and innovations. In March of 2018, a human test driver checking for system error in one of Uber's driverless vehicles lead to a fatal car accident (Harrell 2018). This sparked concern over how safe automated vehicles would be for the broader public. However, the policy process of transportation network companies tells us that this might not matter.

Transportation network companies controlled issue framing to highlight the importance of innovation, business, and technology for thriving cities. If the lessons of TNCs hold true for future transportation technology, we expect companies invested in automated vehicles to gain favorable policies by parroting these same values: that business, innovation, and technology increase development, and in turn, that development secures a city's identity as being welcoming to the future. This bias against safety and cautioning new technology will shape future policy through the policy process that transportation network companies disrupted.

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