

The Role of Informal Transit in New York City
A Case Study of Commuter Vans in Eastern Queens

by

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A Thesis Presented in Partial Fulfillment
of the Requirements for the Degree
Master of Urban and Environmental Planning

Approved November 2017 by the
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ARIZONA STATE UNIVERSITY

December 2017

ABSTRACT

Informal public transport is commonplace in the developing world, but the service exists in the United States as well, and is understudied. Often called "dollar vans", New York's commuter vans serve approximately 120,000 people every day (King and Goldwyn, 2014). While this is a tiny fraction of the New York transit rider population, it is comparable to the total number of commuters who ride transit in smaller cities such as Minneapolis/St Paul and Phoenix. The first part of this study reports on the use of commuter vans in Eastern Queens based on a combination of surveys and a ridership tally, all conducted in summer 2016. It answers four research questions: How many people ride the vans? Who rides the commuter vans? Why do they ride commuter vans? Do commuter vans complement or compete against formal transit? Commuter van ridership in Eastern Queens was approximately 55,000 with a high percentage of female ridership. Time and cost savings were the main factors influencing commuter van ridership. Possession of a MetroCard was shown to negatively affect the frequency of commuter van ridership. The results show evidence of commuter vans playing both a competing and complementary role to MTA bus and subway transit. The second part of this study presents a SWOT analysis results of commuter vans, and the policy implications. It answers 2 research questions: What are the main strengths, weaknesses, opportunities and threats of commuter vans in Eastern Queens? and How do the current policies, rules and regulations affect commuter van operation? The SWOT analysis results show that the commuter van industry is resilient, performs a necessary service, and, with small adjustments that will help reduce operating costs and loss of profits have

a chance of thriving in Eastern Queens and the rest of New York City. The study also discusses the mismatch between policy and practice offering recommendations for improvement to ensure that commuter vans continue to serve residents of New York City.

ACKNOWLEDGMENTS

First and foremost, I in thanks giving, give praise to God for sustaining me through the length of this work and beyond.

I am indebted to my committee chair Dr. Deborah Salon. Her patience, guidance, zeal and dedication to this work, even in times when I had none was the wood that kept the fire burning. I wouldn't have done it without you! My utmost gratitude to my committee members Dr. David King and Dr. Jason Kelley for the guidance, advice and patience through the long presentations that culminated into this thesis. The experiences you shared with me helped propel this thesis into its final product. I also wish to thank my faculty advisor, Dr. David Pijawka for guidance throughout the length of my master's program but most of all for introducing me to Dr. Salon who then became my committee chair.

I would have never been able to complete my thesis without the financial support from the Fulbright program which paid for my Master's program and more specific to this project my stay in New York during the period of data collection and The School of Geographical Sciences and Urban planning which paid for my travel and stay in New York during data collection. Without their financial support, I would have had no data to work with.

I also thank my sister Macrina Musili and my friends Verah Nyarige, David Atika for their moral support and for proofreading and editing my thesis.

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PREFACE

Informal transportation has been defined as the travel services arranged among individuals who agree to prices, routes, and schedules on a case-by-case basis (Valenzuela et al., 2005). Giuliano et al. (2000) identified informal transportation as paratransit services that serve places where existing formal services do not, at convenient times. The type of informal transportation discussed in this paper is the semi-legal vans that offer paratransit services in New York. They are commonly referred to as jitneys or dollar vans but are legally known as commuter vans. Informal public transportation has been shown to concentrate in low income minority neighborhoods while others show a strong correlation between informal transportation and immigrant communities. Studies of the New York informal transportation by King and Goldwyn (2014) show that informal transportation serves a niche. In the case of New York, this niche is made up to a large extent of immigrants from the Caribbean, Asia, Africa and Latin America. This poses the question, can informal transportation be adopted in other parts of New York. An attempt to do so in 2010 failed for more reasons than one but King and Goldwyn (2014) did not identify niche as one of the reasons. There are different perceptions of informal public transportation from scholars, policy makers, mainstream media, formal public systems, and city residents. Some view informal public transport as a competition against the formal public transit while others consider it a complementary system to the formal public system. These perceptions, as will be shown in this paper, affect the policies made to regulate informal transportation.

While this study focuses on the Eastern Queens New York commuter vans, and hopes to test the findings alluded to above from previous studies in the context of the study area, it was motivated by the Nairobi matatu industry. This informal system has over the years shown resilience and creativity that is common among informal economies so much so that it is blamed for the phasing out of the formal Kenya Bus service transit option in Nairobi. This study attempts to understand the role played by commuter vans in New York, a city with ‘the most robust and most efficient formal transit option in North America. While it is clear that matatus in Nairobi ran the formal transit system out of business, New York’s formal transit system is still operational. New York therefore offers a good case study for an informal and formal transportation system operating side by side.

The New York commuter van

20 years after the birth of the matatu, another informal transportation system was born in a city that had arguably the most efficient formal public transportation in the US, New York City. The only comparable trait between New York and Nairobi was density and the presence of urban poor. This transportation system, referred to as dollar vans charged a dollar as the name suggests to ferry people around town if they lived in a community underserved or poorly served by MTA transit (Reiss 2014; King and Goldwyn, 2014; Goldwyn 2017). The New York government, however, did not take too kindly to an informal system competing against the government provided MTA transit. The vans therefore remained illegal for a long time. Even after they were legalized in the early 1990s the city kept them on a leash so tight that the Institute for Justice filed a court case on behalf

of Hector Ricketts and 3 other drivers on claims that at the time New York City ‘laws unconstitutionally restricted the ability of bootstraps capitalists to earn an honest living and denied Brooklyn and Queens residents access to adequate transportation (IJ n.d.). The commuter vans have since expanded to include 5 fleets across neighborhoods in Bronx, Manhattan, Brooklyn and Queens boroughs despite the regulatory obstacles they face. This informal transportation system today present a regulation challenge in New York.

This report presents the results of field research conducted in summer 2016 in Eastern Queens, New York City. While it does not investigate the matatu industry in Nairobi, it presents results that are generalisable enough to provide insight into the informal system in Nairobi and elsewhere in the world. An attempt to understand the commuter vans of New York sheds light onto the communities served by informal transportation, reasons for their existence, strengths, weaknesses, opportunities and threats of the informal transportation sector as well as the policy implications and challenges that informal transportation presents. The results also offer a sneak peak into the travel patterns of the commuter van riders that are comparable to studies conducted on informal transportation customers worldwide (Cervero, 2009; Goldwyn, 2017) as well as the role that informal transportation plays with respect to formal transportation.

This thesis is presented as two papers each answering different research questions outlined below. Research questions answered in paper 1 include:

- A. Who takes commuter vans?
- B. Why do they choose commuter vans over government provided formal transit?

C. Do commuter vans compete against or compliment MTA formal transit?

Paper 2 answers the following research questions:

A. What are the strengths, weaknesses, opportunities and threats of the commuter vans of Eastern Queens?

B. How could the policies that regulate the Eastern Queens commuter vans be improved?

CHAPTER 1

THE PURPOSE THEY SERVE

ABSTRACT

Informal public transport is commonplace in the developing world, but the service exists in the United States as well, and is understudied. Often called “dollar vans”, New York’s commuter vans serve approximately 120,000 people every day (King & Goldwyn, 2014). While this is a tiny fraction of the New York transit rider population, it is comparable to the total number of commuters who ride transit in smaller cities such as Minneapolis/St Paul and Phoenix. This study reports on the use of commuter vans in Eastern Queens based on a combination of surveys and a ridership tally, all conducted in summer 2016. It answers four research questions: How many people ride the vans? Who rides the commuter vans? Why do they ride commuter vans? Do commuter vans complement or compete against formal transit? Commuter van ridership in Eastern Queens was approximately 55,000 with a high percentage of female ridership. Time and cost savings were the main factors influencing commuter van ridership. Possession of a MetroCard was shown to negatively affect the frequency of commuter van ridership. The results show evidence of commuter vans playing both a competing and complementary role to MTA bus and subway transit.

KEYWORDS: paratransit; dollar vans; commuter vans; informal transport; New York City; Taxi and Limousine Commission

INTRODUCTION

The American Public Transit Association (APTA) defines public transportation as transportation by bus, rail or other conveyance, either publicly or privately owned, which provides to the public general or special services on a regular and continuing basis (*APTA, 1994*). The Macmillan dictionary (2009) adds that public transportation is a vehicle that anyone can use by paying a fare. Public transportation can be formal or informal; the difference is who gets paid. Formal public transportation is run by city governments or companies contracted by the city so ultimately, the city gets paid for everyone that uses the transportation system. This also means that the city governments invest in the system and in most cases, subsidize it. The Metropolitan Transportation Authority (MTA) provides formal bus and rail transit services in the New York metropolitan area.

Informal public transportation is common in developing countries. Here, the government is not involved, and the individuals who own and drive the vehicles get paid. Like its formal counterpart, informal transportation has many different types. From Nairobi's matatus and Mexico's colectivos (vans and buses), to Manila's jeepneys and India's rickshaws, informal transportation provides a wealth of service options (*Cervero, 2001*) both motorized and non-motorized at prices bearable to the market - prices that almost all researchers in this field call 'cheap'. Fares are determined by both market forces (*Cervero, 2001*) and competition (*Jury and Frassinelli, 2010*).

The type of informal transportation discussed in this paper is the semi-legal vans that offer paratransit services in New York. They are commonly referred to as jitneys or

dollar vans but are legally known as commuter vans. New York's commuter vans carry a substantial number of passengers each day (*King and Goldwyn, 2014*) - comparable to the total number of commuters who ride transit in other U.S. cities such as Phoenix (*Valley Metro, n.d.*) and Minneapolis/St. Paul (*Metro Transit, n.d.*). There is little data or scholarship documenting this sizable informal transport system, however.

This paper presents the results of on-board surveys and a ridership tally of commuter van riders in Eastern Queens, conducted in the summer of 2016. It answers the questions of who rides the commuter vans and why riders prefer vans over the publicly provided MTA buses and subway, and provides insight into whether the commuter vans compete against or complement MTA transit in this New York neighborhood. Commuter van ridership in the study area was approximately 55,000 daily, and the service was slightly more popular among women than men. Time and cost savings or the perception of cost savings were the main factors influencing commuter van ridership. Possession of an MTA MetroCard was shown to negatively affect the frequency of commuter van ridership, but many van riders transferred to MTA transit to complete their trips. These results show clear evidence of commuter vans playing both a competing and complementary role to MTA bus and subway transit.

CHAPTER 2

LITERATURE REVIEW

Informal transportation has been defined as the travel services arranged among individuals who agree to prices, routes, and schedules on a case-by-case basis (*Valenzuela et al., 2005*), calling it community-based transit which results from recognizing an unmet travel need and organizing, either as volunteers or entrepreneurs, to fill it. Giuliano et al. (2000) identified informal transportation as paratransit services that serve places where existing formal services do not, at convenient times. Cities that have both formal and informal transportation reveal that informal transportation provides transit diversity for residents by running mostly parallel to formal transit and in most cases operating all day and sometimes all night (*Cervero and Golub, 2007; Reiss and Lavey, 2014; Goldwyn, 2017*).

As countries and cities grow and develop, the informal economy (including informal transport services) shrinks and the formal economy comes to dominate (*La Porta and Shleifer, 2014*). A good illustration is the jitneys that became popular at the turn of the 20th Century in the U.S. (*King and Goldwyn, 2014*). The jitneys ‘stole’ up to 50% (*Slater, 1997*) of the riders from the streetcars that operated in that era causing a reduction in revenue. The streetcar companies pushed for regulation of the jitneys (*Goldwyn, 2017*) which led to initially the reduction in number of jitneys (*Slater, 1997*) and eventually the phasing out of jitneys by 1920

(Goldwyn, 2017). U.S. cities have since continued to provide more formal transportation options.

Informal transportation systems have been described by several authors as flexible (Cervero and Golub, 2007), fast (King and Goldwyn, 2014), and cheap. They are also viewed as an inadequate (Cervero and Golub, 2007), largely unsafe, and highly polluting (Kumar, Singh and 2016) transit option found in cities with little to no formal transit. This description is accurate for most informal transport systems in cities in the developing world, like Nairobi, Jakarta, and Manila.

Research on informal economies by La Porta *La Porta and Shleifer (2014)* found that informal firms inhabit an economic space of their own, disconnected from the formal space, but Cervero (2001) writes that the presence of informal transit parallel to formal transit sets in motion competitive pressures on formal operators. Most transportation researchers would be more inclined to agree with Cervero (2001) because informal transportation does not operate in isolation unless it is the only mode of transportation available. There are some places where formal public transit does not exist, in which case informal systems do operate in isolation, as *substitutes* for formal systems. In places where formal systems exist, informal transportation can either act as a *complement* to that service or it can *compete* directly with the formal service. The next few paragraphs provide case studies from literature showing the various roles played by informal transportation in relation to formal transportation.

In poorer countries, where informality is dominant, informal transportation tends to be a substitute for formal public transportation. Cervero and Golub (2007) show that

the dense cores, low car ownership, and crowded streets make efficient public transportation easy to provide in developing countries but the lack of fiscal and institutional capacity results in a failure to meet marketplace demand. This opens the door for market-driven informal transportation services.

In the first world, where formal public transport is dominant, informal transportation is often viewed as a competitor. The informal transportation services in these cities usually begin in response to an unmet demand but gradually develop to serve a community already served by formal transportation. As a result, they can compete directly against formal public transportation. In North Jersey, due to the low car ownership and low income households, mass transportation is a necessity (*Jury and Frassinelli, 2010*) and the formal New Jersey Transit buses are viewed as inadequate by many residents. The unmet demand by the New Jersey Transit attracted the informal transportation called jitneys. Jitneys in North Jersey operate alongside New Jersey Transit buses, directly competing for riders. Because most jitney operators are sole proprietors depending solely on the income they make at the end of the day, they are proactive and market driven. In a comment responding to a Star-Ledger (*Jury and Frassinelli, 2010*) article, a resident of North Jersey writes “*This is in serious contrast (referring to jitney drivers who “will do anything to pick up passengers”) to the GFY attitude of too many drivers on NJT and Coach. They will shut the door in your face. They will cruise past old people standing in freezing rain or the current blistering heat because they are too lazy to make the passengers move to the back so there is room at the front.*” This further enhances the competition. The competition is both physical -- by physically competing for passengers at stops (*NJTPA, 2011*) -- and

strategic -- by keeping the jitney fares lower than NJ Transit fares (*Jury and Frassinelli, 2010; NJTPA, 2011*). This direct competition is considered by the New Jersey Transportation Planning Authority to have contributed to the overall enhancement of mobility (*NJTPA, 2011*).

The complementary role is the third and most favorable role played by informal transportation. Mukherjee (*2016*) posits that one of the advantages of informal economy is that it complements formal economy. On the international stage, informal economies in developing countries contribute significantly to the formal economies in developed countries. For instance, the garment industry in Bangladesh where workers offer informal low-end labor of the value chain which ensures that formal garment enterprises stay globally competitive. The private shuttles of San Francisco are a more local example of the complementary role played by the informal economy. The ridership in San Francisco is too high for Muni- the San Francisco formal transit- to fully serve. Tilly Chang, executive director of the San Francisco County Transportation Authority while speaking to L.A. Times (*Nelson 2015*) admitted that "at the end of the day, we can't meet the demand." citing the importance of the shuttles.

The perception of the role played by informal transportation is at the core of policy and regulation decisions surrounding informal transportation. For instance, New Jersey Interstate Commerce Commission policies that encouraged new entries into the market and relaxed of some of the restrictions on jitneys resulted from the perception that jitneys contribute to increased mobility (*NJTPA, 2011*). Other harsher policies like those that govern the New York commuter vans -- criminalizing passenger pick up at bus stops -- are

as a result of the perception of commuter vans as competing against MTA transit. The lack of or poor enforcement of the rules in poorer countries like Kenya is at least partly due to the perception of informal transit as a substitute to a context that would otherwise require costly formal transit that the government is responsible to provide.

Similar to other types of informal economies, informal public transportation has been shown to concentrate in low income minority neighborhoods (*Goldwyn, 2017, Cervero and Golub, 2007*) and a strong correlation exists between informal transportation in the U.S. and immigrant communities (*King and Goldwyn, 2014; Goldwyn, 2017; Mark, 2010*). Mark (2010) writes that a cheap ride can be found wherever West Indians have settled. The presence of immigrant communities creates a unique need for transportation even in a city with efficient formal transit like New York. This is because many immigrants arrive impoverished and with poor job prospects. This forces them to work several jobs hence they have a high value for their time. They also tend to settle in communities that are typically underserved by state and municipal institutions. For these reasons, informal travel arrangements are an important part of economic survival for immigrants (*Valenzuela et al., 2005*). In addition, Blumenberg and Smart (*Blumenberg and Smart, 2014*) found that preference by immigrants to settle in communities of people from their own country strengthen community ties within the community which then serve as a basis for informal or formal ridesharing.

This study adds to the available literature on informal transportation, specifically in the developed nations. There is very limited scholarly literature focusing on the New York commuter vans, and that which does exist focuses on the Brooklyn dollar vans (*King and*

Goldwyn, 2014; Goldwyn, 2017). The Eastern Queens commuter vans were identified by Reiss and Lavey (2014) as the largest commuter van fleet in New York yet there have been no previous scholarly studies focusing on this area. This study focuses on the Eastern Queens commuter vans and the community they serve hence contributing to the informal transportation research in New York and developed countries as a whole.

CHAPTER 3

BACKGROUND AND STUDY AREA CHARACTERISTICS

The New York commuter vans were birthed in 1980 after an MTA workers' 11-day strike. The strike opened an opportunity for people with personal vehicles who stepped in to ferry workers to destinations at a small fee. The strike presented an opportunity lucrative enough to those who owned vehicles such that even after the MTA services resumed they continued to offer transit services albeit illegally. In 1982, the New York State DOT began to grant permits to dollar vans, making them legal but doing little else to ensure compliance with regulation (*Goldwyn, 2017*). In 1993, the Taxi and Limousine Commission (TLC) was granted regulatory authority over commuter vans and remains the governing body to date. New York presents a unique case because although the vans may have sprung up due to inadequate or absent formal transit services in certain neighborhoods, most of these neighborhoods today have good public transit services, comparable to those in other parts of New York without commuter vans.

In this study, the term commuter van will be used to refer to the TLC licensed vans, and dollar vans will be used as a general term for both semi-legal TLC licensed vans and the illegal (rogue) vans. Commuter vans in New York serve four different neighborhoods as identified by Reiss and Lavey (*2014*): Brooklyn (Flatbush and Utica avenue), Eastern Queens, Chinatowns in Manhattan, Brooklyn and Queens, and the smallest paratransit system in Edenwald, the Bronx. These neighborhoods are largely low income, minority population with a significant population of immigrants (*11, 12*).

Reiss and Lavey (2014) mapped the dollar van routes in New York and identified the neighborhoods they serve. This paper presents results of a study that was conducted in one of the identified neighborhoods - Eastern Queens. Eastern Queens has six main commuter van routes in both Queens and Nassau County. This study focuses on the five commuter van routes plying in at least 1 census tract in Queens County. This eliminates one route referred to by Reiss and Lavey (2014) as Beach 95 that solely serves the community in Far Rockaway, Nassau county. These commuter vans serve 5 main neighborhoods in Eastern Queens that are equivalent to the route names given for this study: Rosedale, Cambria Heights, Green Acres Mall, Far Rockaway and Linden. Other additional neighborhoods are served by virtue of commuter vans plying on roads through or adjacent to them.

The neighborhoods served by the commuter vans fall into 100 census tracts presented in Figure 1. From literature, informality in New York has been associated with low income neighborhoods and immigrant communities. Figure 1 illustrates the population density (Map a), household income (Map b), and car ownership (Map c) in the study area from 2015 U.S. Census American Community Survey data (*Census, 2015*). In comparison with much of New York City, the study area is relatively sparsely populated and unevenly dense. The North and west sides have higher density than the rest of the study area. The study area is the easternmost part of New York City, with a suburban feeling which is why the density is significantly lower than the average density of New York which stands at 27,000 people per square mile (*NYCDOP, n.d.*).

General Demographics Maps

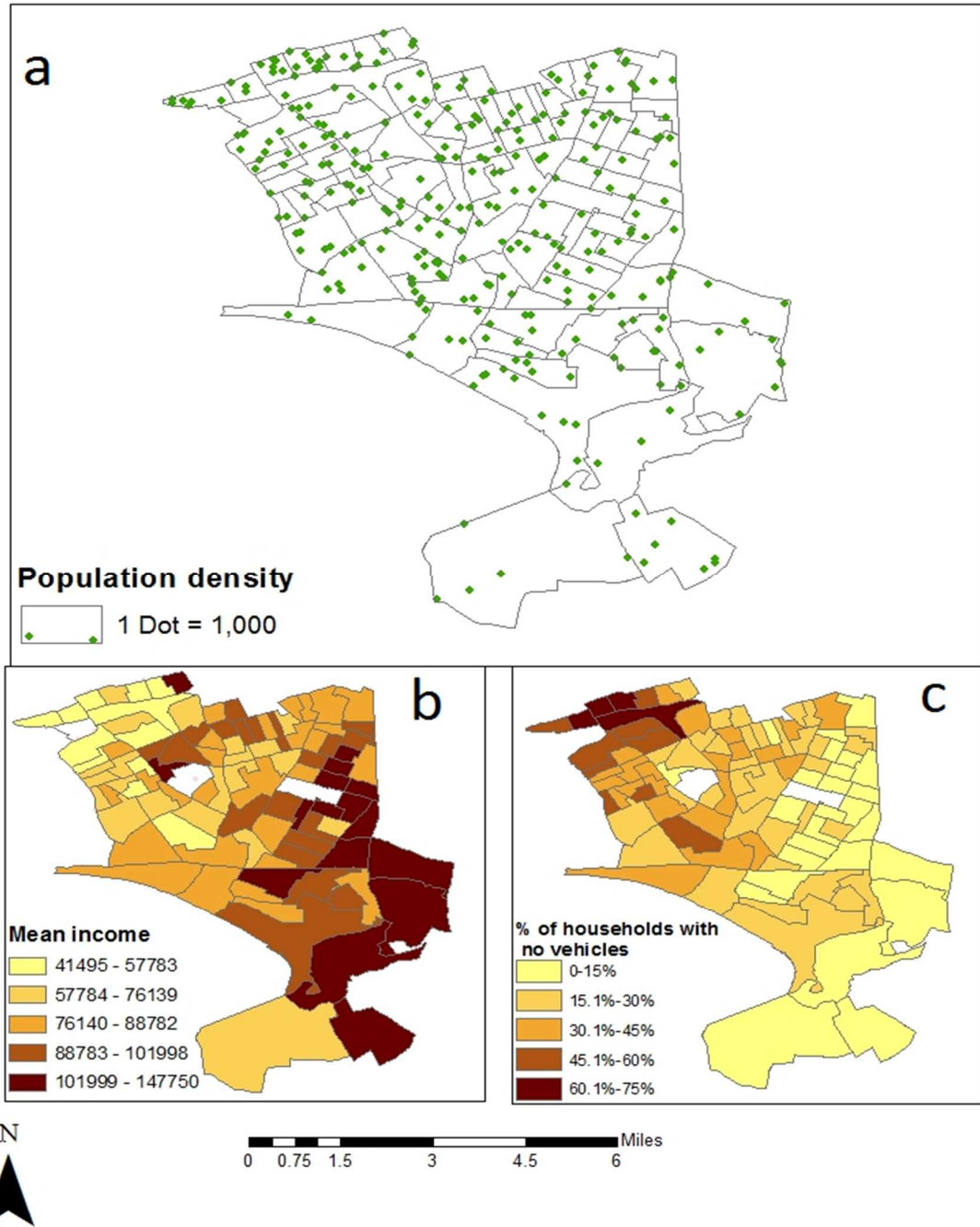


Figure 1. General demographics maps representing Population distribution and density (Map a); Household income (Map b); and Zero-Vehicle Ownership in the study area (map c). Source: (Census, 2015)

Map (b) shows that the mean household income is higher in the sparsely populated east and south side of the study area. The higher density west side has residents with lower income. The median household income in the study area was \$81,729 in 2015 with the highest income group having a household income of over \$100,000 and the lowest \$40,000. The median income is higher than New York's median income which was \$53,373 in 2015 (*Census, 2015*).

Map (c) depicts the spatial distribution of households without vehicles in the study area. These households are completely dependent on shared modes of transportation. In the northwest corner of the study area where density is high and incomes are low, more than half of households are carless. This vehicle ownership pattern directly impacts the spatial pattern of commute mode choices. Where car ownership is low, there is a higher use of public transportation. In census tracts where car ownership is higher, commute trips are made by carpooling or driving alone. Note, however, that by the census definition, a commuter van trip is a "carpool" trip. Overall, 56% of commuters in the study area used public transportation, 23% carpooled, and 31% drove to work in 2015.

King and Goldwyn (2014) showed that dollar vans in New York concentrate in immigrant communities. Based on the survey conducted in this study, approximately half of Eastern Queens commuter van riders were immigrants. Census data show that the whole study area has a significant population of immigrants but the northern and Eastern side of the study area has a higher percentage of immigrants than the southern side. Commuter vans were shown by Goldwyn (2017) and Reiss and Lavey (2014) to be

prevalent in neighborhoods with immigrants from the Caribbean. This is consistent with observations made during data collection which identified a majority of the van riders as immigrants from the Caribbean, Africa and Latin America.

CHAPTER 4

DATA COLLECTION AND ANALYSIS

Data for this study were collected over three months in summer of 2016 using Arizona State University Institutional Review Board approved survey questionnaires, in-person interviews, a three-day tally on each of five routes, and researcher observation. Surveys were administered in randomly-selected commuter vans. Every rider on selected commuter vans had the opportunity to respond to a one-page written survey.

This method was used by Goldwyn (2017) in his study in Brooklyn, NY, which he defended by arguing that it provided the most current information because respondents were giving responses based on their present experience. This approach cannot provide information about commuter van use by a representative sample of neighborhood residents, however.

As with all surveys, nonresponse bias - where those who choose to answer the survey are systematically different from those who choose to decline the survey - is a problem. Because this survey was administered in person, researchers directly observed characteristic differences between respondents and nonrespondents. Specifically, female and younger commuter van riders were more likely to respond to the survey than male and older riders.

The survey questions focused on demographic characteristics and travel behavior of the respondents. The questionnaire had three main sections: The first focused on the travel behavior of the respondents including the modes of transit regularly used, possession

of an MTA MetroCard, and vehicle ownership. The second section focused on the reasons why the respondent preferred to ride commuter vans over other modes of transit, and the third section asked for general demographic characteristics including age, gender, income and immigrant status. 386 commuter van riders completed the survey questionnaire. Data collected in the field was cleaned, coded, and analyzed using Microsoft Excel.

In addition to the surveys, a 3-day ridership tally was conducted on each of the five routes in the study area by riding in one van from start of work to close for three days: Thursday through Saturday. Conducting the tally from Thursday through Saturday allowed for observation of a typical weekday, transition day (Friday), and weekend day ridership. In addition to simple rider counts, characteristics of people who took the vans and the disparities between ridership levels at different times of day were observed.

CHAPTER 5

RESULTS

1. Total Van Ridership Estimate

The ridership tallies on all five routes in the study area were used to estimate commuter van ridership in Eastern Queens. The results represent the ridership of the commuter van excluding the researcher. The capacity of the commuter vans on all the routes except the Far Rockaway route was 13 seated passengers at the time of the study. Summary results are presented in Table 1.

Table 1

Commuter van male and female ridership tally results on individual routes

Van Routes		Thursday	Friday	Saturday	Average
Rosedale	Male	31%	41%	44.90%	39%
	Female	69%	59%	55.10%	61%
	Estimated total	163	178	144	161.7
Far Rockaway	Male	45.60%	41%	42%	42.87%
	Female	54.40%	59%	58%	57.13%
	Estimated total	190	247	212	216
Linden	Male	48%	34%	36.80%	39.60%
	Female	52%	66%	63.20%	60.40%

	Estimated total	232	104	161	165.7
Green Acres Mall	Male	36%	44%	37%	39%
	Female	64%	56%	63%	61%
	Estimated total	139	124	149	137
Cambria Heights	Male	44.30%	44.30%	39%	42.50%
	Female	55.70%	55.70%	61%	57.50%
	Estimated total	116	142	126	128

The mean ridership across all commuter van routes in the study area was 161.3 daily in summer 2016. Interestingly, daily ridership was not appreciably changed from weekday to weekend. There were an estimated 270 registered commuter vans and about 70 illegal (rogue) vans in the study area. The total daily commuter van ridership in the study area was therefore approximately 55,000.

All commuter vans had higher female than male ridership, and this pattern was observed throughout the day. Transit safety has been shown to be a defining factor for women's transport mode choice (Loukaitou-Sideris, 2014); high female ridership could be evidence that commuter vans are perceived as a safe mode of transit in Eastern Queens. In fact, survey respondents in this study selected comfort and safety as some of the positive traits of the Eastern Queens commuter vans.

2. Why Ride the Commuter Vans of Eastern Queens?

The second research question in this study delves into the reasons people choose to take commuter vans. Existing research on informal transport provides a variety of possibilities. Cervero and Golub (2007) describes informal transportation as highly flexible, King and Goldwyn (*King and Goldwyn, 2014*) and Goldwyn (2017) attribute the success of the New York dollar vans to time savings, and low cost is also often cited as an important characteristic of informal transportation.

During the tally exercise, the time spent on every trip was recorded. Separately, time spent on MTA bus trips with the same origin and destination was recorded, and these were compared with the MTA official schedule that provides anticipated trip lengths. The results are presented in the Table 2. On average, commuter van trips on all routes in the study area are at least eleven minutes faster than trips on MTA buses along similar routes. When travelers choose to use a commuter van, then, they are buying time.

Table 2

Trip length comparison between commuter vans and city buses

Buses	City	Observed MTA bus trip length	Official MTA scheduled trip length	Commuter van average trip length	Commuter vans on parallel routes
	Q5	49 minutes	42 minutes	29 minutes	Green Acres Mall
	Q83	27 minutes	31 minutes	22 minutes	Cambria Heights

Q4	31 minutes	32 minutes	23 minutes	Linden
Q111	40 minutes	43 minutes	27 minutes	Rosedale
Q114	55 minutes	68 minutes	42 minutes	Far Rockaway

Survey results confirm that time savings is the most important trait of the Eastern Queens commuter van. Travel time savings accounted for 44% of the reported reasons why respondents chose commuter vans over other modes of transportation. It is important to note that commuter vans provide time savings in both reduced trip length and reduced wait time. The wait time for commuter vans is shorter because the commuter vans are not bound by strict schedules. During field work, several times transit riders were observed seemingly waiting for the city bus at a bus stop - where commuter vans are not allowed to pick up passengers - and hailed a passing van instead.

Another important survey question gathered information on MTA MetroCard possession. To understand the results, it is necessary to understand both the MTA transit and the commuter van fare structures. The MTA fare is \$2.75 for a single trip on either the bus or the subway. This fee, however, guarantees free transfers to either the bus or subway or between buses on the same trip if the commuter has the pay per ride MetroCard. The pay per ride MetroCards also include small fare discounts, and MTA offers half-fare rides for those who qualify for reduced fares and allows free rides for up to three small children accompanied by fare-paying adults. Commuter vans charge \$2 per trip, but include neither

reduced fare options nor free transfers, and there are no commuter van monthly passes available.

For cost sensitive residents who travel locally, the cost advantage of commuter vans (\$2 versus \$2.75) is an attractive trait. Indeed, 22% of the respondents indicated cost as one of the important factors that made them choose commuter vans. It is, however, important to note that some of these respondents were in possession of unlimited ride MetroCards, and therefore did not actually save money by using the vans. Looking at the results in their entirety, the respondents in possession of unlimited ride MTA passes chose to pay extra \$2 per commuter van ride because they have a high value for their time. Respondents with pay per ride MetroCards who transferred to or from MTA transit on the same trip also preferred to pay the extra \$2 for the same reason.

3. Do Vans Compete Against or Complement MTA Transit Service?

The third research question investigates the role that commuter vans play in relation to MTA transit. Literature on informal transportation has showed that these services can either compete against or complement formal transit (*Golub et al., 2009; King, 2015; Goldwyn, 2017*). Both King (2015) and Goldwyn (2017) argue strongly for vans as important complements and occasional substitutes for formal transit. The role of commuter vans as substitutes to MTA transit during harsh weather is apparent. For instance, even with New York City's transportation system largely shut down after hurricane Sandy, privately operated "dollar vans" stayed in operation (*Kaufman et al., 2012*). An MTA bus

driver quoted in (*Olean, 2016*) said that “[The vans] help us out in a lot of ways, when the weather gets bad or when we’re overwhelmed during rush hour, they take [away] some of the burden.”. However, some policy makers and New York residents today still consider commuter vans a competition to MTA transit (*Goldwyn, 2017*, as evidenced by the fact that commuter vans are not allowed to pick up passengers at bus stops. Results from this study show evidence of both roles.

All 386 survey respondents listed at least one other mode option available for them. In particular, 83% of commuter van riders listed the city bus as one of their mode options for the trip they were taking had commuter vans been unavailable. This provides some evidence that the commuter vans compete directly with the New York City buses.

On the other hand, survey results showed that approximately one-third of the respondents had unlimited metrocards. Another third indicated that they had the pay per ride MetroCards, 40% of whom transferred to MTA transit. Taken together, these results mean that over 40% of survey respondents paid for MTA transit for their trips on the day of the survey *and paid \$2 extra* to use the commuter vans. For these people, the vans clearly are complementing the city’s formal transit system.

Simple possession of unlimited ride MetroCards by a significant fraction of commuter van riders is an indicator of the complementary role that commuter vans play. The results of the survey showing that nearly 60% of survey respondents with unlimited MetroCards take commuter vans more than 5 days a week indicates again that respondents take both commuter vans and MTA transit and not necessarily one or the other.

Overall, the survey results indicated that over half of the commuter van riders transfer to other modes of transit. This high level of multimodalism is actually an underestimate; the relevant survey question asked respondents if they planned to transfer to another mode of transportation on their current trip but failed to ask whether they had transferred from another mode to the commuter van. Out of the 53% respondents who transferred to another mode on the same trip, 29% transferred to the subway and 17% to MTA buses. The Eastern Queens commuter vans in this case operate as feeder services to transit routes (*Victor and Ponnuswamy, 2012*) getting passengers from their origin to the Archer/Parson and Far Rockaway subway and bus station, hence playing an important complementary role.

CHAPTER 6

CONCLUSION

This paper has presented an initial picture of the commuter vans of Eastern Queens, New York and their riders, based on field research conducted during the summer of 2016.

The main research questions addressed are:

1. How many people ride the commuter vans in Eastern Queens each day?
2. Who rides the commuter vans?
3. Why do riders prefer vans over the publicly provided MTA buses and subway?
and
4. Do the commuter vans compete against or complement MTA transit in this New York neighborhood?

A three-day ridership tally on each of five routes in the neighborhood indicated that approximately 55,000 people ride these commuter vans each day. Further, a majority of riders were women.

Consistent with prior studies of informal transit systems, results of this study reveal that time savings, cost savings, and convenience are the main features that attract commuter van riders. These characteristics allow commuter vans to compete with MTA transit. The data collected in this research make clear that commuter vans also complement MTA

transit in Eastern Queens by serving as a feeder system. Many travelers take commuter vans and transfer to MTA subways or buses. This finding provides strong evidence that these van riders have a high value of time. Commuter vans in Eastern Queens run parallel to MTA buses, and the MTA fare structure allows for free transfers between all MTA modes on a single journey, so using commuter vans to access MTA transit adds \$2 to the total trip fare.

Put together, these findings illustrate that commuter vans are an important mode of transport for residents of Eastern Queens, and worthy of further investigation. Commuter vans have become part of the public discourse about transportation in the city of New York, and the focus of multiple city council meetings according to Goldwyn (2017), but ridership data and rider surveys such as those reported on here are largely nonexistent.

The commuter vans of New York and similar services elsewhere serve a purpose that is important for transportation planners to understand. The characteristics that make commuter vans attractive are to a large extent out of reach of formal transit. Adjustments to improve formal transit is to many cities a cost they cannot afford. Research is needed to estimate the true cost savings (or lack thereof) of commuter vans and other forms of informal transit. Considering the number of people taking these vans regularly, it is prudent for cities to consider informal transportation as a complement to the formal transportation that they provide. Further research is needed to improve our understanding of these informal systems and develop strategies to integrate them with formal transit.

CHAPTER 7

THE BUSINESS THAT IS COMMUTER VANS

Abstract

The previous section showed that commuter vans serve a population that would be worse off without them. It also defined the two main roles played by commuter vans with respect to MTA transit. This paper looks further into the operations of commuter vans to reveal the various strengths, weaknesses, opportunities and threats of the commuter van industry. The study uses the results of in-person interviews of owners, operators and company owners conducted in Summer, 2016. The results of the SWOT analysis show that commuter vans have distinctive strengths that make them resilient, weaknesses that limit their expansion, external threats that create a not-so-conducive environment for business but also opportunities that could enable expansion of commuter vans ensuring their future existence. Overall, the model shows that the commuter van industry is resilient, performs a necessary service, and, with small adjustments that will help reduce operating costs and loss of profits have a chance of thriving in Eastern Queens and the rest of New York City. The study also discusses the mismatch between policy and practice offering recommendations for improvement to ensure that commuter vans continue to serve residents of New York City.

Key words: Policy, Regulations, SWOT analysis, Taxi and Limousine Commission, New York Department of Transportation

CHAPTER 8

INTRODUCTION AND LITERATURE REVIEW

Informal economies are prevalent in big cities of mostly the developing world. The informal economy in this case refers to businesses that operate under the radar of government regulation but are legal in their operation. As opposed to the larger formal companies that are able to meet a variety of demands expected by consumers due to their capacity (Stigler, 1974), most informal businesses are small scale with limited delivery of services and goods hence are confined to a particular portion of the available informal market. Commuter vans of New York are a perfect example of an industry in the informal economy- informal transportation. Informal transportation has been defined as the travel services arranged among individuals who agree to prices, routes, and schedules on a case-by-case basis (Valenzuela et al., 2005), calling it community-based transit which results from recognizing an unmet travel need and organizing, either as volunteers or entrepreneurs, to fill it. They are according to Cervero and Golub (2007) the paratransit-type services provided without official sanction. King and Goldwyn (2014) recognized that the New York commuter vans serve a niche of mostly low-income immigrants and are therefore restricted to the communities that have these specific characteristics.

Since informal activities are market driven, they only appear and thrive in response to a need that the formal economy is unable or unwilling to fully provide within the economic and social means of the population in that area. Cervero and Golub (2007) reviewed informal transportation systems in the developing countries. They identified a failure to meet demands of the market place due to lack of fiscal and institutional capacity

of the formal systems -where they exist- which necessitate informality. In the poorer developing countries, informal transportation is the only option for the residents. However, as discussed in previous sections of this thesis, residents of Eastern Queens New York have other options to commuter vans. The need identified in New York in this study and by King and Goldwyn (2014) and Goldwyn (2017) is time savings. The previous section showed that commuter vans were at least 11 minutes faster than the buses plying parallel, adjacent or similar routes. Consumers of informal transit services are often in precarious economic situations, traveling long distances from outlying residences to low wage jobs (Golub et al, 2009), hence have a high value for their time.

The informal transport sector is generally made up of small-sized vehicles, owned and operated (or leased) by a single individual (Cervero and Golub, 2007). These vehicles therefore provide a public service albeit unsanctioned to neighborhoods that are underserved but at no extra monetary cost to the government. The commuter vans of New York are like most informal transportation privately owned and operated. About 93% of the drivers interviewed in this study owned the commuter vans that they operated. Being that they are privately owned with no subsidies from the government, this industry is labor intensive, low tech, and structured horizontally among many independent operators (Cervero and Golub, 2007). This limits their chances of taking advantages of economies of scale. Therefore, the many operators are forced to compete against each other to make a profit. Aside from the ‘internal competition’, the commuter vans of New York have been further shown to compete against MTA transit and as such they must keep their trip fare lower than MTA fares. This forces them to survive on low profit margins hence they

dangerously compete for customers. These challenge is further exacerbated by the presence of ‘rogue’ unlicensed vans that provide unfair competition against the licensed vans that must incur the cost of legality.

Being that informal businesses are market driven, they are coined by the stakeholders with little to no rules. These economies that begin as small businesses due to the small number of individuals in action (Stigler, 1974) are meant to either provide income for the business owners and the employees under them while providing a services or goods that are needed to especially the poor (Goldwyn, 2017). The distinct role that informal transportation as an informal economy play is however not clear. Due to the structure of the industry, there is very little information on the actual costs and benefits of the industry. It is because of the poorly understood benefit–cost nature of informal transport that some local authorities, particularly in the poorest parts of the world, simply give up in trying to do anything about the sector, content to let it exist on the margins of society (Cervero and Golub, 2007). In other parts of the world where informal transportation is more prevalent hence difficult to overlook, or where it shadows formal transportation, this industry presents a regulation challenge. In fact, regulation (or the lack of it) is sometimes viewed as the fuel behind informal economies.

The most common reason for informality is the mismatch between practice and regulation. Regulation is an attempt to alter other people’s behavior in accordance with defined standards (Koop & Lodge, 2017) with the intention of coming up with outcomes that are broadly accepted within society (Veggeland, 2017). Policies surrounding informal transportation have been informed to a large extent by perceptions of the informal economy

in cities. There are different perceptions of informal public transportation from scholars, policy makers, mainstream media, formal public systems, and city residents. Some view informal public transport as a competition against the formal public transit (Golub et. al., 2009) while others consider it a complementary system to the formal public system (Goldwyn, 2017). Several authors have classified informality as a developing country phenomena (Cervero, 2001; Cervero and Golub, 2007) and this may make policy makers both in developed countries and in developing countries view it as an eyesore as suggested by Cervero (2001) as opposed to an income-generating, job-providing part of the economy. The mismatch is further enhanced by the fact that Informal operators are often politically weak, poorly represented in the formal city democracy, and are more closely associated with traditional, as opposed to modern, society (Cervero, 2000). Goldwyn (2017) observed that the City and State of New York's current regulatory approach to dollar vans fails to match the practice of dollar vans in parts of Brooklyn and Queens. Regulation is determined by perception of informal transportation as either competition or complements/substitutes to formal transit. The following two paragraphs will present regulation challenges in two cities based on perception of policy makers.

The New York commuter vans began in response to poor services in certain neighborhoods in the city and as a source of employment but the city officials and the public were not very accepting of the industry. The difference between these two industries is that New York had an efficiently working formal transportation system and the dollar vans- as they were labelled then- were viewed as a nuisance and a competition to the formal system. The vans therefore remained illegal for over a decade and were heavily regulated

even after they were legalized until the institute of justice filed and won a lawsuit on behalf of Hector Ricketts and three other drivers (IJ, n.d.). This law suit brought to the limelight the true nature of the commuter vans, the communities they serve and the need they meet. Above all, Hector Ricketts claims that it brought public acceptance and support for the commuter vans. Goldwyn (2017) observed that confidence developed among inhabitants since they got the feeling that their safety and rights will not be violated if there was regulation. The regulations however remain strict and largely unfavorable for the commuter van business but the industry is growing. The biggest challenge in the New York commuter van industry is the ‘rogue’ vans- referring to unauthorized, unlicensed vans. Some of the drivers, as will be presented in this paper, blame the irregular, inconsistent enforcement of the law for the increase in ‘rogue’ vans. Goldwyn (2017) claims that ensuring that all dollar vans are licensed and regular safety checkups are done will enhance operations of roadworthy vehicles only. The claim by drivers for regular regulation enforcement is however half- desired. The operators wish to regulate the industry to control the entry of unauthorized vans but ask that the strict and to some extent impractical regulations be reconsidered.

The regulation of the New York commuter vans leaves a lot to be desired. The strict regulation of commuter vans -because they were viewed as an unnecessary industry- are failing to provide the desired environment for safe, healthy profitable business that meets the transportation needs of the residents. While there is an outcry by commuter van operators and the public for more regulation, there is an obvious need for a change in the approach used to formulate these regulations. In order to have quality service delivery of

the existing vans, maintaining the current licensing protocols is necessary (Esson, et al., 2016) but the approach needs to be one that allows for conversation between the commuter van stakeholders and the governing bodies in order to find the most practical regulations that will be fair to both parties.

This paper will use evidence from field research conducted in Eastern Queens, New York to first explain the strengths, weaknesses, opportunities and threats of the Eastern Queens and by extension the New York commuter vans in an attempt to define the benefit Vs. costs of the commuter vans. It will also present the results of a policy analysis of the regulations governing the New York commuter vans using the ‘perceived view by the policy makers’ lens and further give recommendations for the improvement of commuter van regulations.

This paper is divided into 4 sections. The next section will discuss the study area characteristics, followed by a discussion of the methods used in collection of data as well as analysis, then the presentation of the results of both the SWOT and policy analyses, and finally the policy recommendations and conclusion.

CHAPTER 9

STUDY AREA CHARACTERISTICS

This paper presents results of a study that was conducted in Eastern Queens - one of the neighborhoods served by New York commuter vans. According to Reiss (2014), the Eastern Queens service area has the largest commuter van fleet in New York City. Eastern Queens has six main commuter van routes in both Queens and Nassau County. This study focuses on the five commuter van routes plying in at least 1 census tract in Queens County (fig.1). This eliminates one route referred to by Reiss (2014) as Beach 95 that solely serves the community in Far Rockaway, Nassau county. These commuter vans serve 5 main neighborhoods in Eastern Queens that are equivalent to the route names given for this study: Rosedale, Cambria Heights, Green Acres Mall, Far Rockaway and Linden. The Green Acres mall, Far Rockaway and Linden routes extend into Nassau County. Other additional neighborhoods are served by virtue of commuter vans plying on roads through or adjacent to them: Rochdale, East Rockaway, South Jamaica and Jamaica.

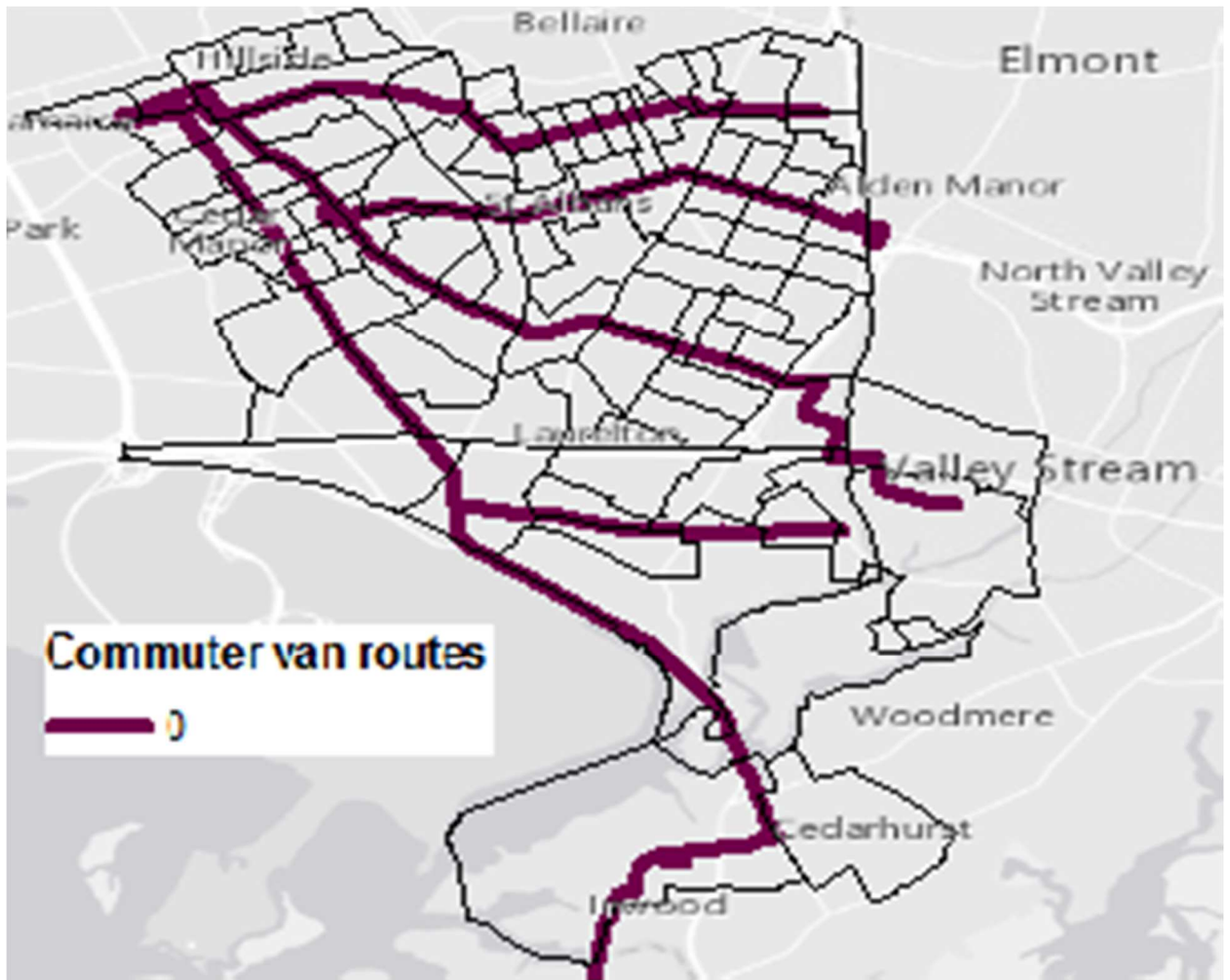


Figure 2: A map of the study area showing the commuter van routes in Eastern Queens

CHAPTER 10

METHODS

Data collection

This research presents results of Strength, Weakness, Opportunity, Threat (SWOT) and policy analyses based on 58 commuter van owners' and/or operators' interviews and 9 company owners' interviews. This primary qualitative data was collected in summer 2016. The interview questionnaire contained nine open ended Institutional Review Board accepted questions for the drivers. The same questions were used to guide the interviews with the base/ company owners. The drivers interviewed were randomly selected at commuter van stops or while I was riding in the commuter vans themselves. The company owners were selected through snowball sampling. The interviews took place while the drivers/ owners/ company owners were working so I got to observe how the industry works as I spoke to them. The interview results were recorded by hand and later digitized for analysis. All drivers were kept anonymous as per the approved IRB requirement hence the results and statements from drivers are generalized to protect the privacy of the interviewed drivers.

Data analysis

The interview results were later logged into a digital forum then grouped into similar categories: characteristics/ facts, challenges, advantages, or recommendations. While doing the SWOT analysis, the interview results were further categorized into

strengths, weaknesses, opportunities and threats that are presented in this paper. The policy analysis focused on the common day-to-day operation of commuter vans. The policies were gathered from the publicly available TLC rules and regulations document and the focus was on chapter 61 which outlines the rules and regulations that govern commuter vans and their owners. These rules were categorized in the perceived view of the policy makers. policymaker's perspective on the relationship between commuter vans and MTA transit will lead to quite different regulatory outcomes. These categories therefore included in view as competing against MTA transit (C), in view of Commuter vans as complements to MTA transit (CM) and not clearly defined view (NC).

CHAPTER 11

RESULTS

The interview results were the main source of data analyzed in this section. A summary of the main points from the results is presented in the table below:

Table 3

Summary of the main points from in-person interview results

Topics	Highlights from interviews	Number of drivers	As a percent of total respondents
Characteristics	Owner/ operator	54	93%
	Operator (driver) only	4	7%
	Average Experience <10	11	19%
	Average Experience 10-20	26	45%
	Average Experience >20	21	36%
Challenges	Illegal vans	58	100%
	High insurance	58	100%
	Lax enforcement	58	100%
	Long working hours	58	100%
	Frequent tickets for not complying with TLC rules e.g. picking hail-a-ride customers	21	36%

	Different rules in Queens and Nassau county	36	62%
	Police harassment	16	27.6%
	Safety challenge: Customer interaction	10	17%
Advantages	Faster than city buses	42	73%
	Cheaper than MTA buses	21	36%
	They are convenient (go to places where buses don't/ neighborhood streets)	21	36%
	Competition from Buses (They must remain cheaper than buses)	11	19%

SWOT Analysis

This section presents results of a SWOT analysis performed for the commuter van industry. In doing this we are considering the commuter van industry as a business entity although it is not owned or managed by one person or company. The assumption made here is that the commuter vans, their owners and operators have the same experiences, advantages, and challenges. The SWOT analysis is done using a summary of the results of owner/operator and to a small extent company owners interview results. As such, it is done from the perspective of the commuter van stakeholders. The results of the 58 interview

respondents are generalized to represent the whole commuter van industry in the study area.



Figure 3. Representation of the Strengths, weaknesses, opportunities and threats of the commuter van industry

Strengths

The commuter van industry is an informal industry owned and run by sole proprietors. Some of the characteristics of informality discussed below are the main advantages that the industry has. They include:

The **first/last mile problem** is one that most transportation planners grapple with when planning for public transportation. Traditional public transportation follows strict routes and schedules that make them relatively inflexible. Some like the subway in New York are inflexible. This leaves most commuters with the pain of figuring out how they will get to their destination. To solve this dilemma, Phoenix metropolitan provides park-and-ride services that allows light rail riders to park their cars for free at provided parking lots, Beijing has a bike share program while Nairobi has informal commercial motor bikes and bicycles called 'bodaboda' that act connections between public bus-stops and origin/destination. Commuter vans due to their flexible nature can conveniently solve this problem in Eastern Queens. The flexibility of commuter vans can be seen through their ability to pick up and drop off anywhere along the streets they ply as well as deviate from their normal routes to pick up and drop off riders as close as possible to their origin/destination. The Eastern Queens commuter vans are conveniently located by the Archer/Parson Subway station. This provides the commuters with a readily available solution to their first/last mile problem while also playing a **complementary role** to the MTA transit.

Commuter vans have several advantages that give them a competitive edge over the MTA transit- their biggest direct competitors. Firstly, the commuter vans because of

their flexible routes and schedules as well as the lower capacity, are able to maneuver through traffic making them significantly faster than city buses. This study showed that commuter vans in Eastern Queens are at least 10 minutes **faster than city buses** plying similar, parallel or adjacent routes to them. Commuter vans were also shown to have an average wait time of 2 minutes which is significantly lower than the wait-time for both city buses and the subway in Eastern Queens. Secondly, the commuter vans are **\$.75 cheaper** than MTA transit per trip. Although this is only true for local commutes (within Eastern Queen) because MetroCards offer free transfers between buses, subways and from buses to subway, the cost savings were shown to be the second most significant factor that made commuter vans an attractive option to the riders.

The history of commuter vans in New York shows that they were birthed as a substitute to MTA transit during a week-long strike of the MTA workers in 1980 (King and Goldwyn 2014, Reiss 2014, Goldwyn 2017). Commuter vans over the years have been painted as a reliable source of transportation in times when MTA is not able to fully function. New York winters are one such time. Drivers in the Eastern Queens van routes pointed out that during winter, the buses due to their size are not able to get to certain neighborhoods and commuter vans rise to the challenge of connecting the residents to the subway stations. After Hurricane Sandy, even with New York City's transportation system largely shut down on 10/29/12, privately operated "dollar vans" stayed in operation (Kaufman et al, 2012). This attribute makes the commuter vans a very resilient source of transportation. Commuter vans were even considered by the city of New York in a 2010 pilot program to replace city buses in neighborhoods where services were reduced or cut

(King and Goldwyn, 2014). While this project was not successful, it presented the possibility of commuter vans as substitutes to MTA transit.

Commuter vans are fully owned and operated by sole proprietors. This means that they provide a public service at **no monetary cost to the city**. While the city must subsidize the subway and city buses and still pay for some of the maintenance cost for these systems, the commuter vans offer similar services albeit small scale, but at no extra cost to the city. This, coupled with the substitution role discussed above gives the city very few incentives to completely ban commuter vans from operation. This characteristic also means that most commuter vans are owner operated -by mostly very **experienced drivers**- hence small scale. Out of the 58 van drivers interviewed in this study, only four were employed operators and 81% of all drivers interviewed had over 10 years of experience as commuter van operators. Being small scale means that the commuter vans **do not pose a significant threat at the moment to the more complex, higher capacity MTA transit**.

While TLC is charged with the oversight responsibility over commuter vans, the industry is organized into a **hierarchical governance model**. Part of this is as a requirement by TLC that all commuter vans be registered under companies licensed to operate by TLC. These companies provide oversight over the commuter vans registered in their company. The governance however extends to the informal sector itself where the company owners and commuter van owners and operators fall under the umbrella of the New York Commuter Van Association (NYCVA). While this does not provide oversight directly to the individual commuter vans, it provides guidance and advocacy for the larger

New York commuter van fleet. This organization and governance gives the industry a voice and some **political power**.

Weaknesses

The informal nature of the commuter van industry is also the source of its weaknesses. The main weaknesses include:

Commuter vans, as discussed above are owned by sole proprietors and receive no subsidies from the city of New York. For this reason, **capital and maintenance costs are internalized by the commuter van owners**. The capital cost can be significant and is the main reason given by drivers as to why most commuter vans are 13-seater vans even though their permitted capacity is 20-seater vans and the use of **simple technology**. Resource scarcity also infringes on the ability of the commuter van owners to service their vehicles frequently because the maintenance costs are very high. The NYCVA has also suffered due to scarcity of resources. One of the members of the NYCVA mentioned that the continued court cases and lobbying of city officials costs a lot of money and because donations are voluntary, the association suffers from limited funds as a direct result of the scarcity in the industry.

Unauthorized unlicensed commuter vans and operators within the commuter van industry was cited as one of the biggest problems. While this is partly contributed to by the cost of legality, it is not fully understood why the number of ‘pirate’ or ‘rogue’ vans is very high. The approximated number of pirate vans in Eastern Queens from an interview with a company owner and the NYCVA president is 70 which is about 21% of the total

number of commuter vans plying the Eastern Queens routes. While the cost of legality is high, the drivers cited the cost that the authorized commuter vans bare due to ‘rogue’ vans to be even higher. One driver said that the fare charged (\$2 per trip) although cheaper than the subsidized MTA transit fares, would be enough if there was no competition from ‘rogue’ vans because they create an unfair competition which reduces their profits significantly. This is another factor that is according to several interviewed drivers fueling the exit from legality to illegality forming a vicious cycle. The vans have significantly lower costs since they do not adhere to the regulations and requirements discussed above that authorized vans have to adhere to. An even broader cost of the ‘rogue’ vans is safety. Since they do not undergo inspection every six months, do not necessarily have the required insurance, and their drivers are not necessarily licensed to drive commercial vehicles, they pose a **safety risk**, a risk posed to more than just the industry.

The commuter vans are clustered in neighborhoods across New York but appear to **serve a specific niche**. The Eastern Queens vans serve a predominantly immigrant population. Serving a niche means that expansion is dependent upon finding the niche in another neighborhood. The NYC pilot project in 2010 introduced commuter vans to a community that did not initially have any. While King and Goldwyn (2014) did not identify niche (or lack of it) as one of the factors that led to its failure, it is not clear if the commuter vans would thrive in other neighborhoods in New York that are not similar to the current neighborhoods served. This also affects the self-governance. The niche served by commuter vans in various neighborhoods are divided by ethnicity. This makes it difficult, according to the NYCVA president to **synchronize the efforts by these various groups**.

The commuter van business is **very labor intensive** and demands **long working hours**. The drivers in Eastern Queens worked an average of 11 hours. This is not sustainable because when an operator cannot work then money is lost. This money may not necessarily be gained by another van. This is also contributed to by the fact that commuter vans **compete against MTA transit** but more directly against city buses. This means that when one van is not operational the riders who would have been served by the said commuter van have the choice of either taking another van or the city bus. There is no guarantee that the riders will end up taking commuter vans in the end.

Opportunities

The opportunities that could potentially enhance the commuter van industry include:

Niche expansion was illustrated for few months during the NYC pilot project in 2010. Although the project did not succeed, it illustrated a potential for expansion as well as the willingness for the city to collaborate with commuter van stakeholders. This could present opportunities for expansion in the future. The city of New York also recognizes the role played by commuter vans during times when the city is in a crisis like after hurricane Sandy. The chance offered by the city for commuter vans to occasionally officially substitute the MTA transit could create an appreciation for commuter vans in neighborhoods that are not currently served. This could potentially offer an opportunity for expansion. As the city continues to appreciate the various roles played by commuter vans, **policies may change** to reflect this appreciation.

The history of commuter vans is marred with policy struggles that resulted in a court case sponsored by the Institute for Justice. The court case was filed against the city of New York by the institute of Justice on behalf of Hector Ricketts (a company owner) and three other drivers (IJ, n.d.) to among other things prohibit the city from vetoing licenses approved by TLC, overturn the arbitrary regulations placed upon commuter van operators by the city. The state trial court handed van entrepreneurs—and the commuters who rely on their service—a victory in June 1999 when it ended the City Council’s power to veto van licenses approved by the New York City Taxi and Limousine Commission and struck down other licensing practices that limited the market. Mr. Ricketts however, during an interview mentioned that the biggest win was **public support**. This court case brought the commuter vans to the limelight after which the public rallied behind them and continue to even today. Being that commuter van industry falls under service industry, public support is important for it to thrive. The court however, did not strike down the arbitrary regulations that limited the operation of commuter vans. The NYCVA has had to work with politicians to revise some of these regulations. They have since garnered support from a few **political leaders**.

Commuter vans are a high risk for insurance companies and initially, no insurance company agreed to cover commuter vans except the mandated government insurance. This meant that insurance rates were pretty much the discretion of the insurance company. This has since changed. Interviews with the drivers gave a list of insurance companies that now cover commuter vans. This puts insurance into the competitive market and this may soon lead to **lower premiums** due to market forces.

Threats

Policies in the city of New York are not all favorable to commuter vans. As mentioned above, the State court upheld the arbitrary regulations that needlessly restrict vans' operations. The appellate court affirmed that decision in March 2001 and in July 2002 the New York Court of Appeals (the state's highest court) refused to take the case (IJ, n.d.). The NYCVA has since had to rally with policy makers to improve some of the regulations and they continue to do that. Some of the policies that are unfavorable to commuter vans that remain even today include: No picking passengers at bus stops, only pre-arranged rides are legal, and no picking up passengers on bus routes. These policies continue to hurt the commuter van industry because they open a door for ticketing by TLC and NYPD, while leaving the commuter van operators with little choice but to break the law. The commuter vans also tend to ply in several counties. three out of five commuter van routes in Eastern Queens go into Nassau County. This requires **double licensing** for both New York city and Nassau county pushing up the cost of operation.

Other policies are favorable to commuter vans including licensing and registration. However, the enforcement of these laws is according to drivers inadequate and rare. All drivers complained that the TLC 'failed' in performing its promised duties and were responsible for the increasing number of pirate vans. **Lax enforcement** as discussed above gives an opportunity to 'rogue vans which reduces revenue for the authorized commuter vans.

High cost of legality. The city of New York through TLC requires that the commuter vans and their drivers be registered with TLC, have commercial permits and

driver's licenses, have commercial vehicle insurance which is extremely costly, and undergo vehicle inspection every six months. All these requirements demand a monetary investment which all the drivers complained was too high. The cost of legality was even cited as the main reason why previously registered vans and drivers are 'going rogue'. The cost reduces the commuter van industry profits significantly.

Negative publicity in the media that mostly occurs after a van has been involved in an accident has commuter vans branded by some as 'death traps'. One driver said that "the media never makes the distinction between a pirate van involved in an accident and commuter vans". Another driver claimed that unauthorized vans get into more accidents than authorized vans and all commuter vans get bad press as a result. This **inability to distinguish between authorized and unauthorized vans** is also observed of the commuter van riders who don't seem to worry that they are in unauthorized vans until, according to one of the drivers, "they get into an accident and realize that the vehicle wasn't properly insured". This limited knowledge harms the commuter van industry because the legal drivers and vans have the proper tools in hand but pay for negative publicity resulting from pirate van operation.

CHAPTER 12

DISCUSSION AND POLICY RECOMMENDATIONS

Commuter Van Regulations

Commuter vans can either be viewed as competing with or complementing MTA transit.

The policymaker's perspective on the relationship between commuter vans and MTA transit will lead to quite different regulatory outcomes. If the policymakers are chiefly concerned about preventing commuter vans from competing with MTA services, we expect that regulation of the vans will limit the services they are allowed to provide to those that aren't being provided by the MTA. If, on the other hand, commuter vans are seen chiefly as complements to MTA services, we expect that regulation of the vans would support the financial stability of the industry while maintaining safety. The table below gives a summary of the regulations that commuter vans and operators are supposed to adhere to as well as observed practices. These are classified regulations in response to either 'competing role', 'complementing role' or not having a clear view.

Table 4

Summary of rules, regulations and practices categorized into the perceived policymaker's perspectives: competing with MTA transit (C), complementing MTA transit (CM) or No clear view (NC). Source: TLC Rules and local laws, chapter 61, King and Goldwyn (2014) and researcher's observation

	Rules/ Practices	Perceived policymaker's perspective
Rules/ regulations (From the rule book)	Record the names and addresses of passengers	NC
	No passenger pick-up at bus stops	C
	No passenger pick-up on bus routes	C
	No hail-a-ride passenger pick-up	C
	Pre- arranged rides only	C
	Capacity 9-20	C
	Oversight mandate to TLC within New York city borders	NC
	Nassau County government rules in Nassau county	NC
	Licensing requirements (Insurance, inspection etc.)	CM

	Structure- Vans have to be registered under a company/base	CM
Practices	Irregular enforcement by TLC	NC
	One designated commuter van stop	C/CM
	2010 Group Ride Vehicle Project	CM

- The no pick-up-at-bus stops rule

This rule makes bus stop passenger pick-up illegal always.

- The no hail-a-ride pick-up

This regulation makes hail-a-ride pick up, which is the bulk of business for the commuter vans, illegal.

- The no pick-up on bus route rule

This rule makes it illegal to operate on a bus route.

- The requirement for pre-arranged rides

The law requires that all rides taken on commuter vans be pre-arranged.

- TLC as the oversight body

The existence of TLC as a commuter van governing body legalizes the commuter van operation, provides licenses and permits to operate and guidance and order to the industry.

- Licensing

The city through TLC provides licenses to both commuter van vehicles and drivers. This validates their presence on the street and a chance to contest tickets given by the NYPD for operation within New York City and Nassau County.

- Structure

The commuter van policy requires the commuter vans to be registered under a company/base. This creates a mini- oversight body because commuter van operators and owners answer to company owners. This helps maintain order on the streets.

- Operation beyond city limits

Commuter van operators and base owners must pay premiums to both TLC and DOT to be allowed to operate in Nassau county. Three of the 5 routes in Eastern Queens operate in Nassau county. Aside from the required tariffs, the rules in New York City and Nassau county are different. Where TLC is not too strict on street pick up, this is not allowed in Nassau county. This inhibits the operation of the commuter vans.

These regulations are accompanied by practices by the TLC, the City of New York, and County governments that seem to limit the operation and expansion of commuter vans

- Designated commuter van stop

The designated commuter van stop outside Archer/Parson subway station offers a loading zone for commuter vans, strategically placed outside their biggest source of demand for transportation. The commuter van stop is however small (can only accommodate 5-6 vans at a time). The commuter van designated parking is about 450 feet from the commuter van stop but on a busy street. For logistical purposes, there is need for at least 2 commuter vans from each route to be present at the bus stop especially during rush hour. These commuter van stop can therefore accommodate vans from only 3 of the 5 routes. The other 2 routes have separate commuter van loading zones that are not designated. These commuter vans compete for space with parked cars on the street and when parking spaces are full they are left with no choice but to load at bus stops, which is illegal.

- Lax enforcement by TLC

From my interviews with the drivers, 100% of the 58 drivers interviewed stated the need for frequent and consistent presence of TLC officials in the streets.

- The 2010 TLC Group Ride Vehicle pilot project

This project as discussed by King and Goldwyn 2014) failed to replace MTA bus services with commuter van services for various reasons. Although this pilot program failed, it highlighted a willingness for the city governing bodies to work towards the expansion of the commuter van service areas as a substitute to MTA transit. This offers a

chance for a creative integration of commuter vans into neighborhoods where they do not exist.

Policy Recommendations

From dissecting the current policies and practices in and around commuter vans, there are opportunities for improvement. These are discussed below and recommendations for how to improve them stated.

The current policy mandates TLC to provide oversight over 9-20 seater vans. Goldwyn (2017) presented evidence of the existence of ‘commuter vans’ with a capacity above 20 seats in Flatbush, Brooklyn. These vans are regulated by the State DOT which has no active presence on the streets of New York, leaving the vans to operate with limited to no oversight. This is a loophole that commuter van operators are taking advantage of in Flatbush and is quickly spreading to Queens. Without TLC watching over them, they will have no reason to abide by the rules and regulations or even the safety requirements of TLC. In Eastern Queens, there are larger buses operating as commuter vans but in most cases, they are fitted with only 20 seats in an effort to remain compliant with TLC rules. I, however, observed buses that had higher capacity. One might imagine that there is not enough demand to fill larger-bus commuter vans, but this is not true. Because commuter vans are to the operators a business, during rush hour when the demand for transportation is higher than supply the commuter van operators allow standees onto their vans when the commuter vans are full. This increases number to above the stipulated capacity for commuter vans. This observation proved that there is enough demand- at least during rush hour -to warrant higher capacity vehicles. My first

recommendation, therefore, is since there is no evidence of positive effect of the cap in the definition of the TLC mandate, the state and in effect TLC should redefine commuter vans and the mandate of TLC over these vans. Widening the regulation net will ensure that commuter van riders, commuter van operators and the public are safe.

My second recommendation relates to the practicality of some of the rules and regulations stipulated for commuter vans. Regulation dictates that commuter vans should not operate along bus routes, forbids hail-a-ride pick-up, and requires pre-arranged rides only. These rules speak to the mismatch between commuter van rules and commuter van operations. Commuter vans depend on hail-a-ride pick-up to make any money out of their business. During my time in the field, I only encountered one commuter van operator who had a pre-arranged pick-up early in the morning but reverted to normal operation after that first trip. It is this tension between laws and practice that makes the vans informal (Goldwyn, 2017). 36% of commuter van operators stated that these rules predispose them to frequent and unnecessary ticketing which further necessitates the need to break the law in order to make enough money to pay the tickets as well as make a living. These regulations seem unnecessary and born out of either the lack of understanding of how commuter vans work or the perception that regulation of commuter vans is meant to prevent them from competing with transit. Since evidence shows that commuter vans have a large complementary role and these rules are not followed anyway, it is time to change the rules. My recommendation therefore is to do away with these rules that hurt the commuter van industry and instead come up with a way to support the industry and enable them to legally provide the public services that they do.

Commuter vans in Eastern Queens face a unique challenge. Three out of the five routes operate beyond the border of Queens County, New York City. While commuter van service is a service that is authorized by the Commission to use Commuter Vans to provide transportation into, out of, or within New York City (TLC rules and local laws, n.d.) TLC's power only extends to the border of the city. This presents a problem because the rules of Nassau county are different from those of New York city. Beyond the city borders, TLC has no jurisdiction. The Nassau County policy necessitates double payment of fees and tariffs that allow commuter vans to operate legally. This creates an unnecessary burden to the commuter van companies, owners and operators. For this problem, I recommend that the governing bodies under which commuter vans operate within and outside the borders of New York city be unified under one umbrella like the State DOT which would dictate the rules of operation of commuter vans in the State of New York. This will ensure uniform rules and regulation across county borders without the state DOT necessarily taking over the oversight responsibility. This will reduce the confusion and also reduce cost to commuter van operators.

Commuter van illegality which refers to the presence and operation of unlicensed 'rogue' vans has been linked to lax enforcement by the TLC. While there is no proof of causality, there seems to be a correlation between enforcement and illegality. 100% of the drivers I interviewed cited illegal vans as one of the biggest challenges for their business. They present unfair competition to the licensed commuter vans, they do not necessarily adhere to the rules and regulations of TLC, they in most cases don't have the liability insurance required by TLC and are according to at least two of the interviewed drivers

more dangerous to ride on. One driver mentioned that, in an effort to compete with legal vans, rogue vans run red lights, drive above the speed limit, and cut off commuter vans and other vehicles. This puts pedestrians as well as commuter van riders at risk. There is also the risk of destroying property. When this is coupled with the lack of adequate insurance, it becomes a threat to public safety. In their defense, TLC officials have repeatedly said that they do not have enough employees to conduct frequent ‘sweeps’ or ensure everyday presence of officers in the streets. My recommendation therefore is for the city and state to allocate required funds to enforce laws and regulations that the city comes up with. This would enable frequent and consistent presence in the streets and hopefully curb the appearance and operation of ‘rogue’ vans.

The policy governing the New York commuter vans has inconsistencies that show the gap of knowledge of commuter van operation among policy makers. Goldwyn (2017) argued that the City and State of New York’s current regulatory approach to dollar vans fails to match the practice of dollar vans in portions of Brooklyn and Queens. In an interview with a TLC official, they admitted to knowing less than they would like about the industry they regulate. These inconsistencies are shown in regulations requiring commuter van operators to provide names and logs for every commuter van rider, to have pre-arranged rides and by forbidding hail-a-ride passenger pick-up. Since being uninformed while regulating an industry is never a virtue (Goldwyn, 2017), the state and city of New York should sponsor research into the commuter vans, their operations, and the population they serve. Research will give insights into the industry, identify weaknesses that need fixing, and forge a partnership to resolve some of the issues within the industry.

Since the city officials and TLC already acknowledge the important role played by commuter vans in Eastern Queens, they should identify ways to harmoniously work towards making the industry safer and better for New York residents.

Summary of the recommendations:

- The state and in effect TLC should redefine commuter vans and the mandate of TLC over these vans to remove the maximum capacity cap.
- The city and TLC should do away with rules that are far from the practice of commuter vans and instead come up with a way to support the industry and enable them to provide the public services that they do.
- The governing bodies under which commuter vans operate within and outside the borders of New York city be unified under one umbrella like the State DOT which would dictate the rules of operation of commuter vans in the State of New York.
- The state and City of New York should empower TLC to do its job by allocating required funds to enforce laws and regulations that the city officials formulate.
- The city should sponsor research into the commuter vans, their operations and the population they serve in order for them to forge ways to harmoniously work towards a safer and better industry for New York residents.

CHAPTER 13

CONCLUSION

Commuter vans serve a need that is not adequately met by the MTA transit. While this paper shows evidence of commuter vans competing and complementing the MTA transit, the most important thing is that the commuter vans exist in Eastern Queens. The commuter vans have been in operation as is for almost 4 decades and there is no indication that the industry will die off. The commuter vans provide a public service that is valuable to the riders - without government subsidies. The government incurs no direct cost from the existence of commuter vans. This paper has shown that although the government seems to recognize the important role played by commuter vans and has responded favorably to some of their requests like having a designated commuter van stop, there are still rules and regulations that are unfavorable and arguably unfair to the industry. This therefore calls for policy improvements and regular enforcement to create a conducive environment for commuter vans to operate.

While this research through the SWOT analysis shows obvious advantages of having commuter vans operate in New York, there is still need for further research into the exact reasons for the existence of 'rogue' vans. One of the company owners sympathized with the 'rogue' vans drivers citing that they were honest people trying to make an honest living but legality is either too expensive or out of reach for them due to low level of education or criminal records. Further studies also need to be conducted to determine the actual cost/ cost saving of commuter vans. A cost/ benefit analysis of the van industry

including its relationship with MTA transit will help determine just how viable a business the commuter vans are and will help with policy decision making.

CHAPTER 14

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APPENDIX A

ASU INSTITUTIONAL REVIEW BOARD APPROVAL



EXEMPTION GRANTED

Deborah Salon

Geographical Sciences and Urban Planning, School of

-Deborah.Salon@asu.edu

On 5/18/2016 the ASU IRB reviewed the following protocol: Type of Review:	Initial Study
Title:	The Role of Informal Public Transportation in a Populous City: Lessons from the City of New York
Investigator:	Deborah Salon
IRB ID:	STUDY00004374
Funding:	Name: Geographical Sciences and Urban Planning, School of
Grant Title:	
Grant ID:	

Documents Reviewed:	<ul style="list-style-type: none"> • Salon_Musili Survey Questionnaire.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Salon_Musili Expert Interview Consent Form, Category: Consent Form; • Salon_Musili Survey Recruitment Script, Category: Recruitment Materials; • Informal Public Transport in New York City, Category: IRB Protocol; • Salon_Musili Driver Interview Questions.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Salon_Musili Expert Interview Questions.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Salon_Musili Driver Interview Consent Form, Category: Consent Form; • Internal travel grant documentation, Category: Sponsor Attachment;
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Dear Deborah Salon:

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 5/18/2016.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc:

Catherine Musil

APPENDIX B

SURVEY INSTRUMENT

My name is Catherine Musili, a Master's student at Arizona State University, from Kenya. I am conducting a study on the role of informal transportation (dollar vans) in New York City. This survey is expected to take 5-10 minutes. All participants in this study must be 18 years or older. Participation in this study is voluntary. You have a right to not answer a question in this study and to quit at any time. There are no foreseeable risks or discomforts associated with your participation. This survey is anonymous and your answers will be used for the sole purpose of understanding the informal transport industry in general. No information will be shared beyond this study.

This study has been reviewed and approved by the Arizona State University Institutional Review Board. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. If you have any concerns or further questions after the study, please contact me at (480) 282-7821 or the Principal investigator, Professor Deborah Salton at dsalton@asu.edu.

Thank you for agreeing to take this survey. Your response is highly valued and appreciated!

1. What is your regular mode of transportation? Check all that apply

Check all that apply.

Personal Vehicle

Bus

Subway

Dollar van

Bicycle

Walking

Other, Please specify

2. Do you have an MTA Metrocard?

Check all that apply.

Yes, I have the 30 day unlimited ride metrocard

Yes I have the 7 day unlimited ride metrocard

Yes, I have the pay-per-ride metrocard

I have the 7-day express bus pass

No, I pay in cash

No, I do not have a metrocard

No, I do not take the Subway or City bus

3. How often do you take dollar vans?

Check all that apply.

- Everyday
- 6 days a week
- 5 days a week
- 4 days a week
- 3 days a week
- 2 days a week
- once a week
- Twice a month
- Once a month
- Less than once a month
- This is my first trip on a dollar van

4. Where are you going now?

Mark only one oval.

Home

School (including College/University)

Work

Shopping

Social/Church/Personal

Other (please specify).....

5. Do you have a car that you could have used to make this trip?

Check all that apply.

Yes

No

6. Will you transfer to another bus or train on this trip to where you are going now?

Check all that apply.

Yes, I will transfer to the city bus

Yes I will transfer to the subway

Yes, I will transfer to another (Please specify)

No

7. If dollar vans were not available, how would you make this trip?

Check all that apply.

Personal vehicle

City bus

Subway

Bicycle

Walk

Not take the trip

8. Why do you take dollar vans (Check all that apply)?

Check all that apply.

Flexible van route

Fast
Comfortable
Cheap
Safe
Convenient
Short wait time
I know the driver
Everyone rides dollar vans
My only option
Other (please specify)

.....

9. Do you think dollar vans are important in your neighborhood?

Check all that apply.

Yes

No

I don't know

10. In your opinion, what makes informal transportation thrive in your neighborhood?

11. What is your gender ?

Check all that apply.

Male

Female

Other:

12. What is your age ?

Check all that apply.

18-30

31-45

46-60

61 or more

13. Which option below best describes your total annual household income?

Check all that apply.

Under \$20000

20000-29999

30000-39999

40000-49999

50000-59999

60000-69999

70000-79999

80000 or greater

14. Informal public transportation has been shown in previous studies to be prevalent in immigrant communities in the US. By answering this question you help test this conclusion.

Are you an immigrant?

Check all that apply.

Yes

No

15. If so, which country did you come from?