Why Do Regulated Jitney Services Often Fail? Evidence from the New York City Group Ride Vehicle Project

March 15, 2013

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Abstract

Many US cities have experimented with jitney services to improve overall transit service. Unfortunately, most of these projects were unsuccessful in that formalized jitney services proved unsustainable. This research takes advantage of a natural policy experiment, the New York City Taxi & Limousine Commission's (TLC) Group Ride Vehicle (GRV) Pilot Project, to evaluate why loosely regulated jitneys often fail. The GRV project was developed as a response to service cuts on dozens of New York Metropolitan Transportation Authority (MTA) bus routes throughout the city. These cuts, coupled with higher transit fares, dramatically limited transit access for many city residents. Shortly after the service reductions went into effect in June 2010, the TLC announced the GRV Pilot Project to bring commuter vans (commuter vans are the licensed jitneys in New York City) to five service areas that lost regular bus service. The TLC expected that the GRV project would mimic the success of existing jitney services and provide improved access. The pilot project targeted service areas in Brooklyn and Queens, and the TLC received commitments from five existing commuter van operators to participate in the project. The project was controversial for multiple reasons, including the City's willingness to privatize formerly public transit service and the imposition of two fares for GRV riders traveling into Manhattan. The first GRV licensed vans began service in September 2010, and despite optimism from operators and the TLC, the program was unofficially discontinued after only a few months.

Though the GRV project failed to attract riders, it highlighted the importance of commuter vans for transit dependent populations that rely on them and suggests many challenges to formalizing informal transit in the United States. Using the TLC GRV project as our starting point, we explore why informal jitneys in the United States succeed, and whether the conditions under which they prosper are compatible with conventional transit operations. Focus groups with operators, unstructured interviews with drivers and riders and participant observation are used to help explain the challenges facing the formalization of jitney services in a mature city. Our qualitative analysis suggests many reasons the GRV project failed: a lack of subsidy to maintain service and build demand, a two-month gap between the bus service cuts and jitney service implementation, poorly branded service, and confusing language used to describe the program. We argue that some of these factors are more perceived than real, but all of them reflect the difficulty in transitioning from niche jitney service to general purpose transit service.

Keywords jitneys, informal transit, New York City, regulatory innovation

1. Introduction

New York City has the largest transit ridership in the United States. The MTA serves about 10 million trips per day on their subway and bus services, and is responsible for about one-third of daily transit trips made in the country. Yet the transit market in New York is rich in many ways beyond conventional fixed route service that deserve study. While New York City yellow taxicabs are a popular and well known symbol of the city, relatively unknown jitneys serve about 120,000 riders daily. On a ridership basis, they serve as many riders as one of the 25 largest U.S. bus systems. These ridership numbers suggest that jitney services play a major role in providing mobility and accessibility to a subset of transit users, though it is not clear if the rides taken by jitney substitute or complement conventional transit service.[1] Scholars tend to fall into three camps when thinking about jitneys services. The first group views them as a market response to unmet demand (Klein et al., 1997). The second group argues that they threaten the "public good" aspects of transit and fail to protect workers adequately (Kirby and Miller, 1975). The third group believes that jitneys and other for-hire services are low cost opportunities to improve transit services (Kirby and Miller, 1975; Baker et al., 2010; Kirby, 1981; Rosenbloom, 1970; Weiner, 1975; Wohl, 1975).

Scholars in the third group suggest that for-hire vehicle services should be subsidized to maximize social welfare gains. Transportation economist Herbert Mohring (1983) argued that minibuses (equivalent to jitneys) represent a desirable service that falls between fixed-route full city buses and point-to-point taxi service. Mohring estimated that while jitneys were unable to support driver wages at the level of unionized transit employees, jitney drivers were able to earn wages similar to taxi drivers.[2] Economist Richard Arnott (1996) made similar claims specifically about taxis, where social welfare was maximized when the state subsidized taxi services at the shadow cost of idling (or cruising). The arguments for subsidy of jitneys and for-hire vehicle services suggest that there is a role for state support of for-hire services rather than turning to a libertarian ideal of unrestrained deregulated markets.

Toward this end, many transit and city agencies have experimented with jitney services as a way to improve fixed-route transit, serve areas with poor coverage and provide cost effective travel for mobility impaired travelers (Cervero, 1998; Cooper et al., 2010) . Robert Cervero argues that jitneys can complement conventional transit and should be encouraged in the United States, though in practice such efforts have failed. Los Angeles, San Diego, San Francisco and Miami all attempted to create new jitney services in the past few decades but scaled back or eliminated the programs after a few years (Center for Urban Transportation Research, 1993; Teal and Nemer, 1986). The Northern New Jersey Transportation Authority is currently studying jitneys as a potential addition to their transit services and has identified numerous concerns with safety, competition and public awareness (AECOM, 2011). The City of New York developed a shared ride taxi program in 2005 to compensate for a transit strike (WNYC, 2005), which was abandoned after the strike was settled. One seemingly successful program, at least on financial

self-sufficiency terms, is the Tennessee van program, though this seems to be the exception to the rule (Newsome and Meyers, 2011). It is of note that the Chattanooga, Tennessee jitney system of about 85 vans served over 20 million rides annually in the late 1970s (Cervero, 1985).

The regular failure to formalize informal jitney services in the United States remains a puzzle. There is obvious interest from planners and officials to recognize the benefits of jitneys, but the high failure rate of planning for them suggests that they are poorly understood, inhibited by institutional obstacles, or burdened by economic pressures. We explore these challenges by analyzing a policy experiment in New York City. In 2010 the TLC sanctioned GRV services in areas where the MTA recently cut bus services. The GRV program was greeted with enthusiasm from existing jitney operators, but was abandoned after a few months due to meager usage. The failure of this program, while unexpected, allowed us to study why it failed from the perspective of the operators and regulators.

This paper is organized as follows. Section 2 explains the theoretical allure of jitney and commuter van services throughout history. Section 3 describes the growth of commuter vans in the New York region. Section 4 reviews different municipal approaches to implementing jitney programs in the United States. Section 5 summarizes critiques of jitney operations. Section 6 provides an overview of the TLC's GRV project and jitney operations in the New York region. Section 7 details the research approach used to evaluate the project and presents data and analysis. Policy implications and directions for research are then discussed prior to concluding the paper.

2. Jitneys and Commuter Vans

Jitney services emerged in the United States during the 1910s and challenged streetcars for transit riders. Cities enacted local laws and regulations, namely onerous insurance requirements, to discourage jitney operations and protect streetcar companies' transit monopoly (Gavis, 1990). Eckert and Hilton (1972) estimate that between 1915 and 1918 the number of jitneys declined from 62,000 to 5,879. With local governments willing to insulate streetcars from competition and eventually takeover failing transit operations in the sixties, there has been little incentive for transit providers to innovate and counteract operating inefficiencies and low productivity. Despite a hundred years of regulations and heavy subsidies for transit, jitneys have continually resurfaced within niche transit markets that are poorly served by conventional systems.

Jitney services, generally, flourish in areas or amongst groups that are excluded from planning or outright ignored by transit agencies and private operators, such as licensed taxis (Suzuki, 1985). In addition to these communities being neglected by traditional transit services, lower auto-ownership rates render residents in these communities transit-dependent (Chatman

and Klein, 2009). Local entrepreneurs who understand the need for transit established informal services, such as carpools and *camionetas*, that provide valuable connections (Blumenberg and Smart, 2010; Valenzuela Jr. et al., 2005; Kemper et al., 2007). Since jitneys target niche markets, ridership pales in comparison to a transit network's total capacity. Cervero and Golub (2007) report that of the 8 million daily bus trips within Rio de Janiero in 2003, vans (or jitneys) served 150,000 passengers in select corridors, or 2% of total ridership. They go on to explain that Rio's jitneys targeted high transit ridership areas that lacked access to reliable service. Within these carefully selected corridors vans might carry half of all trips, and in some neighborhoods bus services might be abandoned because of competition from vans.

Table 1: Selected Legal Jitney Programs in U.S. Cities

City	Years	Daily Passengers During Peak
New York	1983, officially recognized by the State; 1993, City begins to regulate; 2010, TLC launches GRV	120,000 (Licensed + Unlicensed)
Los Angeles	1982-1983, unsubidized jitney service approved by the California Public Utilities Commission; 1997-2001, subsidized jitney service approved by the Metropolitan Transportation Authority	6,500
San Diego	1979-1983 100 operators; late 80s, San Diego stops issuing new permits; Today, 10 licensed operators who provide fixed-route service	2,500
San Francisco	1972, final year of new permits after; 1978, voter referndum makes it illegal to transfer existing permits; 1990s, only one jitney operator left; 2007, 0 legal jitneys	7,500
Miami	Pre-1981, 28 licensed jitneys; 1985 3 new licenses granted then rescinded; 1986, 6 licenses granted and then rescinded; 1992, study found that 400 jitneys licensed + unlicensed opertaing; 1993, jitneys were regulated to provide fixed-route service	45,000 (Licensed + Unlicensed)

Policymakers in cities with existing jitney networks have tried to formalize them to improve service or reduce costs (Rosenbloom, 1970; Center for Urban Research, 1993; Teal and Nemer, 1986). Table 1 describes some of the characteristics of these systems. Miami and New York City realized high levels of ridership while the other systems struggled to attract and maintain riders. Most attempts to formalize these services involved a permitting process that asked operators to identify routes or service areas that are currently underserved by municipal

transit operations, but provided little additional support—the TLC designed the GRV program in this fashion.[3]

3. The New York Context

The history of New York's commuter vans is shrouded in uncertainty, half-measures, and mystery. Most accounts of commuter vans cite the 11-day Amalgamated Transit Union (ATU) and Transport Workers Union (TWU) strike in April 1980 as the event that gave rise to the industry. With normal transit services suspended, savvy entrepreneurs filled the service gap with commuter vans that replicated the MTA's service. Buoyed by profits and commuters' displeasure with the MTA, commuter van operators continued to provide their service after the strike was resolved. Columbia University professors Elliott Sclar, Sigurd Grava, and Charles Downs (1987) examined New York City jitneys and concluded that the rise of vans were correlated with the decline of MTA transit service:

> [T]he establishment and growth of the van operations have been triggered by deficiencies in the regular transit service and riders' concerns about personal safety and demand for better accessibility. The transit strike of 1980 gave a significant boost to the private operations, which did not fade much after the strike was settled.

A 1984 *New York Times* article helps explain why the vans remained so popular after MTA service resumed: the vans offered better service. The article quotes a rider saying she grew "'tired of the [MTA] buses—tired of standing in them, tired of standing at the corner waiting for them in the rain or the snow or whatever…I couldn't be happier with my arrangement. They pick me up in front of my house. It's great, really."

While the strike propelled commuter vans into the public consciousness, they remained entirely illegal until 1983. In 1983, the State Legislature passed legislation to allow the City of New York to issue local ordinances and police commuter vans. Despite the legislation, the City refused to take on oversight responsibilities until 1993. Despite regulatory confusion commuter vans, which are colloquially known as "dollar vans," established profitable routes alongside existing MTA bus service (Grava et al., 1987). A 1992 study claimed that 7,500 passengers chose commuter vans over MTA buses along Flatbush Avenue in Brooklyn (Mitchell, 1992).

At the time of the 1980 transit strike it was difficult to recognize its influence on commuter vans; however, journalists, academics and operators now acknowledge that it played a key role in catalyzing the growth of the industry. While commuter vans flew under the radar for the first few years of their existence, by 1983 City and State officials believed that regulations had to be enacted to restrict the growth of commuter vans and protect the MTA's ridership. While the City was hesitant to act, the City Council did eventually pass legislation in 1993 that placed commuter vans under the auspices of the TLC.

Today, commuter van service in New York fosters high ridership among immigrant and minority communities in Brooklyn and Queens, with substantially less van activity in the other boroughs. About 300 vans licensed by the TLC and about 500 vans operate illegally. The 800 vans carry about 120,000 rides per day, which is comparable to the daily bus ridership in Austin or Dallas, Texas. Among the 800 vans, there are distinct subgroups of operators that focus on specific market segments, such as direct routes between Chinatowns, and specific populations, such as the West Indian communities in Brooklyn. These subgroups of vans offer services that either the MTA doesn't supply, such as direct transit between Chinatown in Manhattan and Flushing, Queens, or the vans replicate MTA services, as is the case along Flatbush Avenue.

The Chinatown jitney services seemingly offer mobility to a specific population that lives and works in areas outside of the central business districts and does not have robust transit connections. The Brooklyn van operations present a more interesting puzzle because they shadow popular bus routes. Like other jitney services that imitate state provisioned transit services, officials worry that these vans poach riders, and in turn, need to be tightly regulated (Giuliano et al., 2002). Bus ridership along Flatbush Avenue, however, remains among the busiest in the city. This suggests that the vans are not stealing riders through greater frequency as the average midday wait for a bus is about two minutes.

4. The State's Commitment

Miami, Los Angeles, and New York have all tried to formalize jitney operations, but never committed fully to their long-term viability. In the early 1980s, Dade County—in 1997 the county adopted the name Miami-Dade County—commissioned the *Jitney Policy Report* to propose ways to regulate its growing number of jitneys (Metro-Dade County Transportation Administration, 1983). This study coincided with the Metro-Dade Transit Agency's bus restructuring plan that consolidated operations and eliminated low ridership lines. The agency invited jitney operators to apply for licenses on seven routes slated for elimination. Six operators were granted licenses and started service; however, the public complained that the vans were not ADA compliant and that passengers using the jitneys to connect with other buses in the Metro-Dade network were forced to pay two fares. Responding to public outcry, the County restored some bus service, which in turn forced jitneys to compete with subsidized transit on sparsely populated routes. While this first attempt at jitney integration failed, Miami has proven persistent in trying to formalize its robust jitney market (Richmond, 2001; Urban Mobility Corporation, 1992).

The story of Miami's jitneys is not unique. Both Los Angeles and New York adopted programs to promote jitneys while simultaneously undercutting their viability. In the case of Los Angeles, governmental agencies, specifically the California Public Utilities Commission (PUC) and the Southern California Rapid Transit District (SCRTD), Los Angeles' public transit operator, failed to coordinate efforts and promote jitneys in tandem. In 1982, the PUC issued permits for Express Transit Direct (ETD), a private jitney operator, to provide service on select

corridors in Los Angeles. Before ETD rolled out its operations, the California Supreme Court approved $.50 sales tax dedicated to transit funding. This new revenue stream allowed SCRTD to reduce fares and increase frequencies on its buses. In response to the lower fares, ETD also cut its fares to attract riders, which proved to be economically unsustainable. After less than a year in operation, ETD withdrew its services (Teal and Nemer, 1986).

Municipalities unwittingly undercut jitney programs in numerous ways. As discussed above, vans cannot be expected to compete with subsidized public transit. In the GRV case, local government failed to coordinate adequately amongst all stakeholders. While the TLC had high hopes for GRV, its inability to work with the TWU and MTA made it difficult to implement the program they designed. While the MTA did nothing explicitly to hinder the program, its unwillingness to coordinate the cancellation of bus service with the launch of GRV made it difficult for the program to create a critical mass of riders to sustain it.

The TWU, on the other hand, viewed the GRV program as a direct threat to its members. It actively tried to sabotage the program in order to protect fired bus drivers and stop the encroachment of private operators on formerly public routes. The TWU both sued the TLC to stop the program, but also submitted a phantom GRV proposal to the TLC, but failed to follow up with Commission after it was selected as a potential operator (Blau, 2010). Once the program started, TWU members showed up at GRV stops with inflatable rats to protest GRV's non-union drivers.

5. Critiques of Jitney Operations in the United States

In a 2010 op-ed in the *New York Times*, professors Elliott Sclar and Robert Paaswell (2010) argued that the GRV program was bad social policy for three reasons. First, the program posed an economic burden on New Yorkers living in low-income neighborhoods. Since the GRVs required cash payment, riders paid two fares to travel from Brooklyn to Manhattan. Second, they decried the privatization of transit service on formerly public routes. Specifically, they worried that lower wage van drivers were displacing well-compensated and well-trained bus drivers. Third, the fragmented management of transit service might undermine New York's environmental and sustainability goals by allowing inefficient operations to become entrenched.

These three critiques of New York's GRV program raise serious concerns for regulators. However, the social policy implications of GRV and other jitney programs are ambiguous. Taking the three critiques in turn, the issue of double fares raises questions of equity. A ride in a commuter van costs each passenger $2. The fare for the MTA is around $2, though the actual cost depends on what types of discounts the rider received. Along popular van routes where buses also operate we observed riders choosing between MTA buses and commuter vans, and some chose the bus and some chose vans. While van riders who connected with another bus or

subway did lose their free transfer, they also gained time. Our observations suggest that many van riders are willing to pay an extra $2 for the travel time savings offered, which can be about 20-30 minutes for the length of the jitney route. For low income workers the extra fare may be worthwhile if it allows for a second job, ease of reaching child care or simply more leisure.

The enduring popularity of jitneys suggests that people value them despite concerns about two-fares, competition and labor exploitation. Without minimizing these concerns, we briefly examine them: It is not certain that jitneys meaningfully reduce overall transit patronage, and it is plausible that jitneys, taxis and other for-hire modes act as complements to conventional transit systems. Specific to driver wages, van drivers are often immigrants, and can earn similar wages to taxi drivers. While these jobs are not as solidly middle class as that of a unionized bus driver, they can be upwardly mobile (all van operators and license holders in New York started out as drivers). The larger concern for the quality of these jobs is whether van drivers are conscripted to a life of poverty or does driving a van offer an opportunity for new immigrants to build a foundation in the city. Driving a jitney may not be a long term career, but it may be a reasonable opportunity for a few years.

The complementary aspects of for-hire vehicle services might actually help the city achieve environmental and sustainability goals. Jitneys expand the reach and type of transit available. If jitneys make transit more accessible by providing speedier services and higher frequencies than would otherwise be provided, then jitneys may actually help reduce auto ownership and usage, which is consistent with the City's goals. Overall these critiques of formalizing jitney services are important, but deserve attention on a case-by-case basis. Certainly the benefits of a formalized jitney program depend on regulations, enforcement and safety. The existence and popularity of jitney services suggest that formalizing the services to address the concerns presented here is worth exploring.

6. Evaluating the Group Ride Vehicle Pilot Project: the Operator Perspective

6.1. Group Ride Vehicle Pilot Project Overview

On July 15th, 2010 the New York TLC announced the GRV pilot project. The project selected five service areas in Brooklyn and Queens where the MTA had eliminated bus service in June 2010. Table 2 shows the average weekday ridership for the lines prior to elimination. The average ridership was low by New York City standards, but sufficient to attract interest from van operators that service could be profitable. Even if the vans realized about a quarter of the bus ridership the program would have been financially successful and comparable with the heavily used van services along Flatbush Avenue.

Table 2: Average Ridership for Prior Bus Service in GRV Service Areas

Bus Route	Average Weekday Ridership 2008	Annual Ridership 2008
B23	1,565	473,852
B39	1,369	459,278
B71	1,059	338,520
Q74	1,983	504,612
Q79	625	167,935

Source: NYCT Bus Ridership Method 1 1997-2009

TLC Commissioner David Yassky championed the program because he believed it would "serve people in new and better ways that never before existed" (Taxi & Limousine Commission, 2010). The program solicited applications for special permits that allowed commuter vans to operate legally along five former bus routes. The program was optimistically welcomed by many existing van operators, though opposed by the TWU.

FIGURE 1: Group Ride Vehicle Service Area Poster

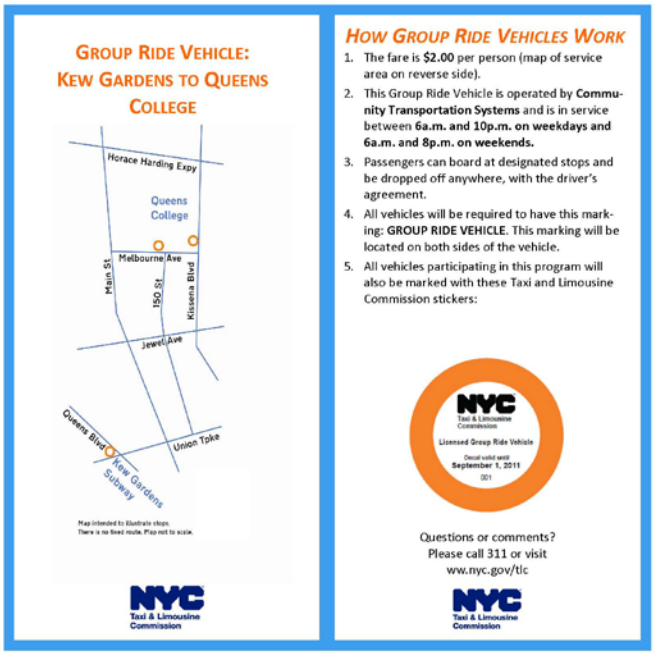

FIGURE 2: Group Ride Vehicle Pick Up Area Signage

The TLC's communication strategy for the new GRV consisted of posting new signage that detailed the new service areas and publicizing the program on their website. Figure 1 shows a service area map in Queens, and Figure 2 shows an example of the signage used at stops. The service area maps present a lot of information to help describe this fledgling service. GRV drivers were only allowed to pick-up riders at the stops designated on the map and drop off passengers at negotiated stops within the service area. The legal definition of GRV services differ from other van services in the city, which picked up and dropped off anywhere along the line. Somewhat controversially, the GRV routes were required to be called service areas. The MTA objected to van services operating fixed-routes as conventional buses do. The language used for the GRV project was carefully selected to be politically palatable, but unfortunately was confusing for drivers and riders.

Five van operators were selected to participate in the GRV program. All operators already provided regular, licensed service and welcomed the chance to increase their market penetration. In New York, the typical jitney is a passenger van that holds up to 14 people, though occasionally the vans are larger (similar to airport shuttles) and holds up to 20 passengers. On September 13th 2010, the first GRV service debuted serving New Yorkers traveling between Union Turnpike subway station and Queens College (the area shown in Figure 1), in the service area previously served by the Q74 bus. The TLC planned to assess the GRV program after one-year, but by the end of December 2010 four of the five operators had returned their permits and abandoned their GRV service areas, and, based on observations by the authors, the fifth operator also discontinued service, but retained his GRV permits.

6.2. Explaining Failure of the GRV Program from the Operator Perspective

All of the GRV operators were already prosperous commuter van entrepreneurs. They believed that their successful track record would carry over to the new GRV service areas and were optimistic about the success of the program. Unfortunately, much like other State-led jitney programs, the TLC's attempt to formalize a mostly informal type of transit failed and services were discontinued weeks after they began.

The authors used multiple qualitative methods to understand why the GRV program failed from the operators' perspective. The primary data come from a focus group with the drivers and operators participating in the GRV project that was conducted in December 2010. The focus groups were conducted in the TLC offices in lower Manhattan. The structured discussion was recorded, though the participants declined to allow direct quotes in this publication.[4] In addition to these insights, unstructured interviews were conducted with TLC officials, van operators and van drivers. Some of the interviews with drivers and operators were conducted by phone when they were off duty, but most of the unstructured interviews were carried out while conducting participant observation of the riders and service characteristics of popular jitney operations along Flatbush Avenue in Brooklyn. The authors also rode along in vans during regular service as part of ongoing research.

Through these focus groups, interviews and observations, we identified four main causes of failure. First, operators wanted a subsidy to maintain service in order to build demand; second, the two-month gap between the cessation of bus service and start of GRV service; third, GRV's poorly branded service, and the confusing language used to describe the program; fourth, it is unclear if jitneys can serve a broad transit market or only thrive in niche markets. Many potential riders are simply unaware that van services exist. The ethnic and immigrant homogeneity of particular van services imply that cultural factors may influence ridership. Yet even after the failure of the GRV program, the operators believed that jitneys could be successful in new markets.

6.3. The Operator Argument for Subsidy

The GRV program operators expected the new service to attract substantially higher ridership. Two experienced van owners planned to provide over ten vans each to serve the areas they were awarded from the TLC. Yet neither of these operators ran more than two vans at a time in the service areas, and all operators reduced service to one van per hour or less within weeks of the program's launch. During a period of observation, the authors recorded vans waiting at their designated GRV stop for an average of just under 20 minutes in order to collect one or two passengers. For only a handful of passengers the operators indicated that there was no way for them to continue service, and in two of the five service areas the van owners drove the routes themselves because of a lack of business.

The owners served the routes because the bulk of jitney drivers are contract labor. Drivers typically rent vans from the owners for about $600 per week and ply areas with established ridership. A van driver working six days per week serving about 150 passengers daily, which is the threshold the focus group participants identified as worthwhile, can make between $150-175 per day after deducting expenses, or about $45,000 annually, though without health insurance, retirement or other benefits. However, because driver income depends directly on how many passengers they carry there is no incentive to prospect for new riders in areas without proven demand.

The operators suggested that the program would have had a greater chance at success had the TLC subsidized it to help build demand through improved service frequency. While these arguments are consistent with the work of Mohring and Arnott cited earlier, it is doubtful that the operators were thinking about maximizing social welfare. Subsidizing GRV services also requires increased regulation and enforcement, and because drivers are independent contractors it is not at all clear that the drivers would actually receive the subsidy directly. During the course of the GRV program, a few operators reported operations that could not be verified. Safeguards that protect the public from subsidies that simply line the pockets of operators are critical, though the resources required for enforcement of jitney service—even existing licensed service—are great.

6.4. The Effects of the Two Month Service Gap

The MTA service cuts took effect on June 30, 2010, and GRV service started in September. All operators pointed to this gap in service as a major impediment to attracting riders since the expectation was that former bus riders already found new ways of getting around. This explanation sounds compelling, but the paucity of any ridership—generally a couple dozen people daily—suggests that something else occurred. If all of the former bus riders who suffered service cuts found other ways of getting around then perhaps the service cuts were justified as social welfare and mobility was not unreasonably harmed.

Certainly the service gap didn't help the GRV project, but the overall failure of the program to attract any riders points to larger causes for failure. If former bus riders were dissatisfied with transit availability, then vans, even at the additional fare, should have been an improvement and attracted riders. Yet there wasn't any evidence for this presented by the operators. One operator mentioned that he knew of one former bus rider who retired due to the service cuts, but we couldn't verify this. What the operators described, however, was that they were soliciting riders who they saw walking along in the service areas. The vans are social enough that drivers pull to the curb and solicit riders, and in some cases distribute their cell phone numbers so that passengers can call to find out the vans schedule. Ultimately, the gap between bus service cuts and the introduction of jitney service helps explain low ridership at first, but is unsatisfactory for explaining why jitney ridership never increased in these service areas.

6.5. Poorly Branded Service

These last two causes of failure are the related concepts of poorly branded service and confusing language. Figure 3 illustrates both of these problems. The vans are generally clean and well maintained, though are heavily used. The van in the photo is a licensed van for use as a commuter van through conventional licensing from the TLC. The van is typical of the branding and quality of vehicles used as jitneys, though a few vehicles (not those used in the GRV project) feature advertising of legal services or hair salons.

The main concern with branding GRV services was the color of the vans. New York's yellow taxicabs are iconic representatives of the city, and the proposed outer borough taxi medallion program will feature apple green vehicles if it is ever implemented. The GRV program had none of these branding advantages. In part this was because the TLC acted quickly to design and implement the program. Many New Yorkers who suffered through bus service cuts were unfamiliar with jitneys prior to GRV service, and though the service area maps briefly explained how the program worked there is little information about the vans' appearance that suggests to conventional transit users to enter a van driven by a stranger.

FIGURE 3: Branding on Group Ride Vehicle

6.6. Confusing Language

The language used to describe the GRV program contributed to the real and perceived problems with branding. In this paper we are using "jitneys" as interchangeable with "commuter vans" and "group ride vehicles." This may be reasonable for an academic paper, but not reasonable for a developing service. Legally operating vans in the city are formally known as commuter vans, and depending on the ethnic groups being served, colloquially as "dollar vans" or "Chinatown vans." The operators and drivers also refer to the service areas as routes, which is also how the riders think of the services. However, due to legal challenges from the TWU and concern from the MTA, the language used in the program was crafted so that the vans were called "group ride vehicles" and the routes were officially known as "service areas." Not surprisingly, using legally expedient terms that potential riders were unfamiliar with without expending the resources to educate riders was harmful to developing ridership.

Throughout the GRV program, local government pursued formal jitney programs with a burst of enthusiasm but little interest in ongoing support. The TLC attempted voluntary cooperation with transit services, and van operators were happy to help. However, the TLC did not have the resources to subsidize or promote jitney ridership in new corridors, nor did the van operators. We can contrast the TLC GRV program with new Select Bus Service along the east side of Manhattan to illustrate the importance of branding, markets and language. When the MTA debuted Select Bus Service in Manhattan in 2010, for example, it paid MTA enforcement agents to ride the new buses explaining how the system worked (Sullivan, 2010). Agents were stationed at stops to explain off-bus payment and other novel features, including the special blue paint scheme on the vehicles. The MTA, in conjunction with the New York City Department of Transportation, promoted its new service aggressively rather than hoping New Yorkers intuitively understood how to use it on their own. The TLC, a small regulatory body with a tiny operating budget, was unable to spend extra money to publicize GRV. As Alan Black (1995) explains to transportation planners, "public transportation is a service that needs to be sold to the public." In the case of the New York City GRV program this was all too true.

7. Conclusions

Considering the longstanding success GRV participants have with their existing commuter van services, the GRV program was expected to fill gaps in transit service. Though the program was designed by the TLC without consultation with operators, nearly everyone expected vans to offer popular services to areas newly lacking bus service. The TLC planned to roll out phase two of the program a few months after the initial launch. Unfortunately, much like other programs elsewhere, the TLC's attempt to formalize a mostly informal type of transit failed. We identified four problematic areas that hindered the success of the project, and the analysis suggests areas of future research to better understand how jitneys fit into urban transit.

The most controversial finding is that jitney services need subsidy in order to expand services. To a large degree, subsidizing jitneys undermines many of the perceived benefits of the

services. In New York and other cities where jitneys maintain some market share, jitneys are privately operated. It is arguable that opposition to jitneys from entrenched interests such as transit agencies and labor unions will expand if jitneys start to receive subsidy to maintain frequency, even if this may be economically efficient and welfare maximizing (as Mohring argued). Moreover, subsidizing service to build demand challenges the conventional jitney model, which is to provide service where demand already exists. The New York dollar vans prosper because they provide a different type of service than the MTA.[5] Whether transit agencies are unable or unwilling to provide jitney-type services is an open question that deserves further study.

The clearest areas where jitney services can be improved are through branding and the language used to describe how the services work. The GRV program was intended to draw a new group of riders to commuter vans, yet the vans remain largely invisible to those not looking for them. Naming the vehicles "Group Ride Vehicles" was confusing as few people intuitively understand what a group ride vehicle is, compared with jitneys (which may have its own connotations) or commuter vans. Promoting the GRV services at limited stops also diminish the utility of the services. Part of the value of commuter vans or jitneys is the flexibility of pick-ups. Having few stops available within a "service area" reduces the legal options for the operators and drivers, almost certainly forcing the drivers to act illegally by picking up passengers in unauthorized areas. Additionally, for new passengers, the concept of a transit service area rather than a route is perplexing. From a legal and political perspective it is clear that using language to clearly delineate the differences between jitneys and buses is important, but from an operator's or passenger's perspective it is confusing. Rather than play to the strengths of existing vans operations, the GRV project attempted to create a new hybrid service which few people immediately understood.

This research identified challenges for formalizing largely informal jitney services in New York. The work presented here also raised additional questions that deserve future research. A major question is to what degree transit planning can and should deal with niche markets. Jitneys in New York serve small, relatively homogenous populations. In some cases, it is clear that New York jitneys are preferred over conventional bus transit because of travel time savings, but these savings were not apparent on GRV service areas. Coordination of jitneys or some other type of feeder bus, even with an additional fare, may prove beneficial for traditionally low-income or immigrant communities by increasing accessibility to employment. While this research examined the operators' perspective, future research will need to address the riders' perspective for why jitneys and vans are seen as (sometimes) preferable to conventional transit.

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[1] Jitneys are known as jitneys, minibuses, vernacular cabs, commuter vans, dollar vans and other names. We use the term jitney generically to describe these services, though they are locally known as dollar vans or Chinatown vans, depending on location of services. In New Jersey jitneys are sometimes known as “immivans” because they serve immigrants almost exclusively.
[2] Herbert Mohring, who passed away in 2012, is perhaps best known for identifying the “Mohring Effect,” where social welfare is maximized in public transit when service is subsidized to increase service frequencies. This is because transit exhibits economies of scale when riders’ waiting time is including in the cost function.

[3] While the permitting approach has been convention, scholars have delineated other potential approaches though these a have not been incorporated into jitney experiences in US cities. Sorenson and Longva, however, outlined four types of coordination paradigms to extend transit services: organizational, contractual, partnership and discursive 26. Sørensen, C.H. and Longva, F. (2011) 'Increased coordination in public transport—which mechanisms are available?'. *Transport Policy*, 18(1), pp. 117-125. Thus far, jitney programs have been pursued using the contractual or partnership coordination models. Cities contract with jitney operators and often specify where they can travel, where they can pick-up and drop off passengers, minimum frequencies, insurance requirements, and vehicle inspection standards. In partnership models, which is more common in the U.S., operators and public agencies form voluntary partnerships built on credible trust.

The contractual model offers more protections against service defaults, but also commits the state to a larger commitment to new transit coordination. This carries substantial risk for transit agencies that must negotiate with union labor, balance the costs and benefits of service expansion and justify multi-tiered services, for instance contracting with jitneys in areas that are already served by local buses. Neither of these models of coordination implies full privatization of transit services. Rather, the state maintains control over the types of services offered though in the partnership model without explicit guarantees and expectations of a contract.

Coordination is more difficult when multiple public actors with different mandates, preferences and constraints engage. In New York City, the TLC is responsible for licensing and enforcement, but scarcely has the resources for subsidies or marketing.[3] The MTA, as the region's monopolist transit provider, does cooperate with other agencies such as the TLC and the New York City Department of Transportation (NYC DOT), but these efforts aim to improve existing services instead of offer new ones.[3] Ultimately, however, a program where the TLC unilaterally tries to coordinate new transit service without the MTA's assistance will be problematic.

[4] Recordings are kept by the authors.

[5] There is one example in the Bronx, New York City, where the homeowners association is subsidizing one van to provide service every half-hour in an area where the bus line was cut (Evelly, 2012). As of August 1, 2012 it is unclear if the service is still operating or attracting any riders.