

Improving Jitney Service Quality:  
An Appropriate Governance Model for San Juan, Puerto Rico

By

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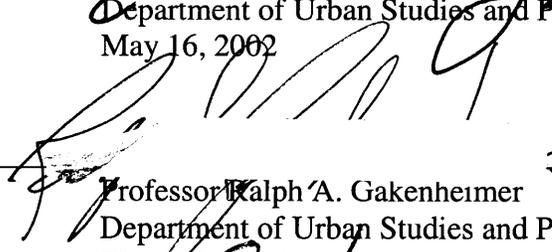
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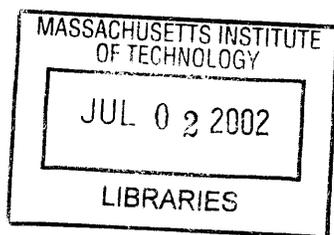
  
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**ABSTRACT**

San Juan, Puerto Rico, like many North American cities, has turned to rail lines as a solution to the mounting traffic congestion threatening the urban environment. However, a rail system must rely on other transit modes to provide feeder services in order to expand its reach and broaden its customer base. This requires intermodal integration. The challenge facing the future success of Tren Urbano, the new rail system projected to open in the next two years, is the integration of the publicos. The publico is the owner operated jitney service indigenous to Puerto Rico that the government anticipates will offer crucial feeder services to Tren Urbano. For intermodal integration to succeed, publicos must offer comparable service quality. Unfortunately, the service quality of publico transit is poor as a consequence of the long-term decline of the publico industry. Therefore, the goal of the government is to improve publico service quality so it is comparable with the rest of the transit system, while recognizing the unique owner operator quality of the industry.

This thesis examines four different jitney systems in North America. The study documents the development of the jitney service, how different cities govern jitney operators, and what affect the governance structure has on the quality of service. The purpose of this study is to determine what kind of governance structure leads to a high quality of jitney service. The study also examines what other factors contribute to high quality service. The ultimate goal is to apply the findings to San Juan, Puerto Rico in order to define future publico reforms.

The case studies illustrate that North American jitney services all rely on hybrid governance models, consisting of government controls and self-regulating mechanisms. The study suggests that a hybrid governance structure that is based on cooperation between operators and government regulators leads to superior service quality. However, service quality is not merely a function of governance structure. Service quality also depends on the profitability of the jitney service, institutional strength, and the context of the industry. In a highly profitable setting, industry actors will spontaneously mobilize and provide a high quality of service. Consequently, the recommendations from this study examine ways of improving the profitability of the publico industry in order to improve the quality of service. In an unprofitable environment, the government must take the lead in developing other strategies to encourage service quality improvements. The recommendations in this study also suggests that the government proactively assist the publico industry improve service quality though various institutional and governance strategies.

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# Chapter 1

# Introduction

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## 1.1 Rail as a solution to congestion

Rapid increases in automobile travel and limited road expansion have brought unprecedented levels of traffic congestion in U.S. cities. During the 1980s, for the 39 largest U.S. metropolises, the number of lane-miles of expressways and major arterials increased just 13.7 percent during the 1980s, while vehicle miles driven rose 31.4 percent (Federal Highway Administration, 1995). According to one estimate, traffic delays rose 57 percent from 1985 to 1988 (Cervero, 1997). In response, many North American cities have turned to rail lines as a solution to the mounting traffic congestion threatening the urban environment. However, rail alone is not a panacea for the problem of congestion. The high cost of building and operating a rail system severely constrains the network coverage. A rail line must rely on other transit modes to provide feeder services in order to expand its reach and broaden its customer base. Historically, rail lines have depended on conventional buses to provide feeder services.

Private transit alternatives such as jitneys also can serve as feeder service. Jitneys are smaller vehicles with a capacity of fewer than 15 passengers that provide unscheduled transit service on a semi-fixed route. The feeder van services in the outer boroughs of New York City serve as an example of jitneys providing feeder services into a rail system. Perhaps the most compelling reason to use jitneys in a feeder service capacity is jitneys are generally unsubsidized by the government and thus would save taxpayer money. Jitneys are capable of thriving without government subsidies because of their low cost structure. The smaller seating-capacity of jitneys and lower cost structure also makes it possible for jitneys to offer unsubsidized transit services in low-demand areas that conventional public transit cannot economically justify. Consequently, a jitney feeder system can reach a wider customer base than conventional buses. Jitneys also serve

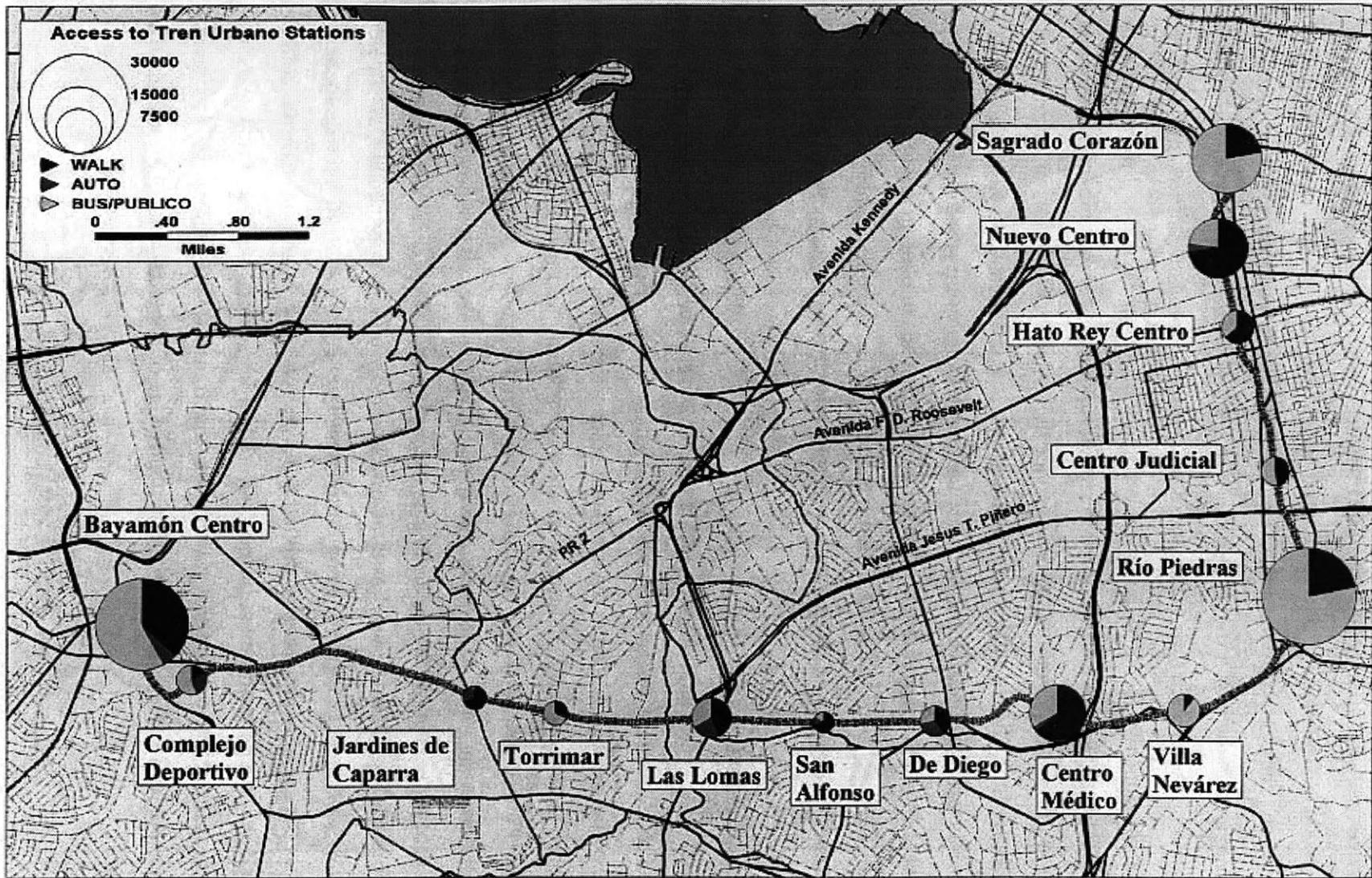
a social service function. Jitneys often provide transit services to low-income neighborhoods where patrons do not own or have access to automobiles and thus have few mobility options.

Although jitneys can provide an unsubsidized feeder service to under-served areas, evidence from around the world suggests the service quality of jitney operations tends to be poor. The poor quality of service, in turn, mainly attracts a minority population of low-income riders. This cyclical relationship feeds into the downward spiral of service delivery. Jitneys can only provide a valuable feeder service function if the service quality is comparable to the other modes. Besides the problems of integration, the poor service quality of jitneys results in harmful consequences for jitney riders and society. For example, the unsafe and chaotic operating practices of jitney drivers threaten public safety and create congestion problems in urban environments. The use of antiquated second hand vehicles leads to poor air quality. Improving the quality of jitney service creates the conditions necessary for intermodal integration and addresses some of the negative externalities caused by poor quality of jitney service.

## **1.2 San Juan Context**

The San Juan Metropolitan Area, located on the north coast of the island of Puerto Rico, is composed of 13 municipalities and occupies 400 square miles. The SJMA is physically constrained by the Atlantic Ocean to the north and volcanic mountains to the south. These constraints have led to population densities that are among the highest in the U.S. In 2000, with a population of 1.4 million people, the population density in the San Juan Metropolitan Area was 3,500 people per square mile. Auto ownership in the SJMA has also seen dramatic increases from 0.141 cars per person in 1964 to 0.620 cars per person in 2000. The SJMA boasts over 150 vehicles per mile of paved road, which is three times more than in the continental U.S. In 1990, autos made 90% of all work trips. The population density in combination with the dramatic increase in auto ownership and use has resulted in severe roadway congestion (Allison, 2002).

The Puerto Rican government intends to introduce a new rail line in next two years in order to address the severe surface congestion issues and transform the existing transit system. Tren Urbano extends 17 kilometers from the southern edge of Santurce to the western suburb of



Map 1.1: Projected Access Mode to Tren Urbano Stations  
Source: Allison, 2002.

Bayamon. In total, there are 16 stations along the heavy rail alignment. The travel time from end to end is approximately 30 minutes. Map 1.1 shows the Tren Urbano alignment with the projected access by mode. Tren Urbano is expected to carry 115,000 daily customers by 2010, 55% of which are expected to access stations by bus or publico (USDOT et al., 1995). The intent of the government is to restructure existing bus and publico routes to support transit centers.

In anticipation of the greater need for feeder services with the opening of Tren Urbano, the Metropolitan Bus Authority (MBA) began efforts to improve the reliability of bus service in 1994, while the Highway and Transportation Authority (HTA) and MBA began a joint planning effort to improve the frequency and directness of bus service. The Transit Center Plan implemented in 1998 restructured all MBA and Metrobus services around a series of twelve Transit Centers located strategically throughout the metropolitan region. Prior to restructuring, the MBA system was generally seen as unreliable and inefficient. The restructured system serves seven municipalities, carrying 31.9 million annual passengers. Although the total number of bus routes decreased from 44 to 32, the previous routes ran infrequently and provided unreliable service (Multisystems, 2000). The new system features a core network of six high-frequency trunk lines, some in counter-flow exclusive lanes, supplemented by feeder routes running every 15, 20, or 30 minutes on weekdays. While most passengers need to make one transfer to arrive at their destination point, the more reliable and frequent service has reduced the total travel time. The changes resulted in a dramatic increase in annual boardings from 16.6 million in 1996 to 24.3 million in 1998 (APTA, 1999).

The two Metrobus services provide the core high-frequency trunk routes in the new system. Metrobus I, contracted by ACT (Autoridad de Carreteras y Transportes), operates on exclusive, counter-flow bus lanes along the north south corridor between Rio Piedras and old San Juan. The average headway on this service is between four and five minutes. Metrobus II, operated by MBA, runs from Bayamon to Santurce via Hato Rey, offering service to the endpoints of Tren Urbano. Both services provide a high frequency high quality service that the public has strongly embraced. The Metrobuses, consequently, require a \$.50 fare, as compared to the subsidized \$.25 fare charged on the MBA buses.

The future of the entire system is largely dependent on the integration of the publicos, the jitneys of Puerto Rico. The current Secretary of Transportation is committed to making the publicos an integral part of the new public transit system. The government's perspective is that the publicos will provide the majority of the feeder service. The strong political power of publico operators in San Juan and the fact that publicos are an unsubsidized service makes publicos indispensable in the new transit system. However, the publico industry has long been in decline since the 1960s. The industry has suffered falling ridership from rising auto ownership and rising costs of operations. The failing profitability of the publico industry has led to poor service quality that contributes to the further decline in ridership. Publico vehicles typically are antiquated second hand vans that lack air conditioning and are difficult to board and exit. The service is infrequent and unreliable during off-peak periods. This poor quality of service has created a negative public image of publicos and the perception that publicos are a transit option for the poor. In truth, the vast majority of publico patrons are captive riders. This situation is not limited to Puerto Rico, worldwide jitneys generally attract captive riders due to the poor quality of service they deliver.

The challenge facing publico integration is influencing publicos operators to offer feeder services that are comparable to those of Tren Urbano and the restructured bus system. In order to attract riders to use the entire transit system, the service quality of the publicos must match those on the buses and Tren Urbano. The quality of publico service is critical for successful intermodal connections and consequently the success of the entire system. Otherwise, 'choice' riders will only access the system via the bus and rail. One of the most obvious differences is the hours of operation. Tren Urbano will offer service from 5am to 1am; in comparison, publicos generally begin offering service around 6am and service dramatically drops off after 2pm. Under this scenario, individuals who do not live along the rail alignment or close to one of the bus routes cannot gain access to the system. Even if the operators are persuaded to extend the hours of service, infrequent and unreliable service will deter potential riders from using the system. In addition, riders willing to patronize Tren Urbano are unlikely to ride a publico if the conditions on the vehicle are uncomfortable.

The unique owner operator nature of the industry poses another challenge to the successful integration of the publicos. In the San Juan Metropolitan Area, there are 2,230 publico operators (FTA. National Transit Database, 1997). Although most organize into small

groups to rationalize service delivery, each operator is a unique individual with separate interests and preferences that drive their behavior. Consequently, operators have great flexibility in the way they operate their businesses. Publico operators are a self-selected group of individuals who highly value their individuality and freedom to make their own decisions. Drivers choose to join the industry because they can set their own hours and decide how to conduct their day. This owner operator attribute, often true in jitney systems around the world, makes organizing and controlling operators very difficult. The question is how to control an industry composed of individuals. The restructuring of the entire transportation system in Puerto Rico provides the opportunity to examine the best way to govern the publico operators.

### **1.3 Purpose of Research**

The purpose of this study is to determine what kind of governance structure leads to a high quality of jitney service through the examination of several jitney case studies. The study documents how different cities approach the governance dilemma and what affect the governance structure has on the quality of service. The study also examines what other factors contribute to high quality service. The final goal is to apply the findings to San Juan, Puerto Rico in order to define future publico reforms.

The objective of each case study is to:

- Evaluate the service quality of the jitney service in each case study;
- Understand the development and context of each jitney system;
- Document government regulations and the enforcement of these regulations; and
- Record other regulatory mechanisms such as self-regulation and the implementation of these arrangements.

This study breaks down service quality into six indicators:

- Safety –vehicle and driver standards, safe operating practices on the roadways;
- Scheduling – including hours of operation, reliability, frequency;
- Rider comfort – including the comfort while in the vehicle and waiting for service;
- In-vehicle time – the travel time for a jitney ride;
- Access to service information – about routes, fares, stops, and schedules; and

- Intermodal integration – includes fare, schedule, and physical integration.

## **1.4 Organization of Study**

Chapter two outlines the history of private and public transportation in the U.S. since the advent of mass transit services. The purpose is to learn from the successes and failures of past transit systems in order to apply the lessons to the current jitney context. The chapter also briefly introduces jitneys as a potential private transit alternative and the context of jitney operations.

Chapter three addresses the question of governance and its application to the jitney industry. What is the optimal degree of regulation to safeguard society and, at the same time, create an environment where firms still have the flexibility to innovate and improve service provision? This chapter summarizes the range of governance models and begins to identify the governance model appropriate for the jitney context.

Chapter four briefly describes the methodology of this study. In all, four jitney case studies were selected including jitney services in Miami, New York, Atlantic City, and San Juan.

Chapters Five through Eight document the findings from the four case studies. The purpose is to document how different cities approach the governance dilemma and what effect the governance structure has on the quality of service. Each case study includes (1) an evaluation of the current quality of service; (2) a history of jitney services in the city and how the history shaped the governance model; (3) a review of government regulations and enforcement; and (4) a detailed account of the self-regulatory mechanisms.

Chapter nine analyses the case studies from a cross-case perspective. The first half of the chapter explores the factors that affect the development of regulatory arrangements and the similarities and differences between cities in terms of government regulations and self-regulatory arrangements. The latter half of the chapter examines the factors that impact service quality and lessons learned from the case studies that lead to a high quality of jitney service.

Chapter ten applies the conclusions from the cross-case comparison to the San Juan Publico context. The recommendations suggest strategies to enhance the economic viability of the publico industry, to improve the quality of service through regulatory changes, and to strengthen government institutions in order to support the jitney industry. Finally, chapter 11 summarizes the results of the study and suggests possible future research topic.

# Chapter 2

# History of Private and Public Transportation

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This chapter briefly outlines the history of private and public transportation in the U.S. The purpose is to trace the role of the government and industry actors. The successes and failures of past transportation policies help identify the future path of jitney governance. Interestingly, the role of the private sector has come full circle since the advent of public transit services. Until relatively recently, private entrepreneurs and companies were the sole providers of transit services. The role of the government evolved from a grantor of private franchises, to regulator, to provider of transportation subsidies. The transit responsibility was eventually transferred to the public sector. The latest trend is a joint effort between the public and private sectors where the public agencies provide transit services and oversee private sector services.

## 2.1 Private Provision of Public Transit

There were few mobility options in the early 1800's. Stagecoaches were the preferred mode of travel, but only the wealthy could afford the cost. Most individuals walked from place to place. The horse bus, also known as the omnibus, made its first appearance in the 1820s. The horse bus could carry many times the number of passengers of a conventional stagecoach. For example, London's first omnibus carried up to 20 passengers. The fares were still far beyond the means of the average worker yet less than the price of most short stagecoach rides. As omnibuses gained popularity, omnibuses became part of the urban landscape. By the 1840s the horse bus had replaced most of the short stagecoach operations (Transport for London, 2000).

The government, interested in maintaining order and control over the streets, had its own concerns. During the 1830s new omnibus services sprang up, with rival bus operators competing for passengers, often racing each other to pick up passengers. The fierce competition between

private firms led to accidents and violence on the streets. Even under omnibus systems where operators organized themselves into self-regulating groups, competition still led to public safety problems. At the same time, population growth and increasing number of vehicles created concerns over urban traffic conditions. The government responded to these challenges by enacting regulations to control omnibuses. In Paris, for example, the government restricted the number of firms in the omnibus trade, the routes, and the maximum number of vehicles (Papayanis, 1996). In some cases, the government franchised associations of bus operators. In exchange, the operators were required to comply with certain rules, safety regulations, and schedules.

Subsequent improvements in transportation technologies provided private firms the economies of scale that the omnibus and stagecoaches operations lacked. Services such as passenger rail and the underground railway, introduced in the 1830s and 1860s, respectively, allowed transit services to carry large numbers of people at a lower cost due to economies of scale. The omnibus based on horse and bus could not achieve the same level of efficiency. In the 1870s the horse tram came into existence. The metal wheels running on smooth tracks in the road were much easier to pull than carriages running on uneven road surfaces. This meant that two horses could pull a tram carrying 50 passengers, about twice the capacity of the horse bus, making trams dramatically cheaper to run. Prior to these technological improvements, the demand for transportation far exceeded the production of services due to the relatively high expense of carrying passengers. The arrival of the electric trams or 'street cars' around the turn of the century brought classless public transport to the masses. These improvements in the economy of scale meant that the supply of services could finally match the public demand for transit services.

Private transit companies dominated the provision of transportation services up until the 1960s. With the advent of new technologies that possessed economies of scale, many of these private transit services developed into regulated monopolies. It was believed that transit was a natural monopoly. As a natural monopoly, transit was thought to possess economies of scale, required cross-subsidization, and needed coordination of services. The government viewed regulations imposed on monopolies as a way of ensuring that transit providers delivered sufficient services and charged fair prices. Regulations often provided long-term franchises that restricted entry and also controlled fare levels and routes. The "five-cent fare" policy, which was

standard in most urban areas in the U.S. from 1904 through the 1940s, coupled with sharp inflation after World War I jeopardized the financial viability of private transit companies (Mantell, 1993). Moreover, increasing automobile usage after World War II and the change to a decentralized land use pattern that further encouraged auto travel resulted in falling transit ridership. By the 1940's and 1950's, the regulated monopolies began to collapse. Many state and local governments intervened with public subsidies. For the first time, the U.S. Urban Mass Transportation Act of 1964 authorized federal capital grants for mass transit; in 1974 the act authorized the use of federal funds for transit operating assistance (Mantell, 1993).

## **2.2 Public Provision of Public Transit**

The collapse of the private transit systems caused U.S. cities to assume the ownership and provision of private transit systems in the 1960s. This decision was partially motivated by the political power of these private companies (Mantell, 1993). The private companies influenced the government to take control of the transit systems and reimburse the private sector their assets. At the time, mass transit was also seen as a social service and thus, should be provided to all segments of society, regardless of demand. Consequently, the government reasoned that transit service should not be left to the whims of market forces, rather transit services were best left up to the control of the government. It was viewed that only the government could safeguard the interests of society.

Since local governments took control of transit systems, the transit industry has experienced an incredible growing deficit. In 1968, the overall deficit was \$90 million; by 1980 it had grown to over \$7.8 billion, recovering only 41% their operating expenses through fare box revenues and essentially none of its capital expenses (Lave, 1985). Government involvement resulted in rising costs in production and falling revenues. The federal subsidies did not require prescribed service standards, leading to inefficient use of the subsidies. With government subsidies, the government could afford increases in labor costs and, at the same time, the subsidies reduced government concerns over operation efficiency. The government also introduced new social programs such as providing service to low-density areas. These services and additional peak-hour services were expensive and so helped increase costs. The rising costs of production illustrate the most prevalent criticism of public provision of transit. There is little

incentive to improve or innovate services under a monopolistic environment. Without competition, public agencies experience declining efficiencies that lead to higher operating costs.

Meanwhile, the artificially low fares and fall in patronage have led to falling public transit revenues. Politically, it is unpopular to raise transit fares, especially since transit directors are often elected officials. Socially, low fares are meant to lure people out of their automobiles into public transit and thus decrease traffic congestion and air pollution. Low fares are also seen as necessary to assure affordable public transit for the poor. The high costs and low revenues due to public management are at the source of the fiscal instability of the transit industry. In addition, public transit has experienced declining patronage that further exacerbates the decline in transit revenues. As the per capita income continues to increase, Americans have gradually moved to suburban communities outside the urban core and bought private autos to satiate their transportation needs. The loss of transit revenue and high cost of transit production have resulted in the postponement of capital equipment replacement and the deferral of maintenance, leading to unreliable operations and the decline of service quality. The deteriorating service quality, in turn, attracts fewer riders further contributing to the progressive decline of the industry.

Both the public and private provision of transit faced substantial financial difficulties. Regulations limiting the fare structure and the growing reliance on private auto forced the collapse of private transit monopolies. While social programs, government subsidies, and the domination of the auto have led to unprecedented deficits in the public transit industry. History has shown that the financial viability of the transit industry is critical. Without financial stability, the governance of the transit industry is trivial since the system will inevitably collapse.

### **2.3 Re-emergence of the Private Sector**

The failures of government-managed transit have prompted a re-emergence of private sector involvement in urban transportation. The 1980s, under the Reagan era, saw a substantial federal push for privatizing transit services in order to combat public transit inefficiencies. The public sector recognized that there were gaps in transit service such as inadequate or insufficient services in underserved areas and during peak hours, and poor service quality on existing transit routes. The belief driving the privatization of transit services was that the private sector would fill these gaps and require little to no government subsidies.

Proponents supporting privatization argue that the private sector is inherently more efficient than the public sector because competition motivates private firms to be more cost conscientious and demand responsive. Privatization is viewed as a valuable tool when the public sector does not have the financial resources to provide transit service or is confronted by considerable taxpayer resistance. The private provision of transit also has the benefit of improving the quality of service. The very nature of the private sector is based on the concept of providing the best demand-responsive product for the least amount of money. It then follows that the private sector is more efficient and more responsive to customer needs. Moreover, privatizing services provides passengers with a variety of services at a range of prices, giving riders more mobility alternatives (Cervero, 1997). This is important because what commuters value most is service quality (Roth, 1988). With a greater array of transit alternatives, more people can find the transit service that matches their needs.

The privatization of transit services takes two forms, competition for the market or competition in the market. The private sector competes *for* the market when the government contracts out monopoly transit service for a route, zone, or entire city. Indianapolis, Denver, San Diego, Las Vegas, and Los Angeles represent five government bus-contracting programs implemented across the U.S. (Richmond, 2000). The private sector competes *in* the market when the transit industry is an open market where there is competition between modes and even on the same routes. The jitney industry is an example of private actors competing in the market.

#### **2.4 Jitneys: A Private Sector Alternative**

Jitneys do not receive government subsidies and yet the industry still thrives. This suggests that jitneys are a more efficient transit service in certain demand environments. Jitney operators provide a service that conventional transit does not offer or the service offered is of poor quality. The challenge to a line-haul system is that it must be supplemented with feeder lines. Jitneys can play a critical role as a feeder service to a line-haul transit system, as illustrated by the New York City vans that shuttle patrons to the subway station. Jitneys are particularly well suited to serve as feeders since vehicles have a comparative advantage in situations of high passenger turnover and short trips. In addition, jitneys can financially self-sustain operations in low-demand areas that conventional public buses cannot support without

subsidization. In this way, jitney service is a potential solution to the high expense of feeder services into a line-haul system and thus applicable to the San Juan model.

#### **2.4.1 Attributes of Jitneys**

Jitneys are generally defined as smaller vehicles that hold up to 15 passengers serving semi-fixed routes with no set schedule. The routes are semi-fixed because operators are often willing to deviate from a fixed route on request by a passenger. Generally, passengers can hail jitneys anywhere along the route, just as operators will stop anywhere along the route. Jitneys are usually owner-operated. Because jitneys provide a demand responsive service that does not follow a set schedule, jitney services swell to accommodate passenger demand during peak hours. This is an important attribute considering the extremely high cost associated with the provision of peak hour services by the public sector. Jitneys also generally provide faster mobility, stopping less often and for a shorter time when the vehicle does stop.

Jitneys provide five types of service: capacity enhancement, service extension, transit feeder service, community-based transit, and activity center connection. Capacity enhancers relieve overcrowding and passenger overflow during peak transit periods. Service extenders provide transit service to low density areas that cannot justify conventional bus service. Transit feeders connect residential areas to other modes of transit such as buses or rail. Community-based transit transport residents, usually of low-income areas, to medical areas, shopping stores, and community centers. Finally, activity center connectors provide circumferential transit service around a destination.

#### **2.4.2 Historical Background**

Jitneys first appeared in Los Angeles in 1914 during a period of high unemployment. Individuals spontaneously began offering rides along streetcar lines for a nickel. 'Jitney' was slang for a nickel at the time. The faster speeds of the jitney attracted streetcar patrons to choose jitneys. In addition to streetcar patrons, jitneys also captured taxi riders and pedestrians. Jitneys were more flexible in terms of routes, fares, and driver operations. However, similar to the omnibuses from a century before, fierce competition between jitney operators created public safety and traffic congestion concerns. In cases where jitney operators organized into groups, there was concern that jitney operators would extort high fares from passengers.

The streetcar operators and organized labor immediately perceived jitneys as a threat. The streetcar companies often maintained parts of the pavement along the tracks and paid municipal taxes. Thus, the interest of the municipal government was aligned with the streetcar operators. The potential reduction of streetcar services also posed a threat to organized labor. The strong political interest to suppress the jitney industry in combination with the public safety issues resulted in the enactment of strict regulations that helped eliminate most jitney services across the U.S. by the 1920s.

The government regulations included raising the cost of entry and operation, and controlling the provision of routes so that jitney service became unprofitable. For example, the authorities required all jitneys to obtain a franchise and comply with costly liability bonds before they were permitted to operate. Once in operation, operators were required to pay taxes on their fare box revenues. The authorities imposed strict regulations on how jitney drivers should operate and where they could operate. Jitney operators were required to provide service for a minimum number of hours and comply with safety regulations such as adhering to speed limits and limiting the total number of passengers in the vehicle. Franchise certificates stipulated the exact route, terminal point, and schedule of the jitney. The authorities required operators to provide service to low-density areas and long unprofitable routes, and excluded jitneys from high-density areas or routes that streetcars already served. The underlying objective, beginning with these first regulations, was to safeguard existing transit services. These early regulations set the standard on how government authorities would regulate and control the jitney industry.

The other factor contributing to the demise of jitney service in the U.S. was the rising popularity of the automobile. The auto competed with both the electric streetcars and jitneys, causing ridership in both industries to decline. The auto also exacerbated congestion problems on roadways, forcing all trips to take a longer amount of time. The longer trip time reduced the value of jitney rides and, at the same time, increased the cost of providing service since fewer trips could be made in a given period of time. The combined impacts of automobiles and restrictive government regulations led to the extinction of almost all jitney services in the U.S.

There are a few exceptions found in the U.S. For instance, both Atlantic City and San Juan, Puerto Rico, have supported jitney services since the early 1900s. Puerto Rico did not have electric streetcars to compete with their publicos. In fact, publicos were the only form of public transit until private bus companies began offering services in the late 1920's. Atlantic

City represented a more typical American city. The local government did enact regulations to reduce the competitive threat to the existing railroad. However, the regulations were lenient enough to allow the nascent industry to survive. Next to Puerto Rico, Atlantic City has the longest running jitney service in the U.S.

The past couple decades have witnessed a rebirth of a few jitney services scattered throughout the U.S. Jitney services have once again resurfaced because jitneys fill a transportation need that public transit does not meet or meets inadequately. Often, these underserved communities are also low-income ethnic communities that command little political power. Residents who live in these communities are in particular need of public transportation options. Auto-ownership is comparatively low among these socioeconomic groups.

Public transit tends to serve the major transportation corridors, serving only a subset of the transit market. There are several reasons why public transit offers very limited service coverage. First, low-density areas generally do not generate the passenger demand necessary for the provision of conventional bus operations. Jitneys, on the other hand, are able to offer service in these relatively low-demand due to their low cost structure and small passenger capacity. Second, it is difficult to convince the public sector to serve new communities. Public transit tends to serve the same areas year after year, whereas jitneys provide a flexible service that quickly adapts to the demands of the passengers. Third, even in high-density areas with low-income residents, the communities do not possess the political clout to force the transit authority to recognize their transportation needs. These communities are thus easily marginalized. Jitney operators, who also tend to be from these communities, tend to initially offer services in neighborhoods where demand is high but transportation services are scarce or inadequate.

Although jitneys offer a solution to the transportation needs for many marginalized communities, incumbent actors interested in maintaining the status quo have tried to block the development of jitney service. This attitude may explain why there are relatively few examples of nascent jitney services. Local governments generally view jitney services in a negative light and so prevent jitneys from developing or try to reduce jitney impact once they have developed. The governments, which are aligned with the interests of the public transit authority, enact regulations that restrict the profitability of the industry and tightly control the operators. The strict regulations are reminiscent of the regulations from the early 1900's when regulations were used to force jitney operations out of business.

### **2.4.3 Benefits of Jitney Services**

From the government's perspective, one of the most important advantages of jitneys is that they do not usually require government subsidies due to their low cost structure. Jitney vehicles are mass produced vehicles that require no special procurement process. Consequently, the initial capital cost is much lower in comparison to a conventional bus. The jitney drivers are typically non-unionized and earn far less per hour than public transit employees. Lastly, jitney are often owned, operated, and maintained by a single individual. Therefore, there are few overhead costs, and operators usually do not purchase health insurance, worker's compensation insurance, or retirement benefits. The fact that jitneys do not require subsidies is critical in the modern era where all public mass transit options require heavy subsidies from local, state, and federal governments.

The principal reason many transit passengers prefer jitneys to conventional transit is because jitneys offer a superior quality of service. Jitneys stop less frequently due to their small capacity, when jitneys stop they stop for a shorter amount of time, and the vehicles have superior acceleration and maneuverability on the roads. Jitneys also guarantee passenger seats and some jitney services are willing to deviate from the fixed route in order to drop off a passenger to their residential home. This personalized service appeals to some passengers' preference for a safer form of transportation.

Improving the overall mix and quality of transportation options may prompt some people to leave their cars, reducing traffic congestion and air pollution. Most Americans have two alternatives outside of the auto – either taxi or bus. Jitney service gives the public another transit option that is more responsive to passenger needs than conventional public transit. The diversification of transit options is important when considering the tremendous diversity in travel preferences. Some individuals may be willing to pay a premium for a very high quality of transit services, while others are willing to sacrifice comfort and speed for a reduced fare. Enticing travelers out of their personal autos into transit has obvious environmental benefits. In the U.S., air pollution is largely a product of an auto-dependent society. Between 30-40% of man-made hydrocarbon and nitrogen-oxide emissions, two of the chief precursors to the formation of photochemical smog, and around two-thirds of carbon monoxide emissions come from the

tailpipes of cars (Cervero, 1997). The development of other transit options can produce much needed air quality improvements.

The fact that jitney operations swell to accommodate the surge in demand is important when considering the cost of providing peak hour service. It is difficult for conventional transit services to overcome the operational and fiscal difficulties associated with peak hour demand. Jitneys provide a service to both riders and transit authorities by reducing peak crowding. The jitney industry also provides a valuable employment opportunity, especially to individuals that have a more difficult time entering mainstream employment.

#### **2.4.4 Drawbacks of Jitney Service**

Along with the benefits, there are also many drawbacks to jitneys service provision. Public transit authorities are very concerned with jitneys 'skimming the cream.' Jitneys are criticized for stealing passengers along scheduled bus routes. This practice decreases fare box revenues and thus increases the need for public transit subsidies. In response, local governments have approved laws that protect the interests of conventional transit services. While 'peak skimming' is a legitimate concern for an unsubsidized private monopoly which needs to cross-subsidize off-peak service from peak fares, it is less convincing for a subsidized public agency which typically faces premium costs to provide peak service.

Other drawbacks stem from the owner-operated nature of the jitney industry. Each driver operates according to his own individual interests. Individual owner operator preferences affect public safety, intermodal integration, service reliability, and vehicle replacement. Owner operators operate in a fashion that maximized their own profitability. This results in unsafe and chaotic driving practices as operators aggressively compete for passengers. The fact that each individual is a separate firm makes intermodal integration a formidable challenge. Transit authorities must negotiate with all the operators in order to reach an agreement on how to integrate services. The general lack of integration is also a consequence of protecting public transit interests and a lack of commitment to an integrated system by government agencies. In an owner-operator environment, operators are motivated by the profitability of demand. So, peak-periods give rise to an abundant supply of operators, while off-peak periods are supported by infrequent and irregular service. Without operator mobilization and collaboration, there is no unifying entity that organizes owner operators to provide frequent, reliable service during off-

peak periods. A similar profitability dilemma exists when examining the age of jitney vehicles. Owner operators tend to drive their vehicles into the ground before investing in a new vehicle. The antiquated jitney vehicles contribute to poor air quality, are public safety hazards, are often uncomfortable for riders, and are inaccessible to the elderly or people with disabilities.

The questionable safety, lack of integration and reliable service during off-peak period, and uncomfortable conditions due to antiquated vehicles all indicate that the quality of jitney service needs improvement. As expected, the poor quality of jitney services mainly attracts a minority population of low-income riders. The jitney clientele, in turn, reinforces the poor quality of service. This cyclical tendency feeds into the downward spiral of service delivery. In addition, there are few incentives for the jitney operators to improve the quality of service. Jitneys do not receive government subsidies and so must completely rely on fare box revenues to support their operations. Owner operators have little reason to improve the quality of service considering the added cost of production, especially if fellow operators offer a comparable level of service.

#### **2.4.5 Americans with Disabilities Act: Implications on Jitney Services**

The fact that jitney operators drive antiquated vehicles is closely connected to the critical issue of universal accessibility. The Americans with Disabilities Act of 1990 made accessible and usable transportation a civil right. The ADA covers both public and private transportation providers and services in all modes, regardless of funding sources. All providers are required to be in compliance by 2000. Regulations are based on service type (fixed or demand responsive) and service provider (public or private entity). A service provided along a given route that arrives at certain times regardless of whether a passenger actively requests the vehicle is regarded as a fixed route rather than demand responsive. A service where the individual must prearrange a transit ride (i.e. make a telephone call) is regarded as a demand-responsive service (Lee, 2000). Arguably, services that deviate from a route upon customer request could be considered demand-responsive. Variations in schedules or vehicle headways are less important when making the distinction between the two service types. A public service provider is considered one that receives direct financial assistance from the government. This includes contracted operations.

	<b>Public Entities (including contract operations)</b>	<b>Private Entities (primarily engaged in the business of transporting people)</b>
<b>Fixed Route Services</b>	Required for all new vehicles. Exception: Used vehicles, as long as the entity made “good faith” efforts to acquire accessible used vehicles (Sect. 222)	Required for all new vehicles. Exception: an automobile or van with a seating capacity of less than 8 people as long as alternative accessible service is available (Sect. 304)
<b>Demand Responsive Services</b>	Not required as long as the system, “when viewed in its entirety, provides a level of service to such individuals equivalent to the level of service provided to the general public” (i.e. alternative accessible services are available) (Sect. 224)	Not required as long as the system, “when viewed in its entirety, provides a level of service to such individuals equivalent to the level of service provided to the general public” (i.e. alternative accessible services are available) (Sect. 224)
<b>Complementary Paratransit Required?</b>	Required if the public entity operators a fixed route system. Exception: If the public entity can demonstrate that paratransit would impose an “undue financial burden” or it operates “commuter bus” services. (Sect. 223)	Not specifically addressed in ADA legislation and assumed to be not required.

Table 2.1: Accessibility Requirements  
Source: American with Disabilities Act

Table 2.1 summarizes the requirements according to service classification. U.S. jitney services, which are not subsidized by the government, would be considered private transit services. Depending on the jitney system, the service could be considered fixed or demand-responsive. For instance, jitney service in New York, Miami, and San Juan is arguably demand-responsive since the regulations allow operators to deviate from a prescribed route.

In the case of a fixed route private transit service, private operators must ensure that all new vehicles have wheelchair lifts. The requirement could be waived if the vehicles have a seating capacity of less than 8 persons and an alternative accessible service is available. The ADA waives accessibility requirements for a demand responsive private transit service as long as the system, “when viewed in its entirety, provides a level of service to such individuals equivalent to the level of service provided to the general public.” This could be interpreted to mean that as long as part of the system provides alternative accessible vehicles, the entire system is still in compliance with ADA.

Jitneys are currently considered private transit since they do not receive government subsidies. However, if local government decides to subsidize jitney services, contract jitney

services or indirectly subsidize jitneys by reimbursing operators for transferring passengers, the ADA accessibility requirements for public agencies would apply because the jitneys would be “...under a contractual or other arrangement or relationship with a public entity.” (ADA, Sect.221). In this way, the ADA requirement discourages jitney fare integration. All new vehicles would have to comply with ADA requirements unless the public agency could demonstrate that such operations would create an “undue financial burden” or that jitney services are equivalent to “commuter bus” operations.

Improving the service quality of jitneys involves replacing antiquated vehicles with new vehicles. The significance of ADA is that if a jitney service is categorized as a fixed route service, than jitney operators must purchase vehicles that comply with the full accessibility requirement. This would require an added expense of approximately \$20,000 per vehicle. Such a heavy financial burden could potentially put many private operators out of business. This is especially true in San Juan where the publico industry has been in long-term decline due to profitability problems. In San Juan’s case, even if publicos could find a legally acceptable loophole to the full accessibility requirement such as continually purchasing used vehicles, the opening of Tren Urbano will draw attention from ADA advocates who will strongly criticize the entire transit system if the feeder lines do not address accessibility issues.

## **2.5 Conclusion**

History demonstrates that both the laissez-faire and over-regulation of transit services are inadequate solutions to the governance of transit services. The omnibus experience illustrates the laissez-faire approach led to chaotic conditions on the roadways and public safety issues. In response, the government established regulations to control private operators. As transportation technology improved, transit services gained economies of scale. The government instituted sole franchises to regulated monopolies in recognition of economies of scale. In order to prevent economic abuse, regulators controlled the fare structure. However, the artificially low fare set by the government led to the collapse of private transit monopolies. The failure of private transit was an example of the government over-regulating transit services to the point where regulations impaired the economic viability of the industry. The inception of jitneys showed a similar pattern. In this case, the government intentionally instituted unreasonable regulations to force jitney operators out of business. These lessons from history suggest that an appropriate

governance model for jitney transit services lies somewhere in between the extremes of laissez-faire and over-regulation.

# Chapter 3

## Regulatory Models

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Government actors argue that there must be some level of industry regulation to mitigate negative externalities caused by jitney services. The spectrum of regulatory arrangements ranges from laissez-faire, where the market is left up to individual firms, to command and control, which imposes strict regulations and sanctions on firms. An alternative regulatory model in between the two extremes is one based on self-regulations. This chapter summarizes the range of governance models and begins to identify the governance model appropriate for the jitney context.

### 3.1 Laissez-faire

Under a laissez-faire regime, the control of the market is left to both individual firms and customers. Industry organizations and the government are not involved. Norms are developed, used, and enforced by the firm itself. Self-discipline prevents the firm from cheating customers and abusing competitor. Firms impose self-disciplinary action out of self-interest, which is based on the fear of consumer retaliation and the threat of regulation, and current notions of fair business behavior.

Proponents of Laissez-faire approach argue that eliminating regulations would produce a richer mix of transit services that could better target the mobility needs of the public. The elimination of restriction would allow firms to innovate in response to market demand, resulting in the specialization of transit services according to public need. A deregulated market environment would produce a wider assortment of urban transportation services that would cater to the wide variation in rider preferences (Cervero, 1997). Free entry would encourage more firms to enter the market and in so doing, the service capacity of the private sector would also increase. Proponents argue that fares are generally lower due to intense competition and exhibit a variety of fare structures. The market dictates routes and so do not need regulatory control.

And any restriction in the type of service deprives private transit of the flexibility that allows them to innovate. Moreover, a deregulated system benefits transit entrepreneurs. An open private transit market would increase employment opportunities, particularly among low-income and minority populations (Cervero,1997). In short, deregulation would lead to improvements in the quality of service and cost savings to the rider.

### **3.2 Command and Control**

The problems with the laissez-faire approach are the same reasons that justify the regulation of industry. The laissez-faire model of governance assumes perfect markets. In reality, the market is imperfect; government intervention is needed to correct market failures. Under command and control regulations, behavior is mandated by government rules. Statutory controls are compulsory and apply to all firms in an industry and thus, can achieve a high level of control.

One form of market failure is the existence of monopolies. A perfectly competitive market has enough producers and consumers that no single producer or consumer has a significant impact on prices. Monopolies have the market power to restrict the production level and consequently increase the price of their product. Regulatory theory dictates that government regulations can prevent these economic abuses by serving as a substitute for competition in a monopoly environment. Even when an industry is not dictated by severe inequalities in market power, not all industries have enough producers that there is perfect competition; some industries may only have a limited number of producers. In this case, regulations ensure industry actors do not abuse consumer confidence.

The second form of economic market failure is negative externalities. An externality is an action that affects an external party and is not accounted for in the market price. Some examples of transportation related negative externalities include environmental pollution, traffic congestion, and health hazards. The purpose of regulations is to force firms and consumers to internalize the externality by making them pay for it. In this way, regulations prevent or mitigate externalities.

The third type of market failure is the underproduction of public goods. Public goods are underproduced because it is very difficult to prevent others from consuming it once it is produced; the production of the good is then unprofitable. An unregulated market fails to

produce certain public goods or the optimal level of a public good. The government can supply the good itself or regulate the private sector to produce the public goods by altering the incentive for private firms.

A perfect market also assumes that consumers and producers have accurate information about market prices and product quality. However, a consumer lacks the ability to judge the appropriateness or safety of a product precisely due to a lack of information. As a result the market system operate inefficiently because consumers are sending the wrong signals to suppliers. Regulations force the private sector to supply information so the consumer can decide whether to buy the product with the knowledge in hand. If there is a risk to consumers, regulations can require the private sector modify the product to remove the risk, safeguarding public health and safety. There is no guarantee that industry actors will produce or provide a service that is safe for the public to consume without government controls.

### **3.3 Jitney Regulations**

In practice, there are no examples of a laissez faire approach to jitneys in North American. Generally, the laissez-faire approach has been discredited by the actual performance of jitneys when government regulations are weak or nonexistent. The few cities in the U.S. with jitney services have some form of command and control regulation. This is explained by the fact that the jitney industry is not a perfect market. There are a limited number of operators participating in service delivery; these operators often ban together forming coalitions with monopoly power that have the potential to abuse consumer confidence. Jitneys also cause negative externalities in urban areas by contributing to traffic congestion and air pollution problems and by posing a potential public safety hazard.

The small number of jitney services in North America are typically regulated by the government through entry and exit, fare structure, routes, driver and vehicle standards, vehicle insurance, and the type of service permitted. Entry into the market can range from complete open entry to a predetermined ceiling set by regulators. Limits on the number of jitneys are usually set by an ordinance according to the principles of 'public necessity and convenience'. The number is often based on a population ratio such as a prescribed number of jitneys per one thousand residents. The authorities typically do not allow the industry to set their own fares. Instead the regulators may explicitly prescribe the fare for a particular route. The fare rates can

be structured according to distance-metered fares, zonal fares, late-night surcharges, and package delivery charges. The authority usually controls the introduction of jitney routes. By in large, jitney systems rely on operators to propose new routes. The operator bears the responsibility to prove the new route is of ‘public necessity and convenience.’ If regulators are persuaded, than the route is open to operators to offer service. Local governments always require the jitney driver to have a chauffeur’s license and the vehicle must meet certain minimum standards, such as not exceed a maximum age (typically 5-8 years). Regulators always require a motor vehicle liability policy that covers the city or county from liability. Finally, regulations sometimes stipulate the types of service jitneys are permitted to provide. For example, some local authorities only allow jitneys to provide prearranged rides while other authorities allow curbside hails anywhere along the agreed route.

### **3.3.1 Jitney Institutions**

The regulatory authority usually responsible for controlling jitneys is the same agency that regulates the for-hire private transportation industries. This agency is almost always a separate entity than the transportation authority that provides and manages conventional bus and rail systems. Jitneys are not regulated as an element of the public transportation network. This partially explains why there is a lack of integration between conventional modes and jitneys. However, the agency typically collaborates with the transit authority. The agency often focuses on licensing vehicles and drivers, while the transit authority looks at the transportation related aspects of jitney service such as the need for a new route or the maximum number of vehicles allowed on a route. Jitney service is sometimes offered between cities. In these cases, the mix of regulators and regulations become more complicated. State actors may get involved due to the intercity nature of the transport.

### **3.4 Critique of the Command and Control Approach**

Critics of the command and control model argue that government intervention fails at a number of levels. Since regulators are not experts in industry, they often develop and implement regulations that are inappropriate in the market context. The command and control approach is particularly ineffective at the implementation stage because an efficient regulatory mechanism should involve the firms in the implementation of the policy (Streeck et al, 1985). Government

regulations raise the important problem of legitimacy. For a regulation to be successful, it needs to win the support and cooperation of the target group (Streeck et al, 1985). Consequently, activities such as monitoring and enforcement are costly and generally ineffective. The problem is coercive enforcement is less efficient, more costly, and more unpleasant. Government regulations also deprive the firms of control over their industry, obstructing firms from responding to the market and impairing the economic viability of the industry. On a practical level, the command and control approach typically faces great political opposition since firms do not appreciate intrusive government regulations.

### **3.5 Problems with Jitney Government Regulations**

The problems facing jitney regulations closely follow the theoretical criticism of the command and control approach. Operators perceive certain government regulations as excessive or unreasonable and consequently ignore the regulations. For instance, New York and Miami have laws that prohibit jitneys from duplicating existing public transit routes. Due to the high profitability of these routes, jitneys illegally ply these routes, causing local transit authorities and union drivers to accuse jitney operators of stealing passengers away from already unprofitable transit lines. In New York, some operators choose to operate illegally, driving without required vehicle insurance, authorization, and licenses. Operators risk illegal operation because of the high cost of complying with regulatory standards and licensing requirements. Since these laws hold little legitimacy in the eyes of operators, operators ignore the regulations, thus acting illegally. As a result, the government must resort to costly coercive enforcement measures to force operators to comply with regulations and traffic laws. However, these enforcement activities still do not prevent operators from ‘stealing’ bus passengers or operating illegally.

Regulations also impair the economic viability of jitney services and obstruct the responsiveness to passenger demand. Current U.S. regulations usually control entry, routes, fares, and type of service. Government imposed high entry costs and low fares weaken the economic viability of the industry. As seen in the early part of this century, authorities imposed regulations that increased operating costs to the point that it was no longer profitable to operate a jitney, resulting in the demise of the industry. In addition, over-regulation deprives the industry of the very factor that makes them successful - the jitneys’ flexibility to market demands. For

instance, government control of routes and the type of jitney service give operators little flexibility to adapt, innovate, and transform according to the market demand.

### **3.6 Alternative Regulatory Arrangement: Self-regulation**

#### **3.6.1 What is Self-regulation?**

Another regulatory option that receives little attention, particularly in transportation literature, is the concept of self-regulation. The government may not need to impose regulations that are difficult to enforce and face political opposition. At the same time, the government may not have to leave a city's mobility completely in the hands of market forces. An option in the middle of these two extremes is relying on firms to organize and regulate themselves. In a self-regulatory regime, firms, rather than the government or market, control their own conduct and performance through formal or informal rules and standards. Norms are developed, monitored, and enforced by the industry itself. Although self-regulation suppresses the competitive process in favor of collective management, firms self-regulate to advance their self-interest. The self-restraint necessary in self-regulation ultimately benefits the cooperating firms. Under pure self-regulation, consumer representatives and the government are kept out of the development and implementation of policies. The self-regulatory body may consult outsiders, but outsiders are excluded from the formal decision making process (Boddewyn, 1985). Self-regulation can range from the coordination of the entire market to a sector of the industry.

On another level, self-regulation can also be seen as a form of governance where the actors are private and are not managed through coercive powers. As the autonomy of business interest associations increase, these organizations may become what Streeck and Schmitter call 'private interest governments' (Streeck et al, 1985). "Private interest government is an alternative to societal orders imposed by three other mechanisms: Government, market, and community." (Streeck et al, 1985, p.21) Peers rather than outsiders establish and enforce voluntarily accepted standards and rules.

Self-regulation theory often discusses self-regulation in tandem with corporatism because corporatism is viewed as a subset of self-regulation. In a corporatist paradigm (Schmitter, 1974) – the state grants public status to the intermediary private associations. In the pure form, the state has no direct control, but instead acts in an administrative or procedural capacity. What makes corporatism distinctive is that it is based on a tight cooperation between state and

associations where the private association is responsible to the government. Thus, the government sometimes supports self-regulatory or corporatist mechanisms that complement the law because this model of governance relieves an administration of costly and complex tasks. The government's role in a self-regulation regime is to supervise industry activities in case firms take advantage of consumer or exhibit anti-competitive behavior.

### **3.6.2 Regulation as a Continuum**

A self-regulatory model does not preclude the participation of the government or market forces. There is a tendency to think that a regulatory model must neatly fall into government intervention, self-regulation, or market competition. However, these three forms of governance can be applied in concert. In fact, industries have demonstrated a growing trend towards modified self-regulation where the association assumes responsibilities delegated to it by a regulatory agency that retains a supervisory role (Boddewyn, 1985).

This flexibility in regulatory responsibilities creates the regulatory spectrum that ranges from pure laissez-faire to pure regulation. Boddewyn lays out a regulatory continuum in his study of advertising self-regulation that can be used as a framework of how to organize governance models. In his study, he identifies laissez-faire as the non-regulatory governance model, followed by pure self-regulation, co-opted self-regulation, negotiated self-regulation, mandated self-regulation, and finally, regulation. Under the co-opted self-regulation model, the industry voluntarily involves non-industry people in the development, application and enforcement of norms. So, actors like consumers, government representatives, independent members of the public, and experts are included in the process. In the negotiated self-regulation model, the industry voluntarily negotiates the development, use and enforcement of norms with some outside body. The difference is that the outsiders remain on the outside of the process. Mandated self-regulation is the model closest to pure regulation. In this model an industry is ordered or designated by the government to develop, use and enforce norms. This system is similar to corporatism.

### **3.6.3 Forms of Self-regulation**

The overall purpose of self-regulation is to develop and implement policies that benefit the members of the organization. These policies regulate competition between producers and

also improve the public image of the industry. Regulating competition requires the development of group standards and rules of conduct. Depending on the goals of the group, the group may establish one or both forms of regulatory mechanisms.

Establishing standards that regulate specific characteristics of products or processes is an important means of controlling competition between producers. These standards take two forms, uniformity and compatibility standards and quality and safety standards. Uniformity and compatibility standards specify the characteristics of a product or group of products so the products made by different producers are interchangeable. In this way, similar products are standardized across the industry. Quality and safety standards control performance-related characteristics. Quality standards guarantee the performance of a product so it can be compared, while safety standards prescribe a minimum standard that the product must meet. These standards stipulate the characteristics of the end product (Hemenway, 1975).

Rules of conduct complements the self-imposed industry standards by addressing the need to control the way firms operate and compete. These behavioral restrictions take two forms, rules of conduct and the management of product price and supply. Conduct codes focus on the behavior of firms so as to address problems that arise from competition. In the provision of services, conduct codes is analogous to quality and safety standards. The management of product price and supply requires firms to coordinate prices, production, and/or investments. This is only possible if all industry actors collude in order to inhibit firms from responding to competitive markets. Price and supply management goes to the extreme in terms of restraining market dynamics through collective action. Establishing policies to control group product standards and behavior is only one facet of self-regulating arrangements.

#### **3.6.4 Functions of a Self-regulating Group**

The implementation of established policies is just as, if not more important than establishing the standards and rules. The implementation of the rules and standards developed by the group require a series of organizational functions including promulgation of policies, monitoring, enforcement, and handling complaints from both consumers and competitors. Once a set of policies are agreed upon, industry actors must be notified of its existence and encouraged to participate in order for firms to feel the full benefit of cooperation. The development and adoption of self-imposed standards and rules of conduct have no significance if

the self-regulating group does not monitor members for compliance and sanction those that do not comply. “Self-regulatory arrangements can only be created and sustained if some basic mechanisms of monitoring are established and cases of non-compliance are effectively and properly sanctioned” (Ronit, 2000). The structure of the industry plays an important role in monitoring and imposing sanctions. The smaller the number of firms and the more concentrated the territorial structure, the easier it is to achieve a successful self-regulating arrangement. Finally, handling complaints from consumers and competitors is important because it serves as a monitoring system that make the organization and its members accountable to internal and external stakeholders. If the organization handles complaints well, it is another mechanism to publicly promote the industry and self-regulatory organization.

The provision of public and government relations also attempts to improve the public image of the industry. By maintaining good ties with the public and government, a self-regulatory business group can better gauge the threat of government regulation and consumer retaliation. So these ties are critical in terms of accountability and information flow. Equally as important, many business associations cultivate public and government relationships to legitimize the self-regulatory organization and its voluntary efforts.

### **3.6.5 Theory of Collective Action**

Self-regulation rests on the assumption that firms spontaneously organize into collective groups. In order to understand self-regulatory arrangements, we must also understand why individuals form collective groups. Firm participation in self-regulatory arrangements ranges from a high degree of commitment to disinterest. Why do some firms cooperate while others choose to stay on their own? Common sense would suggest that firms join into collective groups when the firms perceive a common interest. Olson (1965) posits that individuals act rationally and thus only collectivize when it serves the individual’s self-interest. The individual must benefit in some way in joining the collective group. According to Olson, “the fundamental purpose of an organization is to provide collective benefits or public goods.” These collective benefits are gains that an individual could not attain. In modern society, large groups emerge because they alone are capable of providing, or better at providing, certain useful functions for the individual.

Later authors question Olson's oversimplified model of the rational individual actor. Chiesi argues that collective action is not only dependent on individual incentives that yields public goods, but also the production of 'solidaristic goods' (Chiesi, 1991). Collective action is not based only on economic and political interests. Solidarity and value incentives must also be considered. The three main reasons for collective action are (1) benefits derived from participation, (2) political representation of the interests of the firms, and (3) the importance of building social capital among members of the association (Chiesi, 1991).

Once a collective group is formed, there are four factors influencing group action: consensus, the size of the group, the market power of firms in the group, and social incentives. Traditional theory assumes that group action is solely dependent on group consensus. Olson argues that group consensus is only one factor in the process of group action. The size of the group is also a critical factor in group action. The larger the group, the more difficult it is to organize and come to a consensus. Contrary to Olson's theory, Chiesi suggests that firm size, not the number of actors, influence collective action. Large actors with greater market power more readily influence the decision of the group. Finally, social incentives, such as social pressure, play a role in collective action because they encourage individuals to act in a certain way. Social pressures are effective behavioral regulating mechanisms because people value their social status and the fellowship of their friends and community members. However, social pressure only works in small group situations where there is face-to-face contact. In large group, social pressure only works if the group is composed of many small groups where there is face-to-face contact.

Despite the potential benefits of cooperation, the sub-optimal provision of the collective good and free rider problems are inherent issues with collective action. In small groups or groups where there is unequal interest in a collective good, the collective good is more likely to be provided. But even in a small group, the collective good is not provided on an optimal scale. Individuals only contribute until they get their share of the collective good, after which they stop contributing. The larger the group the farther the organization will fall short from providing the optimal amount of the collective good. If an individual can free ride – not assume any cost but still receive the benefit – the individual will do so. Following this logic, there is no incentive for an individual to join a large group because, regardless of his involvement, he will still receive the

benefits of the large group and his contributions will not have a noticeable effect on a large organization (Olson, 1965).

### **3.6.6 Why Individuals do not Cooperate**

How does one explain why some individuals fail to cooperate? One possible explanation is offered through Hardin's theory of the tragedy of the commons. The theory assumes there are no social relations between people. Each actor experiences the "prisoner's dilemma" that invariably forces each individual to defect because each individual acts without knowledge of how others will act, even though cooperating would produce the greatest benefit to all actors. Under this context, individuals will not join together to cooperate. Self-interest in a vacuum of information and social relationships results in each individual making independent decisions that leads to the degradation of the commons (Hardin, 1965).

### **3.6.7 Conditions which Foster Self-regulation**

There are several pre-conditions that encourage the development of self-regulation in an industry. One important condition is a substantial threat of opportunism by competitors. In a situation where a firm is constantly in fear that competitors will abuse other competing firms or the customer base, it is to the advantage of the firm to cooperate in a self-regulatory regime. Thus, self-regulations often arise in professions where practitioners cannot afford to have the profession lose its credibility and legitimacy. One such example is the American Medical Association, the self-regulatory body of the medical profession. Another precondition that fosters the development of self-regulation is the industry operates in a highly uncertain environment. For example, industries that experience volatile price fluctuations or elastic demand tend to develop self-regulatory mechanisms. The number and the geographic concentration of firms also play a role in the possibility of effective cooperation. Firms are more likely to self-regulate when the number of producers is limited and the producers are in close proximity. In a situation with limited and concentrated actors, it is easier to impose effective sanctions and discourage future non-compliance and free riding. The existence of too many free riders or recalcitrants affects the ability to self-regulate because the recalcitrants disrupt the potential benefits of cooperation. Finally, group dynamics plays a role in whether firms will cooperate. "Voluntary cooperation is easier in a community that has a substantial stock of social

capital, in the form of norms of reciprocity and networks of civic engagement” (Putnam, 1993). Individuals are less likely to defect when placed in a context of serious social sanctions. Without social relationships, there is no foundation of trust and reciprocity, so individuals have the incentive to defect and become a free rider.

### **3.6.8 Motivation for Self-regulation**

There are many motivations that spur industries to self-regulate including reducing transaction costs, pre-empting government regulations, stabilizing markets and rationalizing production, rent seeking, and bureaucratic interests. Some of the benefits driving industry are direct gains from regulation and others are indirect gains from the effects of the regulation on government policy or public opinion. The industry may be motivated to self-regulate by one or several of these reasons.

#### *Reducing Transaction Costs*

Transaction costs refer to the costs of being in an exchange relationship with firms that an outside firm cannot completely control. Transaction costs impact economic efficiency of the firm and firm behavior. The existence of transaction costs explains why firms often merge and why firms organize into self-regulating organizations. Self-regulation helps to reduce transaction costs by standardizing efforts and reducing information costs. “Self-regulation reduces the risk inherent in market transactions by circumscribing the possible behavior of one’s competitors” (Abolafia, 1985). Also, self-regulation establishes rules of conduct that promote mutual trust and other requisites for smooth functioning of markets.

#### *Pre-empting Government Regulation*

An indirect motivation of self-regulation is the desire of industry to avoid intrusive government regulations. Industries are eager to reduce or eliminate intervention by less knowledgeable government agencies. A self-regulatory arrangement indirectly influences the political process so as to reduce the threat of regulation (Leidy, 1994). Self-regulate has the potential to improve the public image or reputation of an industry. Voluntary standards may inspire positive public opinion that can influence the government’s perception of regulatory requirement. If an industry is perceived as effectively controlling industry actors so that

society's interests are safeguarded, than the government will have little need to regulate the industry.

### *Stabilizing Markets and Rationalizing Production*

An important industry incentive that encourages self-regulation is the desire to stabilize markets and/or rationalize production. In an environment of market turbulence, self-regulation helps mitigate market volatility (Abolafia, 1985). For example, a competitive market may produce an environment characterized by wide price fluctuations (commodity market) or uneven provision of services (transport sector). Cooperation among firms to determine product prices eliminated volatile prices; standards and rules ensure a regular provision of services. Also, voluntary standard setting avoids potential standards wars that may erupt without cooperation. Standards and rules of conduct also rationalize production by make coordination easier among firms.

### *Anticompetitive motives*

The desire to self-regulate may also be due to rent seeking behavior on the part of firms. Firms may be capable of achieving higher profits through the restriction of competition that characterizes self-regulation. For instance, standards can limit both price and quality competition through oligopolistic coordination. In addition, standards can have exclusionary impacts when a standard gains legitimacy in the market. In this case, standards and rules of conduct create entry barriers into the industry so that new firms cannot freely enter the market. The existing firms essentially control the direction and future competitiveness of the industry (Hemenway, 1975).

### *Promoting Bureaucratic Interests*

Lastly, we need to consider the fact that a self-regulatory mechanism requires organizational capacity to develop and implement group policies. Organizations that implement self-regulatory initiatives are often motivated by their own self-interest. Although the purpose of an organization is to bring benefits to member firms, the organization has a different perspective than the firms they represent. An organization may be able to identify problems industry actors

cannot, but an organization also wants to protect and expand the importance of the organization itself (Sundgren, 1998).

### **3.6.9 Benefits of Self-regulation**

It is apparent from the industry motives that firms choose to cooperate because self-regulation offers many benefits to both the industry and the society. From the industry's perspective, self-regulatory mechanisms reduced transaction costs between firms, stabilize and rationalize the market, and it indirectly minimizes possible government intrusive regulation. Self-regulation also provides the firm with expensive collective goods like industry lobbying and industry wide statistics that are otherwise too expensive for an individual firm to obtain. From a public interest perspective, self-regulation bolsters the integrity and efficiency of the market. Those with the most expertise in the field, the firms, regulate themselves. The self-determination of regulations by the industry produces controls that are best suited to the industry context. Not only are firms setting the conditions of the regulation, firms are also the watchdogs of the regulation since they are the ones implementing the policies. The industry is more effective regulating industry actors because of industry expertise, industry social relationships, and the physical proximity of control over actors. Ultimately, self-regulation required less costly monitoring and enforcement programs and potentially achieves better compliance to regulations than command and control regulations. In some instances, self-regulatory arrangements have proved so successful that the voluntary standards became legally sanctioned government standards (Hemenway, 1975). In this way, it can be argued that self-regulation is an efficient model of governance in a competitive environment.

### **3.6.10 Problems of Self-regulation: Accountability**

The problems and benefits of self-regulation stem from the same source, restraining competition. On the one hand, the collective action of industry actors can lead to benefits for both industry actors and consumers by curbing dishonest conduct and achieving a certain product or service standard level. On the other hand, a lack of competition under a collusionary arrangement creates a potential for monopoly abuse. Without competition, the industry has little incentive to improve services or innovate, which leads to inefficiencies, higher prices, and a decline in the quality of service. For example, voluntary standard setting may produce higher

costs for customer, stifle innovation, reduce quality, and threaten consumer safety (Hemenway, 1975). “Every standard has the potential for circumscribing some facet of commercial operations.” (Rosenberg, 1976, p.80) The main reason why firms do not innovate under collusionary arrangements is because the firms are no longer accountable to external stakeholders such as consumer groups. As long as all the actors in the industry agree to a higher price or a lower quality of service, the firms can get away with their dishonest behavior. A competitive market forces the producer to be accountable to the customer.

Another problem with self-regulatory arrangements is that power is seldom distributed evenly among stakeholders. Firm power depends on the size of the firm, its self-interest, and its resource availability. Self-regulation can create, reinforce, and utilize various forms of market power. In situations of unequal market power, the policies of a self-regulatory organization are unlikely to represent all firms. Instead, those that hold the most market power are the ones with the decision-making authority. Consequently, the standards and rules will favor these actors. The problem of accountability within an organization is critical. Without a more accountable arrangement based on democratic principles, self-regulation may fall prone to similar problems as a command and control governance model where a ‘self-regulating’ organization imposes regulations on firms. This scenario may face the same kind of resistance from individual firms as government imposed statutes. In addition, in a self-regulatory arrangement, firms can simply stop participating and withdraw from the group.

In situations of collusion and unequal power distribution, there is the potential to abuse the system without some form of accountability to external and internal stakeholders. Since self-regulation is a form of governance outside of conventional governance structures, it may be hard for some to accept that private actors are looking out for the public interest. Private organizations are not subject to the same degree of accountability to public interests as public institutions are. Considering that unequal power dynamics is the rule as opposed to the exception in most industries, accountability within the group is an added issue facing a collective governance regime.

### **3.7 Jitney Self-regulating Organizations**

Most jitney operators form associations in order to provide collective benefits and gain political representation for its members. These associations spontaneously organize through

internal agreements made by operators of a specific route. Every route association is organized differently, and so has a different set of rules and benefits. Smaller route associations often feed into larger organizations in order to lobby for collective interests in the local, state, and federal level. These associations offer a wide range of benefits including financial benefits, organizing the delivery of services, bringing order, and ensuring fairness.

The array of benefits is very diverse and comprehensive. Associations may provide legal or financial aid to members in case of injury or sickness. Some associations offer group insurance coverage, low-interest loans, and informal agreements with local garages. Most importantly, associations rationalize the provision of services so as to avoid inefficiencies and ensure fairness. Associations hire dispatchers to prevent vehicle bunching and head-to-head competition for passengers on the road. Associations may also balance the supply and demand of jitney services by regulating the number of drivers by day-of-week and time-of-day, resulting in an adequate, but not overwhelming, number of operators plying the route at any one time. In the case of low-demand periods, all the members may subsidize the provision of service during off-peak hours. In some cases, associations share their fare box revenue so as to ensure a fair distribution of revenue. Associations also instill order in an environment that would otherwise be subject to individual operators' conduct and preferences. This is done through rules of driver conduct such as boarding and alighting procedures and prohibiting head running. Associations may also have an internal traffic court to deal with misconduct on the road, citizenship among members, and disputes.

### **3.8 Conclusion**

The question is how best to govern the jitney industry without depriving the private sector of the flexibility necessary for innovation. The jitney industry is an example of hybrid governance system that uses both government regulations and industry self-regulation to influence the behavior of operators. As opposed to solely relying on strict regulations and enforcement activities, the jitney governance model also uses existing operator self-imposed arrangements to control drivers. Since most firms are individual owner operators, the industry does not face the usual power inequalities among industry actors. This makes the jitney case study particularly unique when studying how the government tries to control firms and the dynamics of self-regulation.



# Chapter 4

## Research Approach

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This study examines how cities with existing jitney services govern their drivers. The research uncovers the consequence of a particular governance model and what governance strategies bring about a high quality of jitney service to riders. Consequently, I use a case study methodology that relies on interviews, personal observations, newspaper articles, government agency reports, and supporting transportation literature. The primary source of information is from interviews with stakeholders in each case study. Interviews were conducted with the leaders of self-regulating organizations and government officers from agencies that regulate the jitney industry or have a vested interest in jitney issues. I elected not to interview individual jitney operators due to time restraints.

The interviews with the leaders of self-regulating organizations were focused on documenting the functions of the organization. The format of the interviews closely followed the theories on self-regulation; the purpose was to document what rules and standards organizations adopted, how the organizations monitor and enforce rules and standards and respond to complaints, and whether the organization provided political representation. In addition, the interviews uncover the institutional structure of self-regulating organizations, the decision-making process, and challenges facing the industry. The purpose is to document how different organizations organize so others have a model to improvise from. Finally, the interviews help to understand why organizations developed and evolved in the way they did.

The interviews with government officers were focused on regulations and city goals. Interviews are concentrate on what aspects of jitney operation the government controls, how the government enforces these rules, and whether the government is successful. The interviews also document the perceived quality of jitney services. Lastly, the interviews tried to uncover what the goals of the city with regards to jitneys and how the relationship between the government and

operators shaped the development of jitney services. As would be expected, the interview questions varied depending on the jitney context in the city and the person interviewed.

#### **4.1 Case Study Selection**

I selected four domestic case studies including San Juan, Atlantic City, New York City, and Miami. The case studies were selected based on (1) the city had to have a jitney service and (2) the city had to be in the United States so that I could visit the location and conduct interviews in English. These first two criteria resulted in a short list of cities since there are only a few jitney systems in the United States. Finally, the jitney industry must be a big enough size that governance has the potential of becoming an issue. By 1997, there was only a single jitney operator offering service in San Francisco, and there were only ten remaining licensed jitneys operating in the San Ysidro border area in San Diego. (Cervero, 1997) Thus, jitney systems in San Francisco and San Diego are excluded from the study. Originally, I selected Atlantic City as an example of a strong self-regulating organization, New York City as an example of nascent self-regulating organization, and Miami as an example of a jitney service without an operator organization. As it turns out, these distinctions I drew were incorrect. In total, I conducted 33 stakeholder interviews. A breakdown of the individuals interviewed and the organization they represent can be found in Appendix B. Due to the relatively small size of the Miami and Atlantic City jitney industry, I was able to interview enough leaders of operator organizations so as to capture the views of the majority of jitney industry actors.

#### **4.2 Drawbacks to Methodology**

There are many drawbacks in my methodology. Perhaps the most damaging drawback is that the study only examines jitney systems in the United States. The jitney phenomenon exists all over the world. For instance, Latin America and the Caribbean have the most developed and successful jitney services in the world. The conclusions from this research can only be applied in a limited fashion due to the fact that the study only examines U.S. cases.

Due to time constraints, I was only capable of interviewing a small sample of all the operator organization leaders in a city. Therefore, the conclusions based on the self-regulating organizations interviewed in each city are not representative of the entire constellation of

possibilities. This is an especially large drawback when examining the larger jitney industries in New York and San Juan.

Relying on interviews as a source of data always raises questions on the validity of the information. The data collected and the perspective of those interviewed influences the kind of data collected and the possible conclusions that can be drawn. This is a shortcoming when considering interviews with government officers since many of the interview questions asked for their opinion regarding the state of jitney services.

The evaluation of service quality and the strength of an institution's organizational capacity were completely qualitative and subjective. The evaluation is based on the results of other field studies, the regulatory mechanisms, the opinions of those interviewed, and occasionally my own personal observations. This study does not have any quantifiable data that support the evaluation of service quality.

Finally, the language barrier in San Juan, Puerto Rico, severely limited the information I could gather from route association leaders and the number of interviews I could conduct. As a result, the interview results are variable and the total number of interviews is few in comparison to the pool of organization leaders in San Juan.

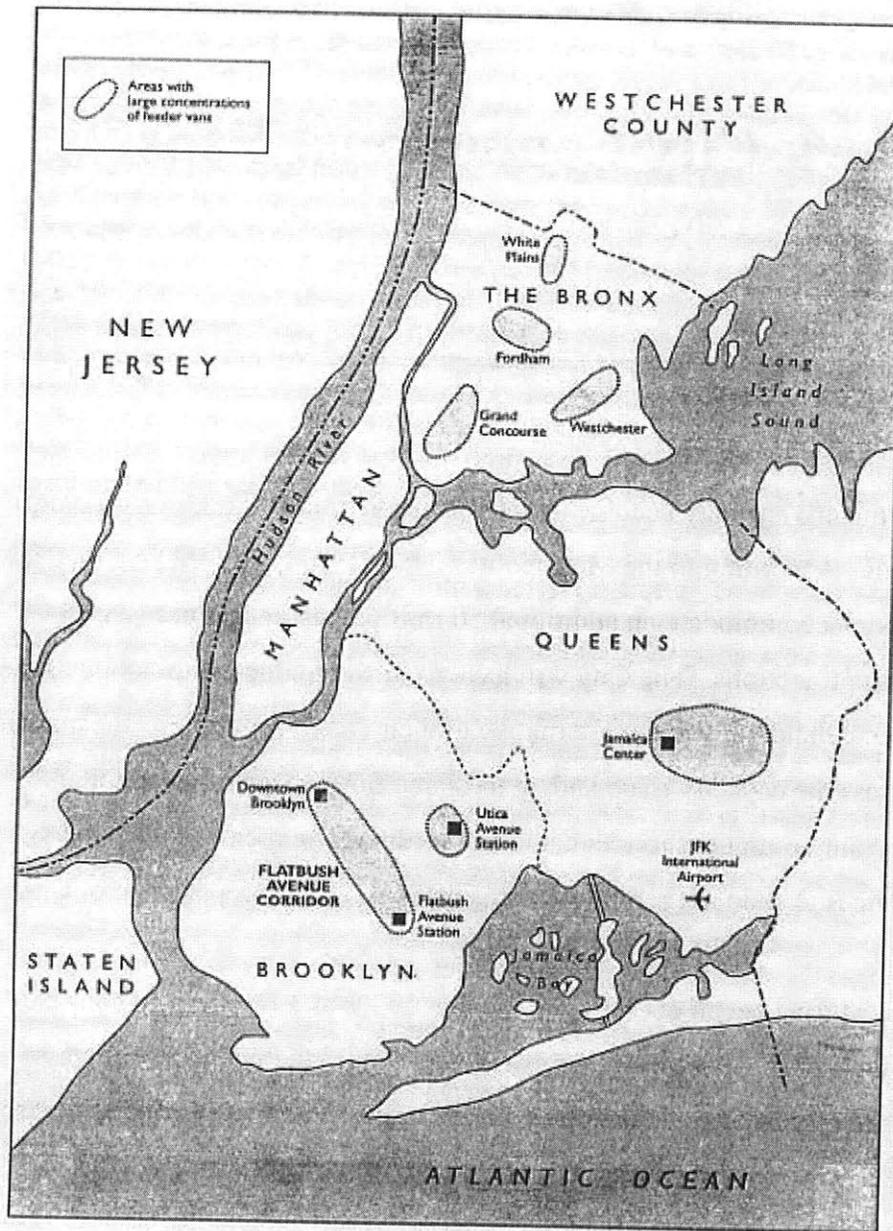
## Chapter 5

# New York City Commercial Vans

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The New York commuter vans may become an indispensable transit mode considering the transit growth projections. According to the Metropolitan Transit Authority (MTA), the New York City Transit will need to accommodate an additional 50 million passengers per year in order to keep up with growth projections. The City will have to further reduce automobile usage by providing the public a secure and convenient alternative to their cars. Commuter vans may be one of various ways to address the capacity issue and, at the same time, save taxpayer dollars. Vans can supplement peak-hour commute service that is extraordinarily expensive for public transit to provide. Van services also do not require transit subsidies. (NYC Department of City Planning, 1998)

New York commercial vans began operating in the late 1970s as a response to poor transit service in the outer boroughs. Van service primarily serves low-income working-class individuals from minority communities that have few transit options. There are two main classes of New York City commuter vans, feeder and express services. Feeder vans are similar to jitneys because they follow fairly established routes and respond to curbside hails. Unlike jitneys, express van services follow routine schedules, provide long-haul services, are subscription services, and operate only during peak hours. Presently, there are a total of 372 legal drivers operating under 70 permit authorities. Each commercial type represents about half of the total van operators. In 1999, it was estimated that there were an additional 1000-5000 vehicles operating illegally, with a legal and illegal patronage of about 40,000 passengers per day (Ramirez, 1999). Since this research is concentrating on jitney services, the case study will limit its attention to feeder van services.



Map 5.1: Parts of Queens, the Bronx, and the Bronx with High Concentrations of Feeder Vans  
 Source: Cervero, 1997.

## 5.1 Service Characteristics of New York Vans

### Route & Type of Service

Feeder vans shuttle residents in outer boroughs to subway stations and around the community. Four subway stations along Hillside Avenue in Southeast Queens were the focal

points for the busiest feeder van activity in New York City in 1998. A study conducted in 1998 found that fewer than 300 vans provide various services in the boroughs of the Bronx, Brooklyn, Queens, and Staten Island (see Map 5.1). Vans often illegally duplicate the paths of established bus routes and solicit passengers at bus stops. A study conducted in 1994 estimated that at least 27 percent of bus routes operated by New York City Transit Authority (NYCTA) and franchised companies face direct competition from feeder vans (Trommer et al, 1994). By law, vans are only allowed to pick-up prearranged rides. However, feeder vans picking up curbside hails anywhere along the route. Operators sometimes deviate from the route since the law does not prescribe fixed-routes. Generally, vans operators avoid picking up elderly passengers and those with a lot of baggage.

### Intermodal Integration

Intermodal Integration in New York is mixed. Van service is informally integrated with other transit modes since feeder van routes terminate at the subway stations and illegally stop at bus routes. Feeder van scheduling is to some extent integrated since vans provide 24 hours service that is generally frequent, even during off-peak hours. There has never been an attempt to integrate fares between public transit and van service. Consequently, vans patrons connecting to the subway must pay twice the fare. Before the introduction of the Metrocard in 1997, passengers on the public transit system also had to pay each time they transferred from one mode to another. Even though the regulators do not regulate the fares, almost all operators charge \$1.25 per ride.

### Scheduling & In-vehicle time

Operators provide a demand-responsive van service that runs close to 24 hours a day, 7 days a week. Field observations in 1998 revealed that the feeder vans provide a slightly lower level of service during the weekend and off-peak periods. Vans come by more frequently, make fewer stops, and take riders closer to their destinations. Considering patrons prefer vans because vans provide a faster form of mobility, frequency, reliability, and trip-time must be superior to other transit options.

### Comfort & Access to Service Information

Operators generally drive 14-passenger vans that sometimes have air conditioning. The vehicles do not comply with ADA requirements. The internal seat configuration of a standard van makes boarding and alighting difficult. The one comfort advantage of van service is that passengers are guaranteed a seat. At some route destinations, there are commuter van signs to direct passenger where to wait. These signs are the only forms of service information provided to the public. Van companies do not provide service information regarding van routes, fares, stops, and frequency. The industry relies on 'word of mouth' to attract new passengers.

### Safety

Drivers are known to drive very aggressively and cut off buses and other vehicles to make timely drop offs. On the other hand, vans also deviate from their route to drop off passengers to their door. This is especially important at night when safety concerns are heightened. The well-enforced vehicle and driver standards ensure that legal van operators are qualified to provide transit services.

## **5.2 Van History**

The New York case study is an example of a commercial van service that has faced great opposition from existing institutions and stakeholders. The commercial vans have had to fight the authorities for recognition since operations began. Both the government authorities and transit union workers opposed the existence of commuter vans mainly because the vans represented a threat to conventional transit services. Government authorities also argue that vans add to rush hour traffic congestion, exacerbate air pollution problems, and pose a potential safety hazard. The struggle of the van industry portrays a story of political and cultural conflict. Politically, vans pose a threat to existing institutions. Culturally, City actors view the service as an eyesore, whereas the communities served openly welcome the services. Many drivers are unlicensed or operate illegally by violating the city law that stipulates prearranged rides. After two decades of operations, the police still continue to cite vans for operating without a license and operating in an illegal fashion. In recent years, regulators have begun to recognize that the vans are a permanent part of the urban landscape. In an attempt to legitimize van service, the city has begun to install signs at drop off and boarding locations at the ends of the routes and

designate curb areas where vans have a place to wait between runs.

### **5.2.1 Van Origins**

Caribbean immigrants began informally hauling Queens residents to subway stations using passenger sedans in the late 1970s. The heaviest concentration of vans developed around the Jamaica section of southeast Queens where there was little in the way of transit services and a large Caribbean community. The spontaneous emergence of van service had a strong cultural dimension (Boyle, 1994). Jitney services were commonplace in the Caribbean. Thus, it was only natural for individuals from the Caribbean community to begin offering rides when they perceived a lack in transit services. The majority of van riders were also working-class residents from the Caribbean community. After the development of van service, the service attracted a wider segment of the population in the neighborhoods vans operated in.

The gap in transit service was also a critical factor in the development of van services. The subway had geographic limitations since it extended to only some areas of the outer boroughs. Consequently, many residents of the area, particularly minority and low-income groups, had few mobility options beyond the subway terminals. The public buses offered a poor quality of service. The vehicles were unclean and overcrowded; the operations were perceived as being unsafe; the service was unreliable and infrequent (Reid, 1995). In addition, taxis do not serve the boroughs since the number of taxis in New York has been fixed at 11,787 medallions since the 1930s (Boyle, 1994). Taxis have evolved into a service that operates only in Manhattan and shuttle passengers to and from the airports. The 1980-81-transit strike spurred the sudden explosion of van services. Consequently, van service spread to Brooklyn and the Bronx during the 1980s. As the demand for services increased and van operations became more stable, operators began driving standard 14-passenger vans.

### **5.2.2 State and Federal Control of Vans**

The State of New York and the Interstate Commerce Commission (ICC), a federal agency, had the authority to freely license vans since both maintained jurisdiction over intra- and inter-state carriers. Depending on the territory of the route, a driver could obtain a license to operate intrastate routes from the state of New York or a driver could apply for an interstate license from the ICC. Neither the ICC nor the state licenses specified the number of vehicles

that could operate under each license. So, an operator could legally operate any number of vehicles with one license. The State and the ICC primarily required that the applicant obtained a 'Certificate of Convenience and Necessity' and demonstrated adequate operator qualifications. The operator had to prove fitness, willingness, financial ability, and public demand. The ICC viewed that the submission of the application demonstrated a need for service. Whereas the state required the applicant to show that the existing mass transit service was inadequate. Although the state requirements appear more stringent than the ICC, in practice, only a handful of applicants were denied on the grounds of need.

Neither the federal nor the state agencies had any intention of controlling the development of the van industry. Neither authority allocated enforcement presence on the streets of New York. The national policy at the time wanted to encourage private sector participation in transit provision and so the state and federal authorities developed laws that made entry into the industry relatively simple.

A number of van operations tried to legitimate their operations through applications to the state. By 1990, eleven operators with a total of 100 vehicles had received state DOT approval (Varley 1996, 4). Even with these relatively lenient laws, only half of all the commuter vans obtained ICC or NY State authorization by 1991.

Beginning August of 1990, the city police began crackdowns on drivers without legal operating licenses. From June 1990 to December 1991, 11,700 city citations were given for violations such as illegally stopping at bus stops and 6,500 state citations were given out for safety issues (Huscok, 1996). In response to the enforcement threat, van operators began forming loose organizations. Van organizations hired lawyers to fight the tickets to keep the fines from becoming excessive. The City countered by increasing the towing fine and requiring operators to buy an expensive window sticker to prove legal status. During this time, the actors in the van industry made a major push for the city to recognize van services as a part of the entire mass transit system.

### **5.2.3 New York City Control of Vans**

It was not until December of 1993 that NYC adopted local law 115 that transfers responsibility of commuter van regulations and enforcement to New York City. The Taxi and Limousine Commission (TLC) was charged with the authority to regulate the commuter van

industry. The commission was required to submit any application it approved to the city council for final approval. In effect, the law gave ultimate authority of granting permits to the city council.

In December of 1993, the New York City Transit Authority produced a report admitting “the van/car services are trying to offer the best attributes of the TA’s service along with meeting needs where the TA falls short”(Galmforth, 1993). Despite these attributes, the report made similar recommendations as the 1992 report that recommended driving the vans out of business through aggressive competition and law enforcement. The 1993 report suggested reducing the price of subway tokens or transfers, using smaller vehicles during peak hours on key routes, and continuing police enforcement efforts in order to shut down illegal services. In November of 1996, the New York City Police Department initiated another enforcement program to eliminate illegal van operations. The enforcement activities resulted in a surge in public bus ridership, suggesting that van patrons would otherwise use conventional bus services. In July of 1997, the transit authority introduced the Metrocard, which allowed free transfers between the bus and subway systems. Hector Ricketts estimated that the Jamaica operations lost approximately 15% of patronage in 1997 as a consequence (Fenner, Nov 17, 1997).

The TLC began processing van applications in September of 1994. Under the strong influence of the transit union workers, the city council refused to approve almost all of them. The opposition of Mayor Guiliani to the City Council’s rejection of van applications spurred the City Council to place a moratorium on van permit approval, pending a study which identified the areas of New York that were underserved by transit authority services and could most benefit from service augmentation by vans. The study, produced in October 1998, acknowledges the clear service advantages of vans despite citing problems of dangerous driving. Vans were “seen as more sensitive to the needs of the local community than the publicly-subsidized bus service. The vans are often operated by local entrepreneur and patronizing them is seen as a way of investing in the community rather than in a large, perhaps insensitive, bus company” (New York City Department of City Planning, 1998, p.73-74)

In March 1999, the New York State Supreme Court ruled against the City regarding the City Council’s 1993 law that gave ultimate authority of granting permits to the City Council. “The courts ruled that local law 115 violated the city charter constitutional separation of powers by allowing the council to administer rather than write a law” (Richmond, 2000, p.127) The

Supreme Court ruling provided some protection against the sentiments of the city council. However, the ruling did not change the fact that vans could only legally offer prearranged transit trips. Consequently, van operators still need to operate illegally to carry out their business.

### **5.3 Industry Problems**

There are several obstacles facing the van industry that were repeatedly mentioned by those interviewed. One major issue that often forces many legally licensed operators to become illegal is purchasing adequate vehicle insurance. There is only one insurance company in New York City that is willing to insure commuter vans, Eagle Insurance. The yearly insurance rate has increased dramatically from \$3,000 a year in 1992 to \$12,000 beginning February 2002. Many operators are worried that they will not be able to remain legally licensed if the insurance rates continue to rise. In fact, at the time the interviews were conducted in mid-January, some of the company presidents mentioned that some of their drivers may not continue driving under the company name due to the unreasonable cost of insurance.

Another issue raised by every company president is competition from both illegal operators and new entrants to their territory. Operators feel powerless against illegal drivers who steal passengers from legitimate operators. Licensed drivers rely on city enforcement activities to minimize or eliminate the threat of illegal drivers. Two company presidents mentioned that they felt the city needed to commit more resources to illegal van crackdowns. One president also felt that the city needed to clearly delineate service territories to prevent licensed operators from other territories from encroaching on properly authorized drivers. Meanwhile, existing companies feel threatened by the encroachment of their territory and routes by new entrants authorized by the city. The president of Rosedale Vans felt that the city should introduce new territories to new operators instead of forcing more drivers to compete for the same number of passengers on an established route.

Jack Schmitt, the director of the transportation division of City Planning, voiced similar concerns over the level of competition among legal operations. He feels that the ad hoc nature of the authorization process produces situations of over-competition among drivers. Mr. Schmitt voiced the need to design a better system of authorization that accounts for overlapping territories and that recognizes a limited carrying capacity for catchment areas. The current level of overlap makes it difficult to map all the territories and devise a comprehensive plan. Since the

City DOT effectively grants the authority to operate, the responsibility falls to the City DOT to develop a better authorization process. The development of a more systematic and comprehensive authorization process is unlikely considering the City DOT currently does not have the capacity to conduct a study for each application, let alone devise a comprehensive authorization process.

The company presidents also raised other issues such as allocating curb rights and installing infrastructure. Two companies cited the need to allocate van curb rights for van stops and van waiting areas at the ends of routes. As it is now, vans often have to roam around the streets 'like fugitives on the road.' Along with curb rights, van operators want the City to install van signs at designated stops and waiting areas. Despite these complaints, most of the company presidents also indicated that the City has helped the industry in recent year by allocating curb rights and installing van signage. The general consensus seems to be that waiting areas and signage is critical to the legitimacy and efficient service provision of van operations. Other issues that receive less attention are the elimination of the law restricting drivers from existing bus routes and discrimination against van operators by enforcement officers.

#### **5.4 Goal of City Agencies**

Transit policymakers envision a long-term role for commuter vans in a coordinated public transportation system. The exact mechanism for integrating the jitneys is not well defined. The approach appears to be to separate van and bus markets. This may mean authorizing the vans to serve areas or neighborhoods not served or underserved by existing bus routes (Center for Urban Transportation Research, 1994). All the City spokespersons interviewed want to move the van industry towards a self-regulating arrangement. They all aspire to create an environment where the industry would self-regulate, making government intervention and enforcement unnecessary. "The best thing companies can do is to be proactive about self-monitoring for compliance, driver training, and respecting the law." (Fromberg, 2002) The ultimate goal is for the industry to regulate itself. It is unclear how regulators expect operators to comply with laws like prearranged rides and restricted activities on existing bus routes when the industry must violate these laws to survive. In recent years, city agencies have begun to recognize and accept the van industry. However, government authorities have yet to legitimate the transit services and view van services as a part of the entire transit system. None

of the City officials interviewed are concerned about monitoring and improving van service quality or intermodal integration. This may be because issues like intermodal integration and service quality only become a consideration when van services are viewed as part of the entire transit system.

## **5.5 Government Regulations**

Commuter vans are defined by the city as nine to twenty passenger motor vehicles that are not permitted to accept curbside hails from prospective passengers. Local Law 115 stipulates that commuter vans are permitted to provide transportation on a “prearranged regular daily basis, over non-specified or irregular routes, between a zone in a residential neighborhood and a location which shall be a work related central location, a mass transit or mass transportation facility, a shopping center, recreation facility or airport.”

The City regulates commuter van entry, vehicle and driver standards, and type of service. In order to legally operate a van service, an individual must obtain a commuter van license, a commuter van driver’s license, an authorization to operate in a territory, vehicle registration and evidence of current liability insurance, and a passenger manifest. The purpose of requiring a passenger manifest is to show that the van service has a prearranged clientele and so will not pick up curbside hails. The prearranged service restriction limits the type of service the vans provide. An applicant must demonstrate vehicle fitness to obtain a van license and possess a commercial driver’s license to acquire the van driver’s license. In addition, the applicant must pass a criminal and driving history check and medical fitness. An applicant for a new or existing territory must demonstrate the present or future public convenience and necessity of the service. Once authorized, the permit holder must operate within the geographic area set forth in the authorization, but is restricted from stopping anywhere along the routes served by the NYC Transit Authority, city buses, or city approved private bus companies. The permit authorizations are only valid for six years, at which time the permit holder must again demonstrate need. The only factor that is left to the discretion of van operators is the fare. However, in order to compete with the New York Transit Authority and its bus routes, almost all van operators charge the same fare, \$1.25.

The numerous requirements make entry into the van industry onerous, deterring new entrants. The regulations also severely restrict the type of service that can be legally provided,

and geographically limit van operations in order to protect incumbent institutions and actors. These restrictions, in combination with heavy enforcement activities, send a clear message that the City does not want van operations to exist; if vans do operate, they must not compete with existing bus services, even if van services are more sensitive to the needs of the public.

The New York regulations have several distinguishing characteristics, some of which are unique to New York. First, New York's regulations control the territory that drivers operate, rather than a predetermined route. Although this gives van operators more flexibility in routing, van operators are confined to operate along corridors where existing transit services do not operate.

Second, the authorities to operate a territory are awarded to a few permit holders, rather than individuals. The City DOT decides how many vehicles are allowed to operate under each permit authority. The City usually awards several permit authorities in a territory. The permit holder then rents out the right to operate in the territory to as many individuals as the permit allows. The regulations force a structural hierarchy in the industry that gives the City more control over van operations. For example, if there is an issue in a territory, the City can contact a few permit holders to resolve the issue. On the other hand, it is interesting that the City does not grant a sole franchise to one permit holder. This may be because the City wants to encourage competition in the territory as a way of forcing accountability among operators and permit holders in a territory.

Third, the law holds the permit holder and owner of the vehicle responsible for ensuring each operator keeps a passenger manifest, passes the annual vehicle inspection, and has the proper licenses, insurance, and vehicle registration. If a driver is discovered to be out of compliance with any of these requirements, both the operator and company are summoned to the court system. By forcing permit authority holders and owners to make sure the driver of the vehicle is in compliance with the city regulations, the law effectively utilizes the organizational capacity of the permit holder and owner to control van drivers.

### 5.5.1 Institutions

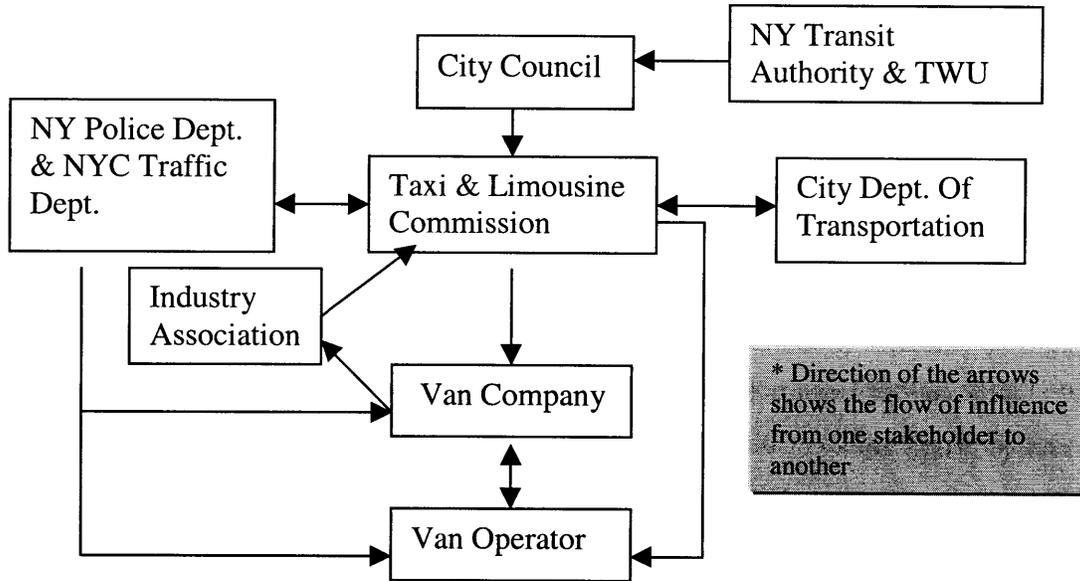


Diagram 5.1: New York Van Stakeholder Relationships

The City Council plays the central role in setting van policies and overseeing how the policies are implemented. The NYTA and TWU have great influence over the decisions made by the City Council (refer to Diagram 5.1 for stakeholder relationships). This influence and the City Council’s low opinion of van services resulted in legislation that favors these longstanding institutions. Local Law 115 directly reflects the interests of the NYTA and TWU – to deter entrepreneurs from entering into the van industry and protect public transit from private competition. Until the 1999 Supreme Court ruling, the City Council also tightly held the reins of how the law was implemented.

The Taxi and Limousine Commission (TLC) is charged with the responsibility of regulating commuter vans through the control of both individual operators and jitney companies. The main responsibility of the TLC is to make sure vehicles and van drivers are legally licensed and to perform monitoring and enforcement activities. The TLC grants commuter van licenses and commuter van driver’s licenses. The TLC also ensures applicants have the proper vehicle registration, liability insurance, and a passenger manifest. The TLC defers to the City Department of Transportation when reviewing over applications for new authorities in existing or new territories. Once approved by the City DOT, the TLC grants a company the authorization

to operate. In addition, the TLC controls jitney companies through company sanctions when an operator is out of compliance. The overriding goal of the TLC is to monitor the industry in question and ensure the industry provides the services safely. However, the political pressures from the City Council and other stakeholders such as the Transit Workers Union (TWU) has forced the TLC to block the van industry from offering transit services in the past (Fromberg, 2002).

The City DOT is charged with conducting a community needs assessment for new authority applications. In reality, the City DOT heavily relies on applicants to demonstrate service needs due to the limited resources the agency. The process is based on a consensus procedure where applicants must convince agency personnel of the value of the proposal. Consequently, the review and approval process is usually lengthy and easily delayed.

Enforcement activities in New York require a multi-agency effort. When an operator is found operating without the required licenses, sanctions are imposed on both the operator and the van company. The TLC has enforcement officers dedicated to van monitoring and enforcement activities. However, in past enforcement crackdowns, the Transit Police Surface Crime Unit and the New York City Police Department had primary responsibility for enforcement. They were supported by the NYSDOT Motor Carrier Investigators, TLC personnel, Long Island Railroad officers, NYSDOT agents, and NYCDOT towing resources.

In recent year, the City Planning Department has become involved in the overall planning of van services. Since the City has also begun to allocate curb space to van operations, the New York City Traffic Department is involved in deciding where stop locations are placed. In the future, if vans and buses ever share an exclusive lane, than the Metropolitan Transit Authority (MTA) must approve the measure.

### **5.5.2 Operations in Practice**

The actual practices of van operators do not mirror those set forth in the city regulations. The stringent entry requirements deter van drivers from becoming legal operators. For many operators, the cost of the necessary licenses, permit authorization, registration, and vehicles insurance is too high. These drivers are willing to risk periodic fines and forfeiture of their vehicles. Even now, no one in the city is able to give an accurate estimate as to how many illegal van operators provide transit services.

The provision that vans can only offer prearranged transit services also forces all operators, both illegally and legally licensed, to violate city codes when plying the streets. All feeder service vans accept curbside hails. It is a prerequisite for doing business in the van industry. Aware of this situation, both regulating and enforcement agencies choose to ignore the violations realizing that the van industry will continue operating in this fashion regardless of city laws. In fact, Lou Ann Dunbar, a representative of the City Department of Transportation, does not perceive that the vans are breaking the law in regards to prearranged rides. If a rider stands at the same place everyday to catch a ride, than it could be construed as a prearranged service. Van drivers also violate the service territory restrictions stipulated in city regulations. Van drivers operate in areas outside of their authorized territory and pick up passengers along existing bus routes and at bus stops. This issue causes a great deal of friction between both van operators and the New York Transit Authority.

The present governance model does a good job in forcing legal regulators to operate safely. However, the illegal operators do not possess adequate vehicle insurance or pass the vehicle standards set forth by the city. These drivers represent a public safety risk and also add to congestion on the roadways. In this way, the current entry regulations fail to address the public safety issues of unlicensed vehicles.

### **5.5.3 Government Monitoring and Enforcement**

The city conducts monitoring and enforcement activities to ensure compliance with regulations. Enforcement officers conduct raids that include mass field inspections, spot checks by unmarked cars, and foot patrols at subway stations where vans congregate. The city ordinance gives enforcement officers the authority to seize and forfeit vehicles of repeat offenders and unlicensed operators. For instance, approximately 4,000 illegal vans and gypsy cabs were seized citywide in 1993 (Cervero, 1997). The fact that the City has the legal authority to impound vehicles is critical. Vehicle forfeiture abilities confer the City the enforcement power to deter illegal activities. At the height of illegal van activity in the mid-1990s, there were 43 police officers in the Bus Unit. Approximately 55 percent of the Bus Unit's time were spent on commuter van enforcement (Commuter Van Service Policy, 1998). Despite the number of resources expended on enforcement efforts, enforcement crackdowns provide limited relief. Although the illegal van population has shrunk since the mid-1990s, when illegal van activity

was at its height, illegal activity still exists today. It is unclear whether the decrease in illegal operators can be attributed to the enforcement activities. It may be a variety of factors such as the introduction of the Metrocard or the overall stabilization of a nascent transportation industry that has resulted in fewer illegal operators.

## **5.6 Operator Organizations**

The permit holder structure that was initiated through City regulations created an organizational unit that eventually led to self-regulating arrangements. Government regulations initially forced the formation of van companies. These companies took the role of the intermediary between the van operator and the city. From the City's perspective, the companies served as a private sector enforcement arm of the City. Over the years, the van companies have evolved to take on additional self-regulatory responsibilities that are not mandated by law.

The operations of jitney companies are generally very similar. Nonetheless, the company presidents conveyed many different company goals including to:

- Attract passengers through advertising;
- Coordinate van services;
- Ensure drivers complied with regulations;
- Create a good working environment; and
- Serve as a liaison between regulators and operators.

Despite these different goals, Approximately 70% of the legally licensed drivers own and operate their own vehicles (Hector Ricketts, 2002) Among company leaders the general consensus is that owner-operators are more reliable and provide better service to riders since they have a vested interest in the industry. From a company perspective, owner operators require no capital investment from the company and drivers can leave the company without impacting the company. Owner operators all pay weekly fees for the use of the permit authority and all operation costs are the responsibility of the owner operator. The drivers that rent vehicles from the company must pay an additional rental fee and daily operating expenses such as fuel. The companies give little in the way of benefits, aside from occasional legal services and financial assistance in times of great financial hardship.

### **5.6.1 Rules of Conduct & Standards**

All four companies have extensive rules of conduct that control the behavior of the companies' drivers on the roadways. All the companies employed dispatchers to regulate the supply of vehicles based on a first in/first out arrangement. In some instances, several companies operating in the same territory and route organize to pay for the cost of a dispatcher. The individual drivers in the Dascom Company were obliged to contribute money to hire a dispatcher that the company president would arrange. The origin of the first in/first out dispatching system among companies seems to be one of evolution and social pressures. Over time, companies and drivers gradually participated due to group pressure and self-interest. A few companies also required that drivers maintain a clean vehicle at all times. All the companies also regulate their drivers to be courteous to passengers and drive safely on the streets. The Flushing Van president was the only company that reported arranging shifts for drivers in order to rationalize service. All other companies did not impose any controls on their drivers in terms of when they should or should not work. One president explained that if only one company held the sole franchise to the territory, than it would make sense for the company to organize the drivers in shifts and more strictly managed service scheduling.

### **5.6.2 Monitoring & Enforcement**

In all four cases, the company ultimately deals with recalcitrant drivers through expulsion from the firm. If the drivers misbehave on the roads, conduct themselves poorly with passengers, do not comply with company rules or city licensing requirements, than the president will first reprimand the driver and eventually fire the driver if he does not correct his behavior. None of the companies fine their drivers for non-compliance or bad conduct. The problem with suspension or expulsion is that the driver is then no longer monitored or controlled by anyone. Despite this drawback, companies frequently dismiss drivers. The president relies on customer complaints via the company compliant hotline, reports from other drivers, and his own supervision, to monitor his drivers. If problems arise between drivers from different companies, the problem is usually reported to the company president who has the responsibility of resolving issue.

### **5.6.3 Organizational Structure & Decision-making Process**

Each company has a self-appointed company president. The president of the company generally makes all the decisions. The decision process is not a democratic one. This is not to say that the president does not receive input from his drivers, regulators, and passengers. The president cannot impose draconian, unreasonable rules without losing his drivers to another company. For example, Dennis Obi, the president of Dascom Company explained that an individual driver suggested the idea of hiring a dispatcher ten years ago. And from this driver's suggestion, the company implemented the dispatching system along his route.

Companies do not form formal organizations to further rationalize van services in a territory or common route. They will have informal meetings to solve problems that arise between companies and their drivers. None of those interviewed are concerned about unreliable service during off-peak hours since many van companies are authorized to operate in a particular territory. There are operators running the routes 24 hours a day.

#### **5.6.4 Role of the Industry-wide Association**

The New York van operators are also organized into an industry wide association called the Interborough Alliance of Commuter Vans. The Alliance is currently composed of 500 operators working for 28 companies (Ricketts, 2002). The companies, as opposed to individuals, pay monthly dues to support the association's efforts. The association does not offer benefits to its members. Its main purpose is to lobby on behalf of the interest of members. Occasionally, the association will assist in resolving issues between companies.

Hector Ricketts, the president of the Alliance, initiated the organization in 1994 in response to the 1993 City Ordinance that transferred regulatory authority to the city. At the time, he felt the van operators needed a voice. Under state authorization, the permit to operate in a territory was indefinite, whereas the city authorization expires every six years, at which time the van operator must once again demonstrate necessity and convenience of the service. The board members, composed of nine operators, are regularly elected to office. The association has established by-laws. Decisions are based on the majority, 51% of votes.

Although the Alliance does not directly impact the behavior of the drivers, as does the company. It is important to recognize its function in the development of the industry. The Alliance serves as an established institution where company leaders and operators can politically organize and coordinate services. The Alliance only admits licensed operators into the

association and not all licensed operators chose to become members. One such company president explained that his company has not enrolled because he does not like the leadership. He feels that the Alliance is not based on a democratic foundation. The leaders of the Alliance make decisions based on their own interests instead of the interests of all the members. Regardless of this opinion, this company president still occasionally attends meeting as an observer.

## Chapter 6

# Miami-Dade County Jitneys

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There are currently 136 jitney vehicles offering transit services in Miami Dade County. The number has stabilized between the 28 jitneys plying routes in 1981 and approximately 400 jitney, most of which were illegal, offering service in the early 1990s. In 1992, it was estimated that jitneys carried 110-125 passenger/weekday (43,000-49,000 passenger trips per week, 946,000-1,078,000 per month). This represented 18-29% of weekday public transit ridership (including metrobus, metrorail, metromover, paratransit)(UMC, 1992).

### 6.1 Miami Jitney Service Characteristics

#### Route & Service type

Eighteen jitney companies offer demand-responsive service along 12 routes in Miami Dade County. Routes typically traverse between a dense area of the county and downtown Miami. These routes have been in existence since 1986 and generally do not compete directly with the Metrobus along substantial portions of the bus routes. Most of the routes are routes that Metro cannot serve due to the financial viability of the route (Alvarez, 2002). Jitneys operate on a semi-fixed route, deviating from the route on passenger request. Jitney operators board and alight passengers anywhere along the route.

#### Fares & Intermodal Integration

Although each company has the flexibility to set its fare, the fare charged across the county is generally the same as the Metrobus fare, \$1.25 per ride. A few jitneys companies offer discount fares for students and seniors. Overall, the County's Metrobus service is viewed as more affordable because a rider can receive a transfer for an extra \$.25 on top of the regular

\$1.25. The only company surveyed that supported an integrated fare program is Conchita's Transit Services. There is no form of revenue sharing or passenger count maintained. Instead, Conchita's and Metrorail allow passengers to transfer freely from one mode to the other. Conchita's only receives a fare when picking up passengers to drop-off at the Metrorail station. Passengers coming from the Metrorail ride free on Conchita's. Rene Gil, the president of Conchita's Transit, stated that his jitney service collects more riders from Metrorail than fare-paying passengers traveling to the Metrorail. Nevertheless, the program increases his rider base and is appreciated by regular patrons. Thus, Mr. Gil is willing to support the program. Mr. Gil also explained that Metrorail was reluctant to agree to a revenue sharing program for fear that jitney operators would illegally collect used transfer passes to reimburse with the County. Conchita's and other companies primarily make physical connections with rail services; bus connections are not as typical.

#### Passenger Comfort

Most jitneys are non-air conditioned 15-passenger vans. Without air-conditioning, the hot and humid climate during summer months creates uncomfortable riding conditions. The internal seating configuration and narrow side-aisle of a standard van makes boarding and alighting difficult for passengers and vehicles can become overcrowded. Conchita's Transit Services requires all drivers to purchase 14-passenger air-conditioned minibuses that are more spacious than conventional vans. None of the jitney vehicles are ADA compliant.

#### Safety & Access to Service Information

In an evaluation performed by the Miami Herald in 1991 (refer to table 6.1 on p.71), the service quality evaluation found that passengers complained about aggressive driving practices while boarding and alighting passengers. Although operators often behave poorly on the roads, there are few cases of illegal jitney operations. Government enforced vehicle and driver standards ensure that legal van operators are qualified to provide transit services. Jitney companies generally do not advertise their service. The public learns about the services through word of mouth.

Service Category	Jitney	Metrobus
Frequency	●●●●● <ul style="list-style-type: none"> <li>⊗ Frequent during peak period</li> <li>⊗ On-time</li> </ul>	●●● <ul style="list-style-type: none"> <li>⊗ Less frequent</li> <li>⊗ Often arrive early</li> </ul>
Speed	●●●●● <ul style="list-style-type: none"> <li>⊗ 1 minute more than Metrobus on a comparable route</li> </ul>	●●● <ul style="list-style-type: none"> <li>⊗ 1 min. Less than jitney on same route</li> <li>⊗ Bus was 4 min. late; 2 jitneys passed bus stop before a Metrobus arrived</li> </ul>
Cleanliness	●●●● <ul style="list-style-type: none"> <li>⊗ Free of garbage</li> <li>⊗ Seats visibly worn w/ taped-up upholstery</li> </ul>	●●●●● <ul style="list-style-type: none"> <li>⊗ Very clean</li> <li>⊗ Trash and graffiti-free</li> </ul>
Comfort	●● <ul style="list-style-type: none"> <li>⊗ Lack of air conditioning; vehicle compartment can become hot</li> <li>⊗ Can become crowded; difficult to climb in and out</li> </ul>	●●●●● <ul style="list-style-type: none"> <li>⊗ Very large and comfortable</li> <li>⊗ Air-conditioned (can become cold w/ few passengers on the bus)</li> </ul>
Friendliness	●●●●● <ul style="list-style-type: none"> <li>⊗ Drivers were courteous and friendly</li> <li>⊗ Willing to stop anywhere or give change</li> </ul>	● <ul style="list-style-type: none"> <li>⊗ Drivers were unfriendly and uncourteous</li> <li>⊗ Required exact change</li> </ul>
Price	●●●● <ul style="list-style-type: none"> <li>⊗ Fare was \$1, 25 cents less than Metrobus</li> <li>⊗ No transfers were an inconvenience</li> </ul>	●●●● <ul style="list-style-type: none"> <li>⊗ Better deal because one can get a transfer for 25 cents</li> </ul>
Driving	●●● <ul style="list-style-type: none"> <li>⊗ Average driving, sluggish brakes</li> <li>⊗ Passengers complain about aggressive driving practices for pick-up and drop-offs</li> </ul>	●●●●● <ul style="list-style-type: none"> <li>⊗ Smooth ride; occasionally fast</li> <li>⊗ One driver drove through a red light without incident</li> </ul>

Table 6.1: Miami Jitney vs. Metrobus Quality of Service

Source: The Miami Herald, April 14, 1991.

\* The categories are ranked on a zero to five circle rating, with five filled circles representing the highest rating. The half-filled circle represents a "half" rating.

### Reliability & In-vehicle Time

The hours of jitney operations generally span from 6am to 10pm. Jitney headways range from 2 to 47 minutes, with a mean headway of 13.6 minutes during the 7-10 a.m. period and 13.7 minutes between the 11 a.m. to 3 p.m. period (Parsons Brinckerhoff Quade and Douglas, 1992). Public opinion indicates that jitneys are more reliable than conventional transit and also provide faster service. The evaluation performed by the Miami Herald observed that jitneys provide more frequent service during peak periods than the Metrobus. The same evaluation also discovered that riders feel jitneys provide a faster service than Metrobuses. In the 1992 Urban Mobility Corporation study, an independent survey found that approximately 65% of the respondents said they were drawn to the jitneys because of faster service to their destination.

### 6.2 Jitney History

Jitneys carrying white passengers operated since 1937. Black Americans were forced to walk long distances during off-peak transit hours since public buses, which allowed Black passengers, only ran during peak hours. It was not until Ernest Johnson, a war veteran, began

offering service in 1946 between Miami and Miami Beach, did jitneys begin serving the black communities. Miami Beach Jitney Service and Liberty City Jitney provided transit services to minority workers commuting to service jobs in downtown Miami and Miami Beach in the 1940s and 50s. Other minority entrepreneurs soon followed suit, serving residents of Liberty City and other low-income, African American neighborhoods beyond the reach of the streetcars.

The Miami jitney system, like the vans in New York, has a strong cultural dimension since both the drivers and riders tend to be from minority communities. The industry mainly serves transit-dependent populations of Caribbean heritage and inner city blacks. An on-board survey found that the majority of riders are low-income workers who recently immigrated to the U.S. In fact, fifty-three percent of those surveyed are non-English speaking.

Dade County assumed responsibility for regulating passenger motor carriers, including jitney operations, in 1981 when the County enacted Ordinance No. 81-17. The Code stated that the County policy objective was to ensure the orderly development of a safe and integrated transportation system that responded to the needs of the public. Similar to New York City, incumbent stakeholders try to protect their own interests by limiting jitney opportunities. What makes Miami different is the County enacted an overarching transportation policy that encourages market forces and competition, reduces restrictive regulatory barriers to entry into the industry, and recognizes that the private sector passenger industry can improve transportation mobility. The bifurcation of transportation policy has resulted in a continual struggle between protecting public bus services and encouraging jitney development.

Applications for three new jitney routes that duplicated or paralleled existing bus routes prompted the County to develop a comprehensive policy toward the jitneys. The Board of County Commissioners directed the Metro Dade Transportation Authority (MDTA) to reconcile the conflicting policy objectives of encouraging competition and private sector participation while maintaining an effective public transportation system. The 1983 Jitney Policy Report recommended to:

*Allow Jitneys to operate anywhere in Dade County outside the transit system core corridors (corridors with existing high service levels); however, new jitney service may not operate on or near any transit or existing jitney route or route segment if it is found by MDTA that serious negative impact on transit and/or jitney ridership will result.*

The Report defined high-density transit corridors (core areas) as those areas within a one-half mile distance from the routes where current Metrobus service is provides 30-minute (or more frequent) service. The recommendation thereby allowed for jitney services without jeopardizing existing Metrobus operations. The recommendation was later incorporated into the Jitney Ordinance (85-20) adopted in 1985.

Privatizing transit gained prominence during the 1980s under the Reagan administration. The establishment of the Jitney Task Force in Dade County in 1987 reflected the new federal transit policy and the County concerns over jitney integration in light of the opening of Metrorail the year before. The task force attempted to bring together the county staff, the county's Consumer Services Department (CSD), MDTA Transport Workers Union, and jitney operators, to redefine the role of jitneys in Dade County.

Overall, the Task Force resulted in a stalemate between operators and County stakeholders. Operators wanted to redefine the core area to open up jitney opportunities on high-density corridors. However, the County was concerned these changes would threaten the financial viability of the MDTA's Metrobus. If jitneys were allowed to operate in high-demand areas during peak hours, the transit authority would be left with little revenue to cross subsidize off-peak operations. The jitney operators also disagreed with the MDTA's "predatory" practice of taking over promising jitney routes after jitney operators developed a market demand for transit service. Operators felt that they should be given three to five years to exploit the market they developed. However, the MDTA felt they should have authority to step in whenever the jitney services "did not meet the needs of the rider." The possibility of expanding jitney operations to special one-time events and developing an integrated fare structure also never materialized.

The number of unauthorized jitneys gradually increased during the 1980s. This was because the Florida State legislature enacted a statute prohibiting local governments from regulating private passenger motor carriers engaged in intercity transportation service. It took operators many years to realize this loophole, but by the early 1990s unregulated jitneys service was rampant. It was estimated that as many as 400 jitney vehicles were in operation along major travel corridors in Dade County. The Florida State legislature passed a corrective amendment in September of 1990. The new legislation limited the statutory exemption to "inter-county" transportation which restored Dade County's power to license private jitneys within the county.

In order to enforce the new legislation, the County enacted Ordinance (91-84) in July 1991, allowing the impoundment of vehicles by county officers for violating the Motor Carrier Code. In March of 1992, the Consumer Services Department, the regulatory agency responsible for the Passenger Motor Carrier vehicles, launched an extensive enforcement campaign. Metrobus experienced a surge in ridership as a result of the enforcement efforts. By 1994, 900 vehicles were impounded since the enactment of the legislation and over 1,200 citations were acted upon by the courts.

The legislative loophole prompted the county to reexamine the role of the jitneys. The county manager developed a new plan to integrate the jitneys into Miami's transportation system. The integration policy consisted of jitneys supplementing existing Metrobus service and jitneys replacing all or part of the existing Metrobus services. The plan proposed to segment transit services so jitneys provided local service while Metrobuses provided limited-stop service. The county manager believed the new policy would provide more frequent and faster service, reduce bus subsidies by \$2 million to allow for realignment in other parts of the county, press unlicensed jitneys to legal status, and comply with the federal policy of promoting unsubsidized private sector services. The Board of County Commissioners rejected the proposal in April of 1992 due to strong opposition by the bus drivers' Transport Workers Union (TWU).

On August 24, 1992, Hurricane Andrew struck the southern portion of Dade County. As a result, the Federal Emergency Management Agency (FEMA) granted \$46 million to provide emergency transit service in southern Dade County. The MDTA employed four contractors who hired approximately 220 jitney operators at \$21 per hour to provide transit services to South Dade residents along twelve MDTA designated routes. All transit service, including bus routes, operated free of charge to riders. MDTA provided extensive supervision to ensure route and schedule adherence. The jitneys carried an estimated 20,000 riders per day. This experience demonstrated that a local government could successfully contract jitney operators to provide a frequent and reliable jitney service. The emergency response to Hurricane Andrew temporarily solved the illegal jitney problem in Dade County. Without illegal jitney competition, ridership on routes with major competition increased 27 percent in the ten-month period.

The challenge facing MDTA after the FEMA grant expired was to keep the 220 jitney operators working legally. The responsibility of jitney operations again fell back to the CSD. The County contracted Red Top Sedan to offer jitney service along seven identified routes.

Although only a quarter of the 200 operators were employed by Red Top Sedan, illegal jitneys did not proliferate as it did earlier because of amendments to the ordinance approving jitney seizure and forfeiture, there were lucrative reconstruction jobs, and operators were not willing to offer service at considerably lower returns after the FEMA grant expired.

Illegal jitney activity still remains an issue but at a lesser degree. In the 1980s, Daniel Fils-Aime perceived a gap in transit service. He applied for a permit in 1988 to start a prearranged jitney service. The problem was that his route violated the 30% duplication rule. In fact, his route was a complete duplication of existing services. In an interview conducted in 2000, Mr. Fils-Aime said, "My goal was to serve the community. I knew it was not legal." After battling the County and the Union for ten years, on September 8, 1998, the Board unanimously voted to allow Mr. Fils-Aime and Alphe Willingham, who was in a similar position by that time, to ply the routes they had been illegally operating. They were finally legalized due to the support of Commissioner Carey, the commissioner in their district.

### **6.3 Government Regulations**

In the Miami-Dade County, a jitney is defined as 15-passenger or less capacity vehicle that operates on a semi-fixed route between fixed terminals on an unscheduled basis. The County regulations control entry, vehicle and driver fitness, and routes of jitney operations. The applicant must obtain a 'certificate of transportation' that grants the authority to operate on a new route. Any modifications to an existing route must go through a similar process. The certificate is the County's way of controlling jitney routes. The applicant must submit a long list of information including a trade name, a proposed vehicle color and markings, management plan, proposed service, and rate structure. The significance of this process is that the private entrepreneur decides what type of service the company will offer and the fare imposed on the public.

Similar to the New York vans, the company then leases the right to ply the route to individual drivers. The statutes have effectively imposed a hierarchical structure where there is a certificate holder that serves as a middleman between the government and the jitney operator. In some cases, the company owns the vehicles and leases both the vehicle and permit to drivers who are only responsible for gas expenses. In the majority of cases, owner-operators lease the permit to operate. Unlike New York, the right to ply a certain route is given to only one

company. It is important to note that companies, therefore, are not in competition with each other, only drivers in a company compete for passengers. The sole right to ply a route by one company also means that the company decides how many operators ply the route. Although, the CSD has legal authority to limit the number of vehicles on a particular route through the number of operating permits administered, the CSD only does this with some of the routes.

Companies are forced by regulations to monitor and enforce County codes because both the company and operator are penalized when the operator is out of compliance. In practice, this system of enforcement often results in the operator paying twice the fine because the company passes their fine to the operators. However, if the operators of a company are cited for too many violations, the company can lose their route certificate. The fact that the certificate holder serves as a regulatory arm of the government is critical to understanding jitney operations in Miami.

Jitneys are permitted to operate in the County as long as the service does not compete with an existing service. It is the applicants responsibility to demonstrate that the "...proposed service will not adversely affect the existing transportation system as a whole or future planned transit service as designated in the most current Miami-Dade Transportation Plan" (Miami-Dade County Code, section 31). If the transit authority wants to contract out services along a certain route, the authority is required by law to offer the contract to the existing licensed company. Only if the service is new can metro request bids for the service.

In order to enter the industry, a driver must have a hack license (a jitney driver's license) and obtain an operating permit to ply a County authorized route. Obtaining a hack license requires holding an appropriate DMV chauffeur license for the type of for-hire vehicle to be operated, passing a background check, taking an eight-hour County training course, and passing an English proficiency test. Before the County will grant the hack license, the applicant must also gain the approval of the certificate holder (company) to ply the route. At the same time, the certificate holder must apply for an operating permit for the new driver. In terms of vehicle fitness, operators must show proof of vehicle insurance and pass periodic inspections conducted by the CSD. The frequency of inspections depends on the age of the vehicle. Vehicles over four years old must pass quarterly inspections. The jitney vehicle also cannot surpass a 15-year age limit set by the County.

As recent as January of 2002, the County board of commissioners modified the definition of the 'high density corridor' to include an area within 1/5 mile, rather than 1/4 mile, from an

existing, approved bus or jitney route. The Board also relaxed the frequency restriction; jitneys are now prohibited from operating on corridors where services are provided at 29-minute average headways, rather than 30 minutes. (Alvarez 2002)

### 6.3.1 Institutions

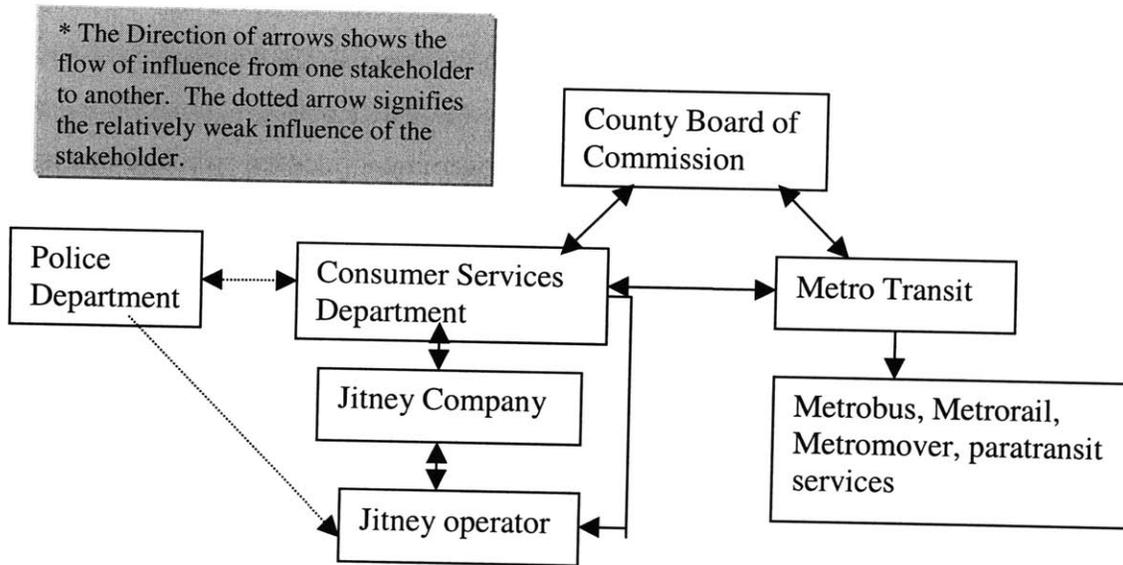


Diagram 6.1: Miami Jitney Stakeholder Relationships

The CSD is the agency responsible for regulating jitneys through the control of both individual operators and jitney companies (refer to diagram 6.1 for stakeholder relationships). The agency writes, implements, and enforces jitney regulations. Any changes or amendments to the regulations must be presented to the public for comments and must be approved by the County Board of Commissioners. The CSD processes applications from individuals trying to obtain a jitney driver's license and operating permit, and accepts applications from a company applying for a new or modified route permit. The application is only sent to Metro Transit if there is any question about whether the route duplicates existing bus or jitney service. Metro Transit is a non-regulatory body that assists the CSD in transportation related analysis. Metro Transit is also the authority that acts as the intermodal agency. Municipalities need to enter into an agreement with Metro Transit before starting a new transit service. Municipalities must demonstrate to Metro Transit that the new service complements those of Metro Transit (Alvarez, 2002).

The CSD assumes the primary responsibility of enforcing County regulations. CSD personnel conduct weekly enforcement activities, inspecting for proper licensing and permit authority, and operator adherence to the approved routes. The CSD sanctions both the individual operator and the jitney company when the operator is out of compliance. In cases of vehicle impoundment, the police department is involved.

## **6.4 Operator Organization**

### **6.4.1 Benefits**

The company as a unit of organization is a government imposed structure that has evolved into a self-regulating organization. Generally, jitney companies offer few benefits to their drivers. Out of the four company presidents (that represent six companies) interviewed, only one offered life and health insurance benefits. One president elaborated by saying that his company did not provide benefits because the company did not have control over the revenue stream. All the companies impose rules, which are not required by the government, on their drivers to rationalize service.

### **6.4.2 Rules of Conduct & Standards**

Only Conchita's Transit Express, operating out of Haileah, reported assigning operators to a fixed schedule. The operators of Conchita's Transit Services follow a master dispatch schedule where each driver bids for the route and schedule he wants to offer. Schedules are allocated according to operator seniority. Under this system, there is no need for dispatching or queuing protocols. The operators maintain a schedule based on a ten-minute headway (as of May 1<sup>st</sup> 2002) without the need of a dispatcher. In order to prevent operators from working only peak hours, the president of Conchita's Transit Express requires that once an operator begins working, his vehicle is required to continue offering services for 10-13 hours. Since Miami regulations allow multiple drivers, an operator can rent out their vehicle to another driver if they do not want to work the full 10-13 hour shift.

None of the other companies surveyed assigned schedules or shifts to drivers. Miami Minibus Transportation Services Inc. does restrict the workday to 10-12 hours and the workweek to four days. The restrictions are meant to protect drivers from fatigue and reduce the level of competition on the route. The other firms do not regulate when operators ply the routes. It is up

to the individual to decide when they want to operate. All of the companies besides Conchita's adhere to some type of dispatching procedure and a first in first out queuing protocol. Sun Jitney and Miami Minibus hire starters to dispatch vehicles according to fixed time intervals. Whereas, Alphe Willingham, the president of TriRail Bus Connection, Liberty City Jitney, and Dade Jitney Service, relies on the operators to enforce dispatch rules. Although the dispatching intervals are longer during off-peak periods, the headways generally do not exceed 30 minutes.

In addition to scheduling rules, most companies also regulate their operators for personal hygiene and vehicle cleanliness, good driving practices, and customer relations. The management at Miami Minibus conducts daily inspections to ensure their drivers comply with the company dress code and maintain a clean vehicle. The president of Conchita's also encourages his drivers to replace their vehicles prior to the County's 15-year age limit in order to maintain a certain vehicle standard and service performance. In fact, if a vehicle breaks down too many times a year, the management requires the operator replace the vehicle. Generally, jitney services in Miami are lucrative enough that vehicle replacement is not an barrier in jitney service delivery.

### **6.4.3 Monitoring & Enforcement**

Enforcement policies among Miami jitney firms vary significantly. On the one extreme, Conchita's Transit has the most extensive list of sanctions and is the only firm that imposes fines on drivers for breaking company rules. For example, the company fines drivers for littering, charging the wrong fare, and running late. The company also suspends drivers for a variety of activities including deviating from the route, poor hygiene, and selling transfers to riders. At the other extreme, the president of Sun Jitney imposed few sanctions on drivers for bad conduct. He felt he has little authority over his drivers; the responsibility of enforcement falls to the CSD. The other firms surveyed rely solely on the threat of suspension or termination to deter drivers from breaking company rulings and misbehaving. The companies, which imposed sanctions, all rely on peer monitoring, oversight of the president, and customer complaints to monitor the quality of service provision.

### **6.4.4 Organizational Structure & Decision-making Process**

A self-appointed president heads all the companies. He is the same individual who applies for the certificate to operate on the route. Decisions are not based a democratic process. The president ultimately decides and implements the company rules. However, the president receives input from the drivers. For instance, Mr. Daniel Fils-Aime, the president of Miami Minibus, holds meetings once a month to give his drivers a chance to give input and discuss issues in a group setting. He feels it is his responsibility to look after his group of drivers and pursue issues with external forces that are relevant to their operations. The organizational structure and decision making process is strikingly similar to the New York vans due to the government imposed company structure.

#### **6.4.5 Industry Problems**

The perceptions by the various presidents regarding the challenges facing the industry varied. None of the companies had the same list of issues. One president stated the biggest issue is the time lag between applying for a hack license and receiving it. Many potential drivers cannot afford to wait five weeks to process the paperwork. The same president also thought it was unfair that the County would take a jitney route for itself after a jitney operation developed sufficient demand. Another president expressed that the biggest issue facing the industry is the 30% duplication restriction. He felt strongly that the County should change the law to reflect a 50% duplication restriction to create more opportunities for jitney operators.

#### **6.4.6 Industry-wide Association**

The company is the only unit of organization in Miami. Unlike New York, the Miami jitney companies have not organized into an industry organization. This may be explained by the relatively small size of the industry. In total there are 18 companies that coordinate 136 operators. (Rushton, 2002) The fact that the companies have not organized may infer that there is no need for an industry association. Political representation seems to be less important in Miami. This may be because 18 company presidents can easily contact the regulators to make themselves heard. None of the presidents interviewed could explain why companies have not organized into an association.

# Chapter 7

## Atlantic City Jitneys

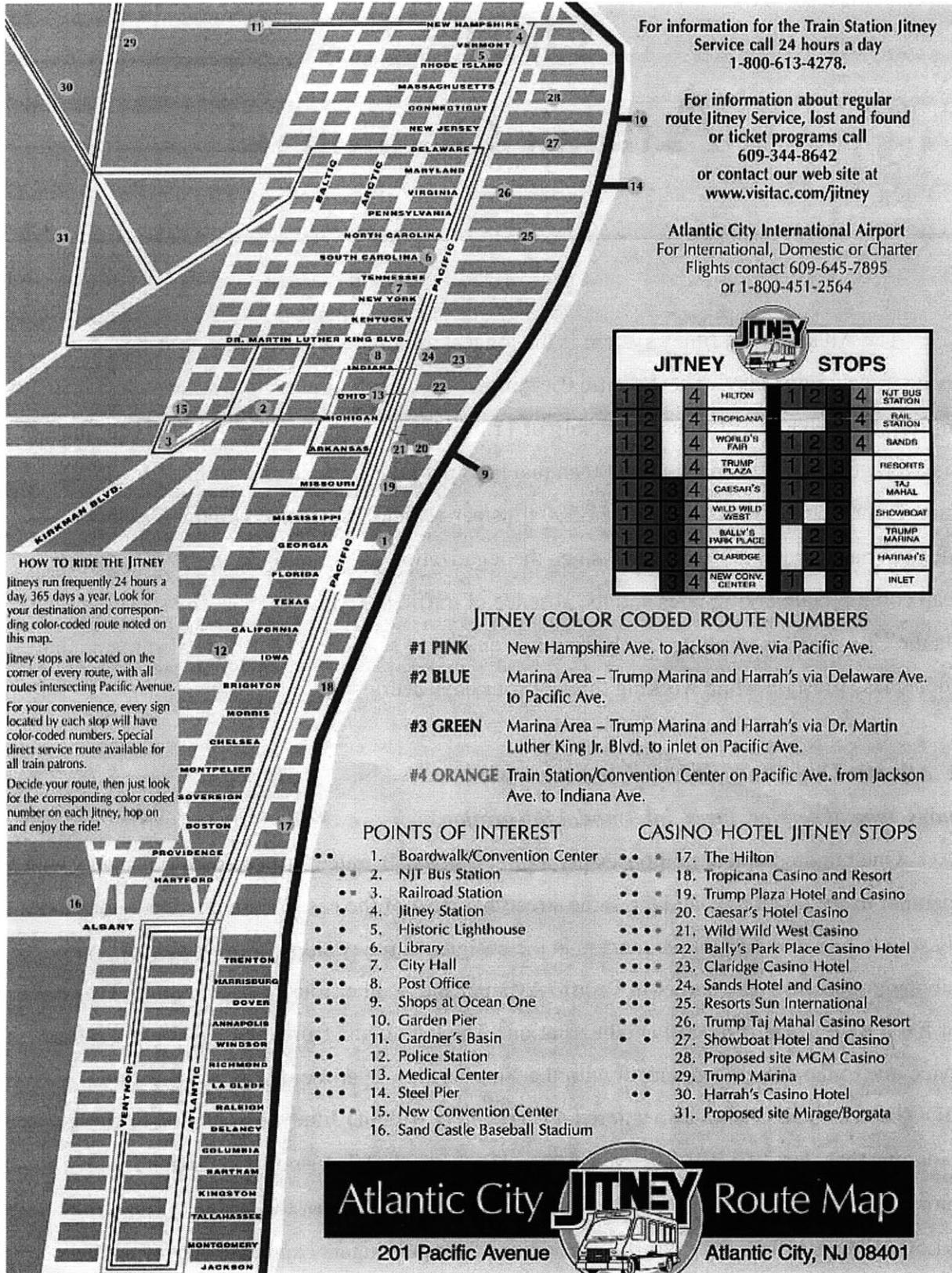
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The Atlantic City Jitney system is the longest running non-subsidized transportation service in America today. The Atlantic City jitneys specialize in moving workers and tourists to and from the casinos. An annual ridership of 11 million trips supports the Atlantic City jitneys. This averages to approximately 63,000 annual trips per jitney vehicle, as compared with New Jersey Transit buses, which average 57,500 trips per vehicle, using much higher capacity buses. Ridership has increased 3% annually since the legalization of gambling in the 1970s, despite cheap commercial parking rates and the absence of traffic (Cervero, 1997). The success of the Atlantic City jitney is attributed to the superior quality of service. The drivers also maintain a middle class lifestyle while working three or four days every week.

### **7.1 Atlantic City Jitney Service Characteristics.**

#### ***Routes, type of service, fares, intermodal integration***

One hundred ninety minibuses ply a three and a half-mile route on Pacific Avenue, which is parallel to the boardwalk and the same street that most of the casinos are on. Operators can only stop to board and alight passengers at the designated jitney stops. Jitneys stop at every casino entrance, on every corner of Pacific Avenue, and at other tourist destinations. Two of the four fixed routes stop at the rail and bus station. The fare to and from the rail station is a free service due to the current agreement with the New Jersey Department of Transportation (NJDOT). The NJDOT has also entered an agreement with the Jitney Association to charge senior citizens a fare of \$.50. The New Jersey Department of Transportation subsidizes each senior citizen fare with \$.75 so operators receive a total of \$1.25 for the service. The normal fare is \$1.50. Jitneys offer a frequent-rider program where passengers can buy books of ten tickets for a discounted rate of \$1.25 per ride.



Map 7.1: Atlantic City Jitney Route Map

### *Scheduling & Speed*

The owner-operators provide a fast, reliable, demand-responsive service 24 hours a day, 365 days a year. Even though there is no set jitney schedule, the average wait time is three to five minutes; the longest wait time is ten minutes. Considering that jitneys stop less frequently and for a shorter amount of time, and travel on side streets where there is little congestion, the in-vehicle time is very short.

The success of the system is attributed to the high customer turnover rate. The key to the rapid turnover rate is the unique nature of Atlantic City both spatially and temporally. Atlantic City is a compact area that is 48 blocks long and 15 blocks wide. The casinos create a 365-days a year, 24-hours-a-day business center that has no extreme peak demand problems. This business environment also creates a constant customer base, particularly among workers in the area. In fact, the majority of the riders are middle class workers commuting to their jobs.

### *Comfort, information, safety*

The Atlantic City jitneys also offer patrons a comfortable ride and easy access to service information. The jitney vehicles are all uniformly colored and designed, 13 passenger mini-buses. All vehicles have air conditioning, wheel chair lifts, radios, and video cameras. The video cameras were recently installed to ensure the safety of both the passengers and drivers. The interior of the mini-bus has a spacious center aisle with two rows of seats on each side. The well-enforced vehicle and driver standards ensure that all operators are qualified to provide transit services. At every jitney stop, there are information signs and a few stops have City installed bus shelters. The local government actively advertises the jitney services in public announcements and tourism information, while the jitney operator association prints a color route map for distribution (see map 7.1), has a web site with service information, and fields phone calls from the public.

## **7.2 Jitney History**

In the midst of a trolley strike in 1915, two entrepreneurs established the first jitney service in Atlantic City. In the beginning, they used six-passenger Ford model-T sedans to offer rides for five cents along Atlantic Avenue. By April of 1914, there were more than 475 private automobiles of all types in operation on Atlantic Avenue. The service was erratic with no

established routes or operating times. Soon the owners formed the Atlantic City Automobile Service Association, which was later renamed the Atlantic City Jitneymans' Association, for the purpose of coordinating service. The owners decided to offer service only in Atlantic City, along Atlantic Avenue, because if services were extended to other towns, than the operation would come under state control. The Jitney Association developed their own traffic laws, governed driver conduct on the road, and scheduled the operators' hours. Their success immediately lead to the bankruptcy of Atlantic City and Shore Railroad, the trolleyline operating on Atlantic Avenue. By the 1930s, the Jitney Association bought the parcel of land, where the Association headquarters, gas pumps, and garage is still located.

In May of 1915, the first jitney ordinance was enacted by the city council. The ordinance stipulated that jitney operators had to obtain a mercantile license to ply the jitney route. In the subsequent two years, the city council enacted several other regulations to control jitney operations. Drivers were required to wear badges; cars had to carry special license numbers; drivers had to obtain city consent to operate; and the route and fare structure was formalized. In 1917, the city also fixed the total number of vehicles at 190 and forced operators to move one block to Pacific Avenue. This change was meant to allow the streetcar company the exclusive rights to Atlantic Avenue. After the World War II, most of the sedans were worn out and needed replacement. In 1947, the first Metro bus that seated 9 passengers was put into service.

Beginning the 1930s, the jitney system became politicized. The City was composed of six political wards, all controlled by Republicans. Each ward had control over about 30 jitney franchise licenses. When selling a franchise right, the buyer had to be from the same ward to guarantee a constant number of franchise owners in a particular ward. From the 1930s to the 60s, city politicians practiced 'brownbagging' where politicians extorted a weekly sum from jitney operators. From the city officials' perspective, the operators had to pay for the privilege of running a jitney. During this period of republican domination, an individual also had to be a registered and voting republican to become a jitney driver (Penman, 2002).

The jitneys struggled though the 1960s when Atlantic City's economy began to decline. In 1964, the cost of a bus and franchise fell as low as \$2,500, compared with \$4,500 to \$6,000 ten years earlier. By the late 1960s, there were only 110 active part-time drivers that mainly worked in the summer months. The decline of the Atlantic City economy and consequently the jitney industry continued into the early 1970s until the New Jersey Legislature legalized

gambling. By 1978, 12 casinos were in operation; all but two casinos were on Pacific Avenue. As a result, the jitneys experienced a renewal in the latter half of the 1970s. The fare increased to 35 cents and then to 50 cents. Between the 1980 and the present, the fare rose from 75 cents to \$1.50. Along with the fare increases, the cost of a jitney franchise also increased in value to a high of \$180,000 in 2000.

Dominik Cappella, the Association president at the time, initiated a variety of changes to the jitney system in the 1980s. The 13-person jitneys replaced the 10-person vehicles. The Association added a new route that cut across town to provide transit services to the marina casinos. At the time, the NY DOT raised objections to this new route. The Association also initiated the frequent rider program and entered into an agreement with the New Jersey Transit to offer discount rates to senior citizens. Finally, the jitneys began advertising on their vehicles.

In the mid 1990s, Bill Penman, the new president of the Jitney Association, applied for state funding in order to purchase new vehicles. After aggressive lobbying, the New Jersey Transit Corporation awarded the Atlantic City Jitney Association \$9.7 million in state money to purchase 190 new jitneys in December of 1996. The subsidy covers 80% of the cost of new vehicles. The other 20% is borrowed from the Casino Reinvestment Development Authority and repaid by jitney operators through the provision of free jitney service between the Atlantic City Rail Station, the Convention Center and the city's 13 casinos for four years. The new vehicles seat 14 passengers and are equipped with wheelchair lifts, radios, and air conditioning. During this time, the New Jersey Transit leased the vehicles to the Association. In July of 2002, the vehicle titles will be transferred to the Association.

### **7.3 Government Regulations**

The local ordinance Chapter 233 sets forth the regulations controlling taxicabs, jitneys and vehicles for hire. The ordinance clearly restricts entry into the industry by limiting the total number of jitneys and requiring city licensing for operation. It also prescribes the fare, routes, and type of service permissible in Atlantic City. Despite the rigid regulatory framework, operators do not perceive that the City has constrained the development of the industry. The operators, supervised by the Association, comply with every regulation set forth by the City. In fact, the Association does not perceive that they are regulated by the city. The City, over time, has codified what the Association was already voluntarily doing. The Association's perception

is that they are the true regulator in Atlantic City (Manny, 2002). The current director of the Mercantile Division concurs with this assessment. In his opinion, the role of the City is to monitor the Association to prevent the possible abuse of power.

The strong and cooperative relationship between the city and the jitney operators may be attributed to two factors, an eighty seven-year long history of jitney operations and the leadership of the Association. The fact that jitneys have managed to thrive since 1915 suggests that the government, at the least, did not strongly oppose the existence of the jitney industry. John Nore, a board member who has been driving a jitney for 32 years, indicated that the last few Association presidents have had good rapport with the City. Consequently, the relationship between the City and the Association entered into an era of collaboration where jitney services have had more opportunities to evolve and mature. In contrast, “the Association could not get anywhere with City Hall thirty years ago” (John Nore, 2002). In his view, the presidents have accepted increases in responsibility in the last 30 years that has fostered the collaborative relationship.

The City restricts entry into the jitney industry through licensing requirements and the limitation of the total number of vehicles. In 1917, the City limited the total number of jitney licenses to 190. This number has remained unchanged to this day. The relatively small number of vehicles in Atlantic City is a critical factor in the success of jitneys in Atlantic City. One association is capable of organizing and controlling all 190 members; a small fleet requires less government organizational capacity and oversight. In order to become a jitney operator, an individual must buy a franchise and vehicle from an existing operator who is willing to sell. In addition to obtaining the vehicle and franchise, a potential applicant must also obtain the required mercantile license from the Mercantile Licensing Division. Applicants cannot have a criminal record, must be a resident of Atlantic County for at least six months, must demonstrate vehicle fitness, and obtain the necessary vehicle insurance policy to receive a mercantile license.

The Association typically approaches the City when they desire a route or fare change. Both the fares and routes are a result of extensive negotiations between the Jitney Association and the City. The City has approved a total of four jitney routes in Atlantic City. The ordinance currently prescribes a flat fare of \$1.50 for authorized jitney routes. The ordinance also requires operators provide a frequent rider coupon program. This fare discount program was originally initiated by the Association and was later adopted in the City law.

The Ordinance stipulates that jitneys must stay on their prescribed routes. Jitneys are only permitted to board and alight passengers at official jitney stops, except when the vehicle is stopped at a red light. Jitney operators cannot carry more than 13 passengers at one time and must assure that each passenger is secure before driving. Drivers must be neat and clean at all times. And vehicles must always visibly display a sign indicating the fare, route, and number of the jitney. All of the City rules and many additional regulations not covered in the ordinance are written in the Association’s bylaws.

What is unique to Atlantic City is the city’s recognition in the ordinance of the role of the Jitney Association. The ordinance recognizes the Atlantic City Jitney Association as the official representative of the jitney owners. The Association is given the responsibility of determining its own internal rules of operation and, by law, must ensure that at least ten jitneys are operating at all times. The law also assigns to the Association the responsibility of furnishing signs at all the jitney stops.

The Mercantile division is responsible for enforcing City regulations. The mercantile division sends out inspectors to confirm that operators comply with City regulations. Inspectors conduct quarterly checks to confirm there are at least 10 vehicles on the road at all times of the day. The mercantile division inspectors also examine the condition of vehicles and grants license renewals once a year.

### 7.3.1 Institutions

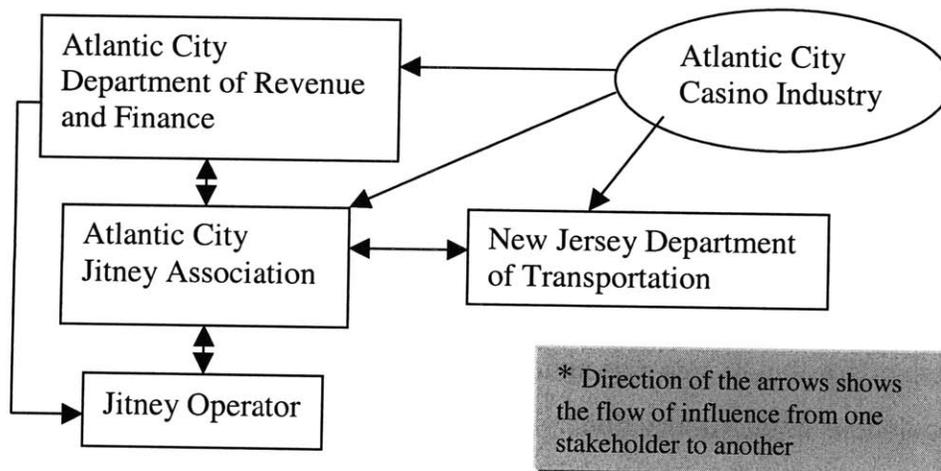


Diagram 7.1: Atlantic City Jitney Stakeholder Relationships

The Atlantic City Department of Revenue and Finance is responsible for regulating jitneys through the control of individual operators and the Atlantic City Jitney Association (refer to diagram 7.1 for stakeholder relationships). The City, for example, requires the Association to maintain at least 10 vehicles on the routes at all times. At the same time, the City also controls operators through licensing requirements, route controls, and fare and service type restrictions.

The Atlantic City jitneys system is the sole city transit service. The New Jersey Department of Transportation (NJ DOT) manages all other bus services since all other transit routes are state services. This is an important distinction from the other case studies where there are competing interests at the city level. Most cities that have jitney services hold the authority to regulate private sector transit services like jitneys and also conventional transit services like buses and rail. This dual responsibility leads to internal conflict of interests for many cities.

The role of the NJ DOT with regards to jitney operations is to oversee the vehicle lease agreement with the Association until the vehicle registration is handed over to the operators. The NJ DOT also has an agreement with the jitneys to subsidize the senior citizen fares. A stakeholder in the Atlantic City that has an indirect role in jitney services provision is the casino industry. Considering Atlantic City's economy and jitney demand hinges on the gambling industry, it is in the operators' and city's self interest to keep the casinos happy. At the same time, casinos are also interested in the jitney service that transports workers and tourists to and from the casinos.

#### **7.4 Operator Organization**

All jitney operators become a member of the Atlantic City Jitney Association. Not only is this stipulated in the city ordinance, in practice, it is also the only way an individual can become an operator since all 190 jitney franchises are managed by the Association. In order to drive a jitney, an applicant must buy the franchise and vehicle from a member. Members pay a \$170 monthly due that supports the administrative staff, which includes the Association president and three administrative professionals. Before an individual is allowed to become a member, the individual must sign a document that states that the he or she will comply with the rules and regulations of the Association.

### **7.4.1 Benefits**

The association provides a few benefits to members. Members enjoy the benefits of nearly wholesale priced gasoline from the gas pump located on the Association's property. Also, the same property also supports an auto garage that has an agreement with the association to give discounts on vehicle maintenance and repair to member operators. Group insurance rates are only offered to officers of the Association. The Association does not offer health insurance coverage because most operators receive health insurance coverage through their spouse.

### **7.4.2 Rules of Conduct & Standards**

The main purpose of the Association is to bring order to jitney operations. Members of the Association are divided into seven groups. Each group, composed of 27 operators, is managed by one of the seven board members. In a day, there are three shifts – early, midday, and late night. A group is assigned to a shift, which runs one particular route, according to a rotating schedule that ensures equity among drivers. Operators work three or four days in a week depending on the rotation schedule. On the road, the board member who is the leader of a group supervises the supply of jitneys. Every member of the Association drives except the president. The Association does not control the dispatching frequency of jitneys, nor does the Association control the queuing protocol. On the day and shift that a driver is scheduled, the driver has the freedom to ply the route freely. However, the driver is not allowed to ply the route on unscheduled days and only the owner of the vehicle is permitted to offer jitney service. A version of these rules has been in practice since the mid-1940s. Since then, the rules have improved incrementally. Each time there was a motion to change the system, the new system had to get the approval of the board and the members.

There are additional operating and traffic rules that dictate the behavior of drivers. The general operating rules cover a whole range of issues. There are typical rules such as drivers must wear proper attire and be courteous to all passengers and pedestrians. The Association requires drug tests and prohibits any illegal activities. The regulations explicitly prescribe that an individual can only own one vehicle. The Association also has a rule that prohibits fighting between operators, enforced through a one-week suspension. In terms of traffic rules, many rules pertain to passenger pick-ups. For example, if an operator pulls behind a jitney that is discharging only, the operator can pull out from behind it provided that the operator leaves the

next corner with people to the first jitney. There are also specific operating rules for each of the four routes. For instance, drivers are automatically fined \$100 for not showing up for the Orange Route.

### **7.4.3 Monitoring & Enforcement**

The Association imposes fines and penalties for breaking rules. The Association convenes a monthly internal traffic court that deliberates on contentious issues. Any driver can report another driver to traffic court. Fines range from \$50 to \$500. The Association will suspend a member after a certain number of infractions or for breaking certain rules stipulated in the bylaws of the Association. In an extreme case, the Association can write a letter to the City to have the city force the operator to sell their franchise and leave the industry. In this case, the association must justify the decision to the city. Generally, members try to settle issues outside of the internal traffic court system to avoid fines. The Association tries to balance enforcement activities so as to be strict but not unreasonable.

### **7.4.4 Organizational Structure and Decision-making Process**

The Association's board is composed of a president, vice-president, treasurer, secretary, and seven board members. The president is the official representative for the association. Every three years, the Association holds elections for new officers. The three-year term is based on the Association's constitution. In order to hold office, the member is required to drive a jitney for at least two years. There are monthly meetings of the officers and quarterly general meetings for all members. In a situation where the decision of the board draws criticism from the members, the issue is put forth to all the members in a vote. In 1982, the Association changed their constitution in regards to the number of votes needed to approve a change in rules. Endorsement of a rule change was revised to be 2/3 of the membership plus one person, 127 votes; rather than 1/2 of the membership plus one person.

The Association generally does not advertise to attract new drivers. Operators come from a wide variety of backgrounds and are generally from a mid-income background. The association does support a training program. The vice-president is responsible for training all new recruits by playing a training video and taking the new recruit out on the routes for one week. The training period can be extended if needed.

#### **7.4.5 Future Challenges**

- Manny Mathioudakis, the current Association president, feels the biggest issue facing the operators is safety of both the drivers and customers.
- Ron Nickels, the Director of Private Carrier Affairs for the NJ Transit Authority believes the major issue facing jitneys is the future replacement of vehicles.
- Bill Penman, the president from 1990-2000, feels that the most pressing issue is safeguarding the safety of drivers and society. Secondly, the operators need other benefits like health care, group insurance rates, and an IRA option.
- Dominik Cappella, the director of the City's mercantile division, feels that the jitney industry will experience a decline in demand in the future. As more casinos are built, the gap between casinos close, potentially resulting in less need for transit services along Pacific Avenue. Moreover, parking only costs \$2, as compared with \$8 in the past.
- John Nore, a 32-year veteran and a board member, felt that high insurance rates were the most pressing problem facing drivers.

# Chapter 8

## San Juan Publicos

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Publicos are the most widespread form of transit on the island of Puerto Rico, carrying 65% of all public transit trips on the island (PRHTA, 1995). Publicos fill a very important social service function, providing low-income individuals with transit service. According to a study conducted in 1996, three out of four publico users are captive riders. Most of the riders are students, workers, housewives, and the unemployed. In Bayamon, 52 percent of the users were reported to be students. Precisely because publicos tend to serve the poor and transit-dependent, the publicos have a negative image as a mode of transportation for the poor. This perception contributes to the many reasons why individuals with transit choices choose not to ride publicos.

Publicos are similar to jitneys in that they provide intraurban transport along fixed routes. Unlike jitney service, publicos also provide door-to-door services within neighborhoods, line-haul intercity travel, and even taxipooling. It is not so much the services rendered that define publico operations as the organizational approach of publico services. “The fundamental characteristic of the publicos is the institutional arrangement that includes the government incentives and regulations, the route associations, and the high percentage of owner-operators with significant flexibility in the way they operate their businesses” (Luyanda Gandhi, 1989, p.110).

### **8.1 Publico Service Characteristics**

#### **8.1.1 Routes, Fares, Type of service**

Publicos in the SJMA provide a demand-responsive service along fixed routes. Most drivers own and operate their own vehicles and also use their vehicles for personal use. There

are two types of publico service in SJMA: Intercity service that provide transportation between cities and towns, and intracity service that operates entirely within one municipality. In 1994, there were a total of 105 routes, 26 of which were intercity and 79 were local routes, operating in the SJMA (Multisystems, 1994). Publicos mainly serve the fringe areas, providing transit service in low-density neighborhoods that buses typically do not serve. The areas served by buses are generally separate from those served by publicos. Thus, buses and publicos do not compete for passengers. Publicos are most common in Bayamon and Rio Piedras, two dense urban communities south of downtown San Juan. Operators stop anywhere along the route and deviate from the main route upon passenger request. The practice of deviating from the fixed route also affects publico scheduling and delays service. Yet, one of the benefits of public service is it provides a personalized transportation option where a rider is dropped off at their residence. The fares are different for each route depending on the length of the route and the area of coverage. In 1995, publico fares ranged from \$.36 to \$.76 per ride. In comparison, subsidized MBA buses charge \$.25 and Metrobuses charge \$.50 per ride. There are special lower fares for students during prescribed hours. Regulations also permit a surcharge of \$.10 after 6 pm, as an incentive to extend service during off-peak periods.

### **8.1.2 Reliability & Frequency**

The frequencies of service along routes vary significantly, depending on demand on the route and the coordination among route operators. In 1994, the median headway was 24.2 minutes for local routes and 10.5 minutes for intercity routes. Central Bayamon's publicos average the shortest headways, 18 minutes, and heaviest load, 13.4 riders per vehicle (Cervero, 1997). On the other hand, routes that operate within Carolina recorded average headways of 45.6 minutes (Multisystems, 1994). In order to rationalize service and provide more regular service, operators along most routes organize into operator organizations. Associations often have some form of dispatching policy so as to provide more reliable and regular service. Publicos generally operate six days a week until 6 p.m., but service drops off dramatically after 2 p.m. during weekdays and after 12 noon on Saturdays. Only a few routes offer evening services and operators do not offer service on Sundays. As a result, riders are often left stranded in the evenings and on Sundays, and are left to wait long periods during the afternoon hours when service is erratic and infrequent.

### **8.1.3 Passenger Comfort**

The majority of the comfort issues relate to the state of the publico vehicles. The majority of vehicles are un-air-conditioned 14 passenger vans. The hot and humid climate in Puerto Rico makes air-conditioning a necessity, especially when the maximum 17 passengers are compressed into the van. In fact, a Metrobus II survey conducted in 1996 found that approximately 40% of the respondents rode the Metrobus because it was air-conditioned. The internal seating configuration and narrow side-aisle of a standard van makes boarding and alighting difficult for passengers. None of the vehicles have wheelchair lifts. With the introduction of Tren Urbano and the integration of modes, publico operators may be forced to purchase ADA compliant vehicles. The antiquated condition of the vehicle creates an uncomfortable riding environment. In the SJMR, 77% of the vehicles are over ten years old; the average age of publicos island-wide is 13.6 years old (MTCG, 1997). In terms of passenger comfort while waiting for publico service, there generally are terminals at route destination points. However, along the route there are no signage, benches, or shelters to protect riders from the weather.

### **8.1.4 Intermodal Integration**

Traditionally, publicos have not been well integrated into the entire public transit system. This is partly due to the fact that geographically publicos and buses operate in separate and distinct parts of the San Juan Metropolitan Area. The regulating agencies responsible for the bus and publico service also operate independently from one another. The lack of coordination of fares, schedules, and staging areas create little opportunity to transfer from one mode to another. Most transit trips are one-seat rides where riders do not need to transfer. In 1997, only 6% of total transit rider made any kind of transfer (Joseph Barr, 1997). Transit routes evolved into a one-seat ride system primarily because transfers substantially increased the total time of the trip due to the unreliability of connecting service.

There are a few examples of intermodal integration. In Bayamon, transit riders have the option to transfer between MBA buses and publico since the staging areas are in close proximity and the MBA buses also stop nearby. Another example of intermodal integration is at the Catano ferry terminal where part of the parking area is reserved for publicos. As a result, it has

become a transfer station linking MBA buses, publicos, and the ferry. In 1997, there were efforts to integrate Metrobus II stops along Ponce de Leon Avenue, near existing publico stops. The plan was never implemented, partially due to the fact that the publico operators opposed the plan.

### **8.1.5 In-vehicle Time**

Publicos are subject to the same traffic conditions as all other vehicles on the roads. Given that traffic congestion is a substantial problem in the San Juan Metropolitan Area, the publico trip-time is severely affected. The average speed for local routes in 1994 was 18 miles per hour, while the average vehicle trip time was around 20 minutes. Some of the most congested roadways in the metropolitan area are located in Bayamon, Guaynabo, and Rio Piedras. The longer trip time of over 25 minutes operating within Bayamon and Rio Piedras reflects the elevated congestion levels in the areas. The government has granted a few publico routes operating privileges on some counter-flow bus corridors. In 1997, the Caguas San Juan route petitioned the PSC to use the bus reverse-flow lane along Ponce de Leon Avenue (PR-1) that would produce a 30-minute timesaving. At the time, the PSC denied the petition.

### **8.1.6 Access to Service Information**

There is no public information provided about publico routes, fares, stops, and scheduling. The public learns about the publico service through 'word of mouth'. The terminals have signs differentiating routes, as do the town plazas where many publico routes terminate. On some routes, special signs are provided to designate the more common boarding points. Either the municipal authorities or the route associations provide these signs. Municipal governments also provide passenger shelters at the most active points. The lack of information limits the publico industry's ability to attract new riders and maintain their existing riders.

## **8.2 Publico History**

### **8.2.1 Regulatory History**

Publico operations began shortly after the introduction of motor vehicles in Puerto Rico. The first franchise operation began in 1907 between the cities of San Juan and Caguas. A year later, a second franchise began operations between San Juan and Ponce. By 1930, slightly over 3,000 vehicles, approximately 25% of the registered automobiles, served the entire island. This

number swelled to 12,000 by 1984 with approximately 880 different routes and contracted to approximately 9,000 in 1994, with approximately 3,000 operating in the San Juan Metropolitan Area (SJMA) (RHTA, 1994; Vescovacci, 1996).

Publicos were legally recognized as a separate form of transport in 1916. Puerto Rico law 75 gave publicos a different tax treatment than private motor vehicles. However, the law did not address controls over publico operations, entry, or fares. By the next year, the Puerto Rico Legislature enacted Law 70 that gave the Public Service Commission (PSC) exclusive authorization to regulate all forms of for-hire transportation, including railroads, buses, taxis, and publicos. Despite the existence of this new agency, administrative action was slow and publicos were subject to only token forms of regulation.

The lack of publico regulatory controls continued until 1949 when Act #366 authorized the PSC to regulate the entry, routing, and other aspects of publico service. The PSC finally obtained clear responsibility over publico services. For the first time the maximum capacity of the publico vehicle was restricted to 10 and licensing was based on the necessity of the service and public hearings. In 1962, the legislature enacted Law 109 that strengthened the PSC's regulatory power. The statute gave the PSC extensive control over publico entry, licensing, transfers, suspensions, and fare rates. The law did not however, interfere with internal publico route operations, except in situations of gross negligence or inadequate service.

In 1974, Law 16 again expanded the PSC's authority by charging the PSC with the sole responsibility for defining and establishing fixed publico routes and the duration of authorization certificates. As part of the implementation of the law, the PSC conducted a general inscription of all publico operators, licensed and unlicensed. After one year, the PSC recorded a total of 9,889 publico cars inscribed in 946 routes. Law 98 enacted in 1977 established the passenger capacity of publicos at 17 or less, while buses were defined as heavy motor vehicles with capacities of 18 or more. Since then, little has changed in regards to publico regulations.

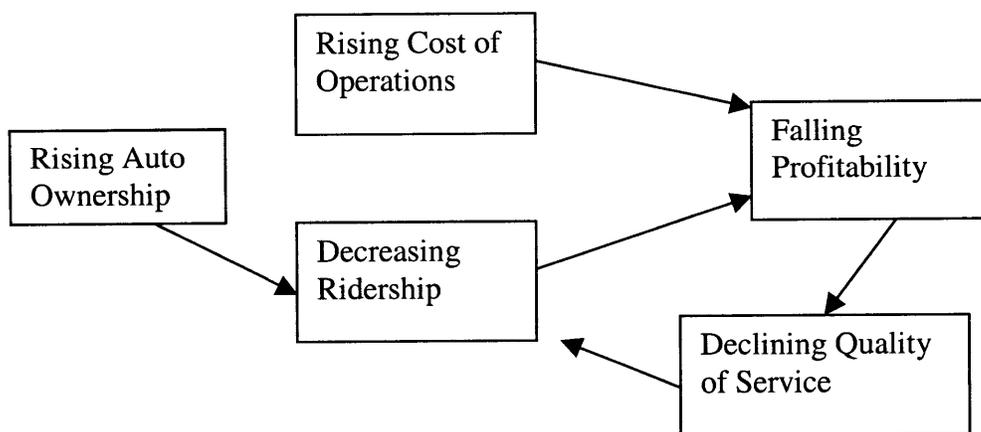
### **8.2.2 Decline of the Industry**

Publicos have experienced a steady decline in ridership since the 1960s, in part, due to rising auto ownership. Publico mode share dropped from 9.2% in 1964 to 2.8% in 1990, while automobile usage has jumped from 62.7% to 90.7% over the same period (Cervero, 1997). At the same time, operating costs have long been mounting at a much faster rate than fare box

revenues. For example, the PSC estimated the daily direct operating expense of a publico van was \$19.81 in 1993, excluding gasoline expenditures (MTCG, 1996). The Management and Technical Consulting Group, Inc. estimates that the cost figures in 1996 were approximately 10 to 20 percent higher. The fall in revenues from declining ridership and the rise in operating costs resulted in the falling profitability of the industry. The 20% decrease in fleet size and the increase of the average age of drivers is a reflection of the state of the industry. The industry does not attract young drivers. This may become a serious industry problem if there is no one to replace aging drivers. Also, current operators report driving only part time due to low passenger demand.

With little in the way of profit, industry actors have few incentives to maintain a high quality of service. For example, operators cannot afford the high cost of new vehicles, which would provide safer and more comfortable conditions for passenger. From 1987 to 1997, the cost of a new vehicle increased 25-30%. (MTCG, 1997). By 1997, a van was estimated at \$30,000 before taxes. This cost does not account for the added capital cost necessary for purchasing vehicles that comply with ADA.

The falling quality of service feeds back into the decline in publico ridership. The relationship between ridership, profitability, and service quality has led to a downward spiral of the industry. Despite these problems, in 1995, publicos still carried approximately 65 percent of total daily transit trips in the SJMA (PRHTA, 1995).



With the introduction of Tren Urbano, publico operators perceive an impending threat to their industry. The government has assured the operators that publicos will continue playing a

crucial role in transit provision. The current contention between regulators and operators is that the government wants publico operators to modify their routes to feed into the new system and change their operating practices so the quality of service is comparable to the new transit system. Operators are resistant to any kind of change.

### **8.2.3 Bus Development**

It was not until 1927 that the PSC awarded a franchise to a private bus company to start bus service in San Juan. Fifteen years later the private bus company voluntarily filed bankruptcy. The San Juan municipal authority immediately took over the private bus assets and services. It was not until 1959 that the Puerto Rico legislature created the Metropolitan Bus Authority (MBA), the public agency that manages the public bus system.

In 1991, the Highway Transit Authority (HTA) introduced the Metrobus I, a high quality public bus service provided by a private contractor. In anticipation of the greater need for feeder bus service with the opening of Tren Urbano, the MBA began efforts to improve the reliability of bus service in 1994, while the HTA and MBA began a joint planning effort to improve the frequency and directness of bus service. The result of these efforts was the introduction of Metrobus II that replaced several lower frequency routes into one high frequency route. The Transit Center Plan implemented in 1997 restructure all MBA and Metrobus services around a series of twelve Transit Centers, reducing the number of bus routes from 44 to 32 (Multisystems, Inc., 2000). The plan effectively delivered more reliable service with buses running every 15, 20, or 30 minutes. The changes resulted in a dramatic increase in ridership.

### **8.3 Government Goal**

The goal of the San Juan Metropolitan Area government is to incorporate the publicos into the “multimodal transit system by means of various programs to help the service become more attractive to potential users and profitable to operators in areas such as vehicle condition, schedule compliance, market studies and development, and multimodal integration” (Allison, SJ Talk, 2002).

The main objectives are to:

- Provide incentives to upgrade services to collective transportation standards;
- Require vehicle improvement;

- Assure service reliability in terms of schedule and coverage;
- Develop publico route maps and system information; and
- Access bus rapid transit corridors.

The goal of the government is to efficiently integrate public and private transit. As in the past, regulators foresee a system where public transit complements the publicos system. Even though the government recognizes that the publicos play a critical role in the success of the entire transportation system, publicos pose a threat to Tren Urbano if they duplicate the rail or bus routes. Like New York and Miami, the reality is that the San Juan government may create new policies that prohibit publicos from offering duplication service in order to prevent head-to-head competition. Historically, publicos and the bus systems in San Juan provide service in distinctly separated areas of the metropolitan and so do not compete for passenger. Considering this history, the prohibition of duplication of service may not cause as much political upheaval in San Juan. In terms of displacing existing publico operators, the Tren Urbano alignment fortunately only affects three existing publico routes, Rio Piedras – Bayamon, Bayamon – Centro Medico, and Rio Piedras- Centro Medico (PRHTA, 1995).

#### **8.4 Government Regulations**

The regulations charge the PSC with granting route authorizations, vehicle registrations, and chauffeur’s license. The PSC grants individual operators with a five-year renewable route authorization that permits operators to operate a specific route. The law limits one driver to each publico vehicle. New applicants for authorization are scrutinized by both the PSC, through need and convenience studies, and the operators of the existing route. The PSC inspects the publico vehicles to determine whether the vehicle meets the minimum vehicle capacity and safety requirements. By law, the PSC is required to inspect publico vehicles on a yearly basis and every 5 years in order to renew a publico license or franchise. Only after passing the vehicle inspection and the applicant receives an authorization to operate, can an applicant obtain the proper vehicle registration and special publico license plates from the DTPW. Lastly, the applicant must obtain a chauffeur’s license from the DTPW to legally operate a publico.

The PSC establishes flat fares based on the distance of the route and the area covered. A petition for a new fare or modification of existing fares must be submitted to the PSC for

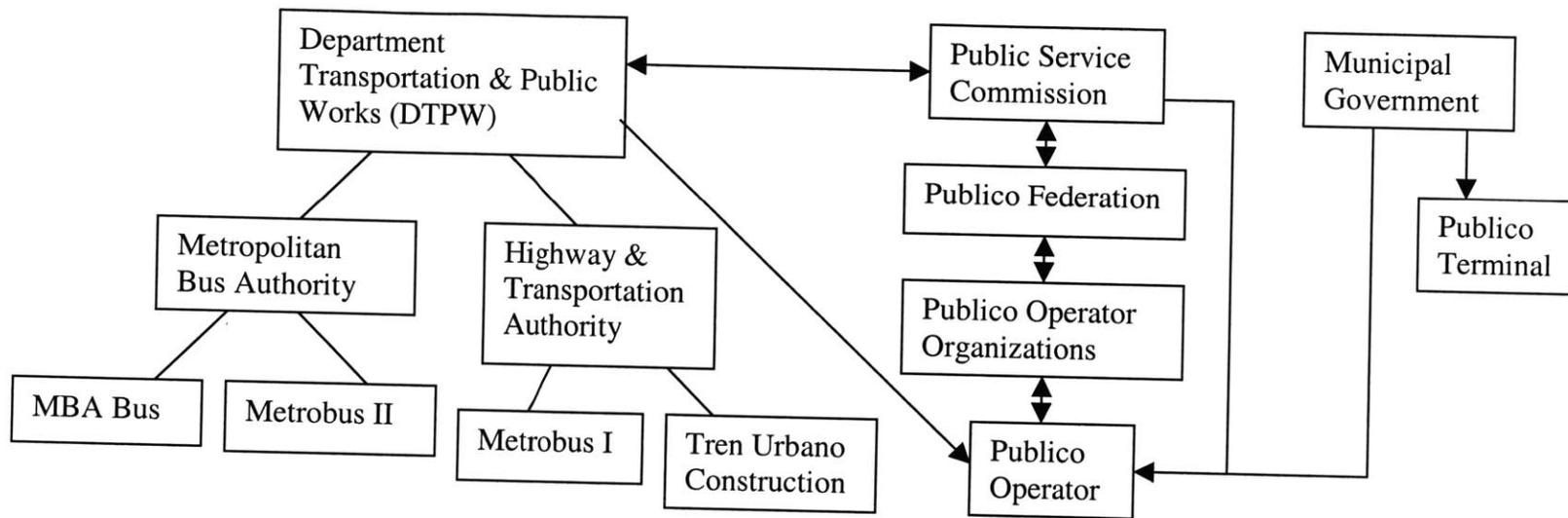
approval. The PSC then publishes the proposed rates with an announcement for public hearings. The burden of proof is on the operators to demonstrate the need for a rate increase. The PSC makes the final decision on whether to grant or deny the petition based on the public hearing the general route situation.

Publico operators must also apply for authorization to ply a new route or modify an existing routes. Normally an authorized operator will petition for a new or modified route. The PSC is required to conduct a need and convenience study of the proposed route. If the route is accepted, the PSC established the route's alignment and the location of terminals and stops.

#### **8.4.1 Institutions**

The fragmentation of publico control poses a great obstacle in the efficient oversight of the publico system. There are three government agencies controlling or regulating publico operations: the Public Service Commission (PSC), the Department of Transportation and Public Works (DTPW), and the Municipal Governments (refer to diagram 8.1 for stakeholder relationships). Both the PSC and the DTPW have statewide jurisdiction. The PSC is charged with controlling entry, routes, and fare rates. Unlike the other case studies, the regulatory agency has little influence on the publico operator organizations. The PSC only has the authority to control the individual operators. The DTPW grants vehicle registration, publico license plates, and the chauffeur's driver's license. The DTPW also regulates traffic and cites terminals and stops along state roads. The municipal government has the authority to cite publico stops and terminals, as well as control traffic operations on municipal roads. No one agency has complete regulatory and planning control over the system. In fact, the agencies are all structured differently and operate independently from the others. This had lead to a sever lack of coordination. This lack of coordination is not limited to publico regulations. It is also true of the relationship between the MBA and publico operators and regulators.

From a holistic perspective, there are two agencies involved in public transportation policies, the DTPW and the Puerto Rico Planning Board. The DTPW performs all the planning, policy making and operational functions relating to public transportation. As part of its responsibility as the Metropolitan Planning Organization, the DTPW has established a Policy Committee for each urbanized area consisting of the head of all commonwealth agencies with



\* Direction of the arrows shows the flow of influence from one stakeholder to another. The solid lines show the hierarchical relationship in organizational structure.

Diagram 8.1: San Juan Publico Stakeholder Relationships



transportation responsibilities and the mayors of all municipalities, comprising the urbanized areas. The Puerto Rico Planning Board, which is part of the Office of the Governor, is a planning agency for the entire island. The PRPB does not establish policies for other agencies; instead it reviews policies in order to ensure that policies do not conflict with those approved by the Board. Currently, the Secretary of Transportation has appointed the president of the Metropolitan Bus Authority (MBA) as the official government spokesperson.

The government is responsible for both the regulation of publicos and the management of the public transit system. Although the Secretary of Transportation has repeatedly voiced that the two interests are not in conflict, the introduction of Tren Urbano has augmented the tension between transit officials and publico operators. Publico operators feel threatened by the new services that may put operators out of business. At the same time, the new rail system may incite the transit authority to react in a similar way as governments in New York and Miami. Government authorities may develop strong tendencies toward protecting train operations from competition and may perceive publicos as a threat.

#### **8.4.2 Government Support**

Considering the publico service has been the backbone of Puerto Rican transit services and have substantially relieved the government of heavy subsidy outlays, regulators have traditionally been supportive of publico operators. Unlike Miami and New York City where jitney and van services were considered an epidemic that needed to be eliminated, regulators in Puerto Rico have viewed the publico system as one that complements the public bus system. Public policies have sought to reward publico entrepreneurs with lower registration fees, excise tax exemptions on vehicle purchases, low interest loans, and publico terminal facilities. In 1991, the annual vehicle registration fee was \$40; publico operators paid a \$1 annual fee. The government grants publico operators a full excise tax exemption; the vehicle excise tax and shipping costs range from 20% to 50% of the original price. Participating local banks also offer low interest rates of 7 to 8% that can be applied toward the purchase of a new vehicle or for the repair current vehicles. In reality, since most operators usually purchase second-hand vehicle, operators generally do not make use of the excise tax exemption or the low interest rates for new vehicles. Primarily, operators recognize the lower registration fees as a form of government support (Arteaga & Arteaga, 1991).

Another form of government support is the provision of publico terminals. Publico terminals include curbside terminals, simple paved lots with passenger canopy shelters, and multistory garage terminals. Curbside terminals are reserved for a specified number of publicos and are identified with special street signs indicating the name of the route. These areas are traditionally located around the town square plaza, the main center of the municipalities. In other areas, existing parking lots have been partially converted into Publico terminals. In the main urban areas where the majority of publico routes are located, multistory garage terminals were constructed. These multistory structures have separate facilities for passenger loading and unloading, waiting areas for drivers, restrooms, and holding areas for hundreds of vehicles. The largest garage terminals are found in Bayamon and Rio Piedras. The federal government funded 80% of the construction of the multistory garage terminals, while the Puerto Rican government covered the remaining cost. The garage terminals provide protection from weather and enhance security and public safety. All these different types of terminals offer vehicle staging areas and facilitate transfers between routes. Terminals also remove vehicles from the street where they would otherwise cause traffic congestion. The publico garages terminals are particularly helpful in facilitating the steady dispatch of vehicles in an orderly manner during off-peak hours. Whereas during peak hours, vans can pull into staging areas, quickly fill up, and begin the route.

The municipal governments have also implemented measures to modify terminal layouts and improve capacity. Municipal governments have widened streets, provided publico parking around the town center plaza areas, and relocated curbside terminals to small off-street areas. These modifications in combination with the provision of terminals decrease traffic congestion around terminals, which reduces safety issues and advances faster vehicle mobility. The terminals create a more coordinated, orderly system that benefits passengers and publico operations. The terminals have effectively formalized a traditionally informal transit system. It should be recognized that the support granted by the Puerto Rican and municipal governments have not effectively addressed the profitability problems that faces the publico industry.

### **8.4.3 Regulatory Enforcement**

The PSC is charged with imposing sanctions upon operators for lack of discipline, inadequate service, route violations and unsafe vehicles. However, the publico industry is only one of many public service sectors that the PSC regulates. The overwhelming number of

responsibilities in combination with the small staff and scarce resources limit the agency's ability to effectively regulate the publico industry. The change in administration a year ago has led to further confusion in publico supervision. As a result, the PSC concentrates on route authorization and the establishment of fares. Many argue that the PSC sporadically or superficially conducts the yearly vehicle inspections required by law. This means that vehicles, usually bought second hand, are only thoroughly inspected every five years by the PSC when the operator needs to renew the license or franchise. This brings into question the safety of publico vehicles.

### **8.5 Operator Organization**

The long publico history and supportive institutional environment has resulted in the development of self-regulating organizations. Considering publicos are the predominant transit option in Puerto Rico, it is not surprising that the government has always viewed publicos favorably. As a result, the Puerto Rican statutes ban the government from interfering with internal publico route operations. The government support of self-regulating organizations has allowed the organizations to have the freedom to change and evolve. This accommodating relationship is one of the contributing factors that have allowed self-regulatory institutions to flourish in Puerto Rico. Another factor is the long publico history that has allowed industry institutions like associations, unions, cooperatives, and federations, to grow and mature with time. Consequently, the management of operators in each association is unique and tailored to the needs of the operators on a particular route.

The vast majority of operators organize by routes into associations, unions, or cooperatives. In 1996, there were 5,960 operators island wide enrolled in operator organizations out of an estimated 9,000 vehicles in 1994 (MTCG, 1996). Route associations and unions are informally organized institutions, whereas cooperatives are formal organizations recognized and regulated by the state. Route associations and unions represent the dominant type of publico operator organizations. The members of a cooperative share revenue. Route Louiza represents one of the few examples of a cooperative that became a cooperative because the members also operate a gas station. Membership is voluntary and open to anyone offering service along a route. The average number of members in a union is 19. A driver typically pays an initial membership fee and a monthly fee. In 1996, the average monthly membership fee was less than

\$10. Some associations require the driver to comply with the government statutes in order to maintain membership. Some organizations require new drivers buy a vehicle from the union in order to join the union and use the terminal staging area.

These organizations provide members with benefits and rationalize publico operations in order to assist their members and provide better service to patrons. Many associations have written by-laws, which stipulate norms of conduct and enforcement mechanisms. One route association leader explained that the association supervises and disciplines operators in order to make sure they comply with the rules of both the association and the Public Service Commission.

### **8.5.1 Benefit**

All of the association leaders report providing benefits to their members. Many organizations reported using the pooled fees to hire legal assistance in the case of disputes with the PSC; some of the organizations use the fees to pay members that cannot work due to accident or illness. However, the benefits offered by the six organizations interviewed are not as comprehensive as the literature suggests. For example, none of the six association leaders reported providing discounted spare parts, tires fuel, or lubricants; the associations did not have informal agreements with local garages for maintenance and repair services; the associations did not use fees as supplementary vehicle insurance on top of the minimum no-fault insurance required for publicos. One president explained that even if his association wanted to purchase items in bulk to sell at a discounted price to members, his association has too few members to buy in bulk. Considering that the average number of members in operator organizations is 19, it is likely that many associations face the same obstacle.

### **8.5.2 Rules of Conduct**

The associations regulate the dispatching arrangement and the queuing order of vehicles. Some publico routes dispatch vehicles according to a predetermined frequency, while other routes require vehicles to leave the terminal when their van is full or filled with a prescribed number of passengers. The practice of waiting until a publico is filled before departing the terminal results in irregular service frequency, particularly during off-peak hours or on routes with lower-demand. The practice also forces riders to walk the extra distance to the terminal for

fear that the vehicle will be full for the first segment of the route. The dispatch rules typically changes according to the time of the day due to passenger demand. The order of vehicle dispatch is typically based on a first in first out policy. Gervacio Rivers, the president of the Rio Piedras – Fajardo route, stated that the vehicle dispatch order in his organization is based on daily random drawings.

The Palmer route from Caguas to San Juan is the only organization interviewed that reports having some system of route coverage to cover non-profitable off-peak periods. The organization gives a \$12 ‘bonus’ from the membership fees to cover a non-profitable late afternoon shift beginning at 4:40pm. Even though the shift does not have a great deal of demand, the route president explained that they offer it due to passengers request. The Palmer route is said to be the oldest publico route in the SJMA and one of the most profitable routes. This may explain why the Palmer route has well-developed rules that are strictly enforced.

Contrary to the literature, none of the association leaders interviewed assign operators to shifts. Each operator has the freedom to work according to his own preferences. The literature also documents that organizations provide “trailer” service where publicos collect passengers only at intermediate points of the routes during peak periods in order to keep publico users along the route from waiting excessively long periods. Besides the supply of services, many organizations regulate operator dress code, driver conduct with passengers, total passenger capacity, and route adherence.

The difficulty with improving the scheduling reliability of publico service is convincing the operators to change their operating practices. There are two factors preventing operators from altering their operating practices. The first factor is the financial consequences associated with different operating practices. Considering operating expenses continue to increase disproportional to revenues, drivers are unwilling to adhere to a set schedule that forces the operator to leave the terminal with few passengers on board. Second, operators enjoy the personal freedom associated with publico operations. Publico operations are subject to the preferences of the individual. In San Juan, operators seem to prefer providing service in the morning hours from 6am to 2pm on weekdays. This behavior differs from the U.S. mainland, where the provision of service is closely linked to the passenger demand. Possible explanations may be cultural preferences and the aging population of the drivers.

### **8.5.3 Enforcement & Monitoring**

Enforcement of these rules of conduct varies depending on the organization. The association leader initially gives the driver a warning. If the behavior continues, than most associations will impose financial penalties, suspension from plying the route, and finally expulsion from the organization. William Ambert River, the president of the Bayamón – Centro Médico route, mentioned that his association no longer imposes financial penalties because the power of the union has atrophied; rather the misbehaving driver is suspended from operations. Associations also report incorrigible drivers to the PSC. It is unclear whether associations resort to expulsion. One leader explained that expelling a member creates bad politics and so it is rarely done.

Associations rely on peer monitoring to enforce rules. Rider input is weak since only some organizations operating out of a garage terminal accept passenger complaint. Otherwise, riders must file their complaints with the PSC, which is responsible for following up with the operators. Considering the limited capacity of the PSC and the circuitous flow of information, publico operators are unlikely to receive the public complaints. In this way, the publico system suffers from a lack of public accountability and limited monitoring capabilities.

### **8.5.4 Relationship with Regulators**

All the leaders interviewed regarded their organization's relationship with the PSC as favorable. The general consensus is that the PSC does a good job resolving publico issue, ranging from dealing with illegal publicos to revoking the license of a misbehaving operator. Considering the PSC's limited organizational capacity, the fact that operators feel confident that the PSC is capable of acting as the enforcer is a surprise. An earlier study performed by Miguel Vescovaci in 1999 found that operators were not confident in the PSC's abilities to resolve disputes on behalf of the operators. Of the 69 respondents surveyed at the Kuilan terminal in Bayamon, 39% felt that the PSC worked effectively in solving disputes related to the introduction of TU, while 36% of the respondents were not satisfied with the PSC's role.

### **8.5.5 Organizational Structure & Decision-making Process**

Every association or union has an elected president who represents the association. In most cases, there are other board members in addition to the president, consisting of a vice-president, secretary, and treasurer. The democratic form of governance provides some form of accountability to the members of the association. Since organizations average around 19 members, the small group dynamics forces the officers to be more accountable to the wishes of the members. Board members are usually not paid or paid a small amount for their responsibilities. The schedule of board members and general meetings range from sporadic to regular monthly meetings. Decisions are usually based on the majority of votes. In the San Juan-Caguas route association, the board members hold the authority to make all the decisions for the group. The rest of the members are expected to comply with the board's decisions. Other associations leave decisions up to all the members. When a dispute cannot be resolved at the association level, the issues are brought to the federation and finally the PSC, which has final authority on public matters.

#### **8.5.6 Publico Federations**

There are two supra-operator organizations in the San Juan Metropolitan Area that represent the interests of member route associations and unions, the Metropolitan Association of Público Operators that represents organizations in Rio Piedras and the United Drivers Association that represents organizations in Bayamon. The operator organizations voluntarily choose to be apart of the federations. Almost all operator organizations in San Juan are members of these institutions. The purpose of the federations is to lobby on behalf of its members. In the 1980s, they were able to lobby the PSC to implement a 10-cent surcharge for night services (Consultores Tecnicos Asociados Inc., 1985). Recent issues dealing with service quality problems related to the introduction of Tren Urbano such as the procurement of new vehicles, providing extended hours of service, and the provision of exclusive lanes. The federation also provides support to the organization when drivers decide to go on strike or when an operator organization opposes the application for a new route.

United Drivers Association, currently headed by Senior Catala, is the federation to which the majority of unions and associations belong. The federation has a board of directors headed by an elected president. The president of the federation who receives a small wage for his responsibilities is elected every three years. Senior Catala has been the president since 1992.

Federation meetings are only held when necessary. Only the presidents or designated representatives of the associations and unions are permitted to attend and vote at federation meetings. The association president is responsible for informing his association members what goes on at the federation level. The existence of federations is an important accountability mechanism that forces the government to respond to industry issues. The federation gives publico operators a powerful voice that would otherwise be diffuse and unorganized. Traditionally, publico cooperatives and federations strongly oppose any changes to their operations and organizations.

It should be recognized that although the purpose of the publico federation is to represent the interests of the individual operator, the president of the federation does not represent all the interests of all the operators. Many operators do not agree with the positions of the federation president. The publico industry is composed of individual owner operators. This means that each individual ultimately operates according to his own preferences and interests. If the government enters a negotiation with the president of the federation, the federation president ultimately does not have the authority to change the behavior of the individual.

# Chapter 9

## Cross Case Comparison

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This chapter is divided into three sections. The first section identifies the factors that affect the development of regulatory arrangements. This discussion frames why the jitney industry and regulating organizations have evolved the way it has. Understanding these factors sheds light on some of the critical issues affecting the jitney industry. Acknowledging the factors that affect jitney development help to anticipate future changes in the industry. The second section documents the similarities and differences of regulatory mechanisms between jitney services so readers can compare the existing spectrum of regulatory mechanisms. The comparison between case studies also helps to isolate successful mechanisms and recognize how they differ from other practices. The last section of this chapter examines the issues that impact jitney service quality and identifies current or possible strategies that leads to a high quality of jitney service.

### **9.1 Factors that Affect the Development of Government Regulations**

There are many factors influencing the development of the jitney governance models. There are two classifications of factors, those that affect the development of government regulations and those that affect operator self-regulatory mechanisms. The most important factor that shapes government regulations is the political environment. Drawing from the case studies, the jitney systems in both San Juan and Atlantic City have a long history dating back to the early part of the 1900's. At the time, the two governments enacted regulations to ensure the safe provision of services but did not attempt to regulate the industry out of existence like other cities in the U.S. The auspicious beginnings and the continuous provision of transit services in both

cities created a political environment that has favored the jitney industry. For instance, publico service was the first and only public transit service in Puerto Rico. This explains why the Puerto Rican government was supportive of the industry. In the Atlantic City case, government support has evolved into government oversight that is closely aligned with the operator self-regulations.

The jitney services in New York and Miami are relatively young in comparison. Their development occurred after conventional bus systems dominated the transit market. Consequently, existing institutions and interest groups wanted to maintain the status quo. The local governments, which supply most transit services, also had a vested interest in protecting the public transit industry. In the New York case, regulators enacted a commuter van policy that was designed to discourage the growth of the industry. Every step of the way, powerful interest groups tried to force vans out of business. Although jitneys in Miami date back to the 1930s, the industry did not begin to expand until the 1980s. By that time, any reduction of public transit provision represented a threat to both government agencies and transit workers. Yet, the overarching transportation policy also directed the County to encourage private transit provision. As a result, the Miami jitney regulations are less restrictive than the New York ordinance. The four case studies demonstrate that current government regulations directly reflect the political environment in which the jitney industry developed and matured.

## **9.2 Factors that Affect the Development of Operator Organizations**

### **9.2.1 Origin of Operator Organization**

The case studies highlight several factors that affect the development of industry self-regulating regimes. One critical factor is the origin of the self-regulating organization. The origin of operator organizations is dependent on how the government granted permit authorities. In Miami and New York, since only a company can obtain a permit authority to operate on a route or in a territory, the company structure is a direct result of government regulations. The company then leases out the right to use the permit authority to individual drivers. These companies voluntarily imposes rules on its drivers and thus can be considered self-regulating organizations. In contrast, the regulators in Atlantic City and San Juan granted permit authorities to individual drivers. Operators soon recognized the value in forming collectives to provide benefits and rationalize service. Consequently, operators spontaneously mobilized into organizations. These two types of operator organizations have different organizational

structures. The internal structure and decision-making process in organizations that spontaneously mobilized are based on democratic principles, whereas companies rely on a company president that makes decisions.

The structure of an organization is critical to the direction of the organization and the development of an organization's rules and standards. For instance, democratic processes seem to encourage more innovation. In Atlantic City, each new president brought new ideas and changes to the association that has strengthened the jitney industry through the years. The president in the 1980s replaced the 10-passenger vehicles with 13-passenger vehicles and added cross-town routes to the operations. The president in the 1990s initiated the lobbying effort to gain state capital assistance funds to purchase a fleet of new minibuses. In contrast, many of the companies in New York seem to manage their drivers in a similar fashion.

The structure of the organization also impacts the level of internal accountability in an organization. An organization based on periodic officer elections and voting protocols is more accountable to the members than an organization based on autocratic control. The level of accountability influences the development of the organization.

### **9.2.2 Economic Profitability of Service**

The economic profitability of the industry is a very important factor in the development of self-regulating institutions. The evidence suggests that the more profitable the operations, the more evolved are the self-regulating organizations. Atlantic City illustrates this hypothesis. Atlantic City jitney drivers, arguably, earn the highest revenues of all the jitney systems examined in this study. The Atlantic City Association also has the most comprehensive list of rules and standards and the most effective monitoring and enforcement mechanisms. The resulting quality of service provided to the public far surpasses the other case studies. Conchita's Transit Services in Miami is another example of a operator organization that strictly regulates its drivers. The various company rules and regulations translate into a high quality jitney service. The high demand and profitability gives the operators a greater incentive to rationalize services and thus develop more advanced self-regulatory arrangement. In contrast, the falling profitability of the publico industry creates few incentives for operator organizations to strictly control driver behavior, leading to a poor level of service quality.

### **9.2.3 Competition Among Organizations**

Another factor influencing the development of self-regulating organizations is competition among organizations along one route or in one territory. The statutes in New York permit multiple companies to operate in a territory, compared to Miami where only one company is given the permit authority to operate on a route. The most likely reason New York City decided to allow competition is to force more public accountability. This fact is consistent with the theory that the government can devise means of regulation that do not restrain the most essential forms of competition in order to maintain accountability. On the other hand, it is more difficult to rationalize service when there are multiple organizations that operate independently. No one company feels empowered to take ownership of the service knowing that there are others competing companies. In addition, firm competition may inspire more aggressive driving behavior as operators from one firm tries to steal passengers from an operator from another firm.

### **9.2.4 Owner Operator Dynamic**

The industry trend toward owner operators also impacts the development of operator organizations. In some ways, the organization has less influence on these operators since they are all entrepreneurs. However, because owner operators have a vested interest in the development of the industry and conditions on the route, owner operators are more willing to participate in self-regulation. Owner operators take more ownership of the service they provide and are more concerned about the way fellow operators conduct themselves. Also, if the vast majority of drivers are owner operators, this will equalize the concentration of power in an operator organization, creating a more democratic environment. The rules of the organization is also more likely to represent the interests of its members when everyone is an owner operators and thus has a tangible interest in the development of organizational rules.

### **9.2.5 Industry Size**

Industry size shapes the responsibilities of operator organizations. Drawing from the case studies, larger industries tend to form smaller self-regulating organizations that combine to form a supra-organization. The smaller organizations regulate their drivers, while the supra-organization serves as the political arm that lobbies for the interests of the entire industry. Both San Juan and New York illustrate this separation of responsibilities. Smaller industries like the

ones in Miami and Atlantic City have only one organizational unit that regulates its drivers and lobbies on behalf of its members. In Miami, the organizational unit is the company. With only 18 companies and 136 operators, companies have not found a need to band together into an industry organization. In Atlantic City, the organizational unit is the Association that controls all 190 jitney operators.

Accountability and representation becomes an issue when the industry is large. It is questionable whether the leader of a supra-organization represents the interests of the individual operator. The leader of the smaller organization must first recognize the opinions of the individual operator before the opinion is passed on to the supra-organization. Even then, the leader of the supra-organization may choose to lobby for a different issue. In this way, large jitney industries may have internal accountability issues.

### 9.3 Cross-Case Comparison: Government Regulations

	New York	Miami	San Juan	Atlantic City
<b>Entry</b>	Y	Y	Y	Y
<b>Routes</b>	Y (by territory)	Y	Y	Y
<b>Fare</b>	N	N	Y	Y
<b>Type of service</b>	Y - prearranged only	N	N	Y - jitney stops only
<b>Age of vehicle</b>	N	15 year	N	N
<b>Multiple drivers</b>	Y	Y	N	N
<b>Vehicle Forfeiture</b>	Y	Y	N	N
<b>Monitoring &amp; Enforcement</b>	Strong	Strong	Weak	Neutral

Table 9.1: Comparison of Government Regulations

**Entry Restrictions:** All the local governments studied impose entry restrictions. The primary purpose of the restrictions is to ensure public safety and secondarily, to discourage new entrants. New York, Miami, and Atlantic City use a dual enforcement strategy where both the government and company enforce the entry regulations.

**Routes:** All the local governments also control routes (or territories in New York's case). Miami and New York have restrictions of bus route duplication. Government control over routes is meant to protect existing transit services from jitney competition.

**Fares:** San Juan and Atlantic City regulate jitney fares in order to protect the public from possible market abuse. However, the New York and Miami case studies suggest that fare regulation is unnecessary. Competition with jitney drivers and conventional transit services force fares to remain comparable or less than conventional transit.

**Type of Service:** Only the governments in New York and Atlantic City imposed restriction on the type of service. New York's motivation to require prearranged rides stems from the interest to shelter existing transit services from jitney competition, whereas Atlantic City only permits boarding and alighting at prearranged jitney stops in order to maintain order on the roadways.

**Vehicle Age Restriction:** Miami was the only government that capped the jitney vehicle age at 15 years, mainly for public safety reasons. It appears that only the operators in San Juan have a problem with vehicle replacement. This may be attributed to the declining profitability of the publico industry.

**Vehicle Forfeiture:** The laws in New York and Miami give the regulators the authority to impound vehicles. This provision gives the government agency a stronger form of enforcement power to deter illegal activities. Operators may view fines as a cost of doing business, and thus fines do not deter operators from illegal activity.

**Multiple Drivers:** Lastly, Atlantic City and San Juan do not allow multiple drivers to operate the same vehicle. The benefit of such a restriction is that the existing operators can maintain their revenue stream. More operators would mean more competition and consequently a smaller portion of the total revenue. However, assuming there is adequate passenger demand, the ability to have multiple drivers generates more revenue per vehicle. In San Juan, where the financial viability of the industry is in jeopardy, this may be one avenue to explore.

## 9.4 Cross-Case Comparison: Self-Regulating Organizations

	New York	Miami	San Juan, PR	Atlantic City
Unit of Organization	Company	Company	Route association	Industry association
Membership %	100%	100%	Vast Majority	100%
Form of Governance	Autocracy	Autocracy	Elect representative	Elect representative
Benefits to drivers	None	None	Few	Few
Rules of conduct				
Shift	No	Conchita's Transit has a master schedule		Rotating Shifts
Queuing protocol	First in/first out	First in/ first out	Variable (first in/ first out, random)	No
Dispatching	Regular dispatch of vehicles	Regular dispatch of vehicles	Time intervals or max. passenger loads	No
Set standards	Must comply with authorities	Must comply with authorities	Varies depending on association	Must comply with authorities
Monitoring	Peer monitoring, president oversight	Peer monitoring, president oversight	Peer monitoring	Peer monitoring, officer monitoring
Field Complaints	Y	Y	Variable	Y
Enforcement Activities	Warning, suspension, expulsion	Warning (only Conchita's imposes monetary fines), suspension, expulsion	Monetary fines, suspension, expulsion	Monetary fines, suspension, expulsion, traffic court
Strength of Enforcement	Strong	Strong	Variable	Strong

Table 9.2: Comparison of Self-Regulating Organizations

The Jitney self-regulating organizations closely follow the functions set forth in the self-regulation theory. The organizations develop rules of conduct, set quality and safety standards,

and manage the supply of services. The organizations also monitor their drivers and impose sanctions on members that break the rules.

#### **9.4.1 Benefits**

Contrary to the literature written on jitneys, operator organizations provide few to no benefits. In Miami and New York City where the operator organization takes the form of a company, the companies generally do not offer any benefits to their operators. One company president explains that since the company does not receive the revenue, he feels no obligation to offer benefits to his drivers. In a company situation, the president feels it is not their responsibility to provide additional benefits outside of rationalizing the supply of service. The operator organizations in San Juan, on the other hand, offer sick pay compensation and legal services. The Atlantic City Association offers its members discounted gasoline and garage repairs. The fact that the organizations in Atlantic City and San Juan generally all offer benefits may be because the rules of the organizations are a product of the needs of the group; leaders are under more group pressure to assist the members. In a company situation, the president can take an operator's opinion under consideration, but he ultimately makes company policy decisions. The president is not as accountable to the needs of his drivers.

#### **9.4.2 Developing Rules & Standards**

The rules developed by operator organizations usually address three service quality issues: scheduling, safety, and passenger comfort. Operator organizations develop rules of conduct that control the scheduling issues such as hours of operation and service frequency. An in-depth discussion of scheduling issues is found in section 9.8.2. Many of the operator organizations require their drivers comply with local government regulations. In Miami and New York, the company is forced to enforce the vehicle and driver standards since the companies are also penalized when the operator is found operating illegally. The Atlantic City Jitney Association, which initiates more stringent standards than the city government, voluntarily enforces City regulations. Most operator organizations also obligate drivers to adhere to personal hygiene, vehicle cleanliness, and customer relations' standards. On the other hand, operator organizations in San Juan generally do not require members to comply with the law, loosely oversee the cleanliness of drivers and their vehicle, and may have rules on how drivers should conduct

themselves with passengers. Generally, San Juan operator organizations do not take responsibility for the actions of its members. This difference may be attributed to the fact that the operator organizations in the other case studies have a good deal of power and capacity to implement policies.

### **9.4.3 Monitoring**

Peer monitoring was common among all the operator organizations. What distinguishes the operator organizations is fielding passenger complaints and monitoring by an officer of the organization. The ability to receive passenger complaints is important when examining the accountability of an organization to external forces such as passenger concerns. The company structure in Miami and New York creates a strong sense of ownership among company presidents. Consequently, company presidents advertise their company phone number on vans as a way of receiving public feedback on their services. The company structure also strongly encourages the president of the company to closely monitor his drivers out of self-interest to protect the reputation of his company. The Atlantic City Jitney Association also fields customer complaints but and elected board members supervise and monitor groups of 27 drivers. This is a particularly successful method of monitoring since there is always a board member on the roads supervising the drivers in his group. Supervision by officers coupled with peer monitoring produces a high level of operator adherence to organizational rules. In contrast, only some San Juan operator organizations operating out of garage terminals offer customers a route phone number so the public can make complaints. Unlike the other case studies, San Juan operator organizations generally do not have the administrative capacity to field calls. Generally, elected officers in these organizations are not monetarily compensated for their leadership roles and consequently must work as much as any other operator; whereas, Atlantic City, Miami, and New York, all have people specifically devoted to administrative coordination.

### **9.4.4 Enforcement**

The primary difference in enforcement strategies is monetary sanctions. All the organizations reported suspending and finally expelling operators for bad behavior. Companies, with the exception of Conchita's Transit Express in Miami, do not impose monetary penalties, while operator organizations in San Juan and Atlantic City do. It is obvious that monetary

sanctions serve as a deterrent from misconduct. It is not clear why companies choose not to employ this strategy. Aside from monetary penalties, the Atlantic City Jitney Association also instituted an internal traffic court unique to Atlantic City. This system is meant to resolve disputes among operators and provides a forum where fellow operators can raise issues of misconduct.

## **9.5 Governance Model Typology**

The four case studies demonstrate a variety of hybrid governance models. The distinguishing factor that differentiates the cities is the relationship between the government regulators and the operators. In New York City, the government and operators were in opposition, creating a system where operator and government regulations are independent from one another. The City imposes restrictive command and control regulations on operators and permit holders, while the self-regulating organization, the company, also imposed its own rules on the drivers. Similar to New York, the Miami governance model is based on two independent regulating mechanisms, the government and the company. The difference is that Miami-Dade County developed more permissive jitney regulations because of the overarching transportation policy that supports private sector transit competition.

The Atlantic City governance model exhibits elements of corporatism. The government's role in Atlantic City is mainly supervisory to protect society from potential abuse. The self-regulating Association leads the direction of the industry and sets the rules governing the operators. The government plays a passive role, occasionally codifying programs and rules that the association has already implemented. Even though the association assumes the lead role, the system is based on a tight cooperation between the regulator and the Association where the private association is ultimately responsible to the government. For instance, the two entities negotiate proposed changes to routes or fares when the occasion arises.

San Juan is an example of a supportive government model. The government imposes command and control regulations, but also provides incentives to operators in order to support publico operations. The government also tries to protect bus services from publico competition, but the relationship in San Juan is not as adversarial as New York and Miami due to the long publico history. In fact, the government has always recognized the need for publicos in Puerto Rico.

## 9.6 Affect of Governance on Service Quality

	NYC		Miami		SJ		AC	
<b>Safety</b>								
vehicle and driver fitness	Y		Y		N	No annual vehicle inspection	Y	
<b>Integration</b>								
Connections	feeder to subway/ no duplication of bus routes		30% duplication restriction		Some connections		Rail and bus connection	
schedules	Y	24 hr service	N		N		Y	24 hr service
fares	N		Y	Conchita's	N		Y	Rail
<b>In vehicle Time</b>	Fast		Fast		Slow	Heavy traffic congestion	Fast	
<b>Reliability/Frequency</b>	Y	24 hr service/ regular dispatch during off-peak hours	Y	Regular dispatch during off-peak hours	N	difficult to change driver practices - demand drops in afternoon hours	Y	24-hr service, at least 10 vehicles, rotating shifts
<b>Information Access</b>	Some	Signage at some route destinations	N		Some	Signage at some terminals	Y	Required signage/ Association provide service information
<b>Passenger Comfort</b>	N		N		N	Average vehicle age 13.6 yrs	Y	ADA compliant vehicles with A/C and radio

Table 9.3: Comparison of Service Quality by Indicator

The New York and Miami governance model based on two distinct regulatory mechanisms produces a similar mediocre quality of service when evaluated according to the six service quality indicators. In terms of safety, the local laws succeed in ensuring legal operators meet minimum safety standards determined by the City through periodic inspections and license renewals and through company level enforcement. Despite the rules set forth by companies, operators tend to drive aggressively, cutting each other off in order to pick-up passengers. In New York, high passenger demand and intense competition among van operators creates a situation where there is frequent, 24-hour van service. Many common routes also support inter-

company dispatching arrangements that guarantee reliable van service. Services in both cities attribute their general success to the fast, convenient service offered to the public. The faster service is due to the nature of jitney operations – jitneys stop less because of their small capacity and stop for a shorter amount of time when they do stop - and the fact that the jitney routes are not heavily congested.

Service quality in New York and Miami fall short in the areas of rider comfort, access to van service information, and intermodal integration. Although riders are guaranteed seating, the vans in New York and Miami are generally not air-conditioned and are difficult to board and alight due to the interior configuration of the vans. Transit service information is purely by word of mouth. New York City has begun to install van signs at destination points in recent year. Conchita's Transit Express in Miami is one of the few companies that has an integrated fare program. There is no form of revenue sharing or passenger count maintained. Instead, Conchita's and Metrorail allow passengers to transfer freely from one mode to the other. New York feeder vans provide transit services to subway stations. In this way, van services physically connect with other modes. However, aside from subway stations, vans generally do not connect with the bus system since New York vans are not allowed to stop anywhere along an existing bus route. Miami jitneys face similar restrictions; jitneys can only duplicate up to 30% of an existing route. This allows for some flexibility for jitneys to connect with other modes.

The San Juan hybrid governance model with a supportive government produced the poorest quality of service. Despite well-developed self-regulating institutions, restrictive government regulations, and government incentives, the publico system does not provide a high quality of transit service. The statute promulgates vehicle standards in order to guarantee public safety. However, the PSC fails to conduct annual vehicle inspections due to limited organizational capacity. Publicos generally do not offer fast trips since publico are subject to the same severe traffic congestion as personal autos. There are a few exceptions where publicos share exclusive lanes with buses. The fact that publicos are permitted to stop anywhere along a route to board or alight passengers also causes traffic congestion that impedes the speed of travel. Although associations help organize the supply of services with special rules, publico services are still sporadic during off-peak periods. Driver preferences and profitability lie at the root of the scheduling issue. Publico organizations also do not provide publicly accessible information about their rates, routes, and schedules. Riders need to find out about publico services by word

of mouth. Finally, publicos vehicles are old, providing an uncomfortable ride, and the internal configuration makes boarding and alighting difficult. Although there are terminals where passengers can wait for publico service, these terminals are not well maintained. In summary, the regulatory arrangement in Puerto Rico has not lead to the provision of a high quality of service.

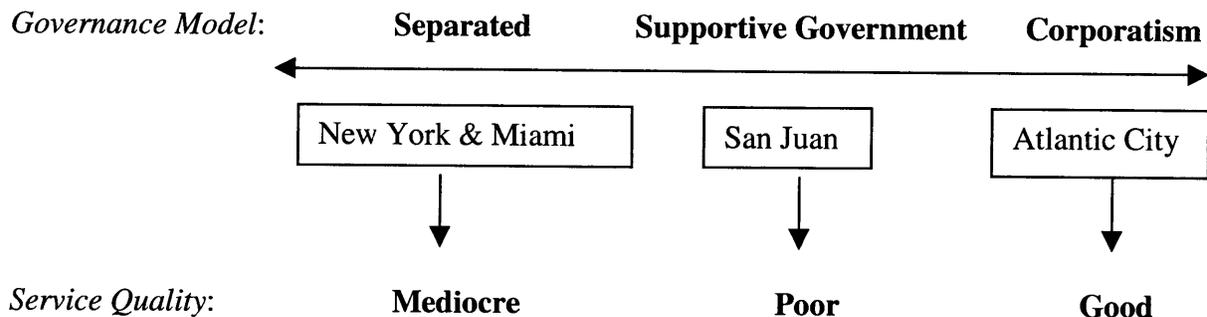
The collaborative governance structure in Atlantic City produced the highest quality of service. The Association voluntarily enforces the vehicle and driver standards set by the City ordinance. The Association also imposes heavy sanctions for unsafe driving practices. The City regulations require the Association to guarantee at least 10 vehicles on the routes at all times of the day in order to ensure reliable and frequent service. In addition to the City regulations, the Association created a system of rotating shifts that assure 24-hour reliable service. The trip time of a jitney ride is short partly because vehicles operate along a side street where there is less traffic. Both the City and the Association promote jitney services. The City regulations also require the Association to install jitney signs at every stop. The routes connect with the bus and rail stations. The operators currently have an agreement with the NJ Transit Authority to provide free rides from the commuter rail to the casinos. All vehicles are 13-passenger spacious minibuses that are equipped with air conditioning, wheelchair lifts, radios, and video cameras.

The success of the Atlantic City model suggests that a corporatism governance structure produces the highest level of service quality. The government gives the Association the autonomy to rule itself, recognizing the strength of the Association. This relationship gives the Association more flexibility over the development of the industry since the government defers most of the regulating responsibilities to the Association. However, dependence on the Association to regulate its drivers only produces a high quality of service when the organization is strong and it is fervently committed to improving service quality. This commitment to improving service quality stems from the profitability of the industry. The more lucrative the service, the more likely operators are willing to impose rules in order to provide a high level of service.

Given the Association has assumed the role of the regulator, there is the risk that the Association could become a rent-seeking institution. The obvious response is that government oversight prevents market abuse. Yet, the Atlantic City Association moves beyond mere compliance with government regulations. The Association consistently initiates industry

improvements. The history of the Atlantic City Jitneys suggests that the democratic organizational structure and decision-making process prevents corruption and lead to improvements. Ultimately, the Association’s leadership is accountable to its members and thus consistently tries to improve operations in order to benefit members. Presidential candidates are elected to office because of proposed changes. As a result, new leadership brings new ideas and the industry does not stagnate.

The governance models identified can be arranged along a continuum. New York is at one end with government regulations separated from self-regulation, while Atlantic City is at the other end with a corporatist style of governance. The quality of service in each of the case studies does not seem to show a similar progression as the governance continuum laid out above. In particular, the quality of service provided by operators in San Juan seems to be inconsistent with the governance continuum, indicating that service quality is not merely a function of the governance structure.



### 9.7 Other Factors Affecting Service Quality

The quality of service is also dependent on the profitability of the jitney industry, the strength of jitney institutions, and the context of jitney operations. The case studies suggest a highly profitable market encourages the development of strong operator organizations that leads to a high quality of service. A strong operator organization possesses the initiative to develop policies and the organizational capacity to implement and enforce these policies. Operators recognize that the market demand is closely linked to the service quality, and the independent provision of service result in an overall poor quality of service. Therefore, operators mobilize into operator organizations in order to coordinate services. The strength of operator organizations

grows as the profitability of the service increase. There is a strong financial incentive for organizations to strictly regulate its drivers in a highly profitable market. Without the discipline of an operator organization, the owner operators would act according to their individual preferences leading to issues such as chaos on the roads and unreliable service provision during off-peak hours. Although the provision of high quality service is associated with a higher cost of operations, the profitability of the industry alleviates the financial challenge associated with offering a higher quality of service. For these reasons, a profitable market and strong operator institutions bring about a high quantity of jitney service.

Atlantic City illustrates the hypothesis that high jitney service profitability leads to a high quality of jitney service. Atlantic City jitney drivers, arguably, earn the highest revenues of all the jitney systems examined in this study. Atlantic City is also in the unique position of having 24-hour passenger demand due to the neighboring casinos. Over the years, the Association has developed into a strong operator organization. The Association initiated most of the service quality improvements. For example, the Association instituted rotating shifts to ensure frequent service coverage 24 hours a day, 365 days a year. The Atlantic City Association also has developed the most comprehensive monitoring mechanism based on customer complaints, peer monitoring, and board member supervision. And the Association enforces rules through extensive fines and operator suspension. The resulting jitney service provided to the public far surpasses most of the other jitney services. In contrast, the falling profitability of the San Juan publico industry creates few incentives for operator organizations to strictly control driver behavior, eventually leading to a poor level of service quality.

The organizational capacity of the regulating agency is also important in the provision of a high quality of jitney service. The government regulators need to have the organizational capacity to oversee and enforce government regulations. For example, the 15-year age restriction established by the Miami regulators carries little significance if the regulators do not enforce the regulations. In New York, Miami, and Atlantic City, strong institutions support the implementation of regulations. In contrast, the publico-regulating agency severely lacks the organizational capacity to perform its regulatory duties such as conducting annual vehicle inspections. This organizational capacity deficiency results in questionable vehicle safety and unsafe operating practices.

Finally, the provision of a high quality service is contingent on the context of jitney service. New York, Miami, and Atlantic City all have manageable surface traffic conditions in the areas where jitneys operate. The traffic congestion in San Juan is severe. Publico trip time is long since publicos are subject to the same traffic conditions as personal autos. The Atlantic City jitney also has the distinction of serving a relatively small area and the jitney services do not compete with the New Jersey public bus system.

## **9.8 Improving Service Quality**

This section concentrates on improving jitney service quality through augmenting the profitability of jitney services and restructuring regulatory mechanisms. This section will not examine how to strengthen operator organization since the strength of an organization stems from the profitability of the jitney service.

It should be recognized that improving service quality may jeopardize the economic viability of a jitney service since many service quality improvements require an additional cost to operators. The jitney industry is thus caught in a dilemma. Poor service quality leads to the decline of the industry, and yet improving service quality in order to attract riders and improve profitability is costly and may jeopardize the financial viability of the industry. For example, vehicle replacement and the provision of frequent reliable services during off-peak hours could force operators out of business. In a context where the jitney industry is financially unstable, the government should focus its attention on strategies that improve the service quality without further jeopardizing the economic viability of the service.

### **9.8.1 Safety**

Perhaps the most important quality of service indicator from the government's perspective is ensuring operators conduct themselves safely. This means that both operators and vehicles pass some minimum safety standard and operators drive safely on the roadways. Typically the government controls both vehicle and driver fitness through regulations and driving conduct through traffic enforcement. Although government licensing imposes a cost on operators, licensing is necessary to guarantee safe jitney operations. What is critical to achieving safe jitney operations is the organizational capacity of the government regulators and the institutions enforcing the regulations. San Juan is an example where the PSC lacks the capacity

to enforce safety standards, whereas New York and Miami have strong regulatory institutions that monitor and enforce jitney operation standards. In addition to enforcing vehicle and driver standards, the government also needs to possess the organizational capacity necessary to enforce traffic safety laws. Drawing from the case studies, the regulatory arrangement most successful in achieving safety standards is a dual enforcement strategy where the government and operator organization enforce government regulations. In Atlantic City, the operator organization voluntarily enforces government regulations. The government can also pressure the operator organizations to enforce city laws. Following the example of New York and Miami, the government can penalize both the organization and the driver if the driver is out of compliance. In this way, operator organization has a vested interest in forcing member drivers to comply with government regulations.

### **9.8.2 Scheduling Issues**

Jitney service scheduling is an important service quality indicator that is typically determined by operators. In the case studies, none of the government regulations predetermined the hours of jitney operations, frequency or reliability of the service. The Atlantic City code does stipulate that the Association is responsible for ensuring at least 10 jitneys ply the routes at any given time. Regulators may have chosen not to restrict jitney scheduling because of the difficulty of enforcement and the potential intrusion on the profitability of the industry. In all cases, the self-regulating organizations control the scheduling pattern of drivers.

The case studies illustrated that operator organizations tend to control when the driver operates or how the driver operates once offering services. There are three types of scheduling rules that organizations impose on drivers: assigning operator shifts, queuing protocols, and dispatching procedures. The Atlantic City jitney Association regulates operator work schedules through rotating shift assignments. The use of shifts ensures 24-hour coverage and the fair distribution of fare box revenues among drivers. Interestingly, the Association does not impose queuing and dispatching procedures in addition to the shifts. Conchita's Transit Express in Miami uses a master dispatch schedule to organize its drivers. Operators choose the route and time schedule according to seniority. The challenge of these types of scheduling approaches is rallying the support of the individual drivers since this approach takes away some of the individual freedom typical of jitney operations.

The operator organizations in other cities only regulate the drivers once the driver begins offering services. The organization imposes queuing and dispatching protocol. Some organizations have rules about how many hours a driver must work once they begin operating in order to maintain service during off-peak hours and encourage fairness among drivers. Otherwise, some drivers will work only during peak-hours when operations are most profitable. Since predetermined shifts are not imposed on operators, the driver has the flexibility of deciding when he wants to work. This type of operator organization produces less frequent service during off-peak periods since service depends on the preference of drivers.

The case studies suggest that when there is a continuous high demand for services, like in the New York and Atlantic City, both prearranged shifts and dispatching protocols leads to the provision of long operating hours, and frequent and reliable service. The industry is much more likely to strictly regulate itself when it is lucrative to do so. In a scenario where profitability is not high, the assignment of shifts can guarantee prescribed hours of operation, but may face opposition from operators if passenger demand cannot justify the extended hours. The queuing and dispatch protocol arrangement produces reliable service, provided the dispatch protocol is based on time intervals. However, there is no guarantee of frequent service during off-peak periods.

### **9.8.3 In-vehicle Time**

Neither self-regulations nor government regulations directly influence the in-vehicle-time of jitney services. In-vehicle-time can be shortened if the route is more direct and/or the ride is faster. Jitneys, by the very nature of the smaller vehicle, provides shorter in-vehicle-time because they stop less frequently and for a shorter amount of time, and the vehicles have better maneuverability and acceleration than buses. Some government regulations address in-vehicle time issues through reducing traffic congestion. Government regulations limit the number of vehicles on the road, restrict the type of services, and encourage the use of terminals at destination points. Entry restrictions limit the number of jitneys on the road. The drawback of restricting entry is the strategy may curb competition. The Atlantic City regulations, prohibiting vehicles from stopping anywhere along the route, minimize traffic congestion that leads to faster travel times and also safer roadways. In practice, the San Juan government has been successful in minimizing traffic at major destination points where terminals have been built. New York

City has also begun designating van-waiting areas, and pick-up and drop off areas to reduce traffic congestion.

The government can shorten in-vehicle-time by offering special privileges to jitney operators that allow jitney to move more quickly through traffic. The government can reserve exclusive or high occupancy vehicle lanes for jitneys. The government in San Juan has extended the use of counter-flow bus lanes to a few publico routes. The government can also grant jitneys head-of-line privileges and signal pre-emption at key intersections in order to reduce the in-vehicle time and thus make the service more attractive. Shortening the in-vehicle time of jitney rides is one way of making the industry more profitable without further increasing the cost of service provision. Reducing traffic congestion and extending special privileges to jitneys places the onus on the government, rather than the operators. The faster trip time not only attracts potential riders but also means that operators can run the same route more times in a prescribed amount of time. These improvements translate into a greater fare box return and thus a more profitable industry.

#### **9.8.4 Access to Service Information**

Both operator organizations and government regulators neglect improving access to jitney service information. Service information includes hours of operation, routes, fares, and schedules. Atlantic City serves as a model of what can be done. Atlantic City Jitney Association produces a color pamphlet for the public and there are public announcement advertising the service. The City also requires that the Association install jitney signage giving service information at designated stops. On certain routes in San Juan and New York, there is signage at the destination points to notify passengers where to wait. Although the Atlantic City model is successful in advertising its services, the context in Atlantic City is dramatically different from the San Juan and New York cases, where there are dozens of routes laced over a large metropolitan area. Each route has a different operator organization managing service delivery. Moreover, in New York, there are multiple companies in a territory. Advertising the range of jitney routes in these larger jitney industries requires a collaborative effort. Considering the multitude of stakeholders in such a project, it may be best for the government to take the lead role as the central organizer and disseminator of service information. Also, in places like New York and San Juan, the self-regulating organization is not permitted to erect curbside signage.

Each city has institutions that are specifically responsible for street signs. Therefore, the government should also assume the role of installing appropriate signage. The government provision of jitney service information is another strategy to improve the profitability of the industry without imposing a financial burden on operators.

### **9.8.5 Comfort**

Comfort includes the comfort of riders in the vehicle and while waiting for service. In most cases, both the government and self-regulating organizations pay little attention to this service quality indicator. Passengers are guaranteed a seat, but due to the interior configuration of the typical van, boarding and alighting is difficult. Also, jitney vehicles usually do not have air conditioning. The comfort of the jitney service is also highly dependent on the age of the vehicle. Miami is the only city with regulations that restrict the maximum age of the jitney vehicles. Aside from Miami, neither the government or operator organizations impose vehicle comfort standards. This may be because it would severely limit the financial viability of the jitney industry. San Juan operators appear to have the most difficulty in replacing vehicles due the declining profitability of the industry.

None of the local government laws require operators to buy ADA compliant vehicles. Nonetheless, the Atlantic City Jitney Association purchased ADA compliant vehicles in 1996. Arguably, the jitney services in New York, Miami, and San Juan are all demand responsive services since the routes are unfixed in New York and vehicles are permitted to deviate from the route on customer request in San Juan and Miami. If considered a demand responsive service, jitneys are not required to comply with ADA as long as the system, “when viewed in its entirety, provides a level of service to such individuals equivalent to the level of service provided to the general public” (ADA, sect. 224). Therefore, these current jitney systems technically are not obliged to comply with the ADA.

Most organizations and government regulations have rules on how drivers should treat passengers. However, passenger complaints are the only accountability mechanism that monitors driver behavior. In all the case studies, the public can make complaints with the regulating agencies. With the exception of San Juan, the public can also file complaints with the jitney operator organization or company. Only some route associations in San Juan field complaint calls. Thus, passengers must file their complaint with the PSC, which lacks the

capacity to follow-up the complaint. Aside from passenger demand, public complaints are the only other form of external accountability. It is therefore important that both operator organizations and regulating agencies have a mechanism that receives and responds to public dissatisfaction.

The Atlantic City Jitney Association is trying to proactively address the issue of public accountability by installing video cameras in every minibus. The video camera recording serves as evidence of jitney operator or passenger misconduct. However, considering basic issues like air-conditioning in vehicles has not yet been met in many jitney services outside of Atlantic City, the installation of video cameras for safety reasons would be low in priority among jitney operators.

In terms of the comfort while waiting for jitney services, San Juan publico garage terminals offer protection from the elements as well as benches. Atlantic City has also installed bus shelters for jitney riders at a few jitney stops. These examples suggest that it is the government's responsibility to provide infrastructure improvements. This is especially true in the San Juan context where publico operators are financially insecure.

#### **9.8.6 Intermodal Integration**

Intermodal integration is another factor that distinguishes a high quality of transit service. Intermodal integration consists of fare integration, schedule integration, and physical connections with other transit modes. There are few examples of fare integration in the case studies. Conchita's Transit Express in Miami is one of the few companies that allow passengers to freely transfer between Conchita's jitneys and the Metrorail. The Atlantic City jitneys also have an agreement where operators provide free service between the rail station, casinos, and convention center. Fares can be integrated across modes through public private agreements. Considering jitney services are unsubsidized by the government, the government will need to bear the majority of revenue losses when initiating a fare integration program.

Neither the government nor operator organizations specifically address the issue of schedule integration. Due to passenger demand, Atlantic City and New York jitneys provide 24-hour services and so schedule integration exists in those cities. Generally, if the jitney service serves as a feeder line into another mode, typically rail, than the hours of jitney operation and frequency will loosely passenger demand.

All the case studies have examples of physical intermodal integration. New York vans provide feeder services to the subway. Some Miami jitney services connect with the Metrorail. The Atlantic City jitney routes stop at the NJ bus station and rail station. Generally, most intermodal integration efforts are initiated by the jitney operator organizations. Operators directly benefit from intermodal connections since they derive passenger demand from these connections. The jitney regulators and local government usually do not encourage intermodal integration. Particularly in the New York and Miami cases, jitneys are not viewed as a part of the entire transit system. Jitneys are seen as supplemental transit services that often threaten the economic viability of public transit services. Therefore, government agencies do not see a need to proactively integrate the services. The government control over jitney routes directly influences intermodal connections. For instance, if government authorities restrict duplication of bus routes, as is the case in New York and Miami, than physical connections between jitneys and buses become illegal and thus rare. Unimpeded by government restrictions, jitney services are more likely to connect with other transit modes because of passenger preferences.

A more controversial strategy to improve jitney service profitability is improving intermodal integration. Intermodal integration could potentially increase the jitney revenues from the additional ridership. The jitney operators in the case studies generally initiate intermodal connections and fare integration. Nevertheless, the City can also play a more proactive role in encouraging integration. For example, City government can relax duplication restrictions in order to allow jitney services to intersect conventional transit services. Unfortunately, the local transit authority may perceive integration as a potential threat to conventional transit services.

## Chapter 10

# Recommendations for San Juan Publico

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There are three issues plaguing the publico industry. One is the poor service quality that has resulted in declining publico ridership. The opening of Tren Urbano has also spurred the government to focus its attention on improving the quality of publico services so the services feeding into Tren Urbano provide a service comparable to Tren Urbano. The second issue, which is in part due to the poor service quality, is the failing profitability of the industry. Rising operating costs and falling revenues from the decline in ridership threaten the very existence of the publico industry. Finally, both the operator organizations and regulating body lack the organizational capacity to enforce rules and regulations. These three issues must be addressed if publicos are to continue to play a major role in transit services. The following recommendations are divided into:

- Strategies that improve the economic sustainability of the publico industry;
- Amendments to the governance model in order to improve service quality; and
- Institutional changes that will help support these new policies.

## **10.1 Improving Economic Viability**

History time and time again has shown that the financial stability of transit services is essential in the sustained provision of transit services. Over-regulation of the jitney industry in the early 1900's obstructed the financial viability of the industry resulting in the elimination of the service. Similarly, the government imposed fixed fare structure and the growing popularity of autos jeopardized the profitability of the private transit industry and caused the private sector to stop offering transit services in the 1960's. The persistence of a transit service depends on the financial stability of the industry.

The profitability of the publico industry is arguably the most pressing issue confronting future publico operations. The publicos of Puerto Rico serve as another example of an industry that is becoming financially unviable. If nothing is done to improve the financial viability of the publico industry, the service will eventually cease to exist. The case studies also suggest that the more profitable the jitney service, the better the quality of service. Therefore, the government should look at strategies to improve the profitability of the industry in order to save the industry from elimination and also as a way to improve the quality of publico service. Assuming the Puerto Rico government wants to maintain publico services, the question then becomes how to improve the industry's profitability. Unfortunately, none of the jitney case studies examined in this study provide guidance as to how to improve jitney profitability. New York, Miami, and Atlantic City all have profitable jitney services that command strong passenger demand. So, little has been done in these cities to intentionally increase revenues or reduce operating costs of jitney operations. Therefore, the following recommendations are not based on experiences from the case studies.

### **10.1.1 Multiple Drivers**

One way of improving the profitability of the publico industry is by making better use of the publico vehicle. The current regulations do not permit more than one driver to operate a vehicle. The government may have enacted this one-driver policy because one driver is easier to control than many. The legislation may have also been a product of the interests of incumbent drivers who wanted to minimize operator competition. The government should revise the regulations so that multiple drivers are allowed to operate the same vehicle. For example, two or three drivers can operate a vehicle in shifts during the day. This arrangement makes better use of

the vehicle and would earn more revenue per vehicle. Considering the high initial capital cost of the vehicle, more efficient use of a vehicle substantially reduces the cost of operation. The side benefit of a multiple driver strategy is that multiple shifts will result in the provision of service that is more evenly distributed throughout the day, as opposed to the current situation where operators primarily offer services in the morning hours.

However, multiple shifts using the same vehicle assumes a much higher passenger demand than the current context. Publico operators presently only operate publicos on a part-time basis because there is not enough demand to justify full-time operations. This strategy assumes that the opening of Tren Urbano will result in a surge in passenger demand that can justify a multiple driver approach. The policy will also have to address accountability issues. If there are multiple drivers using one vehicle, whom does the government hold responsible if the vehicle is out of compliance? The regulations must be revised to reflect the different responsibilities of the owner and other drivers of the vehicles. This includes the licensing and permitting requirements necessary to operate as an owner or driver.

### **10.1.2 User-side Subsidy**

Another way of increasing publico revenues is through user-side subsidies. The government can grant users subsidies to ride publicos. User-side subsidies would entice the public to use publicos and thus boost ridership and publico revenues. This strategy would have a more immediate impact on ridership than improving the quality of service in order to attract passengers. In addition, the increase in passenger demand would encourage operators to improve the quality of publico services. A user-side subsidy would also avoid the potential drawbacks associated with supply-side subsidies. Supply-side subsidies do not guarantee that operators will provide the service level agreed upon with the government. In fact, it is likely that publico operators will take the subsidy and make few changes in their operating practices. It is difficult to enforce mechanisms built into a supply-side subsidy that guarantees operators will extend their operating hours or provide more frequent service. On the other hand with user-side subsidies, operators can only benefit from the program through the provision of services. Thus, user-side subsidies, encourage operators to operate longer hours, to increase the supply of services, and to improve the quality of service delivery.

User-side subsidies and permitting multiple drivers has a limited impact on improving the profitability of publico operations. The user-side subsidies benefit the publico feeder routes most since the influx of publico passengers will stem mainly from Tren Urbano use. Permitting multiple drivers to operate a publico assumes there is an adequate passenger demand that can support the augmented supply of services. Most likely, the only publico routes that can justify an increase in publico supply are the routes feeding into Tren Urbano. Therefore, both these strategies benefit the financial viability of publico operators providing feeder services into Tren Urbano.

### **10.1.3 Lowering the Cost of Operation**

The government needs to also assist publico operators in reducing the cost of operations in order to increase the profitability of the industry. This strategy is particularly important for publico operators who are not impacted by Tren Urbano. It is unlikely that ridership on these routes will see a dramatic surge. Consequently, the falling profitability on these routes will eventually force operators out of business and rob low-income riders of the only form of transit service available in many areas. The government can arrange agreements with local vendors to supply discounted bulk parts, lubricants, and tires. Few operator organizations in San Juan are able to provide discounts to their members due to their relatively small group size. The government should also provide reduced gasoline prices and group vehicle insurance. MBA, which owns its own gasoline pumps, does not pay gasoline tax. The government should extend these privileges to publico operators. Currently, 99% of publico operators only have liability insurance that the government provides when an operator pays for the yearly vehicle registration renewal (Vescovacci, 2002). The government could pool all the operators into one vehicle insurance plan to lower the cost of insurance and extend the lower rate to operators. These measures combined could substantially lower the operating cost of publico services.

## 10.2 Improving Publico Service Quality

	Lessons Learned	Application to San Juan
<b>Safety</b>	<ul style="list-style-type: none"> <li>Dual enforcement mechanism where regulators and operator organization requires operators to comply with government regulations</li> <li>Periodic inspections dependent on the age of the vehicle.</li> </ul>	<ul style="list-style-type: none"> <li>Apply dual enforcement strategy. Sanction both operator and operator organization.</li> <li>Require all operators join an operator organization.</li> </ul>
<b>Comfort</b>	<ul style="list-style-type: none"> <li>Restrict age of vehicle</li> <li>Only Atlantic City has replaced vehicles with ADA compliant spacious, air-conditioned vehicles</li> </ul>	<ul style="list-style-type: none"> <li>Restrict age of vehicle</li> <li>Require new vehicles serving TU stations have a/c and wheel chair lift. Government fund extra cost of ADA compliant vehicles for TU feeder routes.</li> </ul>
<b>Intermodal Integration</b>	<ul style="list-style-type: none"> <li>Fares: free transfers</li> <li>Scheduling: hours of operation naturally match in lucrative market</li> <li>Connection: initiated by operators. Some duplication encourages intermodal connections</li> </ul>	<ul style="list-style-type: none"> <li>Fares: Government subsidize fare integration</li> <li>Scheduling: require matching hours for publico feeder lines only.</li> <li>Connection: give operators the option to feed TU stations and encourage publico connections with transit-centers.</li> </ul>
<b>In-vehicle Time</b>	<ul style="list-style-type: none"> <li>Reduce traffic congestion: limit the number of jitneys, control type of service, terminals and waiting areas at destination points</li> <li>Special privileges: HOV lanes, exclusive lanes, counter-flow bus lanes, head of line privileges, signal pre-emption</li> </ul>	<ul style="list-style-type: none"> <li>Control type of service: establish and enforce fixed stops.</li> <li>Maintain terminals</li> <li>Special privileges: HOV lanes, exclusive lanes, counter-flow bus lanes, head of line privileges, signal pre-emption</li> </ul>
<b>Scheduling</b>	<ul style="list-style-type: none"> <li>No examples of government regulations.</li> <li>A.C. regulations require certain number of vehicles to be on the road at all times.</li> <li>Dependent on controls imposed by operator organizations. Usually either based on predetermined shifts or dispatching procedures.</li> </ul>	<ul style="list-style-type: none"> <li>Different strategies depending on type of publico route</li> <li>Potential feeder routes serving TU stations must adhere to strict rules. Government requires certain number of vehicles serving the route during TU operating hours.</li> <li>Unaffected publico routes are given incentives to develop and adhere to a schedule</li> </ul>
<b>Service Information</b>	<ul style="list-style-type: none"> <li>Atlantic City is only example of jitney advertising - both government and Association. Suggests lucrative jitney services will advertise.</li> <li>A.C. Government require organization install signs</li> <li>Government install signs</li> </ul>	<ul style="list-style-type: none"> <li>Rely on the government to compile and advertise publico service information</li> <li>Government should erect signage</li> </ul>

Table 10.1: Summary of Service Quality Recommendations

### **10.2.1 Comfort & Accessibility**

Passenger comfort, in part, is a function of the age of the vehicle. Considering the average age of a publico is 13.6 years, the comfort of a publico ride is poor. The government could restrict the maximum age of a publico to prevent the operation of antiquated vehicles. For example, the Miami regulations do not permit drivers operate a jitney over 15 years old. This policy is easily enforced when operators renew their annual vehicle registration. However, it is possible that some operators would illegally operate old vehicles. Considering the long-standing financial difficulties facing the publico industry, operators are likely to oppose an age restriction that may force some operators out of business. The government may want to enact a tiered system where publicos serving Tren Urbano stations are required to comply with a lower maximum age than unaffected publico routes. This strategy recognizes the lower profitability along unaffected publico routes. The government should also require operators to replace old vehicles with vehicles that have air conditioning. The problem is that there is little that the regulator can do to force operators to use the air-conditioning units.

If the government is going to require publico operators to purchase new vehicles, than the government should also set up a vehicle replacement program with a government-backed brokerage to cover the cost of the vehicle. The program would provide operators with low-interest loans to purchase new vehicles. The use of an intermediate financial institution such as a brokerage shields the government from potential conflict with publico operators. Under a government sponsored low interest loan, any repossession would portray the government as unsympathetic to operator interests. Instead, the broker would take responsibility for enforcement and repossession of vehicles in the case of default (Lau, 1997).

In addition to the comfort of the ride, there is the problem of universal accessibility. The opening of Tren Urbano will incite ADA advocates to push for full accessibility on the entire system, including the feeder lines. Assuming the Tren Urbano feeder route publicos are considered a fixed route service, than the ADA requires that a reasonable proportion of vehicles must be fully accessible. This means that the government must require that some publico operators serving the Tren Urbano stations operate ADA compliant vehicles. The push is to have operators serving the Tren Urbano stations operate new vehicles so publicos offer a level of vehicle comfort comparable to Tren Urbano. Atlantic City is the only case study that has successfully implemented an ADA compliant vehicle replacement program. This case study

suggests that government funding through political lobbying efforts is needed for individual owner operators to purchase ADA compliant vehicles. Particularly in San Juan where the publico industry has experienced long-term profitability problems, the government will have to provide, at the minimum, the extra funding necessary for ADA compliant vehicles. It is estimated that an ADA compliant vehicle is approximately \$20,000 more than a regular van. Government funding poses the risk of repeating the inefficiencies associated with government subsidies. With the expense of ADA compliant new vehicles, it is all the more necessary to secure enforceable agreements for multiple drivers and schedule adherence. If the publicos on the unaffected routes continue to deviate from the route on request by passenger, it can be argued that these operators are not required to purchase ADA compliant new vehicles. If the government decides to extend signal pre-emption and front-of-the-line privileges to publicos, the government should also buy and install the AVL system in order to track vehicles, and monitor service levels and schedule adherence.

### **10.2.2 Scheduling**

Scheduling is an important service quality problem that deters individuals from riding publicos. Operators offer publico service generally from 6am to 2pm, leaving riders, without other transit alternatives, stranded or waiting for long periods during other times of the day. The following scheduling recommendations are divided into three types of publico routes: potential feeder routes, displaced publico routes, and unaffected publico routes.

#### **10.2.2.1 Potential Feeder Routes**

Publico feeder routes to Tren Urbano should comply with strict schedules. The operating hours of a publico feeder route should match those of Tren Urbano, and publicos should depart Tren Urbano stations at regular intervals during off-peak hours. The government can also institute a policy similar to the one in Atlantic City where there must be a certain number of vehicles plying the route during TU operating hours. The imposition of strict rules is drastically different from the approach taken by the local governments in the case studies examined. None of the local ordinances controlled the schedules of jitneys. The difference is that in places like New York and Miami the transit authorities do not view the jitney system as an integral part of the entire system, which without the jitneys the entire transit system would fail. Consequently,

matching the jitney and conventional transit schedules and service level is seen as unnecessary. However in the San Juan case, the government recognizes that the success of Tren Urbano hinges on the success of the feeder system. Therefore, the government must tightly control publico services in the Tren Urbano stations.

Serving as a feeder service to the Tren Urbano station would be considered a privilege. In order to gain access to Tren Urbano stations, publico operators must follow the rules and regulations set by the government. Rules should include the following:

- Hours of publico operation that closely match those of the Tren Urbano
- Requiring publicos to leave the station at regular intervals, especially during off-peak periods
- A predetermined number of vehicles serving the route during TU operating hours
- Adherence to traffic protocols in the station areas in order to prevent traffic congestion
- Obligating drivers operate new ADA compliant vehicles with an AVL system and automated fare box.
- Periodic publico vehicle inspection to ensure minimum compliance with safety and maintenance standards

The advantage of this arrangement is that it does not coerce publico operators to comply with the new regulations. If an operator chooses to participate, operators must comply with the rules set by the government. Otherwise, operators can continue offering their usual service that terminates at the established publico terminals. At the same time, the stringent rules at the Tren Urbano stations would produce the level of service the government wants to achieve.

The success of this new system is strongly limited by the enforcement of the new station rules. The regulating agencies supervising operations in the Tren Urbano stations will need to dispatch officers to the Tren Urbano stations to monitor and enforce the rules of the station. The allocation of personnel will be particularly critical at the start of station operations. The government must make it clear to operators that it is very serious about running an efficient operation. Once publico and bus operators become accustomed to the new system and it becomes a part of doing business at Tren Urbano stations, then the supervising agency can reduce the number of officers at the stations. The two Tren Urbano stations that will receive the majority of publico traffic are in Bayamon and Rio Piedras.

The government should also direct all passenger complaints to the government officers who are in charge of monitoring the service quality of drivers. Passenger complaints are the only accountability mechanism that monitors driver behavior. This strategy is a compromise between forcing operator organizations to field calls and directing complaints to the regulating agency, which is physically and institutionally too far removed from publico operations. The station officers are then responsible for resolving the issue with the operator organization and relaying the issues to the publico-regulating agency.

Another facet of the enforcement issue is how the government will impose group sanctions. Rules such as purchasing new ADA compliant vehicles are relatively straightforward to enforce by visual inspection. Since the requirement depends on an individual operator, the government can forbid noncompliant operators access to the Tren Urbano station. The dilemma is how to force a group of operators to comply with the requirement to extend their hours of operation, operate according to a regular schedule during off-peak periods, and ensure the minimum number of vehicles on the route. The government cannot penalize an individual for the poor service delivery of the collective group. The government should require all operators on a certain route to form an operator organization. The government can then sanction the entire group for non-compliance of group responsibilities. The sanction may take the form of a monetary fine applied to all operators on the route. Group suspension is not a viable sanctioning method since it would disrupt publico services. This policy is likely to receive considerable opposition from publico operators.

This strategy addresses most of the shortcomings of publico service quality. Only operators that comply with vehicle and driver fitness will be allowed to access the Tren Urbano station. Publicos will be allocated drop off and staging areas in the Tren Urbano station where passengers alight and board the vehicles. The hours of operation will match those of Tren Urbano and operators are forced to provide regular service during off-peak hours. These changes address the integration of schedules. Under this new structured system, the government should advertise and publish publico service information with those of Tren Urbano and the bus system. The government should also install appropriate signage to inform and direct the public. The automated fare boxes installed in the vehicles will address the question of fare integration technology and facilitate a user-side subsidy, as a mechanism to enable publico operators to

purchase new ADA compliant vehicles. Finally, the new ADA compliant vehicles will address the problem of antiquated, inaccessible, non-air-conditioned vehicles.

#### **10.2.2.2 Displaced Publico Operators**

The government is legally required to mitigate the damages to the private operators who are directly impacted by Tren Urbano. In total there are three publico routes affected by Tren Urbano. These three routes, Rio Piedras – Bayamon, Bayamon – Centro Medico, and Rio Piedras- Centro Medico, supported approximately 111, 22, 21 active publico drivers, respectively (MTCG, 1996). As compensation for displacement, the Puerto Rican government should give the displaced publico operators first choice in selecting the publico route they want to operate on. Instead of buying out the publico operator for route displacement, this strategy give the operator the opportunity to run a better publico service that is potentially much more lucrative. If the operator chooses to operate one of the Tren Urbano feeder lines, than a possible compensation package could involve the government paying for the complete cost of the new ADA compliant vehicle. The drawback of this policy is the high expense of the ADA compliant vehicle. With a total of 154 operators, assuming a cost of \$50,000 per vehicle, the supply of new ADA compliant vehicles will cost \$7.7 million. If other operators perceive the government compensation program as generous, these operators may claim that Tren Urbano negatively impacts their services and consequently desire similar compensation packages. Therefore, the government should clearly define and promulgate which routes and operators are eligible so as to prevent future confrontation.

#### **10.2.2.3 Other Publico Routes**

The publico routes that are not impacted by Tren Urbano are not subject to the same service quality standards as feeder routes. Nonetheless, the limited hours of operation and erratic service during off-peak hours deters individuals from patronizing the publicos. Restructuring the entire transit system gives the government the opportunity to reorganize all publico operations, both those serving as feeder routes and those that are not impacted by Tren Urbano.

Considering many of the operators providing service on these routes may chose not to participate as a Tren Urbano feeder service, the government should not regulate the schedule of these publico routes. It is clear from choice of these operators that they do not want to be strictly

controlled by the government. Therefore, government imposed schedules on these routes will meet great political opposition from the drivers. Government imposed regulation will have little legitimacy in the eyes of the public operators. It is likely that the operators will respond by ignoring or even openly defying controls on the schedule of services.

The government should continue to rely on self-regulating route association, unions, and cooperatives to encourage operators to adhere to a schedule. In all of the case studies, the self-regulating organizations are the entities controlling the hours of operation and reliability of the service. Operator organizations, headed by an elected operator, create operating rules that are most sensitive to the route context.

The question is how the government can encourage these route associations to provide extended operating hours and reliable services during off peak periods. One possibility is for the government to grant incentives to route associations for providing scheduled service. Incentives can include benefits such as health insurance, life insurance, social security benefits, funds to improve the exterior or interior of the vehicles, etc. Only after a route association proposes a possible scheduling plan that is subject to regulatory negotiation, will the incentives be extended to the route association members. The government should encourage the route association to follow the Atlantic City model that assigns shifts to operators to get even distribution of service and fair distribution of revenues. During the initial trial period, associations are encouraged to revise the scheduling plan and make internal operating changes that best fit the demands of the passengers and needs of the operators. After the trial period, government enforcement officers begin monitoring the frequency, reliability, and operating hours of a route service. The incentives are only rescinded if the service level does not adhere to the revised route schedule.

The advantage of an incentive program is that the operators have control over the ultimate schedule and how they will organize themselves in order to achieve the schedule. This idea supports the theoretical argument that industry actors are the most knowledgeable with regards to industry practices and therefore would create the most appropriate regulations. The incentive program will also provide the government the necessary scheduling information to package the information for advertising purposes.

The incentive program requires the government to commit substantially more resources toward the management of the publico system. Considering there are currently 79 local publico

routes, the regulating agency will need to oversee the negotiation of each route schedule and subsequent monitoring and enforcement activities. The government provision of incentives also represents an indirect form of subsidization. In this case, publico operations will be considered a 'public transit' service under ADA and if found to be fixed-service, new vehicles will be subject to ADA requirement. The incentive program may not appeal to all associations or only a portion of the total number of associations. In this case, the government has little control over that route's schedule. Lastly, by allowing each association the flexibility of setting their own schedules, there is less uniformity from a management perspective.

### **10.2.3 Safety**

What is critical to achieving safe publico operations is the organizational capacity of the government regulators and the institutions enforcing the regulations. The government needs to improve the organizational capacity of government agencies so the regulators are capable of enforcing vehicle and driver standards such as annual vehicle inspections and traffic safety laws. The regulatory arrangement most successful in achieving safety standards is a dual enforcement strategy where both the government and operator organization enforce government regulations. In the ideal case, the operator organization voluntarily enforces government safety regulation. Only a fraction of the route associations currently require members to comply with government regulations. As an alternative, the government can impose sanctions on both the operator and the route association when the driver is discovered to be out of compliance. The association becomes legally and financially responsible for the actions of member drivers, turning route associations into an extended enforcement arm of the government. In order for this arrangement to achieve success across the entire industry, all operators must join an operator organization. This requirement can be stipulated in an amendment to the publico laws. The advantage of such an arrangement is that full compliance by operators will be more easily achieved when operator organization self-regulate drivers. Moreover, the government expends fewer resources on enforcement activities.

The challenge in this revised system is, unlike the New York and Miami models, the operator organization is charged with enforcement responsibilities as opposed to a company president. Unless the organization is strong and well developed, the added responsibility placed on the organization may not produce any improvements in operator compliance. If the regulators

and/or the operator organization do not have the capacity to enforce regulations, than the operator organization may ignore the sanction imposed on the organization. Without the threat of sanctions, operator organizations have little incentive to enforce government regulations. This change in policy would probably meet opposition since members of an operator organization would not be willing to bear the burden of a delinquent driver's mistake.

#### **10.2.4 In-Vehicle Time**

There are two approaches that can shorten the publico in-vehicle-time: limiting congestion on the roads caused by publicos and extending special privileges to publicos so they can move faster through traffic. The government should reduce traffic congestion by limiting the type of service publicos are allowed to offer and by maintaining terminals at publico destination areas. The government should designate publico stops and restrict operators from stopping anywhere along the route. The current practice of stopping anywhere along the route further exacerbates the already congested roads. In addition, designating stops give the government the opportunity to install publico signage and shelters, bringing attention to an otherwise hidden transit system. The only way that this measure will produce an impact is if the government strictly enforces the policy. Otherwise, operators will continue to stop anywhere along the routes. The publico terminals are critical for preventing traffic congestion around route destination points. Until now, municipal governments have been responsible for maintenance and upkeep activities. However, municipal governments have not had the resources necessary to perform these duties. This problem needs to be resolved in order to extend the terminals useful life.

Severe traffic congestion in San Juan causes publico trip time to be long. The government should establish high occupancy lanes or exclusive lanes for publicos and expand the privilege of using the counter-flow bus lanes to more publico operators. The current construction of PR-5 is an opportunity to institute a high occupancy lane or an exclusive lane for publicos. It is politically more feasible to acquire a lane of a corridor that is new than trying to take away a lane that is currently being used for autos. The government should also grant publicos special privileges such as head-of-line privileges and signal pre-emption at key intersections in order to reduce the in-vehicle time and thus make the service more attractive to

potential riders. The installed AVL systems will support the head-of-line privileges and signal pre-emption.

### **10.2.5 Intermodal Integration**

The transit node reorganization means that riders will have to make transfers, rather than relying on one-seat rides. Even with transfers, the trip time is projected to be shorter. The critical problem of the transit node system is the financial burden on riders, especially low-income riders. According to Miguel Vescovacci's study in 1999, 72% of the operators surveyed were willing to participate in a fare integration system. This is critical when considering the considerably higher cost of a trip without a fare integration program.

The government will need to bear the majority, if not the entire, revenue loss in a fare integration program. Publico operators are unsubsidized and have been financially struggling for many years. Thus, publico operators will strongly oppose any loss in revenues from a fare integration program. Publico operators will also strongly contest any delay in the receipt of revenues since operators rely on daily fares for their daily expenses. Joseph Barr, in the study he conducted in 1997, concluded that for a trip involving both publico and public transit, the discount should be provided on the public mode. In this way, the publico operator always receives the full fare at the time the ride is given. Barr also concludes that smart-card is a feasible solution to the fare technology issue. The government will need to purchase and install these units into publicos because operators are financially incapable of purchasing the equipment (Barr, 1997).

Government regulations should encourage publicos routes to intersect with public transit routes in order to facilitate intermodal connections. The government should proactively negotiate with operators when there is a potential for intermodal connections. The government should also give operators as much flexibility as possible when modifying or adding routes. The routing process should be open for negotiation between the route association and regulators. Operators will naturally position publico stops and routes so they connect with other modes due to passenger demand. However, operators will only want to make intermodal connections if publico routes are altered to reflect the change from a one-seat direct service to a transit-center-based network system.

## **10.3 Improving Institutional Capacity**

### **10.3.1 Reorganizing the Regulatory Framework**

The introduction of Tren Urbano gives the Puerto Rican government an opportunity to reorganize the publico-regulating agency. The MBA, which provides public bus services, and the ACT, which oversees the Metrobus I service, both fall under the DTPW. Only the ferry services and publicos are regulated by agencies outside the DTPW. Under the current agency structure, the PSC, MBA, and ACT are not obligated to collaborate and integrate services. If the goal of the government is to create a well-integrated multimodal transportation network, than the creating of a centralized regulatory authority responsible for all transit modes would make coordinating and implementation more efficient. All the transit related agencies would then be united under one organization. A centralized regulatory authority would provide a centralized management structure, more effective oversight of publico operations, better long-term planning, and improved service coordination between modes.

If placed under a powerful organization like the DTPW, the publico-regulating agency will also have access to an ample pool of financial resources and knowledgeable agency personnel. The government needs to substantially increase the organizational capacity of the future publico regulator. The current publico regulatory framework does not have the organizational capacity to enforce the regulations, resulting in ineffective government regulations. One way of increasing organizational capacity is by positioning the agency under the DTPW where the agency can gain access to financial resources and human capital.

The new agency regulating publicos should not fall under the MBA or ACT; rather the publico agency should be placed at the same hierarchical level as the MBA and ACT. Such a structure will demonstrate that the publico-regulating agency has the same level of authority as the other agencies. This structural organization creates a system of checks and balances between the transit agencies.

### **10.3.2 Enforcement**

Reorganization of publico regulating agency is only one element that contributes to the success of the publico system. The government also needs to sustain consistent enforcement activities. Sustained enforcement is key to service improvements. The government needs to support a level of enforcement that demonstrates the government's commitment to the

regulations. Another aspect of enforcement is the power to impound vehicles. The regulations in both New York and Miami give the regulators the authority to impound vehicles. The enactment of forfeiture laws is critical for the effectiveness of enforcement. Operators may see fines as merely a cost of doing business, whereas forfeiture is viewed as a real threat to jitney operations. A consistent enforcement presence and the threat of forfeiture are necessary to demonstrate to operators that the government is serious about enforcement.

#### **10.4 Timeframe of Implementation**

All the strategies to improve the quality of publico feeder route services should be implemented by the opening of Tren Urbano. The public must be convinced on opening day that the entire transit system offers a high quality of service, regardless of mode. It is perception issue. If the publico service is still poor on opening day, but gradually improves over a course of a year, the public perception of the system from opening day will discourage individuals from using the system. Ridership on the entire system will reflect the negative perception of the publico feeder routes. Therefore, the government should implement all the improvement programs before Tren Urbano begins operations.

On unaffected publico routes, the government should first implement the strategies that improve both the profitability and service quality. These routes will not experience an increase in ridership like those publico routes feeding into Tren Urbano stations. Some service quality improvements require an additional cost to operators. Thus, improving service quality may jeopardize the already failing economic viability of these publico services. Instead, the government should first focus its attention on strategies that improve the service quality without further jeopardizing the economic viability of the service. These strategies include improving in-vehicle time, intermodal integration, and access to publico service information. Improving in-vehicle time assumes that the government enacts regulations to prevent traffic congestion and extends special privileges to jitneys that allow jitneys to move more quickly through traffic. Government incentives to integrate services could potentially increase revenues through additional ridership. Improving publico service information through publicity, the installation of publico signs, and referring transit patrons to publico services when appropriate. These strategies all place the onus on the government to help operators improve the quality of service. The strategies also require little change on the part of the operators. Once these measures are

implemented, the government should implement strategies on improving the comfort and reliability problems of publico service.

# Chapter 11

# Conclusion

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The case studies documented in this study illustrate that jitneys provide invaluable transit services to underserved communities. Without jitney services, these typically low-income minority communities have few transit alternatives. Jitneys also generally offer a superior quality of service, as compared to conventional transit services. Passengers are guaranteed a seat on jitneys and, in places like New York and Miami, many passengers feel culturally more at ease with jitney services. Generally, the total jitney trip time is shorter than conventional transit services since jitneys come by more frequently and tend to stop less and for a shorter period of time.

Jitneys can also play a critical role as an unsubsidized feeder service to a rail system. The relatively short transit distance to the rail stations and the high volume of transit passengers makes rail feeder services particularly profitable for jitney operators. The small carrying capacity of jitney vehicles also makes it economically feasible for jitneys to provide service in low-density areas. Thus, jitney services can extend the potential reach of rail lines. In addition, jitneys provide a way for underserved or inadequately served communities to access the rail system.

Despite these attributes, history has shown that, left on their own, jitney operations bring about public safety, traffic congestion, and air pollution problems. Rival operators aggressively compete for passengers, leading to accidents and unsafe conditions on the roadways. There is no guarantee that operators will operate a safe vehicle or that the operator is qualified to drive a jitney. Chaotic jitney operations also lead to traffic congestion. The congestion and operation of antiquated vehicles contribute to air pollution problems. In response, government actors argue for industry regulation to mitigate or prevent these drawbacks. In practice, jitney services are never left to the market. The laissez-faire approach has been discredited by the actual

performance of jitneys when government regulations were weak or nonexistent. History also illustrates that over-regulation results in the elimination of jitney services.

As a compromise, North American jitney services all rely on hybrid governance models, consisting of government controls and self-regulating mechanisms. The advantage of having a hybrid governance model is that the two mechanisms complement one another. For instance, self-regulating arrangements address scheduling issues that government regulations typically do not address. The dual governance system also serves as a mechanism to force regulatory accountability. A governance model based solely on self-regulation is less accountable to passengers and the public. At the same time, a governance model based solely on command and control regulations assumes that the government will protect the public interest. When in reality, regulations are often captured by the interests of government authorities and special interest groups. Lastly, government controls and self-regulations reinforce one another on critical issues such as vehicle and driver safety.

The case studies document three types of hybrid governance structure. The distinguishing factor that differentiates the cities is the relationship between the government regulators and the operators. In New York City and Miami, the conflict between the public transit and jitney operators created a system where operator and government regulations are independent from one another. San Juan is an example of a supportive government model where the government provides incentives to operators in order to support publico operations. The Atlantic City governance structure is a collaborative system where the operator organization leads the regulations of operators.

Atlantic City produces the highest quality of service, suggesting that a collaborative governance structure leads to a high quality of service. However, service quality is not merely a function of the governance structure. The case studies indicate that the quality of service is also dependent on the strength of jitney institutions, the profitability of the jitney industry, and the context of jitney operations. In a highly profitable setting, industry actors will spontaneously mobilize and provide a high quality of service. A highly profitable market encourages operators to rationalize services through the development of strong operator organizations that are committed to providing the highest level of service to the customers. The profitability of the industry also alleviates the financial burden associated with offering a higher quality of service. The organizational capacity of the regulating agency is another factor that leads to the provision

of a high quality of jitney service. The government regulators need to have the organizational capacity to oversee and enforce government regulations. The threat of enforcement incites jitney operators to comply with government regulations. Lastly, service quality hinges on other contextual factors such as manageable traffic conditions in the areas where jitneys operate.

The case studies suggest that in an unprofitable market, the government has to take the lead in developing other strategies to encourage operators to improve services quality. Therefore, all the recommendations call for a strong government force leading the way for publico improvements. Considering the failing economic viability of the publico industry, the San Juan publico recommendations focus on improving the profitability of the publico industry in order to improve the quality of service. Three ways of improving the economic profitability of the industry are user-side subsidies that encourage the public to ride transit, allowing multiple drivers operate the same vehicle to make better use of costly vehicles, and lowering the cost of operations.

The recommendations also suggest that the government proactively pursues service quality improvement through various institutional and regulatory strategies. Institutional changes include reorganizing the various disjointed agencies into one central authority, placing the publico regulator under this central authority so as to gain access to financial and human resources, and increasing the enforcement power of the publico-regulating agency through vehicle forfeiture laws. The regulatory changes rely on two strategies. One is based in incentives to encourage operators to redefine the service offered along a route. The other strategy employs stringent command and control regulations, but is only imposed on the operators that chose to serve as Tren Urbano feeder routes. The remaining recommendations rely on the government to improve publico service quality since the publico operators do not possess the financial means to incur the cost of providing a higher quality of service.

### **11.1 Areas for Further Research**

- Extend this study to include jitney case studies from around the world. This study has very limited application since all the case studies are in the United States. A wider selection of case studies may uncover drastically different conclusions and applications.

- Vehicle size and quality of service: to date, no one has examined how to determine what size vehicle is most appropriate for a particular context and how the size of the vehicle impacts the quality of service.
- Taxi-cab and jitney industry comparison: considering both industries are based on owner operators, much can be learned from looking at how the taxi industry resolves service quality, ADA compliance, governance, and profitability issues.

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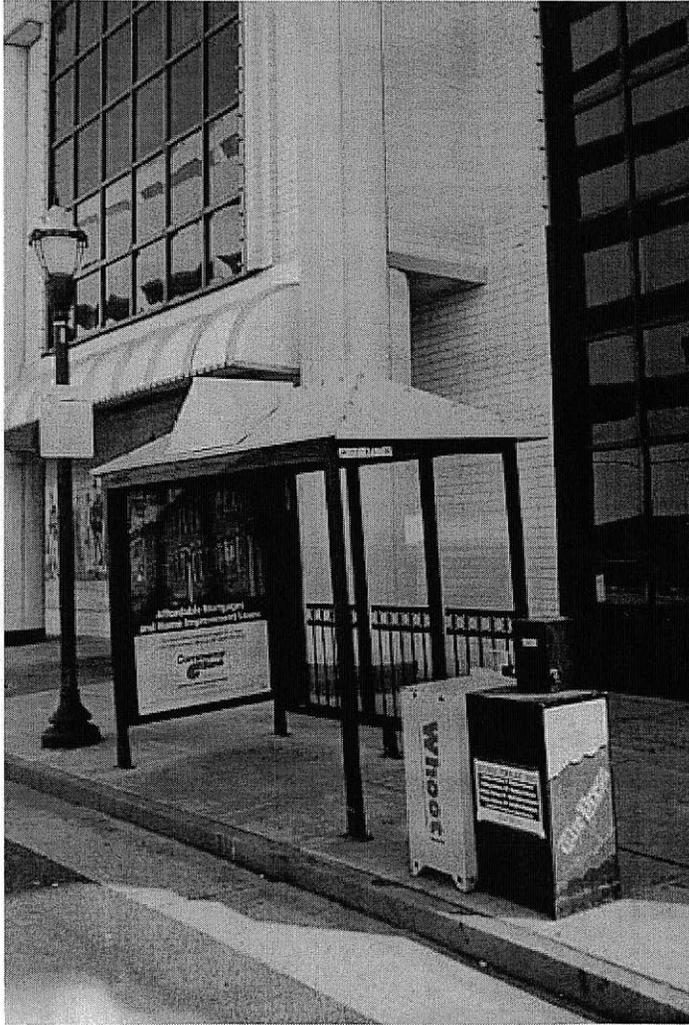
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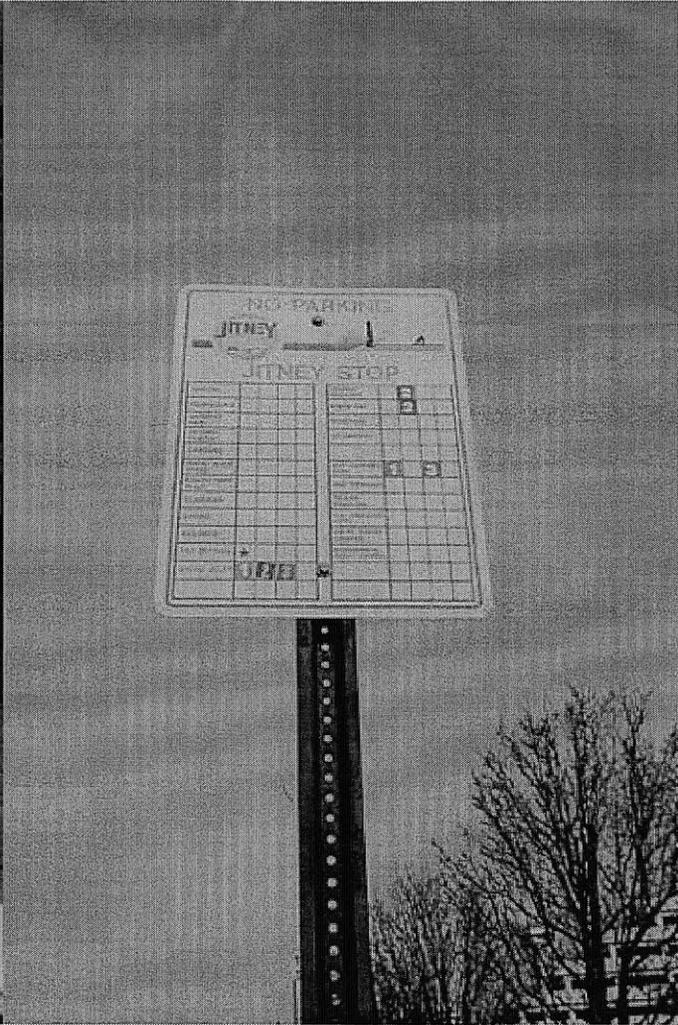
Appendix A: Photo Gallery



San Juan Publico Garage Terminal at Bayamon



Atlantic City Jitney Shelter



Atlantic City Sign at Jitney Stop



Above: Atlantic City Jitney Association Headquarters with Gas Station  
Below: Atlantic City Jitneys on Pacific Avenue



New York Feeder Van Intermodalism at intersection of Parsons and Archer. Vans tie into subway system (top and bottom).



Intermodalism at downtown Miami's Government Center Complex  
Jitney vans tie into Metrorail (top photo) and Metromover (bottom photo) systems.

## Appendix B: List of Interviews by Case Studies

	<b>New York</b>	<b>Miami</b>	<b>San Juan</b>	<b>Atlantic City</b>
<b># of Government Agencies</b>	4	4	4	2
<b>Persons Interviewed &amp; Represented Agency</b>	<ul style="list-style-type: none"> <li>➤ Jack Schmidt. Transportation Division, Department of City Planning.</li> <li>➤ Dunbar, Lou Ann. City Department of Transportation.</li> <li>➤ Alan J. Fromberg. New York City Taxi &amp; Limousine Commission.</li> <li>➤ Smith, Walter. Surface Transportation Enforcement District, NYPD.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Mora, Joe. Consumer Services Department.</li> <li>➤ Rushton, Sheila. Consumer Services Department.</li> <li>➤ Alvarez, Danny. Director, Miami-Dade Transit.</li> <li>➤ Fialkoff, David R. Miami-Dade Transit.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Rodriguez, Gabriel. Department of Transportation and Public Works</li> <li>➤ Rivera, Marisol Rodriguez. Tren Urbano GMAEC.</li> <li>➤ Vescovacci, Miguel. Management &amp; Technical Consulting Group, Inc.</li> <li>➤ Berry, Joan. Tren Urbano GMAEC.</li> </ul>	<p>Cappella, Dominik. Mercantile Services, City of Atlantic City. Nickels, Ron. NJ Transit Authority.</p>
<b># of Organization Leaders</b>	5	4	6	3
<b>Operator Leader &amp; Represented Organization</b>	<ul style="list-style-type: none"> <li>➤ Ajala, Lateef. City Express</li> <li>➤ Clarke, Alando. Rosedale Van Lines, Inc.</li> <li>➤ Kng, Chung. Flushing Van Service.</li> <li>➤ Obi, Dennis. Dascom Corp.</li> <li>➤ Ricketts, Hector. Interborough Alliance of Commuter Vans.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Willingham, Alphe. Dade Jitney Service/ Liberty City Jitney/ TriRail Bus Connection.</li> <li>➤ Gil, Rene. Conchita's Transit Express.</li> <li>➤ Johnson, Ernest. Sun Jitney</li> <li>➤ Fils-Aime, Danial. Miami Minibus Transportation Service Inc.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Arroyo, Juan Martinez. San Juan – Caguas Route</li> <li>➤ Catala, Senor. United Drivers Association.</li> <li>➤ Romer, Ángel. Metropolitan Association of Público Operators (Rio Piedras).</li> <li>➤ Rivera, William Ambert. Bayamón – Centro Médico Route</li> <li>➤ Rivers, Gervacio Rivers. Rio Piedras – Fajardo Route</li> <li>➤ Rodriguez, Juan. Bayamon – Las Vegas – Barrio Palmar Route</li> </ul>	<p>Penman, Bill. Jitney operator Mathioudakis, Emmanuel. Atlantic City Jitney Association. Nore, John. Jitney Operator.</p>

## Appendix C: Cross-Case Comparison of General Service Characteristics

	New York	Miami	San Juan, PR	Atlantic City
Inception of Service	late 1970s	1936	1907	1917
Total legal vehicles	372	136	2,200	190
Boarding	40,000 passengers per day	43,000-49,000 passenger trips per week		11 million annual trips
Service Characteristics	Irregular route, curbside hail, no A/C, passenger vans	Sem-Fixed route, curbside hail, no A/C passenger vehicles (vans and minibus)	Semi-fixed route, curbside hail, no A/C passenger vans	Fixed route, jitney stops only, A/C, wheelchair accessible minibus
Geographic area	Outer Boroughs & Manhattan	Dade County	SJMR	4 routes
Number of routes	70 authorities	12	105	4
Owner Operated	Estimated at 70%	Estimated at 70%	90%	100%
Organizational Unit	Company	Company	Owner-operator association or union	Owner-operator Association
Franchise/ Authority	Only Company permitted to apply for authorization for prescribed number of vehicles, multiple companies permitted in one territory	One franchise granted to one company for each route	Individual Franchise for one route	Individual Franchise to ply all routes
Franchise has authority over what	Territory	1 route	1 route	All routes