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# A NEW STATE OF PRIVATIZATION FOR U.S. TRANSIT? A DELEGATED MANAGEMENT CONTRACT IN THE GREATER NEW ORLEANS REGION

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### **ABSTRACT**

Facing persistent economic and financial hardships after Hurricane Katrina, New Orleans Regional Transit Authority (RTA), in late 2008, decided to adopt a contracting strategy called *delegated management contract* to outsource more functions than has been typical for U.S. transit agencies.

This paper has two principal objectives. The first objective is to document and examine the impacts of RTA's new privatization strategy for the quality and productivity of transit service in comparison with a more conventional contract employed by another transit agency in the region. The second objective is to examine the effects of privatization on the regional coordination of transit service. To achieve these, information and data collected from public sources (such as the National Transit Database), local transit agencies, and our own transit user survey, questionnaire, and interviews are analysed in the case study.

The analysis results show clear improvements in operations and of amenities at bus/streetcar stops, RTA transit users' perceptions of service quality are not improved. The level of transit service coordination in the region is far behind the national average because of serious political and financial reasons. A further qualitative analysis based on the questionnaire and interviews reveals political and financial issues as major barriers to regional coordination, and these concerns of the public agencies certainly override any economic incentive that the private contractor may have.

While further experience and assessment of the delegated management contract is required, the findings of this paper provide valuable information on this new approach for transit contracting.

Keywords: privatization, delegated management contract, urban transit service, regional coordination, service quality, New Orleans

### 1. INTRODUCTION

Public transportation is a vital service that aims to accommodate the travel needs of those without easy access to private automobiles and to improve quality of life in U.S. urban areas. Declining state and federal aid has challenged public transit agencies in the U.S. to provide more cost effective service while declines in population, jobs, and business in inner cities have caused significant losses in cities' tax-bases, and make it financially difficult for public agencies to provide transit service in areas where residents depend on public transit. At the same time, the suburbanization of jobs and housing has made travel patterns of residents and workers more complex, requiring them to travel across multiple jurisdictions. The necessity of traveling across metropolitan areas demands better regional coordination between multiple transit systems. Greater New Orleans exemplifies these trends.

Dealing with post-Hurricane Katrina ridership trends and low productivity of transit service, New Orleans Regional Transit Authority (RTA) decided to turn to a *delegated management contract*, a contracting approach new to the U.S. transit industry. This contract approach transfers more responsibility in management, planning, financing, operation and maintenance to a contractor than has been typical in the U.S.

The study presented in this paper has two main purposes. First, it assesses the initial effects of RTA's delegated management contract on the productivity and quality of transit service. Second, the study examines the effects of privatization on regional transit service coordination in the unique situation where one private firm has been contracted separately by two districts—Orleans Parish and Jefferson Parish. The *Unified Planning Work Program for 2010*, prepared by Regional Planning Commission (RPC) in April of 2009 to document all federally funded planning activities in the urbanized area, predicted positive effects, stating that "[s]ignificant inroads toward regional transit provision have been achieved with the selection of a single operational provider for JeT, RTA, and RPTA, Veolia Transportation (New Orleans Regional Planning Commission 2009)."

In particular, this paper examines the following two hypotheses:

- 1) Given carefully designed requirements and specified economic incentives in contracts, a contractor will provide efficient and effective transit service to the public.
- 2) Given carefully designed contractual terms, a private firm with incentives to improve regional coordination, increase ridership and generate more fare revenue, will improve performance by combining services in separate areas through internal coordination.

This paper is structured as follows. The next section provides a brief literature review of transit contracting and regional coordination of transit service, followed by a section to describe data and data sources. The details of data collection and analysis methods, as well as analysis findings, are described in the fourth section. The last section provides a conclusion with a summary of findings and discussion for issues for further investigation.

### 2. LITERATURE REVIEW

In the U.S., public transit agencies have been more conservative with privatization strategies than in the U.K., other European countries, and Australia. Outsourcing in the U.S. is usually limited to operation, maintenance, and occasionally a few planning functions. In contrast,

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delegated management contracts are a public-private partnership in which a contractor offers substantial expertise in transit planning, operation, and management, while a public agency retains ownership, the monitoring and control of service, and fares. The idea of delegated management first appeared in South Africa in 1992 in the water and sanitation service sector, and has been widely employed in utility sectors as well as transportation sector in France (Horwitz 2001; Amaral and Yvrande-Billon 2009). In this type of contract, benefits are aligned and risks are shared between the public and private parties. Performance indices are often incorporated into these contracts to promote a more collegial relationship between the two parties for better productivity and customer satisfaction than a conventional contractual relationship (Hensher and Stanley 2003; Carlquist 2001). Substantial responsibility is transferred to a private contractor in exchange for high management fees and longer contract periods. These aspects allow a contractor to gain substantial knowledge in the provision of local transit service, which may give the contractor significant advantages over other companies in the next bidding and could lead to a lack of real competition.

Although economic considerations often motivate governments to privatize—reducing public spending and increasing productivity in the provision of transit service— the literature reveals greater complexity in the decision to contract out transit services. Transit agencies are influenced by political, ideological, social, and institutional forces, and by levels of knowledge and experience regarding contracting, as well as by economic incentives (Iseki 2010; Sclar 2000; Richmond 2001; Berechman 1993; Iseki 2004). Inadequate contract design with insufficient economic analysis prior to privatization could actually lead to an overall cost increase, including transaction and monitoring costs, as well as lower quality of service. In addition, the specific provisions of the contract and the manner in which it is awarded (through a competitive bidding process or through straight negotiation) can directly influence the cost-effectiveness of transit services (Hensher and Stanley 2008; Gagnepain and Ivaldi 2002). Thus, whether or not contracting is more cost effective than public provision of transit is an empirical question.

A review of past empirical studies on the effects of contracting reveals a mixture of findings on this subject. Different countries exhibit large variances of experience in transit service privatization and of conditions in transit policies, regulations, transit and labor markets, operation and management, operating environment, and overall travel behaviors of their populations. Many experts believe that London's tendering schemes have been more successful in gaining ridership and improving productivity than the fully deregulated systems elsewhere in the U.K. (White 1995; Karlaftis 2006; White 1990, 1997; Department of Transport 1984, 1994; Mackie, Preston, and Nash 1995). Even among the literature on U.S. transit contracting, the findings are mixed on whether, and to what extent, cost-efficiency and cost-effectiveness are realized (Iseki 2004).

Studies of transit contracting focus on the productivity and effectiveness of transit service by contractors in individual transit systems, but do not address the implications of contracting for regional coordination. Although the importance of regional coordination has been recognized by researchers and practitioners (Meyer et al. 2005; Miller et al. 2005; Pucher and Kurth 1989), providing a broad definition of regional coordination and integration, relatively little research has been conducted on methods and criteria for measuring and evaluating regional coordination and integration using concrete indicators. A thorough review of scholarly articles and reports on the subject of regional coordination and integration

(Pucher and Kurth 1989; Cook, Lawrie, and Henry 2003; Miller, Englisher, and Kaplan 2005; NEA Transport 2003; Tyson 1990; Transport for London 2001; Federal Highway Administration (FHA) 2002; U.K. Commission for Integrated Transport 2001) led to the identification of indicators in three categories: (1) operational/managerial coordination, (2) organizational/institutional coordination, and (3) financial/institutional coordination.

Operational/managerial coordination indicators directly influence a transit user's experience in a transit system and their perceptions of the quality of service of the system. This category of indicators includes coordination of general operations such as schedules, fares, and facilities. The second category, organizational/institutional, involves coordination at the level of transit administration, including indicators such as coordinated goals and policies, centralized administration, and information sharing. The last category, financial/institutional, is generally only practiced in highly coordinated regions and involves the coordination or sharing of financial resources for common goals. This category includes measures such as joint funding arrangements and joint procurement of equipment. Based on these three categories, a set of regional coordination indicators are developed in this paper to evaluate the level of regional coordination in the New Orleans region in comparison with other regions in the U.S..

### 3. DATA, DATA SOURCES, AND DATA COLLECTION

Four distinctive data sets were analyzed: (1) financial and operating data from the National Transit Database (administered by the Federal Transit Administration (FTA) of the U.S. Department of Transportation) from 2001 to 2009, (2) data and documents on transit management, operation, finance and contracting from public agencies in the Greater New Orleans region, (3) original transit user survey data, and (4) information on regional coordination collected from the transit agencies and metropolitan planning organization in the Greater New Orleans region in questionnaires and interviews, which are compared to data collected from a nationwide survey in the related research (citation deleted for anonymity). The first and second sets of data were used to examine processes and contractual terms of transit service outsourcing and to analyze performance indicators between RTA under a delegate management contract and its neighboring transit agency, Jefferson Transit (JeT), which employs a more conventional contract. The third set of data was used to examine and compare service quality between the two transit systems, based on transit users' perceptions. The fourth set of data was analyzed to assess the level of regional coordination in the Greater New Orleans region.

### 4. EMPIRICAL STUDY

#### **Economic and Social Settings and Service Characteristics**

RTA, a political subdivision of the State of Louisiana created in 1979, is by far the largest fixed-route transit operator in the region, operating buses and streetcars in New Orleans (coterminous with Orleans Parish) and in the Jefferson Parish city of Kenner, while JeT serves the rest of Jefferson Parish. The areas served by RTA and JeT, inner city and

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suburban areas respectively, present contrasting economic and social conditions, transit trends and post-Katrina population responses.

Orleans Parish has a lower median income, higher poverty rate, higher proportion of non-automobile households, and larger minority representation than Jefferson Parish (Table 1) (U.S. Bureau of the Census 2008). Significantly higher proportions of commuters use no-driving travel modes, including public transit, in Orleans Parish.

Table 1: Selected Socio-economic Characteristics of Orleans and Jefferson Parish

	Orleans	Jefferson Parish	
	Parish		
Median Household Income	\$37751	\$47135	
Percentage of People Living Below the Poverty Level	22.6%	12.6%	
Households without Access to a vehicle	20%	7%	
Mean Travel Time to Work (workers 16 and over)	22.7 min.	24.1 min.	
Percentage of Residents Using Public Transit to Access Work	7%	1%	
Percentage of Residents Driving to Work Alone	67%	81%	

(U.S. Bureau of the Census 2008)

Before Hurricane Katrina, RTA (under public ownership and management) had been experiencing decline in productivity and patronage due to rapid suburbanization and high pension payments. Katrina caused direct damage to the transit system,<sup>1</sup> reduced the local population, jobs, and resources, drastically reduced two of RTA's primary funding sources, hotel and sales taxes, and exacerbated the low productivity of RTA's in-house service. The annual ridership decreased from the pre-Katrina number, 38.7 million, to 12.2 million in 2008 (New Orleans Regional Planning Commission 2005) (Table 2).

In contrast, JeT sustained considerably less damage than RTA and was able to resume service to a more stable service population a few months after the immediate threat posed by Hurricane Rita had passed (Jefferson Parish 2005). A year after Katrina, Orleans Parish had lost 54 percent of its population while Jefferson Parish experienced a seven percent loss. As of July 2009, Orleans Parish had recovered 78 percent of its pre-Katrina population (an estimated 354,000), while Jefferson Parish's had recovered 98 percent (an estimated 443,000).

<sup>&</sup>lt;sup>1</sup> RTA lost 205 buses and 31 streetcars to the storm and flooding (Luczak 2007). In 2005, RTA operated service 24 hours a day, 7 days a week, with 302 peak buses operating 59 fixed bus routes, 66 streetcars operating on three route alignments, and 92 paratransit vehicles providing service on demand. In 2007, RTA was operating 18 hours a day, consisting of 63 peak buses operating on 28 fixed routes, 14 streetcars operating on three route alignments, and 63 paratransit vehicles (New Orleans Regional Transit Authority 2008).

Table 2: Service Characteristics of RTA and JeT in 2008 and 2009\*

	RTA	JeT
Service Area	75 square miles	94 square miles
Population Served	195,000; 355,000*	438765
Vehicles Operated in Max. Service	109; 113*	42
Vehicles Available for Max. Service	206; 217*	68; 64*
Routes Operated	33	13
Fare Revenues Earned	\$10,529,956	\$2,558,502;
	\$12,370,549*	\$2,486,908*
Modes Operated	Bus	Bus
	Light Rail	(Demand Response)
	(Demand Response)	
Annual Passenger Miles#	30,415,100	11,164,166;
_	40,726,520*	10,827,308*
Annual Unlinked Trips#	12,178,595	2,045,281;
_	15,330,592*	1,981,986*
Annual Vehicle Revenue Miles#	3,827,007	1,304,594;
	4,509,891*	1,407,608*
Annual Vehicle Revenue Hours#	341,727	86,629;
	401,031*	93,522*
Total Operating Funds Expended	\$82,828,828	·
- · · ·	\$83,319,227*	1

<sup>#:</sup> the numbers do not include demand response service, which is not the focus of the study. (Federal Transit Administration 2008, 2009)

### **Transit Service Contracting**

After a significant degradation in the quality of transit service following Hurricane Katrina, the RTA Board of Commissioners decided to contract out all functions and responsibilities below the board level to a private firm, including operations, maintenance, customer care, capital planning, funding, and management (New Orleans Regional Transit Authority 2008)— significantly more than regular contracting arrangements made in the U.S. (Veolia Transportation 2009). RTA selected a multinational private sector operator of multi-modal transit, Veolia, among three bidders<sup>2</sup> and started a series of interim contracts in October, 2008.

First, RTA and Veolia entered into the first 90 days of the *Initial Interim Services* contract, which was later extended by six months. This initial contract served as a test period for Veolia to take over responsibilities from the previous service provider and demonstrate its ability to handle the complex transit system. The transitional tasks for Veolia to fulfill included: 1) investing its own resources in the flexible-route bus system, 2) producing a plan to establish a rail program and also examine the feasibility of future rail options, 3) producing long-term plans for fleet replacement and capital improvement, 4) generating reorganization

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<sup>&</sup>lt;sup>2</sup> Two other bidders were First Transit Inc. of Cincinnati and TMSEL. Veolia was selected based on the recommendation made by a private consultant, Anthony Mumphrey, hired by the RTA. In Mumphrey review, Veolia was rated the highest in the area of management team experience, strategic approach to delivery of services, plans for hiring disadvantaged companies as subcontractors, and in its use of creative ideas (Donze 2008).

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plans to improve service delivery as well as cost savings, and 5) planning for the transition of employees from temporary offices to renovated, permanent offices. The transitional terms illustrate the complexity of the contract and the vast range of responsibilities that were allocated to Veolia.

Following this provisional period, RTA and Veolia entered into an official contract of "delegated management" with an initial term period of five years, with the option to extend an additional five years, starting in September 2009. Veolia's *delegated management contract* with RTA is the first of its kind in the U.S., and the contract period is exceptionally long for transit service contracting in the U.S. As a result of negotiation between RTA and Veolia, the requirements for Veolia were set much less rigidly than in the contract with JeT. Veolia had much more room to decide how to achieve the goals determined through negotiations (New Orleans Regional Transit Authority and Veolia Transportation Services 2008).

Veolia's contractual responsibilities to JeT are similar to those traditionally seen in the U.S. as JeT included a strict outline of requirements in its Request For Proposals (RFP). When consolidating three different contracts into one to reduce redundancies in management and increase efficiencies in service provision, JeT used a competitive tendering process, and awarded a contract to ATC/Vancom, Inc. in July of 2006. Veolia acquired ATC/Vancom, took over the contract, and has been providing services in operation, basic management, and vehicle maintenance to JeT since 2006.

Mechanisms to ensure quality service delivery by Veolia are present in both the RTA and JeT contracts to different degrees and expectations are enforced in different ways. While both RTA and JeT indicate that cost savings are not the only concern. JeT has been more directive in how Veolia is expected to perform when it comes to quality of service and quality customer experiences are a much larger part of these requirements (Department of Transit Administration 2005). For example, JeT requires Veolia to follow strict preventative maintenance and cleaning schedules and comply with the manufacturers' suggested maintenance, and JeT clearly outlined the repercussions of failing to comply by including in the contract that a \$100-a-day fine would be levied against Veolia for non-compliance. Thus, maintenance, on-time performance, ridership growth, the service quality standards and reporting responsibilities are accounted for through financial penalties or risk of contract termination. Penalties for poor performance and noncompliance, combined with a financial retainer against inadequate service delivery, provide a layer of protection for JeT. In order to monitor the quality of service, JeT requires Veolia to report the details of day-to-day operations and customer care. Service is also monitored by parish staff members, who randomly ride buses to check for on-time performance, passenger treatment, cleanliness of vehicles, and any other concerns.

In contrast to JeT's more directive contract, RTA's contract focuses more on expanding and improving physical services, has much less emphasis on the specifics of quality, and takes a more holistic (and possibly naïve) approach by assuming that quality service will be achieved through a shared set of goals between RTA and Veolia.<sup>3</sup> For example, although RTA clearly indicates that preventative maintenance is important to ensure that vehicles are

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<sup>&</sup>lt;sup>3</sup> These common goals include: (1) a commitment by both parties to improve the delivery of public transit services in New Orleans, (2) reducing costs and reinvesting savings, (3) finding alternative public transit system delivery methods to respond to the varying city needs, and (4) funding a Comprehensive Improvement Program (New Orleans Regional Transit Authority and Veolia Transportation Services 2008).

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operating efficiently for both cost saving and service quality concerns, RTA is less involved in setting schedules, compared to JeT. In addition, protections and justifications for termination are not apparent within the RTA contract.

Although both Jefferson Parish and RTA include a variable cost payment to cover operating costs, they approached compensation of Veolia in different ways, reflecting the varied level of responsibilities found within each contract. First, Veolia is compensated by RTA with a fixed rate per month of \$1,390,732 for the length of the contract to cover costs mainly associated with administrative and management responsibilities that are more substantial in the delegated management contract, 4 compared to JeT's per unit compensation that assumes all the costs are included. Second, JeT's contract is designed to include financial incentives for efficient operation and quality performance, including elements typically found in performance-based contracts such as growth in service levels (Hensher and Wallis 2005). For example, Veolia is awarded 10 percent of the difference between the actual annual audited budget, and any cost savings realized by Veolia. In addition, the compensation per revenue hour and the total budget can be renegotiated if the provided amount of service exceeds a certain level. In comparison, although the transitional interim service contract with RTA included several performance-based compensation items. RTA does not include any incentive payment in the final delegated management contract. The rationale behind the decision to remove the incentive payments is unclear from the available documents.

The negotiation process adopted by RTA and Veolia generally helps contracting parties work together toward a common goal of resolution for identified issues and problems according to Hensher and Stanley (Hensher and Stanley 2008). The inclusion of compensation per vehicle hour in the compensation package of RTA's contract is a positive outcome of the negotiation process. After Veolia examined potential measures for cost savings in RTA's documents and data on the existing transit system, the rate of compensation was reduced by 10, 12, and 19 percent for fixed-route bus, paratransit, and streetcar services respectively between the Initial Interim Services contract and the Delegated Management contract (New Orleans Regional Transit Authority and Veolia Transportation Services 2008).

It should be noted that RTA/Veolia did not supply details that allow a full analysis of their contract despite our repeated requests to obtain documents and reports that supplement two documents that RTA/Veolia initially provided.<sup>5</sup> This narrowed the range of information that we could examine. Nevertheless, our analysis of the material that was available presented substantial differences between the two types of contracting. RTA's decision to contract out a wider range of responsibilities required a less rigid, more financially-complicated contract, while JeT outsourced limited functions with clear specification, standards, and compensation to ensure quality control and customer service.

<sup>5</sup> These documents are (1) 2008 Request for Proposals, and (2) Transit Management Services First Amendment to Transit Management Agreement (Transitioning to Delegated Management).

<sup>&</sup>lt;sup>4</sup> The fixed fee covers all administrative, supervisor, and dispatcher employee labor and benefit; Workers' Compensation Insurance; casualty and liability insurance; administrative equipment and supplies; data processing and technical services; security; armored car services; travel; and advertising and promotion.

#### **Evaluation of Performance Indicators**

In the evaluation of the performance of RTA and JeT under different contract arrangements from 2004 to 2009, we examined several performance indicators for efficiency and effectiveness for each agency, in addition to basic financial and operating data.<sup>6</sup>

To evaluate service consumption, unlinked trips (ridership) and passenger miles traveled are examined. RTA's total ridership (bus and rail combined) was about 47 million in 2004. After the substantial drop due to Katrina to 7 million in 2006, RTA's ridership steadily increased (at an average of 2.78 million additional trips per year between 2006 and 2009) back to 15.5 million. In the same three-year period, JeT's ridership dropped (from 2.24 million trips to 1.98 million) to below half of pre-Katrina ridership.

Passenger miles traveled for RTA's bus and rail services combined in 2004 were 109.7 million. After declining in 2006-2007, passenger miles traveled increased from 21.3 million in 2007 to 40.7 million in 2009. RTA's bus passenger miles increased by 12.5 percent and rail passenger miles increased 406.9 percent as restoration proceeded, for a total growth in passenger miles of 42.5 percent. JeT's passenger miles fell by 11.3 percent from 2006 to 2007, began to climb again from 2007 to 2008, but dropped again in 2009 to its approximate level in 2006, 10.82 million.

In order to discount the effects of population on comparisons of transit ridership, the average number of trips per capita (in thousands) for each transit system and mode was computed (Figure 1). The 30.6 percent increase in RTA's total ridership per capita from 2007 to 2009 is notable. From 2008 to 2009, bus ridership per capita, which had been falling since 2006, began to rise, and ridership per capita of the recently completed streetcar lines continued to rise. This suggests that RTA's bus service continued to build up ridership under Veolia's management in 2009, although modal substitution may have affected bus ridership levels during streetcar restorations.

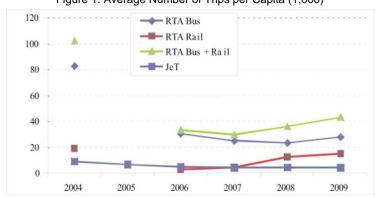


Figure 1: Average Number of Trips per Capita (1,000)

Note: No data available for RTA in 2005.

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<sup>&</sup>lt;sup>6</sup> It should be noted that we did not include data from RTA for 2005, as RTA was not required to report 2005 data to the NTD due to Hurricane Katrina, and that this makes graphs appear discontinuous.

#### **Efficiency Indices**

Cost per vehicle hour and cost per vehicle mile were computed to evaluate the efficiency and productivity of the two transit systems. These efficiency measures normalize an output variable by an input variable, and are more comparable among different agencies and time periods.

Figure 2 shows total modal expenses (TME) per revenue vehicle hour. RTA's cost per revenue vehicle hour for buses drastically declined from 2008 to 2009—by 29.4 percent, showing efficiency improvement under the first full-year of RTA's management and operation. However, this gain in cost efficiency in the bus system is accompanied by a considerable loss in cost efficiency for RTA streetcar operation in 2009 compared to 2008. This loss for streetcars can be attributed to a significant increase in operating costs, which may be due to the higher platform-hour rate charged by Veolia for better management—for example, increasing supervisors on the routes to maintain even intervals between streetcars. As a whole, RTA/Veolia improved the overall efficiency in providing transit service, since the gains made by RTA buses were sufficient to offset the declines in streetcar efficiency. In contrast, JeT's number has been fairly constant after 2006 within \$5 variance in four years after experiencing an 18 percent increase between 2004 and 2006.

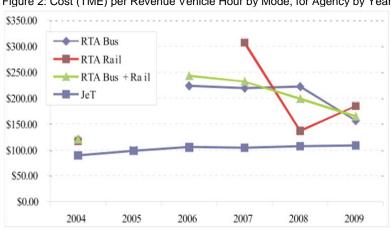
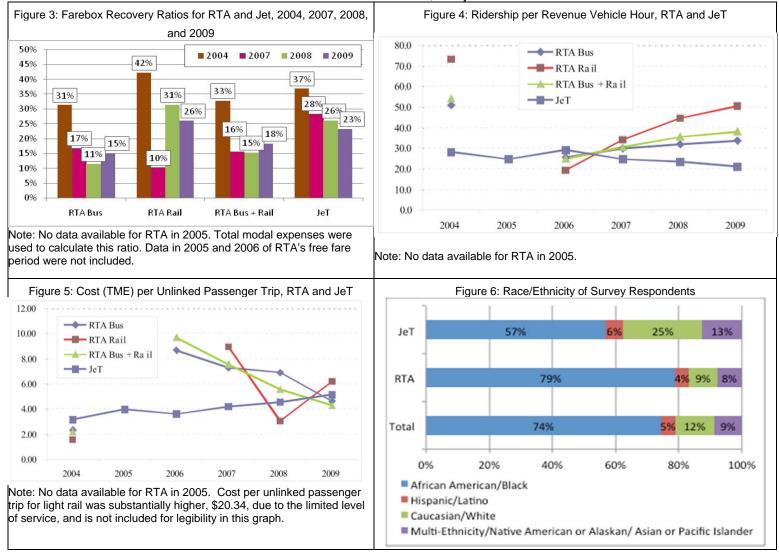


Figure 2: Cost (TME) per Revenue Vehicle Hour by Mode, for Agency by Year

Note: No data available for RTA in 2005.

Figure 3 illustrates RTA's and JeT's farebox recovery ratios, the ratio of fare revenue to total modal expenses. Farebox recovery ratios for 2004, 2007, 2008, and 2009 are shown, with 2005 and 2006 omitted because of RTA's free fare period. This figure suggests that JeT is recovering less and less of its expenses from fares; as its farebox recovery ratio decreased from 28 percent in 2006 to 23 percent in 2009. In contrast, RTA's buses have seen a reversal from earlier trends, as farebox recovery ratios have increased, from a low of 11 percent in 2008 to 15 percent in 2009. RTA's streetcars have seen a five percentage point decline in farebox recovery ratios in 2009, but the system as a whole has improved its ratio by three percentage points, as the bus system makes up a larger proportion of operating expenses and fare revenue.





#### **Effectiveness Indices**

The public provision of transit services should effectively meet a public need. Effectiveness measures how well transit service providers serve the riding public. It takes a ratio of one consumption variable, such as ridership, and one input variable, such as vehicle hour operating costs, or the number of employees and measures how effectively transit service accommodates the public's transit travel.

Figure 4 shows JeT has attracted a consistent level of ridership per revenue vehicle hour, averaging 26.3 riders per vehicle hour over the period studied, with only a slight decline from a high in 2006. Although RTA attracted far fewer riders per unit of service after the hurricane than before, dropping from 54.2 riders per vehicle hour in 2004 to 25.1 in 2006, it increased that number by 52 percent to 38.2 riders from 2006 to 2009.

The cost (TME) per unlinked passenger trip, another cost effectiveness measure, for an RTA streetcar more than doubled in 2009 (to \$6.22 from \$3.07 in 2008) —the first full year of completely restored streetcar service under Veolia (Figure 5). This RTA's streetcar cost per trip is substantially higher (less cost effective) than approximately \$1.60 prior to Hurricane Katrina, which was the lowest cost per trip of either agency or mode in 2004. In contrast, RTA bus cost per passenger trip fell each year since their high of \$8.70 in 2006, with the sharpest decline of 32.8 percent occurring from 2008 to 2009, the system's first full year under Veolia. JeT, on the other hand, has seen rising costs per passenger trip since 2006. JeT's 2009 cost per passenger trip was \$5.16, higher than RTA's cost of \$4.66 for bus alone, and of \$4.31 for bus and rail combined.

In short, while both RTA and JeT experienced losses in transit service productivity in the immediate aftermath of Hurricane Katrina in 2005, they show different performance trends from 2006 to 2009. While JeT has not seen dramatic changes over the four year period, RTA has made significant improvements in several areas, such as revenue miles and hours, trips per capita, cost efficiency, and cost per passenger trip in 2009, that could be attributed to the significant restructuring of RTA transit service management and operation under the RTA/Veolia contract beginning in late 2008. The substantial increase in cost per vehicle hour for RTA streetcar should be investigated further as it contrasts with overall trend in increasing efficiency for RTA.

### Transit User Survey—Importance-Satisfaction Analysis

A survey was designed to assess transit users' perceptions of transit service quality. Questions ranged from issues of safety and cleanliness to waiting times and route information. It also included questions regarding riders' demographic characteristics as well as trips at the time of survey taking. Bus/streetcar stop locations for the survey were carefully selected, taking into account the presence of trip generators/attractors, transfer points of more than two transit lines, and recommendations from the two transit agencies.

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<sup>&</sup>lt;sup>7</sup> In reality, the political motivations of elected officials to serve their specific constituencies often leads to more dispersed transit service than is necessary, in areas that cannot expect even moderate ridership given local demographics and built environments.

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Due to a substantially low number of transit users found waiting at bus stops in Jefferson Parish, part of surveys were switched to on-board, asking respondents to think about the transit stop with their most frequent use to answer survey questions. Most survey respondents spent between 10 and 15 minutes to complete the survey while waiting for their next bus or streetcar, while some respondents did not complete to catch their ride.

A total of 461 responses were collected over a three-month period: 231 at RTA stops, 77 at JeT stops or onboard JeT buses, and 153 at transfer points between the RTA and JeT systems. It should be noted that the number of samples vary by question in the following analysis since not all survey takers answered all questions.

The two transit systems have riders with similar demographic characteristics and trip characteristics except in their racial profiles (Figure 6). JeT's proportion of African American riders surveyed is lower than RTA's (57 percent compared to 79 percent), and its proportion of White riders is higher (25 percent and 9 percent). In both parishes, African American ridership is disproportionately high and White ridership is disproportionately low, compared to the racial breakdowns of populations in each parish.

Commuting constitutes the highest percentage of trips (39 percent), followed by shopping or personal business (26 percent), and school or college (18 percent). Seventy-five percent of the respondents are regular transit users meaning they use transit four or more times a week. Approximately 69 percent of the riders surveyed were on a trip that they regularly made. Sixty-six percent of respondents expected to make at least one transfer, and 34 percent reported that their trip would include a transfer between RTA and JeT. Three quarters of respondents did not have easy access to a car for the trip they were on. Almost half of all respondents reported an income below \$30,000 a year—30 percent below \$15,000 and 22 percent between \$15,000 and \$30,000. About half of the adult riders were between 18 and 35 years, while only five percent were over 65.

The Importance-Satisfaction (IS) analysis (citation deleted for anonymity) is applied in order to evaluate the relative importance of attributes of transit services and facilities. In essence, IS analysis combines both the importance and satisfaction levels in transit users' perception of transit service quality into one composite index, called IS rating, that assess the need for improvement.

In this analysis, the importance rating is based on the proportion of respondents who ranked an attribute "Very Important" out of the total number of valid answers in the four-level Likert scale in the survey. The satisfaction rating is based on the proportion of respondents who indicated satisfaction with the attribute ("Strongly agree" or "Agree somewhat"). These ratings are expressed in percentages. Based on the ratings of all attributes, we determine rankings for both importance and satisfaction. Then, the Importance-Satisfaction (IS) rating was calculated, using equation (1). An agency should prioritize improvements to attributes with high IS ratings.

Equation 1: Importance-Satisfaction<sup>8</sup>

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<sup>&</sup>lt;sup>8</sup> The maximum rating of 1.00 occurs when all respondents consider an attribute "Very important," but no respondents are satisfied with the current quality of the attribute. The minimum rating of 0.00 occur in either: 1) no respondents considering the attribute "Very important," and 2) all respondents being at least somewhat satisfied with the current quality of the attribute (i.e. all respondents chose "Strongly agree" or "Agree somewhat" with a satisfaction statement in the survey).

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IS = [Importance x (1-Satisfaction)] = [Importance x Dissatisfaction]

The quality of service factors for which transit users were asked about importance and satisfaction are listed along with the IS-rating in Table 3.

For eight of the 17 attributes, differences in importance ratings between RTA and JeT user groups were found to be statistically significant in t-tests meaning the two user groups (RTA and JeT) had different priorities (shaded in gray in the tables). While both RTA and JeT transit riders consider overall ease of making a transfer (Q) and two connection- and reliability-related attributes (F & G) important, they have different priorities outside of these areas. While RTA riders highly rank two access-related attributes (H & O), JeT riders placed three regional coordination-related attributes (N, L, & G) among the top six, indicating many JeT riders need to make transfers to the RTA system to complete their trips. In addition, the ease of obtaining information from the other transit system (M & L) was ranked high by JeT riders, but not by RTA riders.

The analysis showed substantial difference in the level of satisfaction between RTA and JeT users. The difference in satisfaction ratings between the two user groups was significant for most attributes. The average of proportions of satisfied respondents for all 17 attributes was 61.5 percent for RTA, compared to 75.1 percent for JeT. The t-test revealed *statistically significant differences* between the two systems for all factors but three that are all ranked relatively high—feeling safe during the day ranked high (I), convenience of paying fare (N), and ease of getting around the stop (O). For these three factors, RTA riders supplied lower ratings of satisfaction with their transit system than JeT riders. In terms of ranking, both groups of riders are satisfied with access-related attributes as two access-rated attributes (H and O) have the highest and third highest satisfaction ratings respectively from both systems' users. However, the riders of both systems are concerned with (B) a lack of sitting space, (F) short waiting time, (G) on-time performance, (J) safety at night, and (K) lighting. Regarding regional coordination, the ranking of the four questions in that category is very similar between the two systems with the higher satisfaction level by JeT riders.

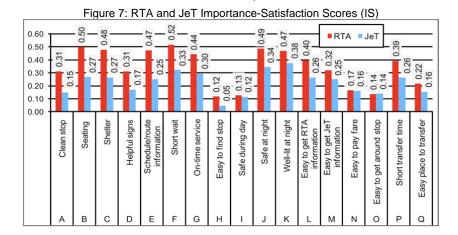
Figure 7 show the IS ratings and rankings for each service quality attribute for the two transit systems. Comparing the average IS rating for eighteen attributes between the two transit systems, RTA has more attributes that demand high-priority improvements to satisfy its users; the average IS ratings were 0.345 and 0.227 in RTA and JeT respectively. Short waits (F) and safety at night (J) are two of the three highest-rated quality issues for both agencies; waiting time is first for RTA and third for JeT, and safety at night is third for RTA and second for JeT. JeT riders' concern for nighttime safety is further emphasized by the importance-satisfaction rating for bus stop lighting at night (K), which ranks first for JeT.

Matters of regional coordination are in the middle range of IS rankings in the same order for both agencies. Based on these IS ratings, ease of obtaining RTA route and schedule information (L) is the highest priority regional coordination to both agencies' users (ranking eighth for RTA, and seventh for JeT), closely followed by shorter transfer times (P). Although JeT riders place higher importance on regional coordination attributes, RTA riders are still less satisfied.

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Table 3: Riders' Importance & Satisfaction Ratings and Rankings

	Survey Question	Category	RTA Importance		JET Importance		RTA Satisfaction		JeT Satisfaction		
	• 0		Rating	Ranking	Rating	Ranking	Rating	Ranking	Rating	Ranking	
A	This station/stop area is clean.	Amenities	84.10%	16	84.40%	17	62.90%	7	82.30%	6	
В	There are enough places to sit.	Amenities	86.30%	15	85.40%	16	42.20%	17	68.80%	14	
С	There is shelter here to protect me from the sun or rain.	Amenities	91.20%	8	93.70%	9	47.50%	12	71.60%	11	
D	The signs here are helpful.	Information	90.40%	11	86.50%	13	65.50%	6	80.20%	7	
E	It is easy to get schedule and route information at this station.	Information	89.40%	12	12 86.50%		47.10%	14	70.80%	12	
F	I usually have a short wait to catch my bus/train.	Connection & Reliability	94.20%	2	94.80%	4	45.10%	15	65.60%	15	
G	My bus/train is usually on time.	rain is usually on time.  Connection & 92.80% 6 Reliability		6	94.80%	5	52.40%	11	68.80%	13	
Н	It is easy to find my stop.	Access	95.00%	1	92.60%	11	87.60%	1	94.70%	70% 1	
I	I feel safe here during the day.	Security & Safety	92.90%	5	93.80%	8	86.20%	2	87.50%	2	
J	I feel safe here at night.	Security & Safety	87.50%	14	89.20%	12	44.40%	16	61.40%	16	
K	This stop is well lit at night.	Security & Safety	89.00%	13	86.30%	15	47.40%	13	56.30%	17	
L	It is easy to get bus/streetcar schedule/route maps of RTA.	Regional Coordination	92.00%	7	94.90%	3	56.80%	9	72.20%	9	
M	It is easy to get bus/streetcar schedule/route maps Regional Roundination 17 Coordination 17		94.40%	6	60.30%	8	73.30%	8			
N	It is convenient to pay for fare.  Regional 90.80% 9  Coordination		95.80%	1	81.70%	4	83.20%	5			
О	It is easy to get around this stop.	Access	92.90%	90% 4 93		10	85.40%	3	84.90%	3	
P	It requires a short waiting time to make a transfer at this stop.	Regional Coordination	90.70%	10	94.10%	7	56.70%	10	72.10%	10	
Q	Overall, this is an easy place to transfer to another bus or streetcar.	Overall	93.20%	3	95.30%	2	76.80%	5	83.70%	4	
		AVERAGE	90.20%		91.50%		61.50%		75.10%		



### **Regional Coordination**

In order to examine the current level of regional coordination for public transit service in the Greater New Orleans region, basic information was collected through questionnaires and then follow-up interviews were conducted with directors and planners at RTA, JeT, and the Regional Planning Commission (RPC, the metropolitan planning organization in New Orleans). The following five major categories and seventeen indicators of regional coordination for transit service were developed:

- 1. Fare, Pass and Discount Programs (Fare Coordination)
- 2. Coordination of Service Schedule,
- 3. Joint Provision of Information,
- 4. Facilities and Vehicles Sharing, and
- 5. **Others** including any joint agreements to promote regional coordination, which would require a high degree of cooperation by both parties.

Table 4 compares the questionnaire responses from the three agencies in New Orleans to the results from the nationwide survey on regional coordination from a broader research project. The percentages show the proportion of agencies that responded positively in each area of regional coordination. Table 4 reveals the premature level of regional coordination of transit service in the New Orleans region, compared to the national average. Out of the seventeen indices, the region has a fully positive response for only three: availability of transit fare media in the other agency's service area (2), joint provision of information through web site links and telephone call services (8), and shared facilities (10).

Although the questionnaire responses are not consistent among the three agencies, one of the three agencies indicates that some level of regional coordination exists for each of the following: (11) clearly defined transfer points; and (12) discussion of possibly locating and designing facilities to better accommodate transfers. While 74 percent of agencies in the nationwide survey provided a positive response on designation of transfer points, two of the three agencies disagree that there is clear designation of transfer point between RTA and JeT systems despite several locations considered as transfer points and indicated in their system maps. Some inconsistency in the responses from RTA, JeT and RPC exhibits the different understanding of current conditions and different perspectives on the part of each agency regarding transit service coordination.

Table 4: Responses to the Questionnaire on Regional Coordination of Transit Service in the Greater New Orleans Region

		<u> </u>	Current Condit				on or transit octivide in the Greater New Orleans Region
	Indicator		RTA JeT RPC		Yes (%)	Note	
1	ţ	A coordinated regional fare system	No	No	No	52%	Some discussion among three agencies, but JeT has some reservations.
2	discount	Availability of passes, tickets, or tokens in the other transit agency's service area	Yes	Yes	N/A	55%	RPC: In the near future RTA will install fare kiosks at major transfer points, and they may also sell JeT tickets.
3	passes/ dis	Passes, tickets, tokens or transfers usable in the other transit system's	No	No	No	54%	-
4	<u> </u>	Special discount program with other public or private entities	N/R	Yes	No	64%	JeT: 3% discounted monthly passes to select state agencies
5	Fares/	Free or discounted transfer from the other transit system	No	No	No	63%	-
6	Service Schedule	Consideration of the other transit system's service availability in service scheduling	No	No	N/R	70%	RPC/JeT: Informal (internal to Veolia) communications when routes are disrupted in order to assists passagners who are transfering. Plan to work together in future.
7	Sch	Coordination in time scheduling to accommodate transfers	No	No	Yes	68%	RPC: Attempts were made. RTA: not currently, but is planning.
8	ıtion	Joint-provision of information on transit service	Yes	Yes	Yes	75%	All: Both transit agencies provide links to each other's web sites/phone numbers
9	Information	Real-time information for operation (e.g. AVL) shared between the two transit systems	No	(Yes)	No	6%	RTA: Both JeT and RTA use similar AVL systems and this will be considered. RPC: RTA considering using this for real-time rider information.
10	ses	Sharing facilities (e.g., terminal, shelter, park & ride lot)	Yes	Yes	Yes	69%	JeT: Two bus terminals; RTA: facilities at three transfer points, and plan to expand one of them.
11	Facilities/vehicles	Clearly designed transfer points	No	No	Yes	74%	RPC: There are transfer points within both RTA and JeT service areas, designated with signage from the appropriate agency. RTA/JeT: No clear desgination that these are transfer points.
12	Facilit	Discussion of possibly locating and designing facilities to better accommodate transfers	Yes	No	No	43%	RPC: RTA plans improvements to transfer points which will benefit JeT passengers but JeT is not involved in the project. RTA and JeT: Discussion about locating joint terminals, but no formal plan.
13	Others	Agreements to (1) increase service frequency or expand routes, (2) jointly markey transit service, (3) introduce regional transit smart card, (4) joint worker training, and (5) share data on ridership, accidents	No	No	No	20%	RPC: Project to encourage non-single occupant commute modes. This program will market the use of transit in general, regardless of transit provider

Note that the "other (13)" category of this table contains five separate questions for a total of seventeen questions.

<sup>\* 51%</sup> responded that their agency is using real-time information, but not sharing with other agencies.

<sup>\*\*</sup> Only includes responses from agencies that do not already clearly designate transfer points with other agencies.

<sup>\*\*\*</sup> In this table, the "other" category is broken down to five different issues.

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In other categories, RTA and JeT are falling behind the national trend, apart from some unofficial coordination of vehicle scheduling being conducted through a private channel within Veolia. The Greater New Orleans region has a very slow rate of progress in special discount programs, compared to 64 percent of agencies in the nation. JeT indicated (3) a special discount program with other public and private entities and (9) real-time information for operation, both of which have potential to expand to the regional level. However, as RTA has not implemented either program or technology, neither has been included in enhancement of regional transit service.

Vehicle scheduling (7) is also in lower levels of coordination in New Orleans. There is no official agreement for coordinating vehicle scheduling between the two agencies in New Orleans, while about 70 percent of agencies that responded to our nationwide survey have such an agreement. At the same time, there is evidence for informal coordination of vehicle scheduling through a staff-level channel within Veolia between RTA and JeT. A departure time of JeT buses is adjusted to pick up passengers from RTA's buses and streetcars, and vice versa. Chisholm (1989) pointed out that this type of informal coordination was considered essential in transit coordination in the San Francisco Bay Area in the 1980s.

Finally, the New Orleans agencies lag behind the national trend in coordination of fare/pass programs, providing a positive response only for the sale of passes, tickets tokens or transfers for the other agency. <sup>10</sup> In contrast, more than half of the agencies in the nationwide survey are implementing programs in each of five indicators listed under the "fares/passes/discount programs" category (13).

The follow-up interviews identified some of the impediments to improving coordination. First, the technology inconsistency due to the different types of fareboxes that RTA and JeT used over the past several years created friction and did not allow easy introduction of common fare media. This technological problem may be solved soon by RTA's introduction of new fareboxes as well as new multiple-day fare magnetic stripe cards called "Jazzy Passes." However, the other three concerns are more serious obstacles and difficult to overcome.

One of the three major obstacles is political representation. An assurance of equal representation on any board or decision-making body is essential particularly from the perspective of Jefferson Transit, which is the smaller agency of the two. Another obstacle is finance. There has to be a strong, solid assurance for JeT that any coordinating efforts are beneficial to the parish's taxpayers and transit riders. Jefferson Parish relies on a parish property tax dedicated for transit service, 11 which has to be renewed with taxpayers' majority

<sup>&</sup>lt;sup>9</sup> The Director of Planning and Scheduling at RTA/Veolia mentioned his consideration that RTA will use an automatic vehicle location (AVL) system similar to JeT's, and that it may make information sharing feasible in the future. While his consideration will not necessarily lead to the selection of the same or similar technology, he could advocate a particular technology. A "champion" often plays a very important role in the introduction of a new technology to a public organization (Achilladelis, Jervis, and Robertson 1971; Ettlie, Bridges, and O'Keefe 1984; Howell and Higgins 1990; Rothwell et al. 1974; Schön 1963; Yoh 2008).

<sup>&</sup>lt;sup>10</sup> RTA and JeT jointly offered a single one-day pass (\$5.00) for users to seamlessly travel in both transit systems with no transfer fare from 2002 to 2005, but terminated the program after the Hurricane Katrina mainly due to difficulty and transparency in calculating shares of fare revenues.

<sup>&</sup>lt;sup>11</sup> 19 percent of operating funds and 20 percent of capital funds are generated locally in 2008, in addition to the 21 percent of operating funds generated by fares.

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votes every ten years (Jefferson Parish Transit (JeT) 2009; Bureau of Governmental Research 2009). The large proportion of local funds attracts more attention from taxpayers than the use of state and federal funds, and the periodical renewal requires elected officials and directors of public service agencies to ensure that all tax funds are properly accounted for and effectively used to provide services to their taxpayers. This clear obligation for a public agency to return benefits to its taxpayers significantly limits the prospects of revenue sharing through transfer exchanges and/or a regional fare media, or other coordination efforts that could lead to an outflow of funding from Jefferson Parish. The last concern is a financial one between agencies. In order to address the second concern, the mechanism for revenue allocation within such policies has to be transparent and fair, so that both agencies can agree on their share of proceeds. This certainly affects the feasibility of implementing common fare media and free/discounted transfers. These political and financial concerns may be exacerbated by RTA's negative reputation from political corruption that plagued the city for years. <sup>12</sup>

RPC, the metropolitan planning organization in the region, is expected to have an important role in facilitating and promoting regional coordination for transit service, as RPC planners recognize the importance of regional transit service to address a jobs-housing imbalance and travel patterns in the region. However, RPC's interview responses revealed their passive role and that they lack authority to influence policy decisions by RTA and JeT. A lack of data, such as regional travel survey data<sup>13</sup> that could inform policy discussion on how services should be allocated between parishes, is another factor limiting the effectiveness in regional transit planning. Under these circumstances, RPC often approaches issues related to regional coordination as a mediator between all of the transportation service providers (including railroad companies), with a focus on solving conflicts and problems among providers and attaining the highest level of satisfaction with the outcome among providers, rather than achieving the goals and objectives that may bring more benefits to the region as a whole.

### 5. CONCLUSION

This paper addressed two main questions in regard to the public transit service contracting in the Greater New Orleans region: (1) whether or not RTA/Veolia's delegated management contract makes improvements in productivity, service quality, and effectiveness in providing fixed-route transit, and (2) whether or not a private firm that contracts with two different transit agencies can improve regional coordination. A positive answer to the second question would show the potential to address geographic equity, jurisdiction issues and other challenges of regional coordination.

The analysis of performance indicators of service operation revealed positive effects of the RTA/Veolia contract, compared to the JeT's more conventional transit service contract. In

<sup>&</sup>lt;sup>12</sup> According to one interviewee, such a negative image was one of major reasons that the adjacent parishes declined a deal to have RTA provide transit service in their areas after its formation in 1983.

<sup>&</sup>lt;sup>13</sup> For example, a regional travel survey has not been conducted for more than 30 years.

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this sense, replacing the former in-house unit, which did not improve the performance for a few years after Hurricane Katrina but was imposing a substantial burden of pension obligation, can be considered successful. However, the analysis of transit user surveys showed that RTA riders are still generally less satisfied with the quality of service in many aspects—in particular with those attributes related to regional coordination—than JeT riders, and that few RTA riders have noticed substantial positive changes in service quality. The lower satisfaction level among RTA riders indicated continued challenges that RTA/Veolia will have to overcome in regard to customer satisfaction, despite RTA's recent improvements on vehicles and amenities at bus and streetcar stops, including shelters, benches, time schedules and route maps.

The analysis of regional coordination based on information collected through the questionnaire, interviews with agency staff, and the nationwide survey revealed very limited efforts being made toward coordination in the Greater New Orleans region compared to the nation average, despite increasing levels of discussion among the agencies, 14 common interests within Veolia, some optimism expressed by the interviewees and an official report prepared by RPC. Many of the testimonies lack concrete plans for funding and implementation of regional coordination. Political and financial issues are major barriers to regional coordination, consistent with past studies on geographic equity and adoption of new technologies among multiple public agencies. At this point, these concerns on the part of the public agencies certainly override any economic incentive that the private contractor may have. A relatively simple contract between JeT and Veolia does not allow Veolia much autonomy outside of operation and maintenance, and JeT generally has greater reservations toward coordination than RTA. In addition, according to RTA's Director of Planning and Scheduling, RTA/Veolia first has to work on improving basic services and operation within its own transit system as these basics were being managed to less than adequate levels by the previous management at RTA, even three years after the hurricane.

The identified political and financial concerns need to be addressed and resolved before attempts at further coordination can move forward. As long as it will not impose a substantial financial burden on any party, it is likely that a few technical issues, such as different technologies for fare collection, bus scheduling, and information sharing will be resolved in the future. It seems important that RTA/Veolia find ways to improve regional coordination within its system without incurring substantial costs that offset the benefits, so that it can gain cooperation from JeT in the future. In addition, initiative on the part of RPC, the metropolitan planning organization for the region, is needed beyond its traditional role as a mediator for improving coordination.

Still, an insufficient amount of information from the bidding and selection processes, the post-selection negotiations between RTA and Veolia, the contractual terms and the limited amount of available operation and financial data—due to both a short period of analysis following the execution of the contract and to a variable level of cooperation on the part of RTA—has made it difficult to conduct a full analysis and draw more definitive conclusions.

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<sup>&</sup>lt;sup>14</sup> Issues repeatedly mentioned in the interviews were: 1) installing a shared facility in Orleans Parish, 2) jointly working on vehicle scheduling to provide seamless travel to transit riders, and 3) discussing the potential for revisiting fare media sharing programs.

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Further analysis is warranted to more thoroughly evaluate the long-term effects of the RTA/Veolia delegated management contract—in particular the effectiveness of the streetcar operation and planning.

Another important subject is the prospect of Veolia developing a regional transit monopoly with the execution of its contract to provide demand-response service to a third transit agency in Southeast Louisiana (River Parishes Transit Authority) in February, 2009, and how that may influence regional coordination. The lack of RTA/Veolia cooperation in providing details on requests for proposals, contracts, and related documents is a serious concern, as lack of transparency in a contract between a public agency and a private firm tends to be *a negative sign* of not executing the contract appropriately—e.g., not properly transferring risks and responsibilities in exchange for the compensation that the private firm receives, which might result in a substantial loss of public resources (Checherita and Gifford 2007; Ortiz and Buxbaum 2008; Sclar 1997).

It is important to closely observe RTA's delegated management contracting as it is the first application of this privatization strategy to the U.S. transit industry. The higher level of responsibilities in the delegated management contract involves more risks and investment of financial, human, and physical resources from private firms, which requires a higher rate of payment. For example, RTA pays fixed management fees in addition to compensation based on a fixed rate per unit of service output. As RTA required investment from Veolia for accelerating a recovery of transit infrastructure and services that was not feasible by the management prior to Veolia, the contract term was extended to five years with an option for an additional five years. Thus, the arrangement becomes more and more like a public-private partnership (PPP) for transit financing.

As has been the case with highway financing PPPs, there will be a debate on balancing and transferring risks and responsibilities to the private firm with protection of public interests. In the case of New Orleans, Veolia *could* behave opportunistically in the next several years to make high profits in capital investments partly funded by a federal TIGER grant. But once major capital improvements are done, the deal may not be lucrative enough for Veolia to renew or re-bid for the contract. In that case, RTA would have to figure out how to fill the big hole Veolia would leave behind. In this sense, it is important to figure out how to align goals between a public transit agency and a private contractor in the long term, and the details of how to measure, implement, and achieve those goals must be clearly delineated in contracts and made public for accountability.

Since municipal governments in the U.S. are increasingly involving the private sector in transit financing due to limited public funding, it is important to keep an eye on this new model of transit privatization to see if it works in the U.S. economic, political, and social environments.<sup>15</sup>

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<sup>&</sup>lt;sup>15</sup> In June, 2010, the Chatham Area Transit (CAT) in Savannah, GA, made an announcement of a five year delegated management contract with Veolia Transportation, including a five year option.

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