RIDE Program Review – Final Report

Financial Analysis and Control Technology Services LLC (FACTS), a management consultancy specializing in performance management solutions, was engaged by the Office of the Inspector General to review RIDE paratransit program for opportunities for cost and operating efficiencies, revenue enhancements or other service changes and to identify risks of possible fraud, waste and abuse of public funds.

Bob Katz, President, Financial Analysis and Control Technology Services LLC December, 2011

Executive Summary

The Commonwealth of Massachusetts currently spends over $200 million annually to provide demand response, paratransit services through 16 regional transportation authorities (RTAs) in accordance with the Americans with Disabilities Act (ADA) and associated federal and state guidelines. One of the largest paratransit services program is The RIDE, administered by the MBTA and operating in 60 cities and towns in and around Greater Boston, provides approximately two million demand response trips annually.

Yet while RIDE costs represent less than 10% of the MBTA's annual operating costs (approximately $90 million annually), the program has been identified by the State Auditor and MBTA officials as a "budget buster" to a public transportation system already under significant financial and operational pressure to provide safe, reliable and affordable transportation to the four million Greater Boston residents that use its various fixed route services daily. While the RIDE's increasing operating costs, now over $50 per trip, can be attributed in part to its expanded service area, an aging population, and higher transportation costs, the primary contributor to its escalating cost structure is an outmoded and underperforming business model which is no longer competitive and exposes the system to greater risk of fraud, waste and abuse.

In addition to the RIDE and other demand response programs administered by local RTAs (and similar to the RIDE), the Commonwealth uses a Medicaid-funded demand response, paratransit service through its Human Services Transportation (HST) Office of the Executive Office of Health and Human Services Department (EOHHS). The HST system employs a brokerage business model, managing hundreds of service vendors to provide federal ADA compliant, cost competitive paratransit operation through six broker RTAs serving not only Greater Boston but the entire Commonwealth. Over 2.2 million of the Medicaid related trips provided in FY2010 were PT-1 (personal transportation) trips and similar in scope to The RIDE. Due to its brokerage business and services model, in FY2010, HST was able to deliver its services at approximately $20 per trip, approximately 40% of what a RIDE costs, while providing safe and reliable transportation.

Over the course of a year, this cost gap between the RIDE model and the brokerage model amounts to almost $60 million in higher annual operating and capital expenses – or $300 million extended over a standard five year MBTA contract.

Service Business Model Differences

The primary difference between these two service offerings is their inherent business models. Within each geographical area, the RIDE program is operated much as it has been since the late 1970s – a "door to door," single sourced operation within each service area. Vendors receive calls from one or more customers in their specified region, the callers are verified as eligible, and transport is dispatched for pickup and delivery to a stated destination. In most cases, each RIDE trip is individual, encouraged by MBTA service policies (such as strict on-time performance goals) and incentivized by penalty clauses in vendor contracts. Each RIDE vendor then bills the MBTA a monthly, fixed, contracted amount for each customer trip taken, with additional costs added for

administrative fees (including maintenance, security, garaging, etc.) and gasoline**. Individual trips are the most expensive.**

In contrast, the HST program through the application of a brokerage model administered through six RTAs including MART (Montachusett Regional RTA), GATRA (Greater Attleboro Taunton RTA) and four other contracted RTAs, uses many qualified vendor sources that compete for each trip, providing the RTA with transportation rates (either on a per mile or fixed basis) that are consistently lower than the RIDE. For example across the whole HST operation in 2010, 375 vendors participated in the program. MART alone received bids from over 150 vendors within its HST service area, which now encompasses over two-thirds of the state's area and population, including Greater Boston. MART records these bids through an on-demand networked portal, accessible to each vendor so they can see the other bids and that allows them to be paid faster for the trips given. The vendor bids include their operating costs (including maintenance and gasoline), capital procurement and profit. Customers call a central number where eligibility, destination, and timing are determined. The broker RTA then sources the trip to its vendor base. Service policies, as opposed to the RIDE, also encourage transporting multiple customers in the same car or van.

Cost saving comparison: contrasting service policies

Despite its lower operating cost per trip, the HST administered program provides service that is comparable to or exceeds RIDE service performance in terms of safety and reliability. From the HST 2010 annual report for the fiscal year ending June 30, 2010, transportation services provided through HST broker RTAs achieved on-time performance of 99.8% (within a 30 minute service window) vs. 94 % for the RIDE program. In addition, over 99.8% of these brokerage RTA demand response trips were accident free and 99.8% complaint free.

Costs are kept lower without sacrificing essential service requirements due to service policies such as:

- "Curb to Curb (CTC)" vs. "Door to Door (DTD)" service policy:

  While the RIDE is exclusively DTD, the HST program provides CTC as its standard service but accommodates individuals requiring assistance as needed. CTC allows vendors to complete more trips per hour, reducing costs associated with additional drivers and vehicles needed to comply with the ADA's mandated 30-minute window around pick-up and delivery.

- Benefits of competition:

  In the brokerage model, vendors bid monthly with established guidelines for their service rates, as compared with a five year contract period with RIDE vendors. Monthly competitive bidding across multiple vendors has resulted in consistently lower trip costs. The RIDE program as currently administered has reduced the number of vendors bidding

and increased its service requirements, almost ensuring a monopoly for the remaining three current providers.

- More efficient fleet usage:

  The MBTA maintains a fleet of over 400 hundred cars and vans (provided to the three RIDE vendors) which must be serviced, secured, replaced and financed at taxpayer expense. Applying efficiencies from the brokerage model can reduce the fleet, administrative expenses, and IT capital costs. Under the brokerage model, vendors incur all fleet costs. Also, the current MBTA contract calls for vendors to garage their RIDE fleet indoors, incurring higher operating, security, and liability costs, whereas vendors supplying the HST brokers incur these costs themselves

- Advanced IT development and design:

  The brokerage system uses more advanced solutions which facilitate vendor coordination, billing and payment activities. The current RIDE vendors are hampered in upgrading their existing systems due to current cost concerns at the MBTA. With the advanced IT platform, call center operations can be centralized and leveraged over a wider area. For example, one RTA, MART, is able to support paratransit services calls across 70% of the State.

Recommendations

Governor Patrick took an important step recently when he signed an Executive Order creating a commission to study paratransit operations across the state. This commission can address the service overlap and cost issues arising from these duplicative demand response transportation systems. To expedite and maximize cost savings across the entire state, the following immediate recommendations should be pursued:

1. MassDOT and EOHHS should work jointly to identify the possible consolidation of the various paratransit services operating within the state. To maximize cost savings, a new business model for supplying paratransit services is needed.

2. The state should investigate adopting, as a new business model, a uniform statewide brokerage business system to capture the cost benefits of a competitive model.

3. Service policies should be designated as a "curb to curb" service with exceptions as prescribed in a customer's eligibility determination.

4. A project manager should be appointed to facilitate further study, communications between the MBTA, EOHHS, and other stakeholders and implementation of a new business model and other recommended changes (and others that the commission may have). The project manager could also identify the costs and savings associated with the adoption of difference business practices.

5. Consistent with the consolidation of paratransit operations, statewide call center operations could be centralized with a common phone number established. Scheduling and dispatching should continue to operate locally. Centralizing call center operations will also facilitate better screening of RIDE customers.

6. Eligibility procedures for qualifying RIDE participants and personal care assistants (PCA) should be tightened, including limiting the health professionals that may grant eligibility as well as considering bringing qualification in-house.

While not identified specifically in the context of this review, there were several other areas which might contribute to further cost reduction/revenue enhancement including:

- Consolidate RTA operations where practicable (i.e., procurement, contracting, vendor oversight, scheduling, etc.)

- In concert with more restrictive eligibility procedures and a centralized call center operation, consider extending the free Charlie Card program to incent RIDE and other paratransit participants to use the fixed route system.

- In some cases, the costs of administering the current system exceed the revenue generated from fares collected. Although ADA regulations restrict paratransit fares to no more than twice the normal fare, additional revenue may be generated through increasing fares based on comparable mass transit services or beyond the ADA mandated service area. For example, if a customer needs two buses to achieve a destination, and instead uses the RIDE, then pursuant to FTA guidelines, the MBTA may be able to charge the customer twice the combined bus fare for the RIDE trip.

I. Introduction

Financial Analysis and Control Technology Services LLC (FACTS), a consultancy specializing in performance management solutions, was engaged by the Office of the Inspector General (IG) in September 2010 to review the RIDE demand response, paratransit system. The IG's initial interest emanated from a review of MBTA paratransit vehicle procurement policies that identified escalating program costs and reduced vendor competition. The review's goals were to identify opportunities for cost and operating efficiencies, revenue enhancements or service policy changes to reduce operating costs and identify possible risks for fraud, waste or abuse of public funds.

The Americans with Disabilities Act (ADA) of 1990

Since the national movement in the mid-1970s, the passage of the 1990 American's for Disabilities Act (ADA) and subsequent federal regulations have sought to assist millions of individuals with physical, psychiatric and/or cognitive disabilities. While most of the ADA regulations deal with issues of employment, education, health care and housing among others, some relae to public transportation. The Federal Transit Administration (FTA) has created ADA-related guidelines for paratransit operations including:

1. Eligibility
2. Origin to destination (OTD) service
3. On-time performance
4. No-shows
5. Telephone hold time
6. Stop announcements and route identification
7. Equipment maintenance

While these service guidelines are very specific in nature, they are considered a minimum public transportation "standard of care" thus the guidelines are subject to interpretation by local transportation agencies in order to maintain flexibility in providing these services. For example, from U.S. DOT/FTA's Topic Guide 5, "Origin to Destination Service in ADA Paratransit:"

> The Americans with Disabilities Act (ADA) classifies complementary paratransit service as origin to destination service. ADA allows transit agencies to establish, or in what circumstances, they will provide door-to-door service or curb-to-curb service. In door-to-door service, the vehicle operator (driver) offers assistance from the rider's door to the vehicle, and comparable assistance at the destination. In curb-to-curb service, assistance is not provided until the rider reaches the curb. **DOT requires transit agencies with curb-to-curb service to still provide assistance to riders who need it due to a disability**.

While the distinction between door-to-door and curb-to-curb service may appear subtle, the cost implications between these two services are decidedly not. According to vendor comments, service productivity using the number of riders per service hour industry metric, may be reduced

up to 30% in a DTD program and results in higher expenses in terms of more vehicles, more drivers and more overhead to service the operation.

Another ADA guideline subject to interpretation is the scheduling "windows" for pickup and delivery. From the DOT/FTA's Topic Guide 6 "On-time Performance in ADA Paratransit:"

> The ADA allows a transit agency to negotiate pickup times with an eligible rider, but the transit agency cannot require him or her to schedule a trip more than one hour before of after his or her desired departure time.

In addition, the FTA specifies that a rider's needed arrival or appointment time must be taken into account (typically through negotiation with the rider) by transit agencies in scheduling the trip. When the ADA requirement that a rider spend no longer then 60 minutes traveling is factored in and that the recommended pickup "window" be 30 minutes or less, the complexity and cost of managing this service, especially in highly trafficked, weather challenged environments like Boston and other major cities, can be particularly challenging to deliver efficiently. Most RTAs use sophisticated software systems to facilitate this scheduling process but can't accommodate the impact of weather, minute-by-minute traffic patterns, no shows or unexpected passenger delays.

One observation of the current FTA/ADA paratransit regulations is that most guidance provided to RTAs is meant to encourage paratransit services and its use with little regards to true delivery cost. There is no cost benefit analysis of these service guidelines and scant guidance on the effective business model to manage the costs associated with the service. In addition, while the FTA provides direct funding assistance to local RTAs for various transportation programs, paratransit is not federally subsidized. This funding issue is further compounded by the FTA/ADA fare restriction to twice the normal fare (in the case of The RIDE, the normal fare is $2 so twice that is $4).

Another observation is that despite its emphasis on paratransit service and compliance guidelines, the FTA/ADA does not establish suitable metrics or require reporting service performance metrics by RTAs on their demand response services (nor for that matter on their fixed route systems) unlike its expense and service operations reporting.

II. Demand Response, Paratransit Services in Massachusetts

In FY09, Massachusetts spent over $200 million dollars for ADA compliant, paratransit services spread across the 16 RTAs that service the state. Since there is no direct federal funding for paratransit services, the state funds these activities. Those activities provided through HST are subsidized, in part, by Medicaid.

Figure 1: On-demand paratransit services.
Source: HST FY10 Annual Report/NTD Database

Massachusetts Regional Transit Authorities (RTA)	HST Related		RTA Related		Total	
	Trips (FY10)	Expenses ($ Millions)	Trips	Expenses ($ Millions)	Trips	Expenses ($ Millions)
Berkshire Regional Transit Authority (BRTA)	**131,008**	**$3.7**	**95,018**	**$1.3**	**226,026**	**$5.0**
Franklin Regional Transit Authority (FRTA)	**79,680**	**2.6**			**79,680**	**2.6**
Montachusett Area Regional Transit (MART)	**3,893,579**	**72.1**	**385,487**	**6.2**	**4,279,066**	**78.7**
Cape Ann Transportation Authority (CATA)	**326,700**	**7.4**	**32,850**	**0.8**	**359,550**	**8.2**
Greater Attleboro-Taunton Regional Authority (GATRA)	**924,565**	**20.6**	**217,174**	**4.3**	**1,141,739**	**24.9**
Cape Cod Regional Transit Authority (CCRTA)	**192,646**	**4.9**	**390,745**	**7.3**	**583,391**	**12.2**
Brockton Area Transit (BAT)			**184,548**	**3.4**	**184,548**	**3.4**
Lowell Regional Transit Authority (LRTA)			**50,186**	**1.6**	**50,186**	**1.6**
Mass. Bay Transit Authority (MBTA)			**1,983,489**	**65.9**	**1,983,489**	**65.9**
Merrimack Valley Regional Transit Authority (MVRTA)			**63,437**	**1.6**	**63,437**	**1.8**
MetroWest Regional Transit Authority (MWRTA)			**40,091**	**1.3**	**40,091**	**1.3**
Pioneer Valley Transit Authority (PVTA)			**308,369**	**7.9**	**308,369**	**7.9**
Southeastern Region Transit Authority (SRTA)			**79,463**	**2.6**	**79,463**	**2.6**
Worcester Regional Transit Authority (WRTA)			**112,636**	**4.6**	**112,636**	**4.6**
Total	**5,548,178**	**$105.0**	**3,943,493**	**$108.7**	**9,491,671**	**$220,867,412**

Although they have a reporting relationship to MassDOT, each RTA operates independently, providing its local services as required. As shown in the chart above, six RTAs act as brokers administering purchased paratransit services through the EOHHS/HST program. Of all the paratransit services provided by the RTAs, the largest and longest servicing on-demand is the MBTA administered program called The RIDE.

III. The RIDE Program

Even prior to the passage of the Americans with Disabilities Act in 1990, the MBTA undertook a program to provide transportation services to the disabled. Begun in 1978, The RIDE initially serviced the town of Brookline and then spread rapidly to the other areas of Greater Boston. The RIDE operates now in 60 cities and towns in and around Boston, encompassing a service area of almost 700 square miles, providing almost two million trips annually to its more than 68,000 active registrants. The RIDE is currently served by three vendors (down from four in the previous contract), each of which been involved with the program for 10 years or longer. The current contract, awarded for the five year period between July 1, 2009 and June 30, 2014:

Figure 2: RIDE Service Providers - Current Contract (5 years ending June 30, 2014).

Source: Office of the State Auditor

Service Area	Service Provider	Contract Cap (FY 2010-2014)
North Region	Greater Lynn Senior Services (GLSS), non-profit	$ 137,511,719
Northwest Region	Veterans Transportation Services (VTS), private	205,766,973
South/Southwest	Thompson Transit/YCN Transportation joint venture (JV), private	163,130,869
Total		506,409,561

As should be noted, in addition to providing RIDE services for approximately $100 million annually, the MBTA has invested hundreds of millions of dollars over the past 30 years to make its fixed route systems ADA accessible as well.

RIDE Service Cost

The most recent contract award represents an 87% increase over the prior contract period due to rising demand and escalating labor, fuel and other administrative costs to support the RIDE program. Evaluating the program on an annual cost per trip basis, the program has increased 35%, the increase associated with FY10, the first year of the new contract period.

Figure 3: RIDE Service Growth 2006-2010.

Source: MBTA/NTD Database

Fiscal Year ending June 30th	2006	2007	2008	2009	2010	% Growth 2004-2010
Registrants	64,000	65,000	66,000	67,000	68,000	6.3%
Trips Provided (Incl. PCAs)	1,458,824	1,584,382	1,764,113	1,983,489	2,095,997	43.7%
Service Cost	$45,188,002	$49,820,245	$54,720,154	$62,343,208	$87,675,071	94.0%
Cost per Trip	$30.98	$31.44	$31.02	$31.43	$41.83	35.0%

The significant increase in program expenses and cost per trip in FY2010, the first year of the new 5-year contract award, are even more alarming considering the very weak economic environment during 2009/2010. As noted by MBTA officials despite it being less than 10% of the MBTA annual budget, the RIDE truly deserves its status as a "budget buster".

Analyzing the figures a bit further, the numbers presented by MBTA present an even greater cost problem than this table would suggest. The ridership presented by the MBTA (and submitted to the FTA/NTD) include the presence of personal care attendants (PCAs) and other health assistants which the RIDE is obligated to provide free transport services under the terms of the ADA. However, these additional people (now 15% of the total ridership) are not charged a fare (although the vendors incur a penalty for the late pickup/drop-off of PCAs), nor is the MBTA charged by the vendors for this additional support. Since the presence of a PCA is directly related to transporting a registered RIDE customer and thus a "cost driver," the number of PCAs must be excluded from the total ridership to get a true reading of the cost per trip. In the most recent fiscal year 2010, when one evaluates the three vendor invoices submitted for reimbursement excluding the "PCA effect", the true operating cost to the MBTA is $47.28 per trip. Also, **considering that the MBTA directly provides most of the vehicles used by the RIDE service providers, the true "all-in" cost to taxpayers is now over $50 per trip.**

Figure 4: RIDE Service Cost (Fiscal Year Ending June 30, 2010)

Source: MBTA/NTD

FY2010	GLSS	VTS	JV	Total
Billable Trips	571,593	704,165	529,645	1,805,403
Submitted Invoices	$24,042,421	$36,275,785	$25,040,074	$85,358,280
Invoiced Cost per Trip	$42.06	$51.52	$47.28	$47.28

RIDE Service Quality

The highest priorities of any transportation system are to provide safe and reliable transit to its passengers and in that regard the RIDE has delivered. According to the MBTA, service quality is excellent. Service performance as measured by on-time performance (pick-up/drop-off within the MBTA mandated 15 minute service window) in the most recent year available (FY2010), was 94%. When one considers the traffic and weather conditions vendors must endure. Accident-free and complaint-free performance measures were even better, at 99.8% and 99.8%, respectively. Prior operating periods were not evaluated for service quality so this report was unable to evaluate the true impact of the new penalties/incentives in the recent contract. Vendors have claimed that these new penalties added to program cost proposals under the new current five year contract because vendors could not predict the financial risks posed by these new contract/performance terms. Unfortunately, the effort to improve service quality has resulted in an "unaffordable and unsustainable" "limousine-like" service based on economic trends and serious federal, state, and MBTA budget constraints.

The RIDE Procurement Policy

From the beginning of the RIDE program, the MBTA had opted to administer this program through vendors rather than to provide services directly, recognizing that its operating strengths lay in developing and servicing fixed route transportation systems. As the RIDE program has evolved and grown, so too has its complexity. The MBTA's Office of Transportation Access (OTA) has been directly responsible for the RIDE program's administration and under the OTA the RIDE has become nationally recognized and acknowledged by the FTA as one of the finest paratransit operations in the country. This has increased the program's visibility and influence within the Greater Boston community which in turn has increased demand, especially in recent years as the increasing cost of private transportation, an aging population and local budget constraints have pushed ridership higher. To meet rising demand and slow the cost escalation, MBTA provides over 70% of the RIDE fleet (sedans, specialized vans) to its vendors as well as call center optimization software/hardware and continues to seek improved service quality through the imposition of service penalties and incentives and other contract provisioning. However the escalating program costs have pushed the MBTA to streamline its paratransit efforts most recently in 2009, when the MBTA ceded the greater Framingham/Natick area support to the newly created Metro-West Regional Transportation Authority (MWRTA) and combined the South and Southwest service areas reducing the number of RIDE vendors from four to three.

While this strategy has reduced administrative support costs, it has created a virtual service monopoly for the three remaining vendors. Other national transportation companies bidding the service in most recent contract solicitations in 2004/2009 could not compete with these local providers or withdrew their bids due to the contract terms and conditions. Although the MBTA has sought to mitigate the escalating operating costs by providing many of the components the vendors use to provide the service (sedans, specialized lift assisted vans, mobile computers, scheduling systems etc.) and imposing a long list of penalties to maintain service quality and exercise some expense "claw back", RIDE costs have continued to escalate significantly, now exceeding $50 per trip (with associated vehicle depreciation and financing costs) in the most current calendar year.

Vendor Penalties and Incentives

To maintain and improve service quality (and engage in some expense "claw back"), the MBTA has instituted a significant number of penalties or infractions on its RIDE vendors. While the vendors have agreed generally that performance has improved, the operational offset is that vendors have had to increase the number of drivers, available cars/vans and associated administrative overhead to comply with the contract provisions and avoid these penalties, increasing the overall cost of the RIDE program. While the penalties are generally acknowledged by vendors as having helped improve RIDE service quality, they do not represent a significant cost recovery (<1%) against the total costs of the program. Penalty avoidance, however, has increased overall service delivery costs.

Figure 5: The RIDE Contract Vendor Incentives and Penalties.
Source: RIDE RFP

Incentives		Penalties/Infractions	
a.	No infractions in monthly period	b.	Missed Trip
c.	100% of complement of personnel for entire year	e.	Late Trip (pickup>30 minutes late)
d.	No "At-Fault" accidents	f.	Late drop-off (>10 minutes late)
		g.	At-Fault accidents
		h.	Failure to achieve >90% on time (within 20 minute window)
		i.	Lift or ramp failure
		j.	Air-conditioning/heater failure
		k.	Uniform policy infraction
		l.	Service interruption/failure – toll free communication line
		m.	Vehicle communication interruption/failure
		n.	Computer system failure
		o.	Failure to respond to complaints
		p.	Failure to report an accident
		q.	Complaints exceeding .2% of trips
		r.	Total trips with travel times> 60 minutes exceeding 2% of all trips
		s.	Vacancy in "key senior staff" positions longer than 60 days
		t.	Failure to mention telephone performance standard
		u.	Failure to maintain 100% of proposed complement of personnel for each position during entire month

IV. Competitive Regional Transit Authority Analysis

Through the auspices of the Federal Transit Administration, a publicly accessible National Transportation Database (NTD) exists to provide detailed cost and operational data on all regional transportation authorities operating in the United States. Each fiscal year following the close of business (typically June 30th), all local RTAs are required to submit a report detailing various operating statistics covering public transportation services including paratransit or as it's commonly designated, demand response programs.

For 2009, the latest year available on-line, it appears that the problem of providing cost-effective demand response systems is endemic throughout the country. As shown in the table below, many large metropolitan areas are experiencing rising demand and rising costs to provide these services.

Figure 6: Largest U.S. Demand Response Programs.
Source: NTD - FY 2009, except as noted

State	Agency	Total Unlinked Trips (MM)	Operating Cost per Unlinked Trip	Operating Cost per Passenger Mile	Avg. Trip Length
CA	Access Services	2.8	$31.40	$2.46	12.8
	Orange County TA	1.5	$25.53	$2.52	10.1
DC	WMATA	2.1	$41.07	$5.04	8.2
FL	MDT (Miami-Dade)	1.6	$28.69	$2.65	10.8
IL	Pace (Chicago)	2.0	$66.84	$9.09	7.4
MD	MTA	1.3	$33.63	$4.68	7.2
NJ	NJ Transit	4.0	$17.35	$2.51	6.9
NY	NYC Transit	5.9	$74.45	$6.64	11.2
PA	SEPTA	1.8	$27.51	$4.37	6.3
	Port Authority (Alleghany)	1.7	$19.93	$2.71	7.4
TX	Metro (Houston)	1.5	$23.84	$2.12	11.3
MA (FY2009)	MBTA	2.0	$33.22	$2.76	12.0
MA (FY2010)	MBTA (All Purchased DR Services - NTD)	2.1	$41.65	$3.46	12.0
MA (FY2010)	MBTA (Excl. PCAs)	1.8	$47.28	-	-
MA (FY2011 – 6 mos. through Dec. 2010)	MBTA (RIDE only)	1.0	$48.40 (approx.)	-	-

Of note, neither the NTD nor the RIDE vendor information (shown above) include depreciation expenses for vehicles purchased specifically for use in demand response services or any associated financing expense. As of April 2011, the MBTA owns a fleet of 572 sedans and lift assisted vans (76% of the total fleet) which it provides to its three vendors for servicing RIDE customers (to support increased demand for RIDE services, additional vehicles were purchased with federal economic stimulus funding)). At an average cost of approximately $40,000 per vehicle and an expected life of between six and seven years, unreported depreciation expense would represent nearly $2 cost per trip (approximately) in depreciation and related interest expense.

One interesting observation of the reported NTD information is the experience of the New Jersey (NJ) Transit paratransit system, Access Link. Despite its proximity to New York and Philadelphia, Access Link has been able to sustain a lower cost demand response operation ($17.35 per trip vs. $48.40 per trip for the RIDE, amenable to the HST brokerage model, primarily through a curb-to-curb service policy with a service area within a three-quarter mile radius to its fixed route system, as required under ADA. It also maintains a centralized call center and a single phone number through which any eligible NJ citizen may receive paratransit services.

V. EOHHS/HST Brokerage Transportation Services

Almost in competition with the RIDE but operating outside the public eye, the Massachusetts' Executive Office of Health and Human Services (EOHHS) has provided health related transportation services to support its programs since 2001. These services are managed by the Human Services Transportation (HST) Office and support three EOHHS agencies for the following programs:

- MassHealth (Medicaid) – demand response, non-emergency medical transportation system (PT-1) analogous to "The RIDE" program.
- MassHealth funded Day Habilitation program (DayHab).
- Department of Developmental Services (DDS) – supports employment workshops/residential needs.
- Department of Public Health (DPH) – early intervention programs for children and families.

Over 5.5 million trips were provided in FY2010, an increase of 6.5% from FY09, with 2.2 million PT-1 trips spread across the six RTAs with HST contracts. Total consumers served totaled 36,387 statewide. [The MBTA has a similar number of "active" customers of the RIDE.]

To provide a cost effective service, HST employs a brokerage business model, developed in partnership with MassDOT, in which several state RTAs are contracted to provide transportation services for these medical programs across nine geographic areas covering the entire state. Rather than the RIDE single outsourced vendor supplying demand response transportation services in a given geography, the broker RTA contracts with hundreds of individually qualified vendors to provide similar, ADA compliant services. While not specifically identified in its annual report, HST brokerage operates under a curb-to-curb service policy. As of FY2010, there were 375 local transportation providers supporting the HST brokerage system representing a fleet of 2,400 vehicles and over 2,700 drivers.

Over the years the brokerage configuration has evolved from eight brokers in nine areas to the current configuration of six brokers with MART, the largest broker, providing 70% of all statewide HST services in FY2010.

In FY2010, the HST transportation system spent $111.3 million, providing 5.5 million trips, of which 2.2 million or 40% were demand response, PT-1 related trips. The six designated broker RTA and their service areas as follows: (Note: RIDE service area vendors serving the same HST brokerage areas are identified in parenthesis).

Figure 7: Regional Transportation Authorities in the HST Brokerage System

Regional Transportation Authority	Service Area	Trips Provided (All types- FY10	Trips Provided (PT-1 only FY10)
Berkshire Regional Transit Authority (BRTA)	HST-1 Western MA (none)	131,008	NA
Franklin Regional Transit Authority (FRTA)	HST-2 Western MA (none)	79,680	NA
Montachusett Area Regional Transit (MART)	HST-3,4,5 and 9 Central MA, Greater Boston (JV, GLSS, VTS)	3,893,579	NA
Cape Ann Transportation Authority (CATA)	HST6 - North Shore (GLSS)	326,700	NA
Greater Attleboro-Taunton Regional Authority (GATRA)	HST-7 South (JV)	924,565	NA
Cape Cod Regional Transit Authority (CCRTA)	HST-8 Cape Cod (none)	192,646	NA
Total		5,548,178	2,187,149

In addition to the PT-1 and other health related services provided to MassHealth, the broker RTAs along with the other nine RTAs provide direct paratransit, demand response services themselves (usually fixed route, CTC services) to the their local populations. In total, demand response spending across the state totals over $200 million annually.

In FY2010, the HST system spent approximately $111.3 million, including broker management costs or $20.06 per trip, a net decrease of 2% per trip from the previous year. **Within the HST service area covering greater Boston, MART's brokerage model combined with shorter trip lengths, was able to deliver cost per trip performance of $12 per trip --- $35 per trip lower than the RIDE!**

Figure 8: Brokerage RTA PT-1 Cost per Trip – FY2010.

Source – HST Annual Report

Service Area	Broker RTA	PT-1 Trips Provided (FY10)	Direct Cost per Trip	Administrative Cost per Trip	Direct Cost per Trip
HST-1 Western MA (none)	**BRTA**	36,273	$41.66	$2.04	$43.70
HST-2 Western MA (none)	**FRTA**	33,889	27.58	1.97	29.55
HST-3	**MART**	221,895	12.89	1.00	13.89
HST-4	**MART**	152,330	12.38	1.00	13.38
HST-5	**MART**	219,726	13.41	1.00	14.41
HST6 - North Shore (GLSS)	**CATA**	119,306	25.00	1.25	26.25
HST-7 South (JV)	**GATRA**	433,417	21.90	1.35	23.25
HST-8 Cape Cod (none)	**CCRTA**	49,302	33.44	1.35	34.79
HST-9 (Greater Boston)	**MART**	921,011	9.93	1.78	11.71
	Total	2,187,149	15.59	1.14	16.73

What is even more telling about the competitive aspect of the brokerage model is that while RIDE costs under the new contract in FY09/FY10 increased over 30%, HST was able to get a 6.5% decrease from its vendor base.

Figure 9: HST PT-1 Service Growth and Cost FY2006-2010.

Source: HST Annual Report

Fiscal Year ending June 30th	2006	2007	2008	2009	2010	% Growth (Reduction) 2004-2010
Trips Provided (Incl. PCAs)	1,673,008	1,799,349	2,005,112	2,116,882	2,187,149	30.7%
Direct Cost per Trip	$16.67	$17.23	$17.76	$17.51	$15.59	(6.5%)

Brokerage RTA Service Quality

While the HST office admits to an evolving performance and reporting system, especially for its PT-1 service, that is more anecdotal and not as sophisticated as the MBTA, lacking the on-board computers on its vendor-supplied vehicles to monitor precise pickup and delivery times, service quality is also excellent, performance akin to a fixed route system.

Figure 10: HST Service Quality Metrics – FY2010.
Source: HST Annual Report

Consumer Trips (FY2010)	5,548,178
Completed On-time Trips (%)	99.9%
Accident-free Trips (%)	99.8%
Complaint-free Trips (%)	99.8%

It is the opinion of this consultant that service quality for HST brokerage system as it applies to the PT-1 component of its demand response services is very similar to that of the RIDE vendor's performance.

Brokerage Business Model

In the HST brokerage model, each contracted RTA must comply with HST's contract terms and conditions over the five year length of the contract, similar to the RIDE contracting process. The broker RTA then subcontracts with local transportation companies to provide transport services in its designated service area. These local companies must be approved/qualified by the broker RTA and undergo CORI checks and other inspections to ensure compliance with state and federal regulations, including ADA. Once approved, each company provides/maintains service quotes regularly for the routes required by RTA customers. In the case of paratransit/demand response services, these quotes (which can be on a fixed fee or per mile basis) are posted in real-time to the HST's call center system so all suppliers can see the quotes in a true competitive environment.

When a service call is received at the RTAs call center operation, the caller's identity and eligibility is verified by the operator using the same system as well as any special needs (nature of disability, need for personal care assistant etc.) as specified in the individual's PT-1 request. After eligibility is established, the negotiated pick-up and drop-off times (within a 15 minute service window) are established based on the service appointment. Once confirmed, the trip requirements are consolidated with other service requests to facilitate shared rides, when possible. The call center operator assigns the request to a vendor servicing that route based on the cost quotes provided. The computer system displays a sorted list of vendors to choose from and the stated service policy is to select the lowest cost provider that meets customer needs. A consolidated list of riders/itineraries needed is generated for the next day's needs and available to the vendor along with any special needs. When service has been completed, the vendor reports each day's work

back to the brokerage, where each vendor's total invoiced amount is determined, facilitating payment and minimizing the administrative burden the local transportation company incurs.

Unlike the RIDE program, the broker RTA only pays for the direct service provided. The vendor must include in its quote all its costs (and profit) needed to support its own business model including labor, maintenance, gas, administration and depreciation. During the economic recession period of 2009/10, while RIDE costs increased 33% on a per trip basis between the old and new contracts, the HST brokerage model delivered a 2% cost reduction.

Cost and Service Performance

The data is based on contract performance standards and varies depending on the agency/program model. In general there is a 15-minute service window for consumer pick-ups and drop-offs with no allowance for being late to the scheduled service. This data is submitted to the HST Office monthly by the broker RTAs and is based on incidents/complaints received by the broker. In addition the brokers conduct unannounced on-site inspections to monitor performance including on-time performance and in FY10 there were an average of 24 inspections taking place every weekday throughout the state. While this data is a good indicator of performance for the EOHHS transportation system it is not absolute (unreported incidents are not captured) and HST is still refining its ongoing performance and reporting capabilities.

Paratransit Program Eligibility

As demand for paratransit services has increased, program eligibility has become an increasing area of concern. The U.S. DOT/FTA's ADA regulations provide for establishing eligibility based on the following:

- Are prevented from traveling to or from fixed route stops and stations;
- Are unable to use a bus route or station for a particular trip because the route or station is not accessible;
- Are unable to "navigate the systems" (e.g. cognitive disability including disorientation, lack problem solving skills, lack community safety skills or other skills needed to use a transit system).

The RIDE eligibility determination process is also highly regulated. Any eligibility process must include:

- Determination within 21 days of application (interim service otherwise);
- Written notice of determination and if denied, specific explanations for the decision and description of the appeals process;
- If appealed, appellants must be heard in person and may have others provide information on their behalf, as long as there is a "separation of authority" between those providing the initial determination and the appeal;

- No residency requirement.

The MBTA's OTA department administers the paperwork-intensive process including reviewing a four page self-assessment and an assessment completed by a licensed health care professional. Once received and processed, an application is reviewed using an in-house panel within 21 calendar days, as required by ADA. In FY2010, the OTA reviewed/processed over 18,600 service applications, or 1500 per month. **As such, the MBTA's RIDE is one of the only major metropolitan transit systems not performing in-house evaluations under the assumption that the current review process is more cost effective and efficient than using outside consultants.**

The EOHHS/HST conducts a similar assessment process for its paratransit services although some RTAs provide an in-person assessment as well.

VI. Findings

Business Model Differences

As noted earlier, the three priorities for any public transportation system should be safety, dependability and affordability. While both the RIDE and the HST brokerage model exhibit similar on-time and accident-free/complaint-free performance from their respective paratransit operations, the cost differences are significant and in the case of the MBTA, not affordable. Without determining the precise impact of the differences in their respective services, we have summarized the major differences between the two business models that contribute to higher costs.

Figure 11: RIDE/HST Business Model Differences

1. **Greater competition** - larger, more available vehicle fleet (more qualified vendors competing on a ride by ride basis). Due to the current RIDE service requirements; other large transportation companies can't compete with the few, entrenched local bidders.

2. **"Curb to Curb" vs. "Door to Door" service policy** – while the RIDE is exclusively a DTD service, the HST program CTC system accommodates individuals requiring individual assistance. Consider Door to Station for some customers.

3. **Operating window** – ADA requires a 30 minute window around pick-up and delivery with each RIDE participant not allowed to travel longer than one hour. This service policy often manifests itself into fewer trips per hour that can be delivered, contributing to reduced efficiencies and higher costs for extra cars and drivers to comply within the service window. Having a curb-to-curb service would contribute to higher service efficiencies and overall lower costs.

4. **Efficient fleet usage** - the MBTA maintains a fleet of over 700 sedans and lift-enabled vans, which must be purchased, serviced, secured, replaced and financed at taxpayer expense.

5. **Centralized call center operations** - management administration for scheduling and dispatching.

6. **Continuous vs. discrete procurement process** – The MBTA enters into vendor contacts for five years. In the brokerage model, vendors bid monthly with established guidelines for their service rates.

7. **Advanced IT development and design** – the brokerage systems use more advanced solutions, which facilitate vendor coordination, billing and payment activities. The current RIDE vendors are hampered in upgrading their existing systems due to current cost concerns at the MBTA.

8. **Lower overall program administrative cost**. For example, the MBTA contract calls for vendors to garage their RIDE fleet indoors, incurring higher operating, security, and liability costs. The vendors supplying the HST brokers incur these costs themselves as well as any profit and administrative cost they incur.

9. **Medicaid reimbursement** – whereas HST administers the Medicaid related trips which are reimbursed; no such tracking nor reimbursement exists for RIDE sponsored visits to health care providers.

The effect of these business model differences is significant when applied to the two million rides the RIDE provides annually. If we only apply the FY10 difference between the RIDE and the average state-wide brokerage RTA cost per trip (as below), the $21.77 per trip difference applied against two million trips would result in a $45.6 million savings in annual operating costs. If one uses the HST Service Area 9 which comprises much of the service area covered by The RIDE but at a cost of only $11 per trip (including administrative costs), then the potential savings offered by the brokerage model would be even greater, possibly as much as $60 million in annual cost savings and up to $300 million over a standard five year contract. It seems that these savings could be delivered without compromising customer safety and service reliability.

Figure 12: Potential Cost Savings Brokerage Model vs. the RIDE FY2006-FY2010

	FY06	FY07	FY08	FY09	FY10
The RIDE	$30.98	$31.44	$31.02	$31.43	$41.83
HST Brokerage (All RTAs)	$17.45	$18.02	$18.53	$20.54	$20.06
Difference	$13.53	$13.42	$12.49	$10.89	$21.77
RIDE Trips (Includes PCAs)	1,458,824	1,584,382	1,764,113	1,983,489	2,095,997
Potential Savings ($MM)	$19.7 million	$21.3 million	$22.0 million	$21.6 million	$45.6 million

VII. Recommendations

With two ADA compliant paratransit systems operating side by side in the same geographies servicing similar clientele, it seems particularly wasteful to the taxpayers of Massachusetts to maintain both. When one considers that one system, the EOHHS/HST brokerage model, delivers an equivalent level of service quality for 40% or less of the current RIDE cost per trip, the decision to unify paratransit operations under a single banner using a common brokerage model to control the rampant growth in expenses is compelling. To expedite and maximize the paratransit cost savings across the entire State, the following recommendations should be pursued:

Figure 13: Review Recommendations

1. MassDOT and EOHHS should work jointly to identify the possible consolidation of the various paratransit services operating within the state. To maximize cost savings, a new business model for supplying paratransit services is needed.

2. The state should investigate adopting, as a new business model, a uniform statewide brokerage business system to capture the cost benefits of a competitive model.

3. Service policies should be designated as a “curb to curb” service with exceptions as prescribed in a customer’s eligibility determination.

4. A project manager should be appointed to facilitate further study, communications between the MBTA, EOHHS, and other stakeholders and implementation of a new business model and other recommended changes (and others that the commission may have). The project manager could also identify the costs and savings associated with the adoption of difference business practices.

5. Consistent with the consolidation of paratransit operations, statewide call center operations should be centralized with a common phone number established. Scheduling and dispatching should continue to operate locally. Centralizing call center operations will also facilitate better screening of RIDE customers.

6. Eligibility procedures for qualifying RIDE participants and personal care assistants (PCA) should be tightened across the area, including limiting the health professionals that may grant eligibility as well as considering bringing qualification in-house.

There are enormous challenges to merging paratransit services. The RIDE has a long tradition and has tremendous visibility as its recognizable yellow banded, sedans and cars travel the streets of Greater Boston. As has been pointed out earlier, the goals of public transportation should be safety, reliability and affordability. While the first two goals have met or exceeded expectations, the RIDE It is simply no longer an affordable business model in its current form in a socio-economic environment of rising expenses, budget deficits, an aging population base and pressure on local towns and communities looking for ways to offset revenue losses by reducing their transportation budgets.

The MBTA has endeavored over the years to improve service quality and should be commended for that effort. Particularly in recent years, the MBTA has also recognized the need to reign in RIDE costs and has commissioned many studies to assist in this effort. Unfortunately while expenses can be squeezed from "tuning" the existing system, the RIDE program suffers from an outdated business model. With modern IT/communications technology, scalable cloud based systems are creating new opportunities to reduce cost and increase operating flexibility from older brick and mortar approaches, even in a business as mature as transportation.

The brokerage system, while not necessarily a new paradigm in paratransit operations, benefits greatly not only through the application of modern scheduling/call center systems but also the integration of these systems with all the aspects of managing the "business". Some aspects of the traditional model continue to be a paperwork nightmare but because of the brokerage system integration including quote administration and back office support, these systems provide a much more end-to-end solution that is infinitely scalable with modest investment.

Finally, the paratransit transportation is a people services business, especially important to the ADA eligible community who may depend on it as a primary means of transport. Federal and state regulatory guidelines require that this community have a transportation system that respects their needs and provides services that are safe and reliable. However, the system shouldn't guarantee different economic standards of care, which is unavailable or unaffordable for other customers of the different forms of Mass Transit.