



## 2 RTA PROFILES

### OVERVIEW

Regional transit authorities (RTAs) in Massachusetts serve a total of 262 communities, provide over 29 million trips annually and have a combined annual budget of more than \$150 million. Within this large service network, there are 15 individual RTAs that operate a unique set of services, which are intended to meet local and regional transportation needs. As part of understanding both the overall network of RTA services and each individual RTA, the study team prepared a series of RTA Profiles. The RTA Profiles were intended to provide a comprehensive overview of each of the RTAs, including their services, operations and performance. While comprehensive, the information and analysis presented in the RTA Profiles represents a single point in time; agencies are fluid and dynamic, thus this perspective will also change.

The RTA Profiles were created using a variety of available published information, including data reported to the National Transit Database (NTD) as well as information posted to agency websites and published in annual reports. The RTA Profiles also incorporated information collected as part of the study team interviews with RTA Administrators.

The RTA Profiles were laid out according to a consistent format that included an overview of each agency and the types of services operated. The profiles also included a detailed analysis of operating and productivity statistics, including historical trend data collected for the last ten years of operations. Operating and productivity statistics, including the trend analysis, primarily reflect data reported to NTD, ensuring a consistent data source was used across each agency. The only exception was in a handful of cases where the analysis identified anomalies in the data; in these cases the study team followed up directly with the RTA to investigate the findings and in some cases, revised data was provided. Draft RTA Profiles were shared with RTA Administrators and Advisory Committee members for their review and comment prior to finalizing the documents.

The RTA Profiles reflect the following outline:

- Service area
- Types of service
- Service levels
- Regional connectivity
- Major facilities
- Fares
- Ridership
- Fleet size
- Operating expenses and fare revenues
- 10-year trends:
  - Ridership
  - Revenue vehicle hours
  - Operating costs and fare revenue
  - Operating cost per passenger
  - Passengers per revenue vehicle hour
  - Operating cost per revenue vehicle
- Notable initiatives

## Berkshire Regional Transit Authority

The Berkshire Regional Transit Authority (BRTA) serves 22 towns and two cities in Berkshire County, in the westernmost part of Massachusetts, with rural fixed-route and demand responsive service. The fixed-route service, commonly known as the "B Bus" operates

12 towns in the RTA service area; remaining towns are served with demand response service. Most fixed-route service is focused in Pittsfield, BRTA's headquarters.

BRTA is the human service transportation (HST) broker for its service area, providing transportation throughout the commonwealth with most trips to Springfield, Worcester, and Boston medical facilities as their final destination.

### BRTA SERVICES

BRTA provides three types of services:

- Small Urban/Rural fixed-route service
- ADA complementary paratransit
- Demand response service for older adults and people with disabilities

BRTA fixed-route service is comprised of 14 local routes, 11 of which serve Pittsfield. Most buses run along major north-south routes, such as Routes 183, 20, 7 and 8. Local services generally operate from 5:45 am to 7:20 pm on weekdays and 7:15 am to 7:00 pm on Saturdays. Most service operates every 30 minutes on the weekdays and 60 minutes on Saturdays. Local service is not provided on Sundays and major holidays.

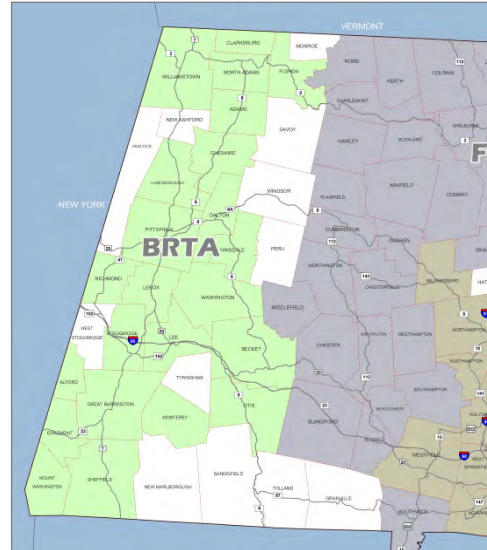
BRTA also works with member communities to provide local demand responsive service. This service, operated by the paratransit operator and local Council on Aging organizations, is also available to BRTA's member communities for older adults and persons with disabilities.

### BRTA REGIONAL CONNECTIONS

Most BRTA routes operate to and from the Joseph Scelsi Intermodal Transportation Center (ITC). Regional services operate from this hub and others:

- Peter Pan bus service is available from Great Barrington, Lee, Lenox, Pittsfield, Sheffield, Stockbridge, and Williamstown to Albany, Boston, New York, Providence, Springfield, and Worcester. Regional bus service to and from Pittsfield stops at the ITC daily.
- Amtrak service stops daily in Pittsfield via the Lake Shore Limited, which travels from Boston to Chicago.

BRTA Service Area



BRTA Route Map



## BRTA MAJOR FACILITIES

BRTA's major facility is the ITC, which opened in November 2004 after two years of construction and more than 20 years of planning. This center connects local bus and taxi services with intercity rail and bus services, and provides pedestrian access to the central business district in Pittsfield. BRTA's administrative offices are also housed in the ITC.

## BRTA FARES

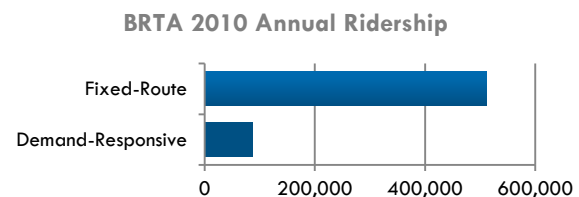
BRTA has a simple fare structure for its fixed-route service: \$1.25 per community/zone. Discounts are offered, including a 50% discount (60¢ fare) for senior citizens, registered disabled riders, and Medicare cardholders. Children aged 5 years or younger ride for free. Transfers are also free. A 20 zone pass is also available, and can be purchased from any bus driver, in person or by mail from the BRTA offices (saves 20¢ per ride).

BRTA also offers free fares on your birthday.

Starting with the 2011-2012 school year, a student pass program is available to all students through grade 12. The pass provides unlimited access to the BRTA fixed-route system for \$75 per season (fall, winter, and spring).

## BRTA 2010 RIDERSHIP

BRTA carried nearly 600,000 passengers in 2010. 85% of these passengers used fixed-route services and the remainder used demand-responsive. BRTA carried the sixth lowest volume of riders among Massachusetts RTAs and provided the fifth lowest amount of service in terms of vehicle hours.



## BRTA 2010 FLEET SIZE

In 2010, BRTA had 23 vehicles for fixed-route service and 55 vehicles for demand-responsive service. Compared to other RTAs, BRTA has the fifth lowest number of vehicles and the sixth largest demand-responsive fleet.

## BRTA 2010 OPERATING EXPENSES AND FARE REVENUES

BRTA's total 2010 operating expenses were \$5.2 million. Of this, \$4.3 million or 81% was for fixed-route service, and 19% was for demand-responsive service. As compared with the other RTA's, BRTA's annual operating costs were the fifth lowest; higher only than VTA, CATA, FRTA, and NRTA.

Fare revenue covers approximately 23% of BRTA's 2010 operating expenses. By type of service, fare revenues cover 17% of the operating costs associated with fixed-route service and 48% of demand-responsive operating costs. In 2010, BRTA collected the sixth lowest amount of fare revenue among RTAs and had the fifth highest farebox return ratio. For demand-responsive service, BRTA's farebox recovery ratio is the highest of all RTAs.

## BRTA EFFECTIVENESS AND TRENDS<sup>1</sup>

Over the past nine years for fixed-route service (data from 2001 is unreliable) and from 2006 - 2010 for demand-responsive (data from 2001 - 2005 is unreliable and/or not available, except for operating costs and fare revenues); BRTA's overall ridership has increased. Over the same period, service levels have

<sup>1</sup> All cost and revenue data is presented in actual year values. Costs and fare revenues for 2001 are in \$2001; operating costs and fare revenues for 2010 are in \$2010.



decreased for fixed-route and increased for demand-responsive. Costs have also increased for both services.

## BRTA Ridership

Between 2002 and 2010 for fixed-route service, ridership has remained steady. Meanwhile, demand-responsive ridership has decreased by 50% from 2006 to 2010. In 2009, demand-responsive ridership nearly doubled to 95,000 annual riders. This increase reflects a change in reporting rather than an increase in service provided. In 2009, the Council on Aging service providers began reporting all trips provided, including trips provided on Mobility Assistance Program (MAP) vehicles, a practice that changed in 2009. After this spike, ridership slightly dipped in 2010. Part of the change in ridership is also attributable to a loss of funding for transportation to job site program in 2010.

## BRTA Revenue Vehicle Hours

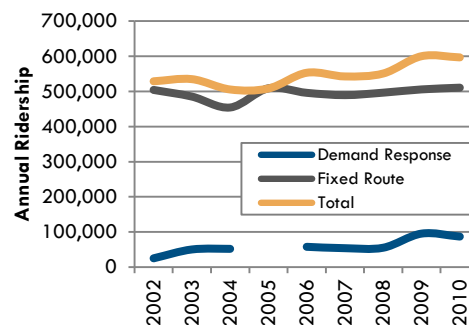
Since 2002, BRTA's fixed-route service levels, as measured in revenue vehicle service hours, decreased modestly by 7%. Demand-responsive hours increased modestly by 9%. The change in the service levels is reflected in the service mix. In 2006, demand-responsive service accounted for 47% of BRTA's service hours, by 2010 it accounted for 52%.

## BRTA Operating Costs and Fare Revenue

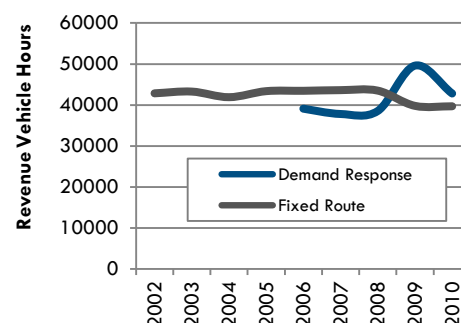
BRTA's operating costs increased from \$3.8 million in 2002 to \$5.2 million in 2010. This represents an increase of 37% over 9 years, or an average of 5% per year. Cost increases are within expectations and account for increases in fuel and health insurance costs, plus the additional service. Both fixed-route costs and demand-responsive costs increased: 48% and 4%, respectively. Higher percentage increases for fixed-route reflect growth off of a smaller base.

Fare revenues increased over the same period, and grew faster than operating costs. Fare revenue generated by fixed-route services grew by 54%, and fare revenue generated by demand-responsive services decreased by 52%. The data shows fluctuations in operating cost per passenger for demand responsive service, especially for the past few years; this variation reflects changes in reporting practices (2009) and loss of funding that supported some riders (2010).

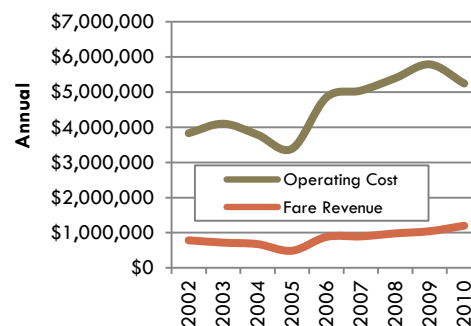
BRTA Ridership Trends



BRTA Vehicle Service Hour Trends



BRTA Operating Cost and Farebox Revenue





## BRTA Operating Cost per Passenger

Between 2002 and 2010, BRTA's operating cost per passenger for fixed-route service increased from \$5.74 to \$8.36, or by 46%. From 2006 to 2010, BRTA's operating cost per passenger decreased for demand-responsive service, from \$15.40 to \$11.29, or by 27%. In 2010, BRTA's operating cost per passenger was seventh highest of all RTAs.

## BRTA Passengers per Revenue Vehicle Hour

Between 2002 and 2010, BRTA decreased the amount of fixed-route service provided. Ridership, however, remained steady, and thus passengers per revenue hour increased slightly, from 11.8 in 2002 to 12.9 in 2010, or an increase of 9%.

For demand-responsive service, BRTA decreased the hours of service provided by 9% (from 2006 to 2010) and experienced substantial ridership increases over the same time. Passengers per revenue hour then increased from 1.5 in 2006 to 2.0 in 2010.

## BRTA Operating Cost per Revenue Vehicle Hour

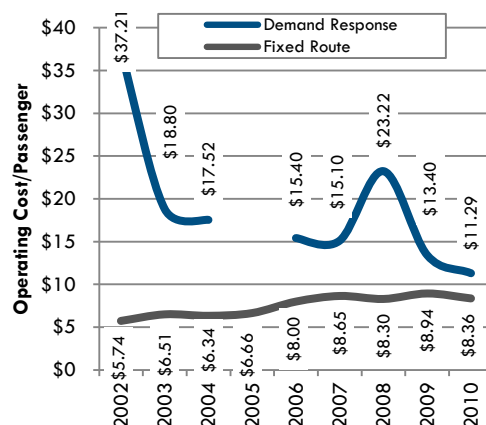
Between 2002 and 2010, BRTA's fixed-route operating costs increased an average of 5% per year. Operating cost by service type, however, vary considerably. Fixed-route operating cost per service hour increased by 48% since 2002, whereas demand-responsive costs have increased since 2006 by 10%.

Compared to other RTAs, BRTA has the third highest operating cost per hour for fixed-route service (only lower than MART and WRTA), and the lowest operating cost per hour for demand-responsive.

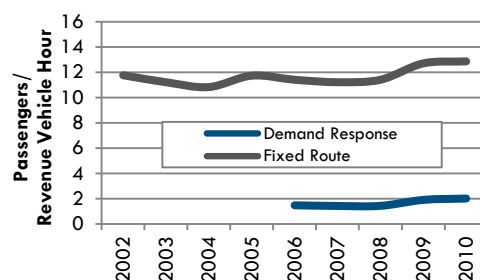
## BRTA KEY FACTS/NOTABLE INITIATIVES

- The Joseph Scelsi ITC not only provides connections between local bus, intercity bus and rail, it also houses several classrooms for the Berkshire Community College and Mass College of Liberal Arts joint venture. Currently, some 2,200 students use the building.
- Recently launched a rebranding campaign "new and better BRTA" with new maps, schedules and marketing information.
- Over the past few years BRTA worked to "right size" its fleets so that it has smaller vehicles, which the agency feels is more appropriate for much of its rural service area.
- Implemented Intelligent Transportation System containing GPS vehicle locators on fixed-route vehicles, depot monitors for select high traffic locations, "Where's my Ride" smart phone and texting capabilities/application.
- BRTA has actively pursued several federal grants, including a Livability Initiative and State of Good Repair Initiative to help expand the RTA's Intelligent Transportation System capabilities as well as other capital programs.

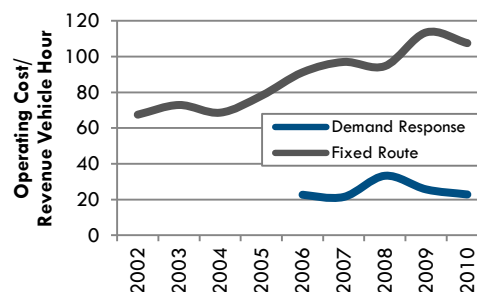
BRTA Operating Cost per Passenger Trends



BRTA Passengers per Revenue Vehicle Hour Trends



BRTA Operating Cost per Revenue Vehicle Hour Trends







## Brockton Area Transit Authority

The Brockton Area Transit Authority (BAT) serves 10 communities in the Brockton area. The majority of service is focused on downtown Brockton; in addition, connections are provided to regional services in Brockton, Stoughton, and Boston (Ashmont). BAT provides service to all communities in its service area.

### BAT SERVICES

BAT provides a number of different types of services:

- Fixed-Route
  - Local
  - Ashmont
  - Deviated Fixed Tour
- Demand-Response
  - ADA complementary paratransit

Most BAT service consists of local routes. These include 13 fixed-routes, one deviated fixed tour, and one route to the Dorchester Ashmont station.

Local services generally operate from 6:00 am to 9:00 pm on weekdays, 7:00 am to 9:00 pm on Saturdays, and 11:30 am to 6:30 pm on Sundays. BAT's Ashmont route operates to and from the MBTA's Ashmont Red Line Station in Boston, and operates from 4:50 am to 11:25 pm on weekdays and 5:05 am to 10:45 pm on Saturdays. Most service operates every 20 to 45 minutes.

Paratransit service operates the same hours as local service and is available only for senior and disabled riders.

### BAT REGIONAL CONNECTIONS

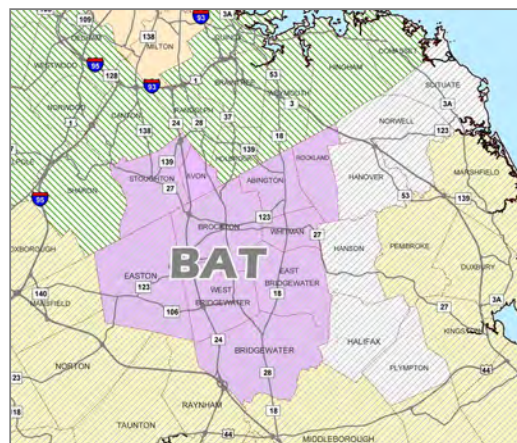
BAT provides a large number of regional connections. These include:

- Most service operates to and from BAT's Intermodal Transportation Center (BAT Centre), which is in downtown Brockton adjacent to the Brockton Commuter Rail Station on the MBTA's Middleborough/Lakeville Line. As a result, excellent connections are provided with commuter rail.
- Two routes serve Montello Station and one route serves Campello Station, both of which are also on the Middleborough/Lakeville Line.
- One route provides service to Stoughton Station on the Stoughton Line.
- One route provides connections to Ashmont Station on the MBTA's Red Line.
- One route connects with MBTA local service in Braintree and Quincy.

### BAT MAJOR FACILITIES

As described above, most service operates to and from the BAT Centre, which is BAT's major passenger facility, parking garage and administration facility. Other major public transit facilities are the MBTA's Montello, Brockton, and Campello Stations on the Middleborough/Lakeville Line.

BAT Service Area



BAT Route Map





## BAT FARES

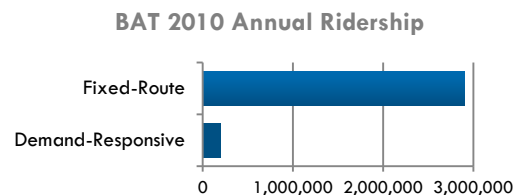
BAT has three basic fare structures for its three primary types of service:

- Local (regular fixed-route, shuttle service, and Flex service): \$1.25
- Ashmont: \$2.00
- Paratransit: \$2.50 within one community; \$3.50 between communities; \$7.50 to major medical facilities in Boston

A variety of discounts are provided for local and Ashmont services. These include a 50% discount for seniors, disabled riders, and children between 5 and 11, and no fare for accompanied children under 5. Free transfers are provided and are good for 1 hour, but are not valid for return trips. In March 2011, BAT began accepting Charlie Cards for fare payment and provides users of those cards a 10¢ discount per trip. One, seven, and 31-day passes are also offered. No discounts are offered for paratransit service.

## BAT 2010 RIDERSHIP

In 2010, BAT carried just over 3 million passengers. Approximately 93% of these passengers used local and express bus services and 7% used paratransit. In total, BAT carries the third highest volume of riders among Massachusetts RTAs (behind PVRTA and WRTA), and the third highest amount of service (in terms of vehicle hours).



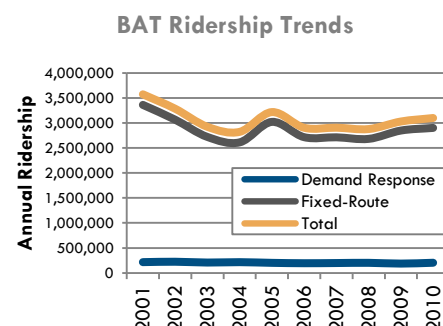
## BAT 2010 FLEET SIZE

In 2010, BAT had 54 vehicles for local and fixed-route service and 51 vehicles for paratransit service. Compared to other RTAs, BAT has the third largest fixed-route fleet and the sixth largest paratransit fleet.

## BAT 2010 OPERATING EXPENSES AND FARE REVENUES

In 2010, BAT's total operating expenses were \$12.8 million dollars. Of this, \$9.6 million or 75% was for local and express service, and 25% was for paratransit service. BAT's operating costs were the third highest among RTAs (behind PVRTA and WRTA).

Fare revenue covered approximately 28% of BAT's 2010 operating expenses. By type of service, fare revenues cover 25% of local and express service costs and 35% of paratransit. BAT collects the second highest amount of fare revenue among RTAs, behind only PVRTA, and has the second highest farebox return ratio.



## BAT EFFECTIVENESS AND TRENDS<sup>2</sup>

Over the past 10 years, BAT's overall ridership trends have been slightly downward, while over the same period service levels have increased. In terms of BAT's cost per unit of service, BAT has become more cost-effective delivering paratransit service, but less effective delivering local service. Overall, lower overall ridership levels have led to lower overall productivity.

<sup>2</sup>All cost and revenue data is presented in actual year values. Costs and fare revenues for 2001 are in \$2001; operating costs and fare revenues for 2010 are in \$2010.



### BAT Ridership

Between 2001 and 2010, total ridership has declined from 3.6 million to 3.1 million passengers per year. Most of these declines occurred in the early-mid 2000s and most declines were on local and express services. Local and express route ridership has remained relatively stable since 2003. Demand-response ridership has been stable since at least 2000, which is in contrast to many other transit systems where large increases in paratransit ridership have been driving large increases in operating costs.

### BAT Revenue Vehicle Hours

Since 2001, the total amount of service that BAT has provided, in terms of revenue vehicle hours, has increased by 22%. Most of this increase is attributed to a 62% increase in demand-responsive service, compared to a 6% increase in fixed-route service. Demand-responsive service now accounts for about 40% of BAT service.

### BAT Operating Costs and Fare Revenue

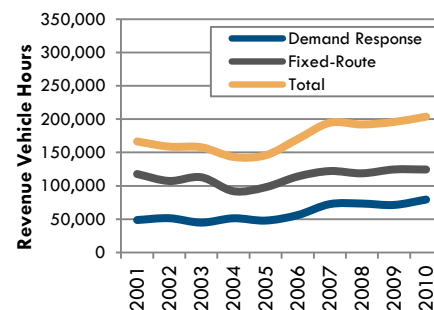
BAT's operating costs increased from \$10.5 million in 2001 to \$12.9 million in 2010. This represents an increase of 23% over 10 years, or an average of 2.4% per year, which is low considering increases in fuel and health insurance costs that significantly impact transit operating costs. Within this overall increase, costs for paratransit increased to a slightly higher extent than for local and express service. Over the 10 year period, paratransit costs increased by 27%, whereas local and fixed-route costs increased by 22%.

Fare revenues increased over the same period from \$2.6 million to \$3.6 million. This was an increase of 51%, which greatly exceeded the percentage increase in BAT's operating costs. BAT's farebox return was 23% in 2001 and almost 28% in 2010. As is the case at all transit systems, farebox return has declined in years between fare increases, but BAT has used fare increases to maintain a farebox return ratio of between 22% and 30%.

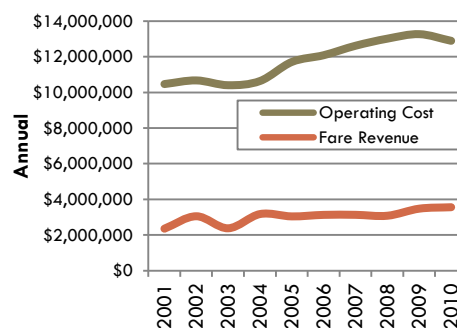
### BAT Operating Cost per Passenger

Between 2001 and 2010, BAT's operating cost per passenger for local and express service increased from \$2.36 to \$3.32, or by 41%. BAT's operating cost per passenger for paratransit service has increased to a lesser extent, from \$11.91 to \$16.10, or by 35%. Operating costs per passenger have increased to a greater extent than total operating costs due to a combination of modest operating cost increases and modest ridership declines. Still, BAT's 2010 operating cost per passenger was the third lowest among all RTAs (behind only VTA and PVTa).

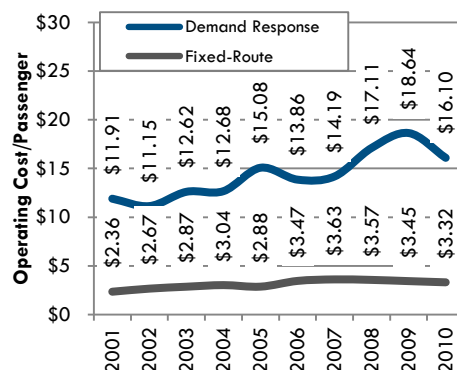
**BAT Vehicle Service Hour Trends**



**BAT Operating Cost and Farebox Revenue**



**BAT Operating Cost per Passenger Trends**



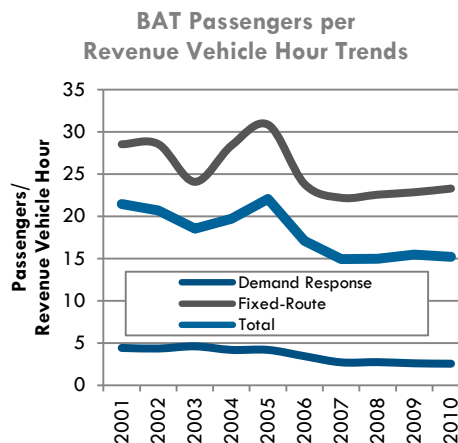




### BAT Passengers per Revenue Vehicle Hour

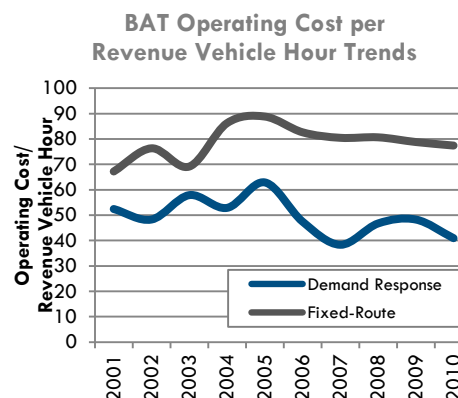
Between 2001 and 2010, BAT has increased the amount of service that it provides, with increases in revenue vehicle miles of service of 6% for local and express service and 62% for demand-response service. Even with these increases, ridership has declined, and as a result, the number of passengers carried per revenue vehicle hour has declined to a greater extent than overall ridership. Local and express ridership per revenue vehicle hour declined from 28.5 to 23.3, and for paratransit declined from 4.4 to 2.5.

The decline in passengers per vehicle hour on demand-response service has been particularly steep, as paratransit ridership has remained relatively stable, but revenue vehicle hours have increased by 62%. BAT is providing much more service to serve a similar number of trips. Reasons for this may include greater geographical dispersion of customers and destinations across the BAT service area, and greater difficulty in effectively grouping customer trips.



### BAT Operating Cost per Revenue Vehicle Hour

Between 2001 and 2010, BAT's operating costs increased modestly for both local and paratransit service. BAT's operating cost per revenue vehicle hour has increased for local service and decreased for paratransit. For local and shuttle service, this cost increased from \$67.23 to \$77.41, or by 15%. This decrease is particularly notable considering large increases in fuel and health insurance cost during that time. For paratransit, these costs declined from \$52.42 to \$40.97, or by 22%. This is due to BAT providing much more paratransit service hours since 2001. BAT's 2010 operating cost per revenue vehicle hour is seventh lowest of all RTAs.



### BAT KEY FACTS/NOTABLE INITIATIVES

- BAT reduced unit operating costs between 2005 and 2009.
- In terms of most performance metrics, BAT is one of the top three performing RTAs in the state.
- Excluding NRTA and VTA, which carry very high volumes of seasonal visitors, BAT carries more riders per capita (13) than any other RTA except PVRTA. In other words, when looking at the total number of people living in each RTA service area, BAT averages the second highest trips per capita on an annual basis.
- In March 2011, BAT adopted the MBTA's automated fare collection system and is now part of the Charlie Card system.
- BAT hosts a Community Advisory Committee that meets twice each year to advise consumer-related policies
- BAT received an award from Governor Romney for its Transit Oriented Development efforts.
- BAT has partnered with Bridgewater State University to provide transit and experiential learning opportunities.

## Cape Ann Transportation Authority

The Cape Ann Transportation Authority (CATA) serves the Cape Ann communities of Gloucester, Rockport, Ipswich, and Essex. Most service converges in Gloucester, and is provided on weekdays and Saturdays.

CATA is also the human service transportation (HST) broker for Region 6.

### CATA SERVICES

CATA provides several different types of services:

- Local fixed-route service
- Seasonal trolley and fixed-route service
- Dial-a-Ride senior transportation
- ADA complementary paratransit
- Health Link Service
- Beverly Circulator Route

Most CATA service operates Monday through Saturday; operating times and frequencies vary widely, with service beginning after 6:00 am and ending by 7:00 pm on weekdays and Saturdays. Many routes operate only during select periods of the day, including the peak AM and PM periods.

Some of CATA's services are seasonal, operating only during peak summer periods only. These include a Cruiseship Trolley route, the Ipswich-Essex route, the Stage Fort Park Shuttle, and the Rockport loop route.

CATA also operates a local circulator shuttle route under contract for the City of Beverly. The route operates Monday through Friday between 7:45 am and 5:45 pm and Saturdays between 7:00 am and 4:30 pm, and has a different fare structure than other CATA services.

ADA complementary paratransit services are available in Rockport and Gloucester only, and operate from 6:00 am to 7:00 pm Monday through Friday and from 9:00 am to 6:00 pm on Saturday. Additionally, CATA provides demand response service for seniors aged 60 and over in Gloucester, Rockport, Essex, and Ipswich. The service operates Monday through Friday between 7:30 am and 4:30 pm.

CATA operates a growing Health Link service under a MassDOT grant which provides connections to MGH East, Beverly Dialysis, the Lahey Clinic in Danvers and Beverly Hospital.

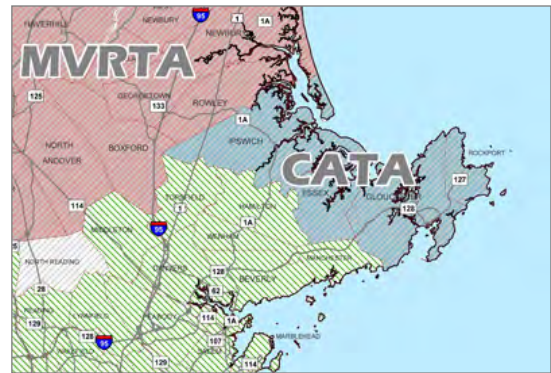
### CATA REGIONAL CONNECTIONS

Most CATA routes serve one of the MBTA commuter rail stations along the MBTA's Newburyport/Rockport Commuter Rail Line, including Rockport, Gloucester, and West Gloucester. Additionally, one of CATA's Yellow Line routes connects Gloucester with Peabody and Danvers.

### CATA MAJOR FACILITIES

As described, CATA serves several stations on the MBTA Newburyport/Rockport Commuter Rail Line. These facilities are owned and operated by the MBTA. The Cape Ann Transportation Authority owns the

CATA Service Area



CATA Route Map



office, operations and maintenance building that houses CATA and the Cape Ann Transportation Operating Company (CATOC) in an industrial park in Gloucester.

## CATA FARES

CATA has several fare types for its services:

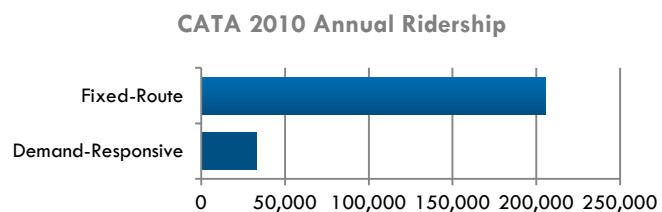
- Local fixed-route: Gloucester: \$1.00 / Rockport: \$1.25
- Local fixed-route: Danvers and Peabody Malls: \$3.00 one-way, \$5.00 roundtrip
- Stage Fort Park Shuttle: \$1.00 / \$3.00 day pass
- Beverly Circulator Route: \$0.50
- ADA complementary paratransit: \$1.00 per community
- Senior Dial-a-Ride: \$1.00 voluntary donation

A variety of discounts are provided for fixed-route services. These include a 50% discount for people aged 60 or over, disabled riders, and those with a Medicare card, and free service for accompanied children under 5. Student annual and semester passes are offered, as well as an annual pass that allows students to ride on an unlimited basis or for a discounted \$0.50 per ride. A monthly pass for the Beverly Circulator Route is available for \$8.00.

Transfers are free between most lines. However, no transfers may be made for free between the Green and Orange Line routes to other routes.

## CATA 2010 RIDERSHIP

In 2010, CATA carried just fewer than 240,000 passengers. 205,000 passengers (or 86%) used fixed-route services, while the remainder used demand-responsive service. In total, CATA carried the third lowest volume of riders among Massachusetts RTAs, more than only FRTA and NRTA. CATA provides the second lowest amount of service in terms of revenue vehicle hours, more than only NRTA.



## CATA 2010 FLEET SIZE

In 2010, CATA had 18 vehicles for fixed-route service and 10 vehicles for demand-responsive service. Among all Massachusetts RTAs, CATA had the second smallest fixed-route fleet and the third smallest demand-responsive fleet.

## CATA 2010 OPERATING EXPENSES AND FARE REVENUES

In 2010, CATA's total operating expenses were \$2.5 million. Of this, \$1.6 million or 67% was for fixed-route service, and 33% was for demand-responsive service. CATA's operating costs are the third lowest among RTAs.

Fare revenue covered approximately 8% of CATA's 2010 operating expenses. By type of service, fare revenues cover 3% of paratransit costs and 10% of fixed-route service costs. CATA collects the lowest amount of fare revenue among RTAs, and has the lowest farebox return ratio.



## CATA EFFECTIVENESS AND TRENDS<sup>3</sup>

Between 2001 and 2003, ridership on CATA's fixed-route services dropped by more than a quarter, which has impacted productivity and service levels.

### CATA Ridership

Between 2001 and 2010, total ridership decreased from 410,000 to 240,000 passengers per year, or by 42%. Overall ridership declined by approximately one-quarter from 2001 to 2003, and has either declined or remained steady since that time. Loss in ridership was nearly all on fixed-route services; ridership on demand-responsive services has remained relatively steady between 33,000 and 42,000 riders each year.

### CATA Revenue Vehicle Hours

Since 2001, the total amount of service that CATA has provided, in terms of revenue vehicle hours, has declined by 19%. From 2001, revenue hours on fixed-route services dropped by 22%, and revenue hours on demand-responsive services dropped by 13%.

### CATA Operating Costs and Fare Revenue

CATA's operating costs increased from \$1.9 million in 2001 to \$2.4 million in 2010. This represents an increase of 25% over 10 years, or an average of 3% per year. This comparatively low growth in costs is partially accounted for by the 19% reduction in service hours, but is nonetheless low considering other industry cost increases such as fuel and health insurance.

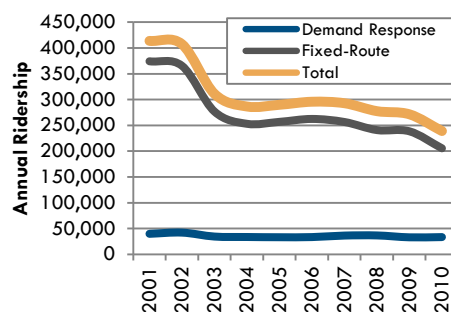
From 2001 to 2010, in spite of ridership declining by almost half, farebox revenues increased from \$160,000 to \$190,000 - an increase of 8%. As previously noted, CATA has the lowest farebox revenue among all RTAs.

### CATA Operating Cost per Passenger

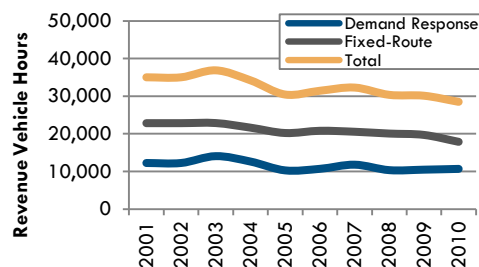
Between 2001 and 2010, CATA's operating cost per passenger for fixed-route service increased from \$3.70 to \$7.87, or by 113%. CATA has the sixth highest cost per passenger for fixed-route service among RTAs.

CATA's operating cost per passenger for demand responsive service increased to a lesser extent, from \$13.94 to \$23.94, or by 72%. CATA's demand-responsive operating cost per passenger is seventh highest among RTAs. Overall, CATA's operating cost per total passenger grew from \$4.68 in 2000 to \$10.11 in 2010, and is now the sixth highest of all RTAs.

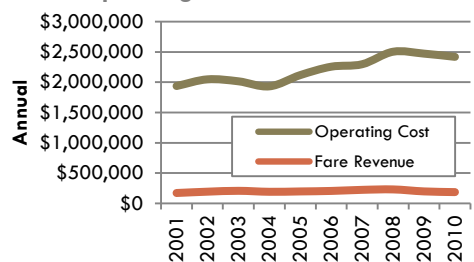
CATA Ridership Trends



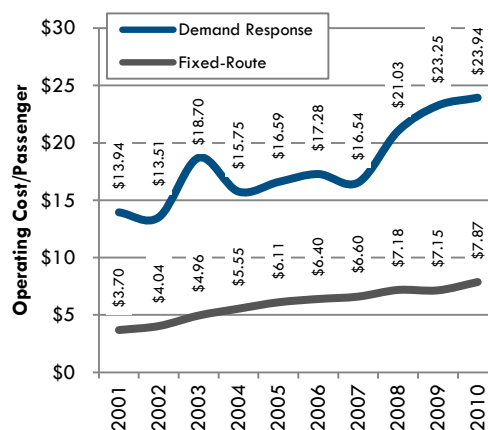
CATA Vehicle Service Hour Trends



CATA Operating Cost and Farebox Revenue



CATA Operating Cost per Passenger Trends



<sup>3</sup> All cost and revenue data is presented in actual year values. Costs and fare revenues for 2001 are in \$2001; operating costs and fare revenues for 2010 are in \$2010.



## CATA Passengers per Revenue Vehicle Hour

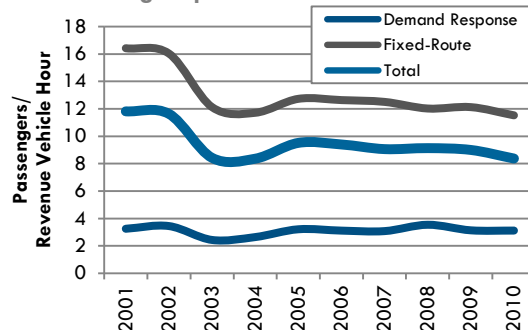
Between 2001 and 2010, CATA's total number of passengers carried per passenger hour varied widely, ranging from 8.4 to 11.8. This is primarily due to fluctuations in productivity on fixed-route service, where the rate has varied from 11.5 to 16.4 passengers per hour. Productivity on demand-responsive service varied less, from 2.4 to 3.4 passengers per hour. Productivity dropped between 2001 and 2003, when ridership dropped by almost a quarter, and although it has recovered somewhat since that time, it has not recovered to the same levels as prior to the decline. In total, CATA is seventh lowest among RTAs in terms of passengers per revenue hour.

## CATA Operating Cost per Revenue Vehicle Hour

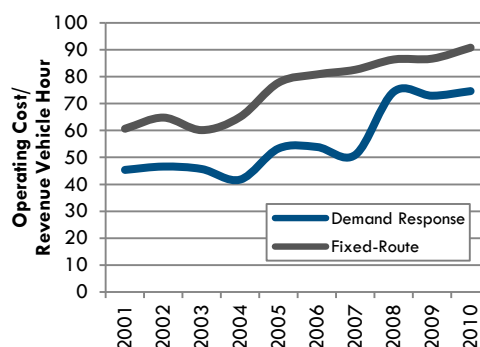
Between 2001 and 2010, CATA's operating cost per revenue vehicle hour for all services increased by an average of 5.2% per year. In that time, the cost for demand-responsive service increased from \$45.33 to \$74.68, or by 65%. Increases in demand-responsive service were generally very small until 2008, when the price jumped by 46%, rising from \$50.96 to \$74.44. The operating cost per hour for fixed-route services also increased between 2001 and 2010, rising from \$60.69 to \$90.82, or by 50%.

CATA's operating cost per hour for fixed-route service is sixth highest among RTAs, but its cost for demand-responsive service is second highest among RTAs. CATA's cost for demand-responsive service is lower only than VTA, and significantly more expensive than the majority of RTAs. Thus, CATA also has the third highest overall operating cost per revenue hour.

CATA Passengers per Revenue Vehicle Hour Trends



CATA Operating Cost per Revenue Vehicle Hour Trends



## CATA KEY FACTS/NOTABLE INITIATIVES

- CATA serves as the HST broker for its service area, plus additional communities outside the CATA service area.
- CATA provides extended holiday and summer season services.
- CATA provides “tripper” service for Gloucester schools.
- CATA recently implemented a new computer system for paratransit scheduling and dispatch, and is investigating the feasibility of smart card fare payment.
- CATOC, a private company, has been the operating provider since 1988.



## Cape Cod Regional Transit Authority

The Cape Cod Regional Transit Authority (CCRTA) serves the 15 communities on Cape Cod. CCRTA's service area is large, and unlike in many other RTA areas, there is no urban core around which most service is focused. Instead, CCRTA serves three small urban centers (Hyannis, Falmouth, and Provincetown) and areas in between. CCRTA is also one of four RTAs that serves an area with large influxes of summer visitors who produce much higher demand in the summer season than during the rest of the year.

In addition, CCRTA serves as the human service transportation broker for the Cape and the islands.

### CCRTA SERVICES

CCRTA provides five different types of services:

- Fixed-Route
  - Local
  - “The Flex” route deviation service
- Demand-Response
  - b-bus general public dial-a-ride service
  - ADA complementary paratransit
  - Boston Hospital Transportation (BHT)

For fixed-route service, CCRTA provides two different service levels: year-round and additional summer season service. Year-round local service consists of three local fixed-routes and The Flex route-deviation route. These routes generally operate along the Cape's most important arterials (Routes 6 and 28) and serve the Cape's largest activity centers. In addition, b-Bus provides general public dial-a-ride service within each community and to neighboring locations (however, in practice, this service is utilized largely by seniors and persons with disabilities). These services generally operate from early morning (5:30 am - 7:30 am) to evenings (6:15 pm - 8:20 pm) on weekdays, and 9:30 am to 6:15 pm - 8:20pm on Saturdays. ADA complementary paratransit service is provided within 3/4 mile of fixed-route service.

Finally, four days a week, CCRTA provides one round trip a day between the Cape and Boston hospitals.

During the summer season, three additional local fixed-route services are provided (from late June to early September). These operate in the Cape's primary tourist centers in Falmouth, Hyannis, and Provincetown/Truro. Sunday service is also provided during the summer.

### CCRTA REGIONAL CONNECTIONS

Most CCRTA fixed-route service operates to and from the Hyannis Transportation Center in downtown Hyannis, where connections can be made to regional services:

- Plymouth & Brockton bus service to the outer Cape, and South Station and Logan Airport in Boston.

CCRTA Service Area



CCRTA Route Map



- Peter Pan bus service to New Bedford, Fall River, Providence, and New York City.
- Shuttle service to Steamship Authority ferries to Martha's Vineyard and Nantucket.

## CCRTA MAJOR FACILITIES

As described above, most service operates to and from the Hyannis Transportation Center, which is CCRTA's major passenger facility, and its administrative facility.

## CCRTA FARES

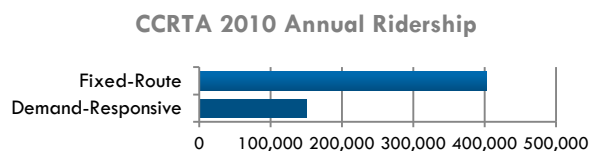
CCRTA has four basic fare structures for its four primary types of service:

- Fixed-route service: \$2.00 (except the summertime Hyannis Area Trolley, which is free)
- The Flex route deviation service: \$2.00 for on-route trips; \$4.00 for off-route trips
- b-bus: \$3.00
- ADA complementary paratransit: \$2.50
- Boston Hospital Transportation: \$15.00

A variety of discounts are provided for local, flex, and demand responsive services. These include a 50% discount for people over 60, disabled riders, and those with a Medicare card, and free service for accompanied children under 5. Single day passes and 20 ride transit passes are also offered. No discounts are offered for ADA paratransit and Boston Hospital Transportation services.

## CCRTA 2010 RIDERSHIP

In 2010, CCRTA carried more than 550,000 passengers. Three-quarters of these passengers used fixed-route services (including The Flex) and about one-quarter used demand-response service (b-bus and paratransit). In total, CCRTA carries the fifth lowest volume of riders among Massachusetts RTAs, but provides the fifth highest amount of service in terms of vehicle hours. The relative differential between ridership and the amount of service provided is due to a number of factors that include: (1) the lack of an urban center with high transit demand, (2) its provision of area-wide demand-response service that is less productive than traditional fixed-route service, and (3) low productivity on fixed-route services that in part is due to long distances between major activity centers.



## CCRTA 2010 FLEET SIZE

In 2010, CCRTA had 33 vehicles for fixed-route service and 58 vehicles for demand responsive service. The large number of demand-response vehicles relative to fixed-route vehicles reflects CCRTA's strong emphasis on its b-bus demand-response service.

## CCRTA 2010 OPERATING EXPENSES AND FARE REVENUES

In 2010, CCRTA's operating expenses for fixed-route and demand-response service were \$6.9 million dollars. Of this, 54% was for demand-response service, and 46% was for fixed-route service. CCRTA's operating costs are the seventh lowest among RTAs.

Fare revenue covered approximately 13% of CCRTA's 2010 operating expenses. By type of service, fare revenues cover 6% of paratransit costs and 20% of local service costs. CCRTA collects the fifth lowest amount of fare revenue among RTAs, and has the fifth lowest farebox return ratio. CCRTA has used fare increases to avoid service cuts and to increase service.



## CCRTA EFFECTIVENESS AND TRENDS<sup>4</sup>

Over the past 10 years, CCRTA's overall ridership fluctuated from year-to-year but has increased overall. Over the same period, the amount of demand-response service has been steady, and there have been significant increases in fixed-route service which were largely attributable to the implementation of The Flex service.

### CCRTA Ridership

Between 2001 and 2010, total ridership has increased from 425,000 to 553,000 passengers per year. Fixed-route ridership has increased by 62% overall, with a large (40%) increase from 2006 to 2007. This is explained by the implementation of The Flex service. Demand-response ridership decreased overall by 15% from 2001 to 2010 and experienced only slight increases or decreases in ridership year-to-year.

### CCRTA Revenue Vehicle Hours

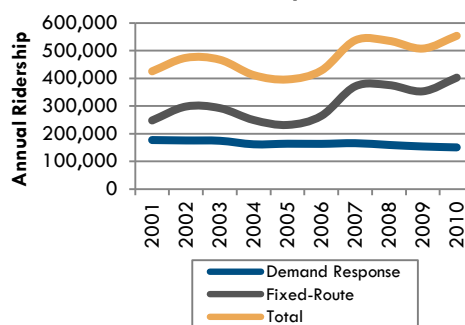
Since 2001, the total amount of service that CCRTA has provided in terms of revenue vehicle hours has increased by 41%. Most of this increase has been in fixed-route service, which has increased by 65%, with much of the increase attributable to introduction of The Flex. (Note that the 65% increase in fixed-route service produced a 62% increase in ridership on those services.) The amount of demand-response service increased by 27%. However, even though the amount of fixed-route service has increased more substantially than demand-response, CCRTA still provides 15% more demand-response service than fixed-route service. This, to a significant extent, reflects CCRTA's emphasis on b-bus service.

### CCRTA Operating Costs and Fare Revenue

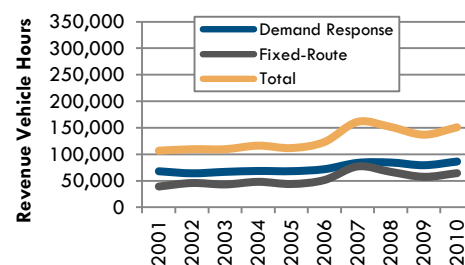
CCRTA's operating costs increased from \$3.8 million in 2001 to \$6.9 million in 2010. This represents an increase of 82% over 10 years, or an average of 7% per year. These operating cost increases are heavily influenced by the expansion of fixed-route service in 2006.

From 2001-2010, fare revenues significantly increased. For fixed-route service, fare revenues jumped from about \$220,000 in 2001 to almost \$650,000 in 2010, an increase of about 200%. Revenues for demand-response service increased by 70%, from \$138,000 in 2001 to \$234,000 in 2010.

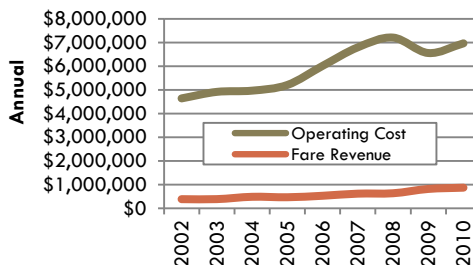
CCRTA Ridership Trends



CCRTA Vehicle Service Hour Trends



CCRTA Operating Cost and Farebox Revenue



<sup>4</sup> All cost and revenue data is presented in actual year values. Costs and fare revenues for 2001 are in \$2001; operating costs and fare revenues for 2010 are in \$2010.



## CCRTA Operating Cost per Passenger

Between 2001 and 2010, CCRTA's operating cost per passenger for fixed-route service increased from \$4.88 to \$7.96, or by 63%. CCRTA has the fifth highest cost per passenger for fixed-route service among RTAs. Part of this increase is due to the introduction of The Flex route-deviation service, which has higher costs than other fixed-route services due to its long length through a more sparsely developed service area, and the route-deviation nature of the service. Demand-response cost per passenger also increased substantially, from \$14.81 in 2001 to \$24.93 in 2010 (68% increase).

## CCRTA Passengers per Revenue Vehicle Hour

Between 2001 and 2010, the number of passengers that CCRTA has carried per vehicle hour has decreased by 8%, from 4.0 to 3.7. This overall figure is heavily influenced by demand-response service, where the figure has decreased by one-third, from 2.6 to 1.7. The number of passengers carried per hour on fixed-route service has only slightly declined from 6.4 to 6.3. In total, CCRTA carries the lowest number of passengers per revenue hour of all RTAs. This is partially due to its provision of b-bus dial-a-ride service throughout its service area and low productivity on The Flex.

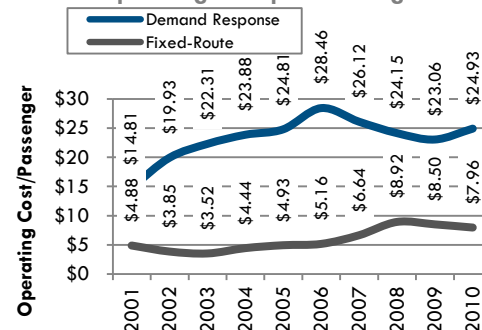
## CCRTA Operating Cost per Revenue Vehicle Hour

Between 2001 and 2010, CCRTA's operating cost per revenue vehicle hour for all services has increased by an average of 3% per year. Increases in fixed-route service have been very high, particularly from 2006 - 2008, with the introduction of The Flex. CCRTA's operating cost per hour for fixed-route service is the lowest among RTAs, and its cost for demand-response service is sixth lowest. Notably, CCRTA has the lowest differential between its cost per hour for fixed-route service and demand-response service, and on an overall basis, has one of the lowest cost per vehicle hour of all RTAs.

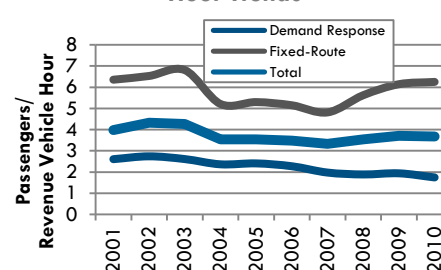
## CCRTA KEY FACTS/NOTABLE INITIATIVES

- CCRTA provides general public demand-response service throughout its service area.
- CCRTA serves as the human service transportation broker for Martha's Vineyard and Nantucket, as well as for its own service area.
- CCRTA's overall cost structure is the lowest among all RTAs.
- However, CCRTA carries the lowest number of riders per unit of service, and thus its overall cost per passenger, is the highest of all RTAs.
- CCRTA's low passenger per revenue hour figures are the result of low ridership on its fixed-route services and the provision of a large amount of demand-response service, which by its nature has relatively low productivity.

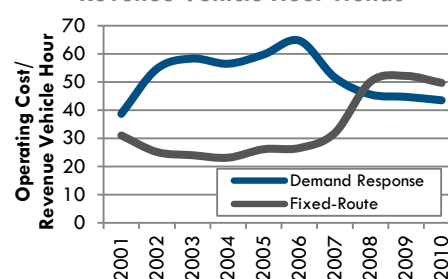
CCRTA Operating Cost per Passenger Trends



CCRTA Passengers per Revenue Vehicle Hour Trends



CCRTA Operating Cost per Revenue Vehicle Hour Trends







## Franklin Regional Transit Authority

The Franklin Regional Transit Authority (FRTA) serves the largest and most rural service area of all RTAs in Massachusetts, with 40 communities in Franklin, Hampden, Hampshire, and Worcester counties. In 2006, FRTA merged with the Greenfield Montague Transportation Area (GMTA) to create a single agency responsible for the entire region.

Of the 40 towns in FRTA's service area, 12 receive some form of fixed-route service and the remainder receive demand response service. All FRTA fixed-route service connects in Greenfield.

FRTA is also the human service transportation (HST) broker for its service area.

### FRTA SERVICES

FRTA provides three types of services:

- Fixed-route service
- ADA complementary paratransit
- Demand response service for older adults, persons with disabilities and other special populations

FRTA fixed-route service is comprised of six routes, each of which stop in Greenfield. One route serves Greenfield only and the others serve multiple communities to the west, south, and east. Most routes operate from 6:00 am to 7:15 pm and are available Monday through Friday only. Minimum headways are 60 minutes and can be as much as 4 hours.

FRTA's ADA complementary paratransit is available within 3/4 mile of fixed-route service and during the same days and hours as fixed-route.

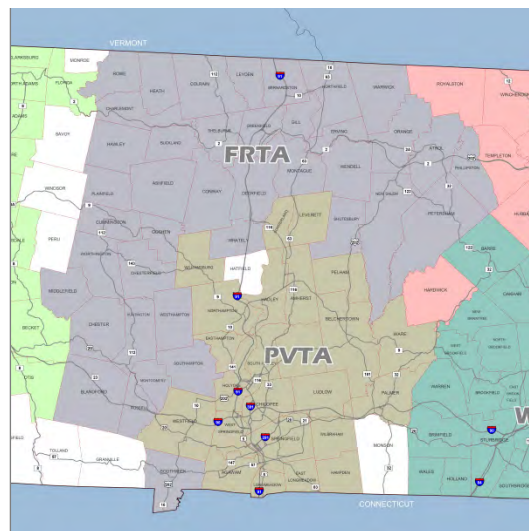
FRTA also manages curb-to-curb, dial-a-ride demand-responsive service for most communities in its service area. Eligibility for the service varies by town, but in most areas the service is available to adults over the age of 60, eligible riders at Franklin County Home Care, nursing home residents, and Veterans with a disability rating of 70% or greater.

### FRTA REGIONAL CONNECTIONS

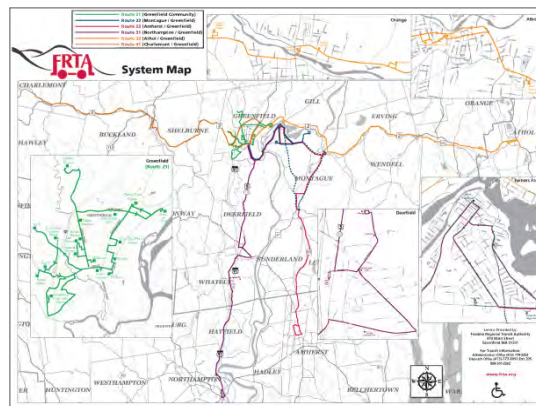
FRTA routes provide several regional connections:

- FRTA connects to the Pioneer Valley Transit Authority (PVTA) at the UMass Haisis Mall stop, at the Academy of Music in downtown Northampton, and at the South Deerfield Center. Connections are available on weekdays only.
- FRTA partners with Montachusett Regional Transit Authority (MART) via a G-link route that offers connections between Athol and Orange to Greenfield and Gardner. FRTA's portion of G-Link extends from Greenfield to Athol (Route #32). Passengers can transfer at Orange Center, Wal-Mart, Hannafords, Ocean State Job Lots, YMCA, Uptown Common - Athol, and Athol Memorial Hospital.

FRTA Service Area



FRTA Route Map





Greenfield also has regional intercity bus service provided by Peter Pan. Connections are available to Amherst, Boston, Framingham, Holyoke, New York, Providence, and Springfield.

## FRTA MAJOR FACILITIES

FRTA administrative offices are currently located in downtown Greenfield. FRTA is in the final stages of constructing an Intermodal Transit Center that will also be located in downtown Greenfield. FRTA's administrative offices will move to this new facility in January 2012 and buses are expected to start serving the center later in 2012.

FRTA currently maintains its vehicles at a facility developed by the former GMTA agency. GMTA continues to own this facility and leases it to FRTA. FRTA's future use of this facility is being negotiated.

## FRTA FARES

FRTA's fare structure is varied and generally reflects a distance based structure:

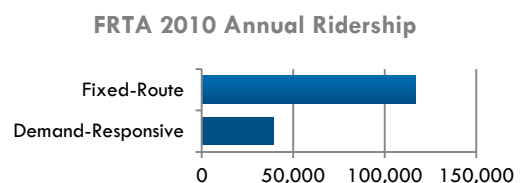
- Route #21: Greenfield Community Route and Route #22: Montague/Greenfield Route: \$1.00
- Route #31: Northampton/Greenfield Route, Route #32: Athol/Greenfield Route, and #41: Charlemont/Greenfield Route: \$1.50
- Route #23: Amherst/Greenfield Route: \$3.00

Discounts are available to certain groups who use FRTA's fixed-route services: half-fare discounts are available to persons over 60, those with a statewide access pass, ADA cards, and Medicare cards. Passengers with a Massachusetts Commission for the Blind card or a valid Department of Veterans Affairs photo ID ride for free, as well as children under 5. Transfers between FRTA fixed-routes are free. ADA complementary paratransit fares are set at twice the fixed-route fares.

Fares on the demand response service vary by service provider and distance. Towns where service is provided by a private contractor (Franklin Transit Management) pay \$1.50 for a trip within the town, \$2.00 for a trip to an adjacent town and \$2.50 for a trip further out. Fares in towns where service is provided by the Council on Aging are slightly lower, but with the same distance based model (e.g., \$1.00, \$1.50 and \$2.00). There are also a few exceptions where no fares are charged. These exceptions vary by town and trip, and may for example include shopping trips or trips to the senior center.

## FRTA 2010 RIDERSHIP

In 2010, FRTA's fixed-route and demand-responsive services carried more than 155,000 passengers. About three-quarters of the ridership was on fixed-route service and one-quarter on demand-responsive service. FRTA carries the fewest passengers of all Massachusetts RTAs. For fixed-route, FRTA also carried the fewest number of passengers, and it served the fourth lowest number of demand-responsive passengers.



## FRTA 2010 FLEET SIZE

In 2010, FRTA had 17 vehicles for fixed-route service and 37 vehicles for demand-responsive service. Compared to other RTAs, FRTA has the fifth smallest overall fleet.

## FRTA 2010 OPERATING EXPENSES AND FARE REVENUES

In 2010, FRTA's total operating expenses were \$2.0 million. Of this, \$1.1 million or 54% was for fixed-route service, and 46% was for demand-responsive service. FRTA's overall operating expenses were the second lowest among RTAs (NRTA is the lowest).



Fare revenue covers approximately 23% of FRTA's 2010 operating expenses. By type of service, fare revenues cover 6% of fixed-route costs and 60% of demand-responsive costs. FRTA collects the third lowest amount of fare revenue among RTAs, but has the fourth highest overall farebox return ratio.

## FRTA EFFECTIVENESS AND TRENDS<sup>5</sup>

Prior to 2006, public transportation services in FRTA's current service area were provided by two independent agencies - FRTA and GMTA. As a result, data for time periods before 2006 reflect services provided by FRTA only, while data after 2006 reflect the combined services of GMTA and FRTA. As result, we structured our analysis of trends to begin in 2007, when all service is provided by a single agency.

Overall, the merger resulted in a tripling of FRTA's ridership, a doubling in operating costs, and a substantial increase in farebox revenues.

### FRTA Ridership

Between 2008 and 2010, FRTA ridership on fixed-route service decreased slightly from about 126,500 to 116,500 riders. Ridership on demand-responsive service decreased even more, declining from about 60,000 riders to 39,000.

### FRTA Revenue Vehicle Hours

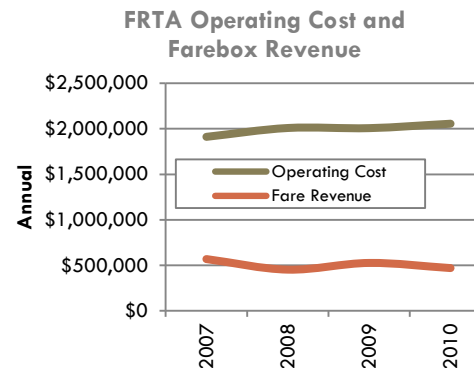
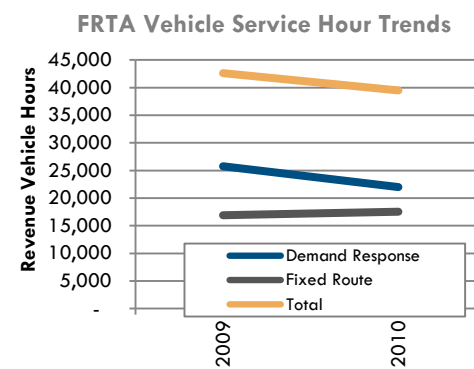
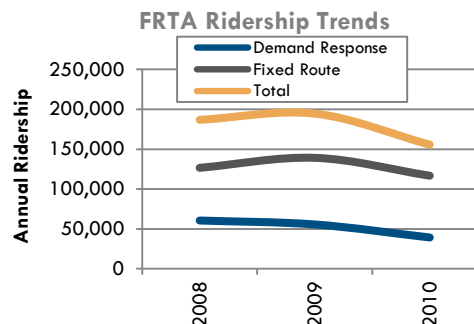
FRTA provides more hours for demand-responsive service (56% of hours) than for fixed-route. However, the gap is closing as hours for fixed-route service increased from 16,900 to 17,500 between 2009 and 2010 while hours on demand response service decreased (from 25,700 to 21,900) over the same time period.

In 2010, FRTA had the second lowest number of revenue vehicle hours of service for fixed-route services (higher only than NRTA) and the fourth lowest number of revenue vehicle hours for demand-responsive service.

### FRTA Operating Costs and Fare Revenue

From 2007 to 2010, FRTA's operating costs increased by 7%. Fixed-route costs increased by 7% and demand-responsive by 8%.

Ridership data shows that there are slightly fewer riders on fixed-route service and slightly more riders on demand responsive service. As a result, fare revenues decreased on fixed-route service by 42% and increased for demand response service by 22%. Overall, service costs increased faster than ridership, thus the farebox recovery rate decreased from 30% in 2007 to 23% in 2010.



<sup>5</sup> All cost and revenue data is presented in actual year values. Costs and fare revenues for 2001 are in \$2001; operating costs and fare revenues for 2010 are in \$2010.



In 2010, FRTA had the second lowest operating costs of all RTAs (only higher than NRTA) and the third lowest farebox revenues (higher than NRTA and CATA). FRTA's farebox recovery rate is above average for RTAs, at 23%.

### FRTA Operating Cost per Passenger

Between 2008 and 2010, FRTA's operating cost per passenger for fixed-route service increased from \$8.62 to \$9.56, or by 11%. FRTA's operating cost per passenger for demand-responsive service increased even more, from \$15.19 to \$23.91, or by 57%. This is not surprising, as ridership on the fixed-route service declined while costs increased. This compares with the demand-responsive service where ridership increased more dramatically as costs increased.

FRTA's 2010 operating cost per passenger for fixed-route service is the highest of all RTAs and about average for demand-responsive service.

### FRTA Passengers per Revenue Vehicle Hour

In 2010, FRTA carried 6.6 passengers per service hour on its fixed-route service and 1.8 passengers per hour on its demand-responsive service. Overall, FRTA has the second lowest number of passengers per service hour compared to other RTAs (only to CCRTA).

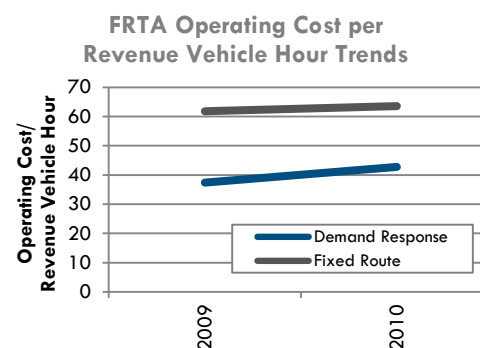
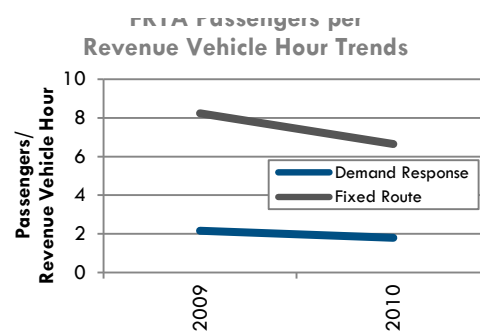
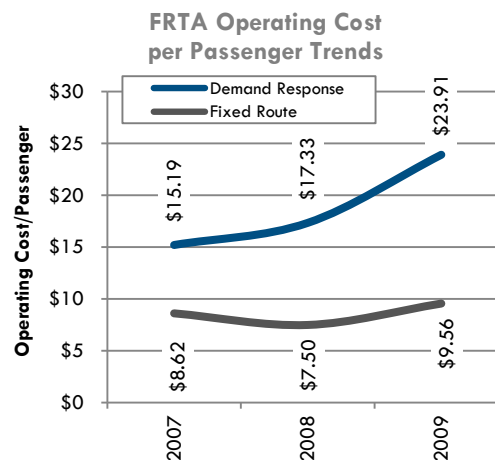
### FRTA Operating Cost per Revenue Vehicle Hour

In 2010, FRTA had an overall operating cost per revenue vehicle hour of \$51.99. Cost per hour for fixed-route service were \$63.54, and costs per demand-responsive were \$42.78.

FRTA has the second lowest operating cost per revenue vehicle hour of all RTAs. For fixed-route, only VTA and CCRTA have a lower cost per hour; and for demand-responsive, only BAT and BRTA have lower costs.

## FRTA KEY FACTS/NOTABLE INITIATIVES

- FRTA is about to open a new Intermodal Transportation Center in downtown Greenfield. This facility will provide intermodal connections with local and intercity bus services, and rail service. It will also become FRTA's administrative headquarters and house as well as the regional planning commission's offices.
- FRTA is implementing Intelligent Transportation System improvements. They currently have electronic fareboxes and cameras on all their vehicles. They are also updating their scheduling software (to Ecolane) and will be installing Automatic Vehicle Locators and Mobile Data Terminals on all their vehicles. Their new intermodal center will also have real-time passenger information.
- A study exploring the feasibility of extending bus service from Greenfield to Bernardston, Gill and Northfield via Route 5/10 was just completed.

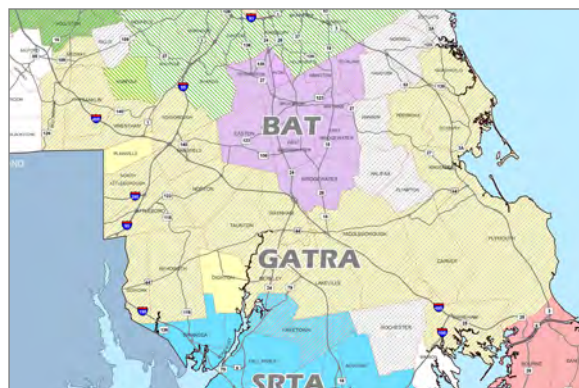




## Greater Attleboro Taunton Regional Transit Authority

The Greater Attleboro Taunton Regional Transit Authority (GATRA) serves 26 communities in the southeastern area of Massachusetts, bordering northeastern Rhode Island. GATRA's service area is large and diverse, covering small cities, suburban, and rural communities. GATRA provides fixed-route service in 16 of these communities and demand-response service to all. In addition, GATRA partners with several local Councils on Aging (COAs) to provide service to seniors. GATRA also serves as the broker for Human Service Transportation in southeastern MA.

GATRA Service Area



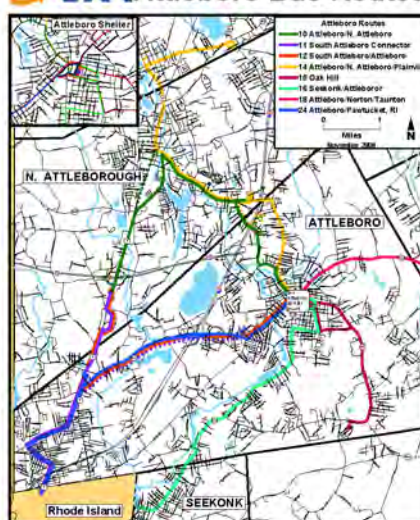
### GATRA SERVICES

GATRA provides four types of services:

- Fixed-Route
  - Local routes
  - Commuter rail shuttles
- Demand-Response
  - Dial-A-Ride
  - ADA complementary paratransit

In total, GATRA service is comprised of 24 fixed-routes, six commuter shuttles, community-wide Dial-A-Ride, and ADA complementary paratransit service. Many routes connect in Taunton, Attleboro, and Plymouth.

GATRA Attleboro Bus Routes



GATRA Taunton Bus Routes



Local services generally operate from 6:00 am to 6:30 pm Monday through Friday, and from 9:00 am to 5:00 pm on Saturday. There is no service on Sundays and most major holidays. Commuter rail shuttles are timed to arrive at MBTA stations about 10 minutes before the train departs for Boston in the morning, and depart almost immediately after the trains arrive in the evening going outbound. Complementary ADA paratransit operates within 3/4 mile of fixed-route during the same hours as local fixed-route service. Community-wide Dial-A-Ride service, available in areas that do not have fixed-route service, operates Monday through Friday from 8:00 am to 4:00 pm with no service on Saturday or Sunday. Passengers who are eligible for ADA complementary paratransit area also eligible for Dial-A-Ride service.

### GATRA REGIONAL CONNECTIONS

The majority of GATRA routes connect at either the Taunton GATRA Terminal, the downtown Attleboro GATRA Shelter, or at Memorial Hall in Plymouth. Connections to regional services from these hubs and other locations are available:

- GATRA provides shuttle service to several MBTA commuter rail stations: Forge Park, Mansfield, Hanson, Attleboro, and Lakeville.





- Commuter bus services are available via Bloom, Plymouth & Brockton Street Railway Co. (P&B), and DATTCO. Bloom picks up at the Taunton Bus Terminal, at Friendly's in Taunton, and in Raynham, and drops in Boston by South Station and on Stuart Street. P&B offers service between Exit 5 in Plymouth to South Station in Boston. DATTCO picks up at the Taunton Galleria Mall and drops at Boston's South Station.

The current MassDOT South Coast Rail Project has a preferred corridor alignment that will bring commuter rail service to Taunton. The recommended route would include three new commuter rail stations in the GATRA area: one in Raynham and two in Taunton.

## GATRA MAJOR FACILITIES

GATRA owns and operates a central bus depot in Taunton which is where its administrative and maintenance facility is located. GATRA also manages the MBTA's Mansfield and Attleboro commuter rail stations.

## GATRA FARES

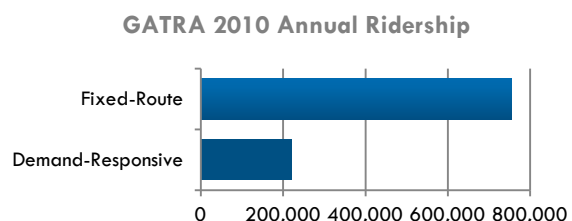
GATRA's basic fare structure is as follows:

- Local fixed-route service: \$1.00 (Route #18: Attleboro-Taunton is \$2.00)
- Commuter rail shuttles: \$1.00
- ADA complementary paratransit: \$1.25 (trips beyond boundaries of neighboring communities are \$2.50)

GATRA offers a variety of discounts for fixed-route service, including a half-fare for senior citizens, registered riders with disabilities, Medicare cardholders, and students through high school. Transfers are \$0.50 (within one town only) and \$0.25 for half-fare riders. Passes are also available for full-fare and half-fare riders for one day, three days, ten rides, and one month. A 10-ride pass is available for ADA complementary paratransit service. Finally, Wheaton college students ride for free on Route 140 between Wheaton College and the Mansfield MBTA Commuter Rail station.

## GATRA 2010 RIDERSHIP

In 2010, GATRA carried nearly one million passengers. Approximately 77% of these passengers used fixed-route services and the remainder used demand-responsive. As of 2010, GATRA carried the eighth highest volume of riders among Massachusetts RTAs, and provides the fifth highest amount of service (in terms of vehicle hours).



## GATRA 2010 FLEET SIZE

In 2010, GATRA had 50 vehicles for fixed-route service and 62 vehicles for demand-responsive service. Compared to other RTAs, GATRA has the fifth largest fixed-route fleet, and the fourth largest demand-responsive fleet (behind PVRTA, MART and WRTA).

## GATRA 2010 OPERATING EXPENSES AND FARE REVENUES

In 2010, GATRA's total operating expenses were \$11.4 million. Of this, 59% was for fixed-route service and 41% was for demand-responsive service. GATRA's operating costs were the sixth highest among RTAs, just above average.

Fare revenue covers approximately 16% of GATRA's 2010 operating expenses. By type of service, fare revenues cover 24% of fixed-route costs but only 5% of demand-responsive costs. GATRA collects the fourth highest amount of fare revenue among RTAs and falls about average for farebox return ratio.





## GATRA EFFECTIVENESS AND TRENDS<sup>6</sup>

Over the past 10 years, GATRA's overall ridership has decreased on fixed-route service, and remained relatively stable on demand-response service. Over the same period, fixed-route service levels have decreased for fixed-route (but not as substantially as ridership) and demand-response service levels have increased.

### GATRA Ridership

Between 2001 and 2010, total ridership declined by 15% from 1.1 million to 975,000 passengers per year. On fixed-route service, ridership declined between 2001 and 2006, but has been increasing since that time. Demand-responsive ridership declined for most of the decade, but then increased between 2008 and 2010 due to the expansion of service to new communities.

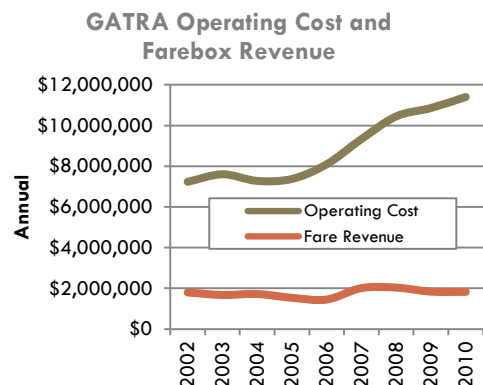
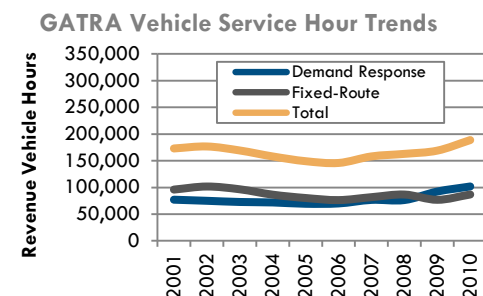
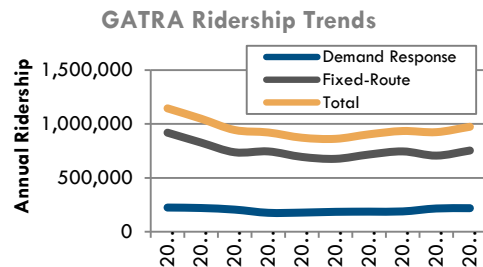
### GATRA Revenue Vehicle Hours

The total amount of service that GATRA has provided decreased between 2001 and 2006. However, recent increases in service have brought vehicle hours of service back above 2001 levels. By type of service, the number of fixed-route hours declined by 10% the last 10 years, while demand-response hours have increased by 33%. Nearly all of the demand-response increases have been over the past few years due to the expansion of Dial-A-Ride service to new communities.

### Operating Costs and Fare Revenue

Between 2001 and 2010, GATRA's operating costs increased from \$7 million to \$11.4 million. This represents an increase of 64% over 10 years, or an average of 6% per year. By type of service, fixed-route costs increased by 52% and demand-responsive costs increased by 85%.

Overall, fare revenues were flat, as a 4% decline in fixed-route fare revenue was generally offset by a 62% increase in demand-response revenues.



<sup>6</sup> All cost and revenue data is presented in actual year values. Costs and fare revenues for 2001 are in \$2001; operating costs and fare revenues for 2010 are in \$2010.



## GATRA Operating Cost per Passenger

Between 2001 and 2010, GATRA's operating cost per passenger for fixed-route service increased from \$4.81 to \$8.90, or by 85%. GATRA's operating cost per passenger for demand-responsive service has also increased significantly, from \$11.19 to \$21.28, or by 90%. GATRA's 2010 operating cost per passenger is the fourth highest of all RTAs.

## GATRA Passengers per Revenue Vehicle Hour

On fixed-route service, declines in ridership have been greater than decreases in service, and thus ridership per revenue vehicle hour has decreased by 9.3% from 9.6 to 8.7. On demand-response service, total ridership declined between 2001 and 2010 in spite of service increases, and ridership per hour declined by 24% from 2.9 to 2.2.

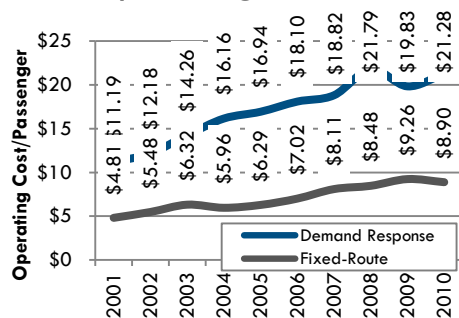
## GATRA Operating Cost per Revenue Vehicle Hour

GATRA's operating costs per vehicle hour have increased significantly between 2001 and 2010. For fixed-route services, costs have increased by 68% from \$46.03 to \$77.38. For demand-response service, costs have increased by 40% from \$32.91 to \$45.93 in 2010. However, in spite of these increases, GATRA's cost structure is low, and the third lowest among RTAs.

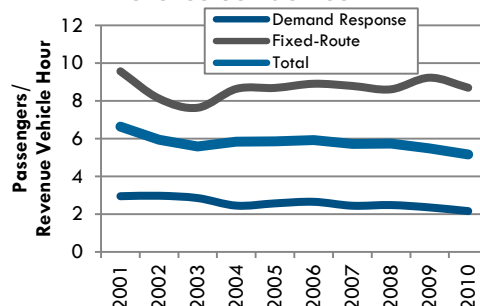
## GATRA KEY FACTS/NOTABLE INITIATIVES

- Unlike many other RTAs, GATRA does not have a central hub for service and has a very large service area with diverse service needs.
- In 2001 GATRA provided more fixed-route service than demand-response service (55% to 45% in terms of vehicle hours). Now, GATRA provides more demand-response service than fixed-route service. This change has been due to the recent addition of new communities where only demand-response service is provided.
- In 2010, GATRA had the third lowest operating cost per service hour among RTAs (only higher than CCRTA and FRTA).
- GATRA hosts GCAC, the GATRA Consumer Advisory Committee, which is comprised of individuals who provide an open forum for general consumer and ADA related issues for GATRA fixed-route and demand-responsive services. GCAC meets quarterly, with specialized monthly subcommittee meetings. GCAC's mailing list is about 200 people and organizations.
- GATRA conducted a Comprehensive Service Analysis in 2008.
- GATRA's recent service improvements include route consolidation in Plymouth, including the introduction of a new deviated route service, and a new shuttle service in Pembroke.

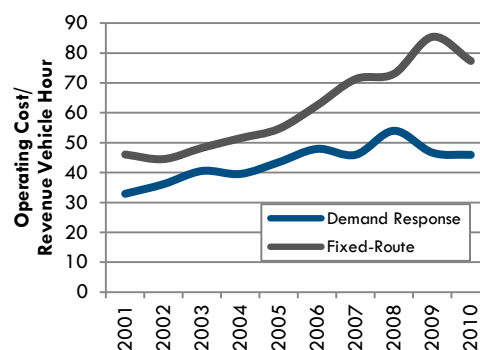
**GATRA Operating Cost per Passenger Trends**



**GATRA Passengers per Revenue Vehicle Hour**



**GATRA Operating Cost per Revenue Vehicle Hour Trends**



## Lowell Regional Transit Authority

The Lowell Regional Transit Authority (LRTA) serves Lowell and 16 surrounding towns. LRTA provides local and suburban bus services, a downtown shuttle, and ADA complementary paratransit service. All fixed-route services connect at the Robert B. Kennedy Bus Transfer Center, a part of the Charles A. Gallagher Transit Terminal which includes the Lowell Commuter Rail Station.

### LRTA SERVICES

LRTA provides a variety of services:

- Fixed-Route
  - City
  - Suburban
  - Downtown Shuttle
- Demand-Responsive
  - Service for seniors in 10 communities
  - ADA complementary paratransit in communities with fixed-route service
  - Medical transportation
  - COA-sponsored van service in communities not served by demand-responsive service.
  - Recreation and social trips for nursing home residents.

Most LRTA service consists of local city and suburban routes that are focused on Lowell. These include 18 local fixed routes (including “city” and “suburban” services) and a downtown Lowell shuttle. Local services generally operate from 6:00 am to 7:00 pm on weekdays, 8:00 am to 5:00 pm on Saturdays. No service is provided on Sundays. Of the 18 routes, one operates during the winter holiday season only.

LRTA’s Roadrunner demand-responsive service operates in all communities with fixed-route service, plus four others. This service is available for those aged 60 or older and provides curb-to-curb service anywhere within the 10 Roadrunner communities from 8:00 am to 4:00 pm on weekdays. Roadrunner also provides LRTA’s ADA complementary paratransit service and this service operates the same hours as fixed-route service.

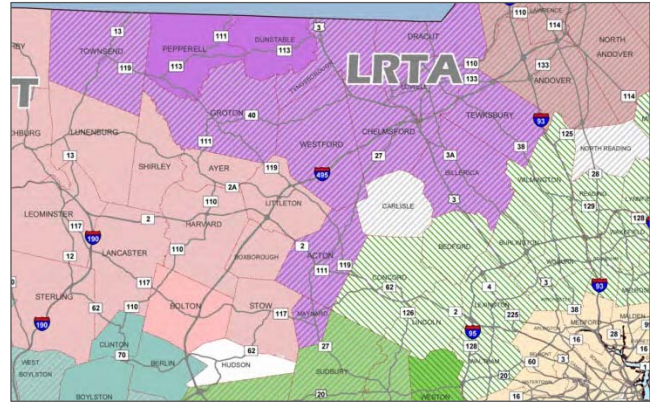
LRTA also provides three specialized types of demand-responsive service. These include:

- Medical trips to Lahey Clinic in Burlington, the Bedford VA Medical Center, and Boston area hospitals. This service operates on Wednesdays and is available to Road Runner eligible residents of Acton, Billerica, Chelmsford, Dracut, Lowell, Tewksbury, and Westford.
- Council on Aging sponsored van service for seniors in areas that are not served by Roadrunner.
- LIFE (Living for the Elderly) recreation and social trips for nursing home residents.

### LRTA REGIONAL CONNECTIONS

All of LRTA’s services converge at the Gallagher Transit Terminal, which is also the terminal for regional commuter rail services on MBTA’s Lowell Line. The Lowell Line provides service to Boston’s North

LRTA Service Area



LRTA Communities and Services

Community	Fixed-Route	Non-ADA Paratransit
Acton		√
Andover		
Bedford		
Billerica	√	√
Burlington	*	
Carlisle		
Chelmsford	√	√
Dracut	√	√
Dunstable		
Groton		√
Lowell	√	√
Maynard		
Pepperell		√
Tewksbury	√	√
Townsend		√
Tyngsborough	√	
Westford	√	√

\* Note: LRTA provides service to/from Burlington, but not within Burlington.



Station every 30 to 60 minutes from approximately 5:30 am to midnight on weekdays, and every 120 minutes between 7:00 am and 11:30 pm on Saturdays and Sundays. The Merrimack Valley Regional Transit Authority (MVRTA) provides service from Lawrence to Lowell at the Gallagher Transit Terminal on Route 41. Additionally, private operator Peter Pan provides regional coach services to destinations within New England and Sunshine Travel provides service to Mohegan Sun casino from Gallagher Transit Terminal.

## LRTA MAJOR FACILITIES

As described above, most service operates to and from the Gallagher Transit Terminal, which is LRTA's major passenger facility and also houses the LRTA administrative offices. The facility has 950 commuter parking spaces available at daily and monthly rates. The Gallagher Transit Terminal is located at the intersection of Thorndike Street at YMCA Drive. LRTA's bus maintenance facility is a separate facility located at 100 Hale Street.

## LRTA FARES

LRTA has three basic fare structures for its three primary types of service:

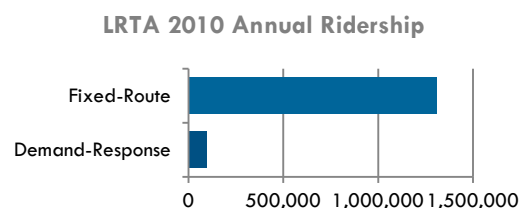
- Local Fixed-Route: \$1.00
- Suburban Fixed-Route: \$1.50
- Demand-Responsive: \$1.00 within one community; \$1.50 between communities; \$25.00 to Boston medical facilities, and \$12.50 to Bedford and Burlington medical facilities.

LRTA provides a variety of discounts for fixed-route services. These include a 50% discount for older adults (age 60+), disabled riders, and children between 6 and 12, and no fare for accompanied children under age 6. System-wide monthly passes are also offered for \$35.00, with a discounted rate for older adults and students (\$20.00). An 'express pass' for the Downtown Shuttle is also available (\$20.00). No discounts are offered for paratransit service.

Transfers cost \$0.25 on city routes (\$0.10 for discount riders), \$0.50 on suburban routes (\$0.25 for discount riders), and transfers are free to and from the downtown shuttle.

## LRTA 2010 RIDERSHIP

In 2010 LRTA carried 1.4 million passengers. A total of 93% of these passengers used local bus services and 7% used paratransit. In total, LRTA carries the sixth highest volume of riders among Massachusetts RTAs, but provides only the ninth highest amount of service (in terms of vehicle hours). The service has relatively high ridership largely due to the large proportion of riders using fixed-route service.



## LRTA 2010 FLEET SIZE

In 2010, LRTA had 47 vehicles for fixed-route service and 32 vehicles for paratransit service. Compared to other RTAs, LRTA has the sixth largest fixed-route fleet and the eighth largest paratransit fleet.

## LRTA 2010 OPERATING EXPENSES AND FARE REVENUES

In 2010, LRTA's total operating expenses were just under \$8.8 million. Of this, \$7.2 million (or 82%) was for fixed-route service, and \$1.6 million (or 18%) was for demand-responsive service. LRTA's operating costs were the eighth highest among RTAs.

Fare revenue covered approximately 13% of LRTA's 2010 operating expenses. By type of service, fare revenues cover 14% of fixed-route costs and 7% of demand-responsive costs. LRTA collects the sixth



lowest amount of fare revenue among RTAs, and has the fourth lowest farebox return ratio. In general, this is due to low farebox revenues from both fixed-route and demand-responsive services.

## LRTA EFFECTIVENESS AND TRENDS<sup>7</sup>

### LRTA Ridership

Between 2001 and 2010, total ridership on LRTA services declined from 1,820,000 to 1,440,000 passengers, or by 17%. Ridership began to decline after 2002, when service was reduced by 9%, and then declined until 2007, when ridership reached a low of 1,350,000 passengers. Since that time, ridership levels have fluctuated but have generally increased.

Ridership levels on fixed-route services dropped from 1.70 million riders to 1.34 million riders, or by 21%. During the same period, ridership on demand-responsive services declined from 124,000 riders to 100,000 passengers, or by 20%. Most of the decline took place between 2001 and 2004, when demand-responsive ridership dropped from 124,000 to 100,000. Since that time, ridership levels have been fairly steady.

### LRTA Revenue Vehicle Hours

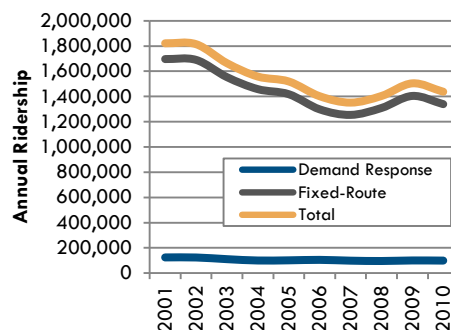
Between 2001 and 2010, the total amount of service that LRTA has provided, in terms of revenue vehicle hours, decreased from about 131,000 annual hours to about 116,000 hours, or by 8%. About half of the hours reduced were on fixed-route service and half were on demand-responsive service.

### LRTA Operating Costs and Fare Revenue

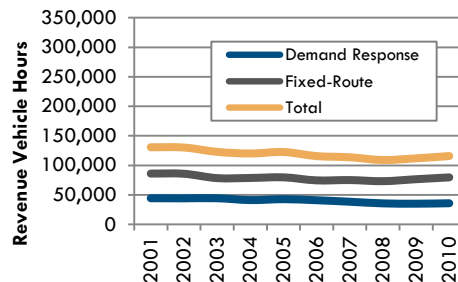
LRTA's operating costs increased between 2001 and 2010 from \$6.7 million to \$8.8 million, or by 32% overall. This represents an average annual increase of 3%. This very low rate of increase reflects the 11% reduction in revenue vehicle hours.

During the same period, farebox revenues increased 42% overall, rising from \$780,000 to \$1.1 million. On fixed-route services fare revenues rose by 41%, and on demand-responsive services, fare revenues increased by 51%.

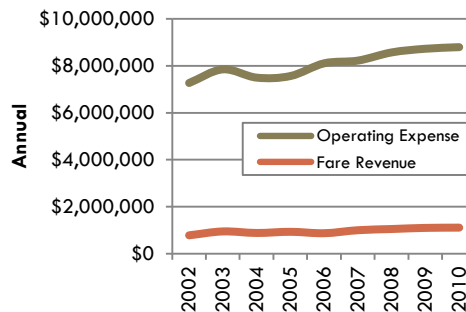
LRTA Ridership Trends



LRTA Vehicle Service Hour Trends



LRTA Operating Cost and Farebox Revenue



<sup>7</sup> All cost and revenue data is presented in actual year values. Costs and fare revenues for 2001 are in \$2001; operating costs and fare revenues for 2010 are in \$2010.





## LRTA Operating Cost per Passenger

Between 2001 and 2010, LRTA's overall operating cost per passenger increased from \$3.67 to \$6.11, or by 67%. Compared to other RTAs, LRTA's operating cost per passenger is in the middle.

On fixed-route services, operating costs per passenger increased from \$2.99 to \$5.41 or by 80%, meaning that LRTA has the median operating cost per passenger among RTAs. Demand-responsive costs, however, increased by only 24%, from \$12.90 per passenger to \$15.67. LRTA has the second lowest demand-responsive operating cost per passenger of all RTAs.

## LRTA Passengers per Revenue Vehicle Hour

Between 2001 and 2010, the number of passengers that LRTA has carried per passenger hour has fluctuated from 11.9 to 13.9. On fixed-route services, ridership has fluctuated from 16.6 to 19.7 passengers per revenue hour, and on demand-responsive services, the number of passengers per revenue hour has remained relatively steady, at 2.4 to 2.8. During the period when total ridership dropped (2002-2006), fixed-route service efficiency also declined. However, since ridership began to increase in 2007, efficiency has also increased. LRTA carries the seventh-highest volume of fixed-route passengers per revenue hour, and the third-highest rate of demand-responsive passengers per revenue hour.

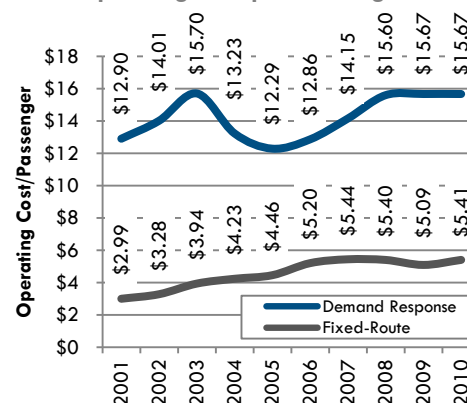
## LRTA Operating Cost per Revenue Vehicle Hour

Between 2001 and 2010, LRTA's operating cost per revenue vehicle hour increased by 48%, or an average of 4.7% per year. During that period, fixed-route costs increased from \$58.81 to \$90.55, or by 54% and demand-responsive costs increased from \$36.14 to \$43.15, or by only 19%. LRTA's 2010 operating cost per revenue vehicle hour for fixed-route service was seventh highest among RTAs, while for demand-responsive service it was fourth lowest.

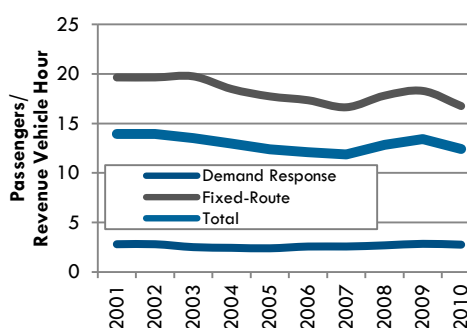
## LRTA KEY FACTS/ NOTABLE INITIATIVES

- All LRTA fixed route services converge at Gallagher Transit Terminal, which is also the terminal for the MBTA Lowell Commuter Rail Line. This terminal provides strong local and regional connections.
- On Wednesdays, LRTA provides extended door-to-door paratransit service for riders to access medical clinics in Burlington, Bedford, and Boston at a higher rate.
- LRTA provides paratransit service beyond what is required by ADA, serving ten communities in the Greater Lowell area.
- LRTA's costs for demand-responsive service, on a per passenger basis, are among the lowest of all RTAs.
- LRTA offers among the lowest fare among all RTAs for paratransit service (\$1.00 to \$1.50, the same price as fixed-route services). Fare revenues on LRTA services are relatively low.

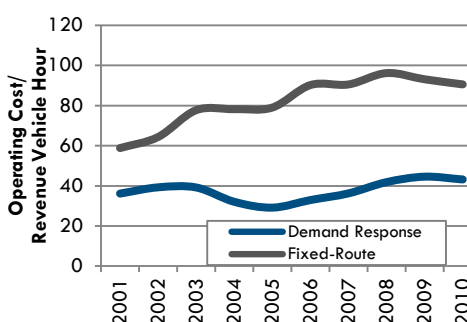
LRTA Operating Cost per Passenger Trends



LRTA Passengers per Revenue Vehicle Hour Trends



LRTA Operating Cost per Revenue Vehicle Hour Trends





## Martha's Vineyard Regional Transit Authority

The Martha's Vineyard Transit Authority (VTA) provides public transportation to all six towns on Martha's Vineyard. VTA provides year-round service, plus additional peak tourist season service between May and October.

### VTA SERVICES

VTA provides three types of services:

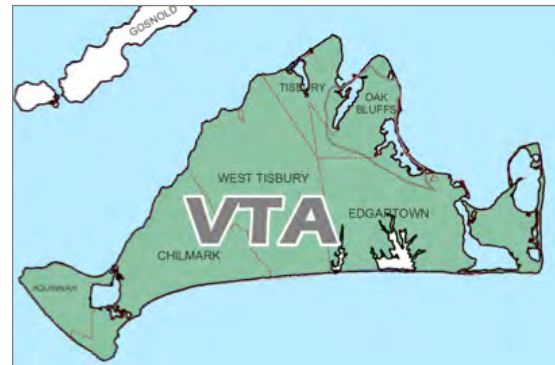
- Fixed-route service
- ADA complementary paratransit
- Boston medical transportation

VTA fixed-route service is comprised of 13 routes, 12 of which operate year-round. Fixed-route services run seven days a week, except for Thanksgiving and Christmas Day. During the summer peak, most VTA service runs every 30 to 60 minutes, from approximately 7:00 am – midnight. (Route #11 is the only seasonal service, which runs through downtown Edgartown at headways of 15 minutes.) Off-season, routes are less frequent and limited to service during AM and PM peaks. Service generally begins at 7:00 am and ends at 6:00 pm, and operates every 60 to 120 minutes. All buses can be flagged down anywhere along the route, provided it is safe for the bus to stop. VTA is one of the few RTAs that provide seven day a week service.

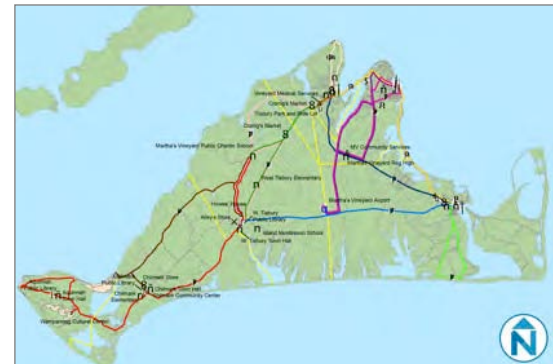
VTA's ADA complementary paratransit service, "The Lift", is available to individuals who are unable to use the fixed-route services because of a disability. The Lift is available within 3/4 mile of fixed-route service during the same days and hours as fixed-route.

Boston-area medical facility transportation is provided year-round by VTA. Every Tuesday, a van leaves at 7:00 am, takes the ferry to Woods Hole, and travels to many Boston hospitals and medical facilities. The van takes a 5:00 pm ferry back to the island, arriving on the Vineyard at 5:45pm. To be eligible for the service, individuals must be over 60 years old or have a medical disability. Riders must receive certification before using the service, and reservations must be made in advance. There is also stand-by status for other passengers, available on a space-available basis.

VTA Service Area



VTA Route Map



### VTA REGIONAL CONNECTIONS

VTA provides regional connections to the Vineyard's three ferry terminals and the airport. The services provided at the terminals and airport, which are not operated by VTA, include:

#### Vineyard Haven

- Year-round ferry service to and from Woods Hole
- Peak season ferry service to and from New Bedford

#### Oak Bluffs

- Year-round service ferry to and from New Bedford and Falmouth
- Peak season ferry service to and from Woods Hole, Falmouth, Hyannis, Nantucket, and Quonset Point, RI



## Edgartown

- Peak season ferry service to and from Falmouth

## Martha's Vineyard Airport

- Year-round air service to Boston, Hyannis, Nantucket.
- Peak season air service to and from New Bedford, Providence, White Plains, New York-JFK, Washington-Reagan, and New York-LaGuardia.

## MTA MAJOR FACILITIES

Major MTA facilities are limited to its administrative offices and garage, which are located in the same facility near the Martha's Vineyard Airport. MTA also has transit hubs in Vineyard Haven, West Tisbury, Edgartown, and Oak Bluffs, but these hubs have only limited bus stop facilities.

## MTA FARES

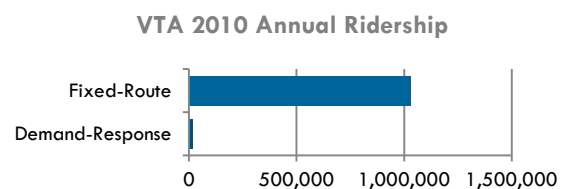
MTA has three basic fare structures for its primary types of service:

- Fixed-route service: \$1.00 per town, each way, including town of origin. With this fare structure, regular fares on individual routes range from \$1 to \$3.
- Demand-response: \$1.00 per town, each way, including town of origin.
- Boston medical transportation: \$10 each way

A variety of discounts are on fixed route service: 50% for seniors over 65, and free for children age 6 and under. One, three, seven, monthly, and annual passes are also available. Annual passes are available for students for half-price.

## MTA 2010 RIDERSHIP

In 2010, MTA carried just under 1.1 million passengers. The overwhelming majority of riders—99%—were on MTA's fixed-route services. MTA serves most of the island with fixed-route service, which limits demand for demand-response service to those who are unable to ride the bus.



It should also be noted that MTA's ridership is heavily concentrated in the summer tourist season. During July and August, ridership averages nearly 9,000 passengers per day, versus 700 to 800 per day in the middle of the winter.

## MTA 2011 FLEET SIZE

For fixed-route service, MTA operates 31 buses that range in size from 25 to 40 feet. For demand-response service, MTA uses five vans. By size and age, MTA's fleet composition is as shown below. MTA has a very young fleet, with only one van that is beyond its useful life.

Compared to other RTAs, MTA has the seventh smallest fixed-route fleet and the third smallest demand-responsive fleet (only higher than NRTA and CATA).

## MTA 2010 OPERATING EXPENSES AND FARE REVENUES

In 2010, MTA's total operating expenses were \$4.1 million. Of this, 88% was for fixed-route service, and 12% was for demand-responsive service. MTA's fixed-route operating costs are the sixth lowest of all RTAs, and demand-responsive costs were the second lowest (again, only higher than NRTA).



Fare revenue covered approximately 33% of VTA's 2010 operating expenses, which is very high, and the highest of all RTAs. By type of service, fare revenues cover 37% of fixed-route costs and 4% of demand-responsive costs. In 2010, VTA collected over \$1.3 million in fare revenue.

In total, VTA funds its operating costs through its farebox revenue (29%), state operating assistance (26%), federal funds (22%), local funds (18%), and brokerage and third party reimbursements (4%). VTA's combined share of local funds and farebox revenues, at 47%, is very high and helps the agency fund its evening and weekend service.

## VTA EFFECTIVENESS AND TRENDS<sup>8</sup>

Over the past decade, VTA's overall service levels, ridership, and productivity have increased dramatically.

### VTA Ridership

Between 2001 and 2010, VTA's total ridership has increased by 202% from 364,000 passengers per year to over 1.1 million. As described above, 99% of VTA's ridership is on its fixed-route services, and demand-response ridership has remained very low, ranging from 17,000 passengers in 2001 to 15,000 passengers in 2010. Much of that decline was attributable to VTA's 2007 transition from demand-response to year-round fixed-route service.

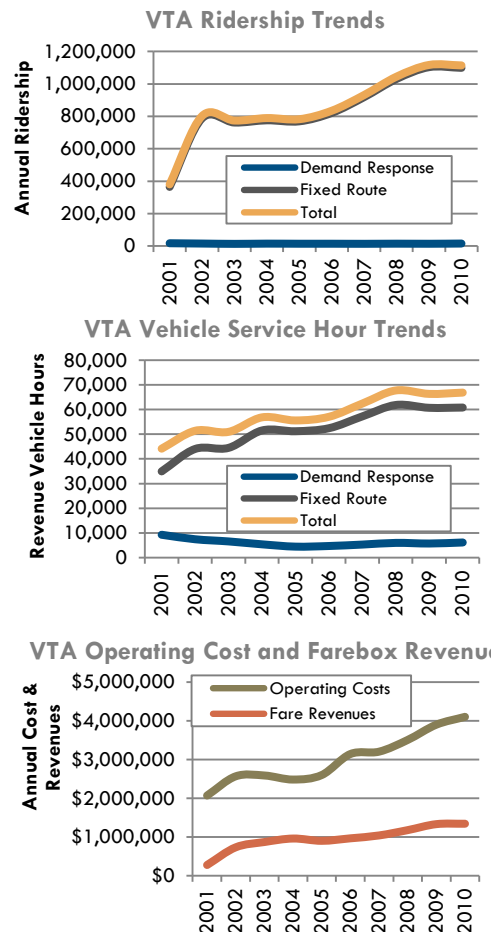
### VTA Revenue Vehicle Hours

Much of VTA's ridership increases have been due to the expansion of service, which has included new year-round routes and more frequent service. These service increases have been particularly effective, as ridership increases have been much higher than increases in the number vehicle hours. Between 2001 and 2010, the number of vehicle hours that VTA provides for fixed-route service has increased by 74%, or only 36% as much as the 202% increase in ridership. All of the service increases were for fixed-route service; over the same period, demand response hours declined by 34%.

### VTA Operating Costs and Fare Revenue

VTA's operating costs increased from \$2.1 million in 2001 to \$4.1 million in 2010, with much of the increase attributable to service expansions in 2002 and 2003 (when the number of service hours increased by 25% and 17%, respectively). In total, operating costs increased by 123% between 2001 and 2010, which again was significantly less than the 202% increase in ridership.

Fare revenues increased to a much higher extent than ridership or operating costs—up 390% between 2001 and 2010. This very large increase was due to the combination of fare and ridership increases. Over the same period, VTA's farebox return ratio has increased from 13% to 34%.



<sup>8</sup> All cost and revenue data is presented in actual year values. Costs and fare revenues for 2001 are in \$2001; operating costs and fare revenues for 2010 are in \$2010.





## VTA Operating Cost per Passenger

With ridership increases that have exceeded increases in operating costs, VTA's total operating cost per passenger declined from \$5.45 in 2001 to \$3.69 in 2010. These figures are overwhelmingly driven by VTA's cost per fixed-route passenger, which comprises 99% of the total, and VTA's cost per passenger for fixed-route service declined from \$4.47 to \$3.30. Based on 2010 rankings, this cost was the second lowest of all RTAs, second only to PVTa.

However, low cost for fixed-route riders masks high costs for demand-response riders, where costs increased from \$26.71 per passenger in 2001 to \$32.42 in 2010. These costs are high, and the highest of all RTAs.

## VTA Passengers per Revenue Vehicle Hour

Between 2001 and 2002, when VTA expanded service, the number of passengers that it carried per passenger hour increased by 62% from 12.3 to 19.9. It then declined through 2004 but since has slowly increased to 20.5. Again, these numbers are driven very strongly by fixed-route service, and based on 2010 rankings, VTA carries the sixth highest number of fixed-route passengers among all RTAs. (During July and August, it is likely that VTA carries the highest numbers.)

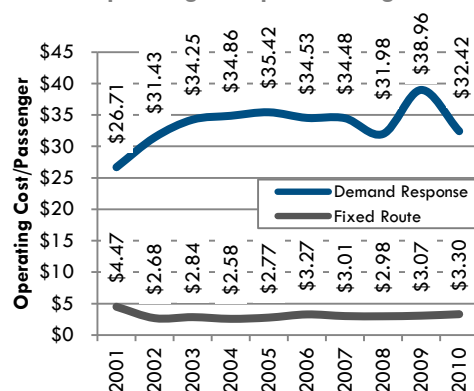
Over the same period, ridership per hour for demand-response service has been very low, but has increased from 1.8 in 2001 to 2.4 in 2010. This performance was about middle among RTAs.

## VTA Operating Cost per Revenue Vehicle Hour

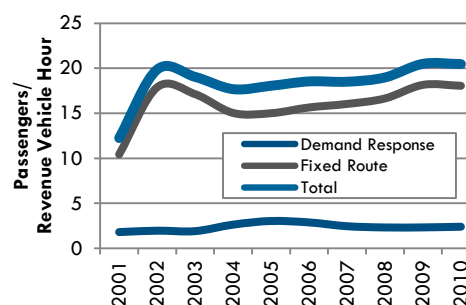
Between 2001 and 2010, VTA's operating cost per total revenue vehicle hour increased from \$47.03 to 61.37, or an average of 5.8% per year. For fixed route services, cost increases have been slightly lower, from \$46.66 to \$59.70. However, costs for demand-response service have increased at a much higher rate, from \$48.40 to \$78.09.

In 2001, operating costs per hour for fixed-route and demand-response service were essentially the same. However, in the mid-2000s, demand-response costs spiked significantly to over \$100 per hour, and have come down to under \$80 since that time. At most transit systems, demand-response costs are lower than fixed-route costs. This is usually because fixed-route drivers are paid higher rates than demand-response drivers; however, VTA pays both types of drivers the same rates. Based on 2010 rankings, VTA has the second lowest cost per revenue vehicle hour for fixed-route service, but the second highest for demand-response service.

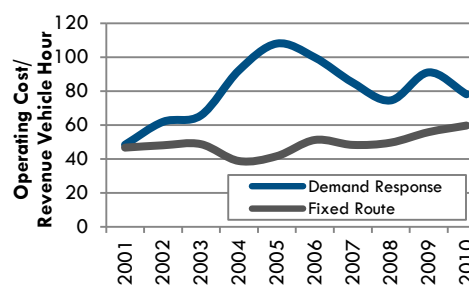
VTA Operating Cost per Passenger Trends



VTA Passengers per Revenue Vehicle Hour Trends



VTA Operating Cost per Revenue Vehicle Hour Trends



## VTA KEY FACTS/NOTABLE INITIATIVES

- Over the past ten years, VTA has expanded its service significantly, more than tripled its ridership, and increased its productivity.
- VTA's service and demand is highly seasonal. In the peak summer season, ridership is over 13 times higher than in the winter, and in the winter, 1/3 of its fleet is idle (plates are taken off of the vehicles to reduce insurance costs; largest vehicles are taken off the road). Years ago, VTA leased



some vehicles in the off-season to Vermont properties but in recent years, there have been no requests.

- Unlike most RTA's VTA provides seven day a week service and evening service.
- On a year-round basis, VTA carries the second highest volume of riders per revenue vehicle hour of all RTAs; during the summer it is likely the highest.
- VTAs fixed-route and demand-responsive cost structures are among the lowest of all RTAs.
- VTA's farebox return, at 33%, is the highest of all RTAs.
- VTA's local funding is also very high, e.g. for FY2012, the local share of funding is about 27%.
- The combination of a high farebox revenues and strong local support provides the resources for seven day a week and peak season evening service.

## Merrimack Valley Regional Transit Authority

The Merrimack Valley Regional Transit Authority (MVRTA) provides transit services in the Merrimack Valley in northeastern Massachusetts. Fixed-route service is largely centered on Haverhill, Lawrence and Methuen, but also extends beyond its membership area to Lowell, Boston, and Hampton Beach (NH). MVRTA consists of 15 communities in the Merrimack Valley (Haverhill, Lawrence, Andover, North Andover, Methuen, Merrimac, Amesbury, Newburyport, Boxford, Groveland, Salisbury, Georgetown, Rowley, West Newbury and Newbury). MVRTA operates weekday commuter service to Boston and general public dial-a-ride. Local fixed-route service is provided Monday through Saturday.

### MVRTA SERVICES

MVRTA provides five basic types of service:

- Fixed-Route
  - Local
  - Boston Commuter Bus
- Demand-Response
  - EZ Trans (ADA complementary paratransit and non-ADA demand response service)
  - Boston/Peabody Medi-Ride
  - Ring & Ride (general public dial-a-ride and flex-route service)

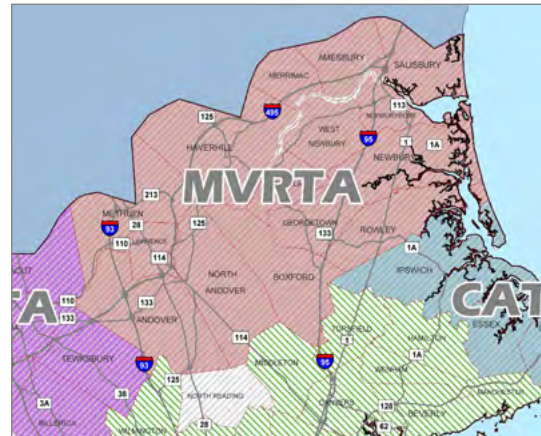
MVRTA operates 20 fixed-routes, with five different types of service. Sixteen are local fixed-routes. Four provide intercity service, between Lawrence and Haverhill; Lawrence and Lowell; Haverhill and Amesbury; and Amesbury/Newburyport/Salisbury. Another route provides seasonal service to beach areas, including to Hampton Beach. The remaining fixed-route service is employment based service. Most local fixed-route services generally operate from early morning (5:00 am – 7:00 am) to late afternoon/evening (5:45 pm – 8:00 pm) on weekdays, and 7:00 am – 7:00 pm on Saturdays.

EZ Trans provides both ADA complementary paratransit service in conjunction with MVRTA fixed-route services as well as demand response service for older adults and persons with disabilities living in municipalities with fixed-route service. All ADA and demand response service have higher fares. ADA service is provided during fixed-route operating hours, while EZ Trans non-ADA service is offered Monday to Friday from 8:00 am to 5:00 pm.

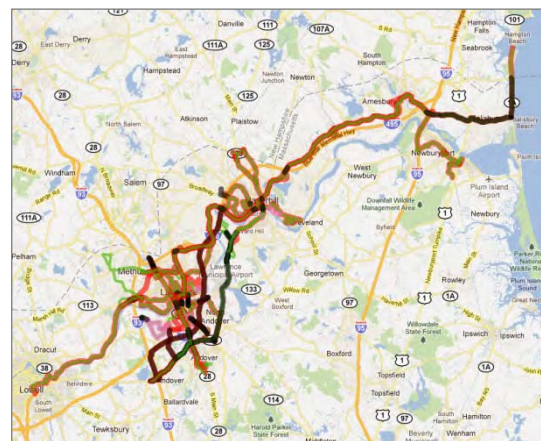
The Boston Commuter Bus provides commuter connections from Methuen, Lawrence and Andover to multiple destinations in downtown Boston and the Back Bay, including Government Center, Park Street Station, the State Transportation Building, Copley Square, and Kingston/Essex at South Station. MVRTA provides four AM inbound trips and four PM outbound trips; the AM trips depart Methuen between 5:45 am and 7:00 am, and PM trips depart Boston between 4:40 pm and 5:40 pm. Service operates on weekdays only.

Boston/Peabody Medi-Ride operates three days per week, connecting the communities within the MVRTA service area to 13 Boston-area hospitals and the Lahey Clinic in Peabody. Service is provided to only one of three geographic areas on each service day (Greater Haverhill on Mondays, Greater Lawrence on Tuesdays, and Greater Newburyport on Thursdays). The Boston/Peabody Medi-Ride service is funded by a Federal Transit New Freedom Grant.

MVRTA Service Area



MVRTA Routes





Ring & Ride is a series of municipally based demand-responsive services that are provided in a defined service area or along three specific former bus routes. There are five communities that receive Ring & Ride within a defined service area. There are three communities that receive Ring & Ride route designated service, Route 42 – West Methuen, Route 22 – Andover, and portions of Route 54 – Newburyport.

## MVRTA REGIONAL CONNECTIONS

Many of MVRTA's local fixed-routes connect to either the MBTA's Commuter Rail stations in Haverhill and Lawrence. Haverhill Station is also served by Amtrak's Downeaster Service between Portland, Maine and Boston. Additionally, MVRTA's Route 41 service operates between Lawrence and Lowell, serving the Kennedy Transit Terminal in Lowell, where most Lowell Regional Transit Authority (LRTA) routes plus the MBTA's Lowell Commuter Rail Line converge. The connections create opportunities for travel between systems and across communities between Lowell, Lawrence, Haverhill and Newburyport. Connections to Commuter Rail in Newburyport are also provided by Route 54 – Newburyport/Salisbury. MVRTA is also exploring service to Route 28/Rockingham Park in New Hampshire.

## MVRTA MAJOR FACILITIES

MVRTA's most significant passenger facility is the McGovern Center in Lawrence, which opened in December 2005, and includes local bus service connections to the MBTA commuter rail, and incorporates a structured parking facility. The Gateway Project, a multimodal surface parking area, opened in November 2010. The Haverhill Intermodal Parking Facility, a new structured parking garage located adjacent to Haverhill Station, opened in November 2011. The Costello Transportation Center is under construction in Amesbury, and will be a hub for fixed and paratransit service. It is scheduled to open in May 2012. MVRTA also has plans for a transportation facility in Newburyport.

MVRTA bases all of its services and its administrative headquarters at a facility it has owned since 1980 and continues to upgrade. This facility is located at 85 Railroad Avenue in Haverhill, near the Bradford Commuter Rail Station. All service begins and is housed here, and all maintenance and cleaning is completed here.

## MVRTA FARES

MVRTA has five basic fare structures for its five distinct types of service:

- Fixed-route service: \$1.25
- Boston Commuter Bus: \$5.00
- Medi-Ride: \$8.00 adult, \$4.00 companion
- Ring & Ride: \$ 2.00 within the designated service area; rides for seniors to the Boxford Senior Center are free; Groveland route is free. Georgetown Ring & Ride service is free.
- EZ Trans: \$2.00 (ADA trips); \$3.00 to \$9.00 (non-ADA trips)

On local fixed-route services and Ring & Ride, transfers between local fixed-route services are free, and a variety of discounts are provided. These include a 50% discount for people over 59, disabled riders, and those with a Medicare card, reduced rates (\$.60) for students, aged 13-17 on school days only, and free rides for accompanied children under age 6 at all times. A variety of passes are also offered, including 31-day, one-day, 20-ride and 10-ride passes. No discounts are available on EZ Trans services.

On the Boston Commuter Bus, a discounted 10-ride pass is available, and senior citizens ride for \$4.50, which is a \$0.50 discount.

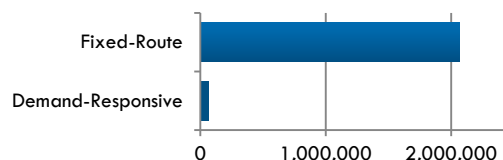




## MVRTA 2010 RIDERSHIP<sup>9</sup>

In 2010, MVRTA carried approximately 2.1 million passengers. Ridership on demand-responsive services accounted for just 67,000 of these riders, or 3% of the total. This figure includes riders on EZ Trans service as well as on Ring & Ride. MVRTA carries the fourth highest number of riders among Massachusetts RTAs, but provides only the eighth highest volume of service in terms of revenue vehicle hours.

MVRTA 2010 Annual Ridership



## MVRTA 2010 FLEET SIZE

In 2010, MVRTA had 52 vehicles for fixed-route service and 16 vehicles for demand responsive service. As compared to the other RTAs, MVRTA has the fourth largest fixed-route fleet and the fourth smallest demand-responsive fleet.

## MVRTA 2010 OPERATING EXPENSES AND FARE REVENUES

In 2010, MVRTA's total operating expenses were \$11.5 million dollars. Of this, \$9.7 million or 85% was for fixed-route service, and 15% was for fixed-route service. MVRTA's operating costs are the fifth highest among RTAs.

Fare revenue covered approximately 12% of MVRTA's 2010 operating expenses. By type of service, fare revenues cover 8% of paratransit costs and 13% of local service costs. The total amount of fare revenue collected by MVRTA is about average among RTAs, but MVRTA has the third lowest farebox return ratio.

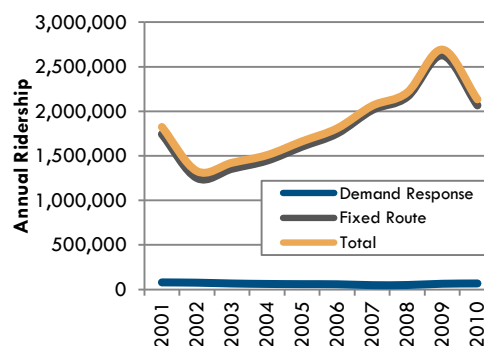
## MVRTA EFFECTIVENESS AND TRENDS<sup>10</sup>

MVRTA's productivity is influenced by the fact that ridership on fixed-route services grew while ridership on demand-responsive services declined. As a result, their overall productivity has increased over time.

### MVRTA Ridership

Between 2001 and 2010, total ridership increased from 1.8 million passengers to 2.1 million passengers per year, an overall increase of 17%. Ridership has grown every year since 2002. Fixed-route ridership accounts for almost all of the change in total ridership. Demand-responsive ridership dropped by 16% since 2001, but this only represents a loss of 12,000 annual rides.

MVRTA Ridership Trends



<sup>9</sup> All data for this and the following sections are NTD 2010 data to maintain consistency between reports.

<sup>10</sup> All cost and revenue data is presented in actual year values. Costs and fare revenues for 2001 are in \$2001; operating costs and fare revenues for 2010 are in \$2010.



## MVRTA Revenue Vehicle Hours

Since 2001, the total amount of service that MVRTA provided, in terms of revenue vehicle hours, decreased by 18%. However, while revenue vehicle hours on demand responsive services decreased by 39% -- dropping from 59,000 hours to 36,000 hours -- annual fixed-route hours decreased by only 5%, dropping from 103,000 to 98,000. For demand response service, the decline in service provided corresponds with the decline in ridership.

## MVRTA Operating Costs and Fare Revenue

MVRTA's operating costs increased from \$7.6 million in 2001 to \$11.5 million in 2010. This represents an increase of 52% over 10 years, or an average of 6% per year. Overall, this increase is comparatively low, and reflects the overall reduction in service hours that took place during the same period. The MVRTA improved fixed-route service on 11 Lawrence based routes for weekdays and Saturdays in FY2006 by improving route frequencies and adding weekday peak hour service. These coincided with the December 2005 opening of the McGovern transportation Centre in Lawrence, which all contributed to an increase in operating cost over this period.

Overall, from 2001 to 2010, farebox revenues increased from \$850,000 to \$1.4 million, or by 59%, seemingly largely due to the increase in ridership over time.

## MVRTA Operating Cost per Passenger

Between 2001 and 2010, MVRTA's operating cost per passenger increased from \$4.16 to \$5.39, or by 30% (for an average of 3.9% per year). MVRTA has the fourth lowest operating cost per passenger among RTAs.

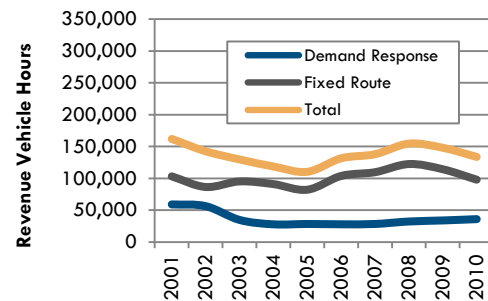
MVRTA's operating cost per passenger for fixed-route services remained fairly steady over the decade, rising from \$3.76 to \$4.74, or by 26% overall. MVRTA has the fifth lowest fixed-route operating cost per passenger among all RTAs.

Between 2001 and 2010, MVRTA's operating cost per passenger on demand-responsive services increased from \$12.83 to \$25.42, an increase of 98%. Overall, MVRTA had the fourth highest demand-responsive operating cost per passenger (2008).

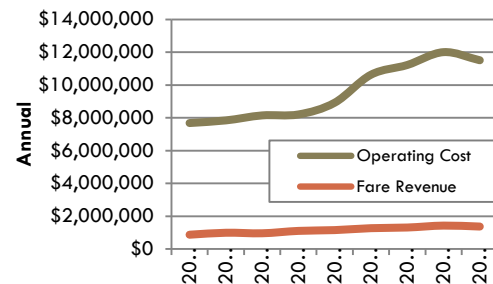
## MVRTA Passengers per Revenue Vehicle Hour

Between 2001 and 2010, the number of passengers that MVRTA carried per passenger hour fluctuated somewhat, but overall increased from 11.3 passengers per revenue vehicle hour to 16.0 passengers per revenue vehicle hour, an increase of 42%. Increased efficiency occurred for both fixed-route and demand-responsive services. On fixed-route services, a 5% decrease in service hours resulted in a 19% increase in ridership, while a 39% reduction in demand-responsive service hours was correlated with only a 16% loss in ridership. On demand-responsive services, efficiency remained fairly steady at between

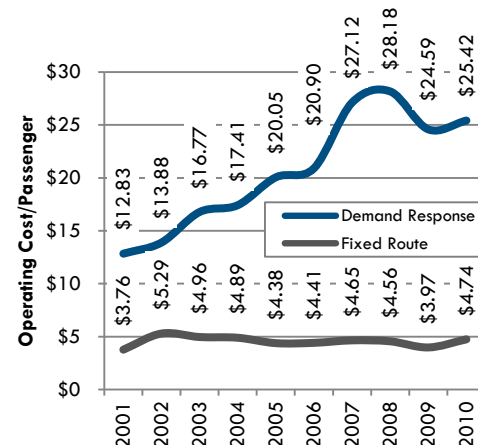
MVRTA Vehicle Service Hour Trends



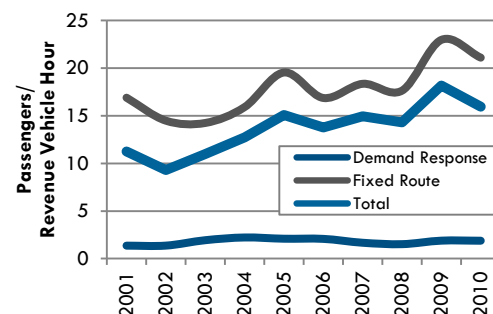
MVRTA Operating Cost and Farebox Revenue



MVRTA Operating Cost per Passenger Trends



MVRTA Passengers per Revenue Vehicle Hour Trends



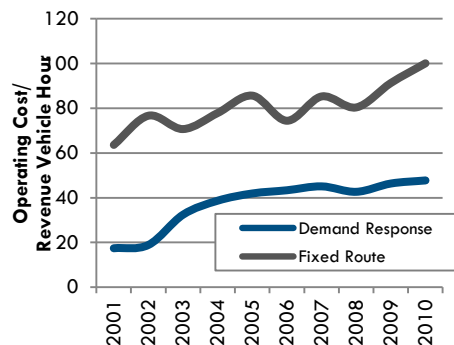


1.4 and 2.2 passengers per revenue vehicle hour, while on fixed-routes service levels rose from 16.9 to 21.0 passengers per revenue vehicle hour. As compared with other RTA's MVRTA carries the fourth highest number of passengers per revenue vehicle hour on all services. It also carries the fourth highest number of fixed-route passengers per hour, but the fifth lowest number of passengers per hour on demand-responsive services.

## MVRTA Operating Cost per Revenue Vehicle Hour

Between 2001 and 2010, MVRTA's operating cost per revenue vehicle hour for all services increased by 84%, or an average of 7.4% per year. While costs on both types of service rose, demand-responsive costs grew much faster: the cost of demand-responsive service grew by 174%, as compared with 57% for the fixed-route service. MVRTA's demand-responsive operating cost per hour is seventh lowest among RTAs, but fixed-route costs are fourth-highest. MVRTA has the second-highest operating cost per hour among all RTAs.

MVRTA Operating Cost per Revenue Vehicle Hour Trends



## MVRTA KEY FACTS/NOTABLE INITIATIVES

- MVRTA provides two different types of demand-responsive service: EZ Trans, the ADA complementary paratransit service, and Ring & Ride, a set of “flex” routes that provide demand-response service within defined areas. Two Ring & Ride services have eligibility requirements, but most do not.
- MVRTA operates a successful Boston Commuter Bus service to destinations within Boston (such as Park Street, Government Center, and Back Bay) that are not directly served by the MBTA Haverhill Commuter Rail Line (which serves North Station).
- MVRTA is one of the original five RTAs established under Chapter 161B.
- MVRTA has been heavily involved and successful in completing capital projects to enhance local service and complement economic development initiatives.

## Metrowest Regional Transit Authority

The MetroWest Regional Transit Authority (MWRTA) serves the suburbs west of Boston, primarily between I-95 and I-495. Services are centered in Framingham, and Natick, with service also provided to Ashland, Holliston, Hopkinton, Marlborough, Sherborn, Southborough, Sudbury, Wayland and Weston. MWRTA commenced operating services in 2006, when legislation allowing the formation of new RTAs within the existing MBTA service area was passed.

### MWRTA SERVICES

MWRTA provides six different types of services:

- Local fixed-route service
- A Green Line Shuttle service
- Veteran's Hospital Shuttle (to Boston VA Hospitals)
- ADA complementary paratransit (The RIDE) - Framingham and Natick
- "Dial-a-Ride" ADA complementary paratransit - Marlborough, Southborough, Ashland, Wayland
- Natick Grocery service

The 11 fixed-route services generally operate from morning (5:30 am - 9:40 am) to late afternoon/evenings (3:47 pm - 7:55 pm) on weekdays, and limited service on four routes is provided between morning (9:00 am-9:30 am) and afternoon (3:45-5:30 pm) on Saturdays. Most routes operate throughout the day on weekdays, but some routes provide peak period service only. The Green Line Shuttle (Route 1) operates between 5:45 am and 7:18 pm on weekdays only. The Veteran's Shuttle provides three round-trips daily between Framingham and the veteran's hospitals in the Jamaica plain and West Roxbury neighborhoods of Boston.

In 2009, MWRTA assumed responsibility for the MBTA's 'The RIDE' operations within Framingham and Natick. 'The RIDE' ADA complementary paratransit service is provided throughout Framingham and Natick (and is not limited to the legally mandated 3/4 of a mile of fixed-route services). For clients who were screened for eligibility after July 1, 2009, service on MWRTA's 'The RIDE' is provided during the same operating days and times as fixed-route service. For clients who gained eligibility prior to this date, service is available following MBTA standards, between 5 am and 2 am seven days per week.

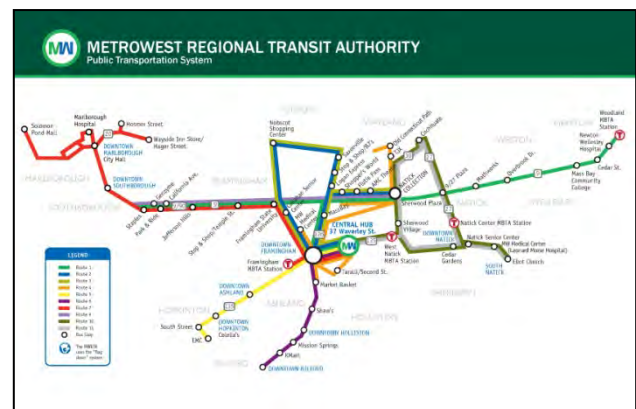
'Dial-a-Ride' ADA complementary and elder paratransit service operates in the other communities within MWRTA's fixed route service area. Dial-a-Ride service is open to riders in Marlborough, Southborough, Ashland, and Wayland. Advance booking is required two days in advance for elders, or one day in advance for ADA riders. For medical trips and pre-arranged group trips, service is also provided to all communities within and neighboring the MWRTA service area, plus Needham, Shrewsbury, Worcester and Boston for a higher fare. The Dial-a-Ride service is contracted to Busy Bee Transportation.

MWRTA offers a door-to-door grocery shopping shuttle to Natick residents who are 65 and older and have signed up for the senior transportation access ID card. Service must be reserved ahead and is subject to space availability. The service operates on Tuesdays and Thursdays to Market Basket in Ashland.

MWRTA Service Area



MWRTA System Map







## MWRTA REGIONAL CONNECTIONS

MWRTA provides service to three MBTA commuter rail stations (Framingham, West Natick, and Natick Center on the Framingham/Worcester line) and one station on the MBTA Green Line D - Riverside (Woodland Station). MWRTA is seeking an improved connection between their bus hub and West Natick station. MWRTA also maintains some reciprocity with WRTA on demand response service.

## MWRTA MAJOR FACILITIES

Most service operates to and from downtown Framingham, converging at Downtown Common, near the Framingham Commuter Rail Station. All fixed-route services also converge at the “Central Hub” on Waverly Street at the Framingham/Natick border. The Central Hub is also the MWRTA headquarters, and houses the operations and maintenance of MWRTA vehicles. MWRTA has been in this building for the past three years, and has substantially renovated and added value to it, including installation of maintenance, fare collection and technology systems.

## MWRTA FARES

MWRTA has a number of fare structures for its services:

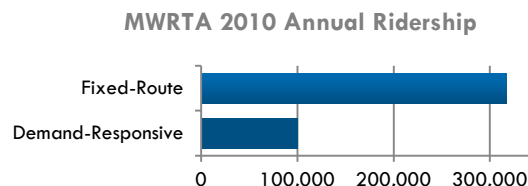
- Fixed-route service: \$1.50
- Green Line Shuttle (Route 1): \$3.00/\$1.50 for partial distance trip
- Veteran's Hospital Shuttle: \$2.00
- Natick Grocery Shuttle: \$3.00 round trip
- 'The RIDE' ADA complementary paratransit: \$2.00 (cash fares not accepted - advance billing only)
- 'Dial-a-Ride' ADA complementary paratransit: \$2.00 within service area; \$3.00 for medical trips to other contiguous service areas plus Shrewsbury and Needham; \$5.00 for medical trips to Boston and Worcester

A variety of discounts are provided for local fixed-route services. These include a 50% discount for people over 64, passengers with disabilities, and those with a Medicare card, a 33% discount for students, and free service for blind individuals and accompanied children under 6. Single day passes and 20 ride transit passes are also offered. Additionally, MWRTA has inter-operability with the CharlieCard fare system on fixed-route services and offers a discount of between \$0.05 and \$0.80 (depending on the service used and other discounts applied) for using the card. No discounts are offered for ADA paratransit and Veteran's Hospital Shuttle services. No passes are available.

Transfers among MWRTA fixed-route services are free with a paper ticket issued on board.

## MWRTA 2010 RIDERSHIP

In 2010, MWRTA carried just under 420,000 passengers. In total, 76% of riders used fixed-route services and 24% used demand-responsive services. Overall, as of 2010, MWRTA carried the fourth lowest volume of riders among Massachusetts RTAs, and the sixth lowest amount of service in terms of vehicle hours.



## MWRTA 2010 FLEET SIZE

In 2010, MWRTA had 23 vehicles for fixed-route service and 29 vehicles for demand-responsive service.

## MWRTA 2010 OPERATING EXPENSES AND FARE REVENUES

In 2010, MWRTA's total operating expenses were \$5.6 million dollars. Of this, \$2.8 million or 49% was for demand-responsive service, and 51% was for fixed-route service. MWRTA's operating costs are the sixth lowest among RTAs.

Fare revenue covered approximately 9% of MWRTA's 2009 operating expenses. By type of service, fare revenues covered 10% of paratransit costs and 9% of local service costs. MWRTA collected the fourth lowest amount of fare revenue among RTAs, and had the second lowest farebox return ratio.

### MWRTA EFFECTIVENESS AND TRENDS<sup>11</sup>

MWRTA commenced service in 2006, and integrated services formerly provided by the Framingham Lift and the Natick Neighborhood Bus service. Due to transitions from this service, and continued takeover of previously provided MBTA paratransit (The Ride) service, numbers prior to 2010 are inconsistent and in the process of being updated. Demand Response ridership on The Ride service assumed from the MBTA had credited costs and service to MWRTA and ridership to the MBTA. NTD reporting data for 2010 is accurate and used for comparative purposes. According to MWRTA ridership has risen annually since MWRTA service began.

#### MWRTA Ridership

MWRTA ridership in 2010 totaled almost 420,000 passengers. The majority of this ridership, almost 317,000 passengers, is on the fixed-route service. An additional 100,000 riders are on the various demand-response services provided.

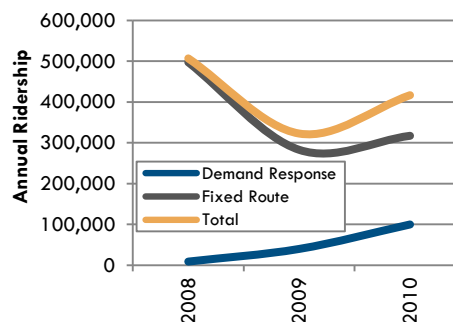
#### MWRTA Revenue Vehicle Hours

In 2010, revenue vehicle hours totaled over 91,000 service hours. Though split somewhat equally, demand response hours (49,158) exceeded fixed-route service hours (42,661).

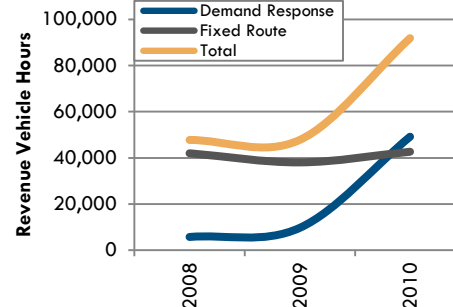
#### MWRTA Operating Costs and Fare Revenue

MWRTA's operating costs for 2010 are almost \$5.6 million in 2010, with a fairly even split between demand response and fixed-route service costs. Fare revenue was approximately \$520,000, likewise derived almost evenly from demand response and fixed-route service.

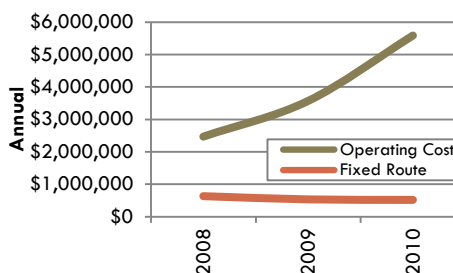
MWRTA Ridership Trends



MWRTA Vehicle Service Hour Trends



MWRTA Operating Cost and Farebox Revenue



<sup>11</sup> All cost and revenue data is presented in actual year values. Costs and fare revenues for 2001 are in \$2001; operating costs and fare revenues for 2010 are in \$2010.



## MWRTA Operating Cost per Passenger

In 2010, MWRTA's operating cost per passenger on fixed-route services was \$8.91, during this period, which is an increase from previously shown information. This was the second highest costs per passenger among RTAs.

MWRTA's operating cost per passenger on demand-response services for 2010 is \$27.74. This was the third highest cost among RTAs.

## MWRTA Passengers per Revenue Vehicle Hour

Passengers per revenue vehicle hour for MWRTA fixed-route service was just below 8 passengers/hour. For demand-response service these numbers were about 2 passengers per hour. MWRTA had the third lowest number of passengers per revenue vehicle hour among RTAs in 2010.

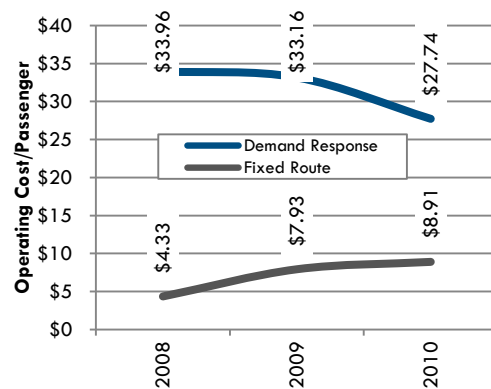
## MWRTA Operating Cost per Revenue Vehicle Hour

In 2010, MWRTA had the fourth lowest operating cost per revenue vehicle hour of all RTAs. For 2010, MWRTA's operating cost per revenue vehicle hour was \$60.83. Operating cost per revenue vehicle hour increased by 29% on fixed-route services, rising from \$51.31 in 2008 to \$66.17 in 2010.

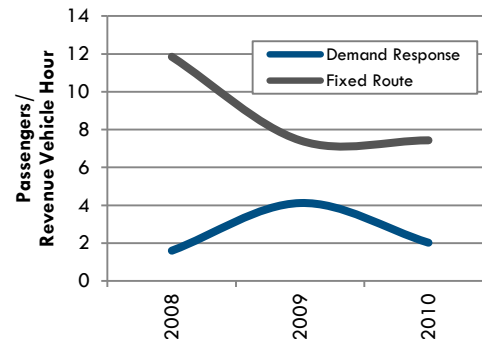
## MWRTA KEY FACTS/NOTABLE INITIATIVES

- MWRTA is the newest RTA, having only been in existence since 2006.
- MWRTA continues to assume responsibility for The RIDE ADA complementary paratransit service within Framingham and Natick from the MBTA, with a significant impact on overall operating statistics for the agency.
- MWRTA continues to advance technologically. It was the first system in the Commonwealth to implement a virtual map service showing bus locations in real time online. MWRTA also has Charlie Card interoperability with the MBTA and uses the same fareboxes.
- Significant growth within MetroWest is envisioned, as 57% of employed MetroWest residents work in MetroWest, while only 12% work in Boston.
- In a short period of time, MWRTA has established partnerships with universities, large employers and TMAs, and continues to expand these.

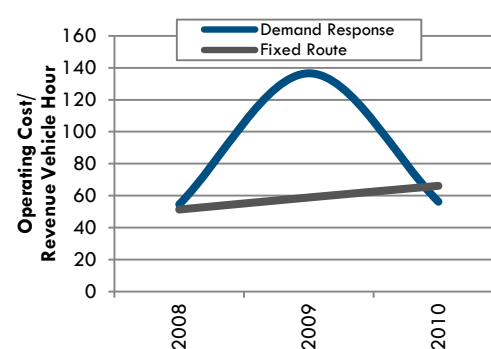
MWRTA Operating Cost per Passenger Trends



MWRTA Passengers per Revenue Vehicle Hour Trends



MWRTA Operating Cost per Revenue Vehicle Hour Trends





## Montachusett Regional Transit Authority

The Montachusett Regional Transit Authority (MART) serves an area covering 21 municipalities in north-central Massachusetts. Its core service area includes the cities of Fitchburg, Leominster, and Gardner, but its overall service area includes the adjoining towns of Ashburnham, Ashby, Ayer, Bolton, Boxborough, Hardwick, Harvard, Hubbardston, Lancaster, Littleton, Lunenburg, Royalston, Shirley, Sterling, Stow, Templeton, Westminster, and Winchendon. Most of MART's fixed-route service converges at the MART Intermodal Center in Fitchburg or at Monument Square in Leominster.

MART serves as the human service transportation (HST) broker for its service area. In addition, it also has the HST contracts for approximately 70% of state of Massachusetts, including Metro Boston, the Pioneer Valley, the North Central Area, Lowell and the South Central Area of Worcester County.

### MART SERVICES

MART provides several different types of services:

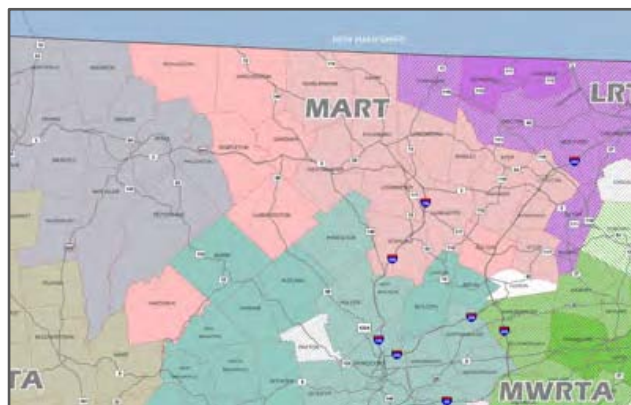
- Local fixed-route service within and adjacent to Leominster, Fitchburg, and Gardner
- Longer-distance fixed-route service: Mount Wachusett Community College (MWCC) Route and G-Link services
- Boston and Worcester Shuttles (service to area hospitals)
- Subscription demand response service in Fitchburg, Gardner and Leominster.
- Regular fixed-route and shuttle service for Fitchburg State University.
- Town-based demand response service through local COAs.
- ADA complementary paratransit

MART provides 13 fixed-route local bus services. These generally begin operations on weekdays between 5:00 am and 7:00 am and run through evenings ending between 5:00 pm and 7:00 pm.

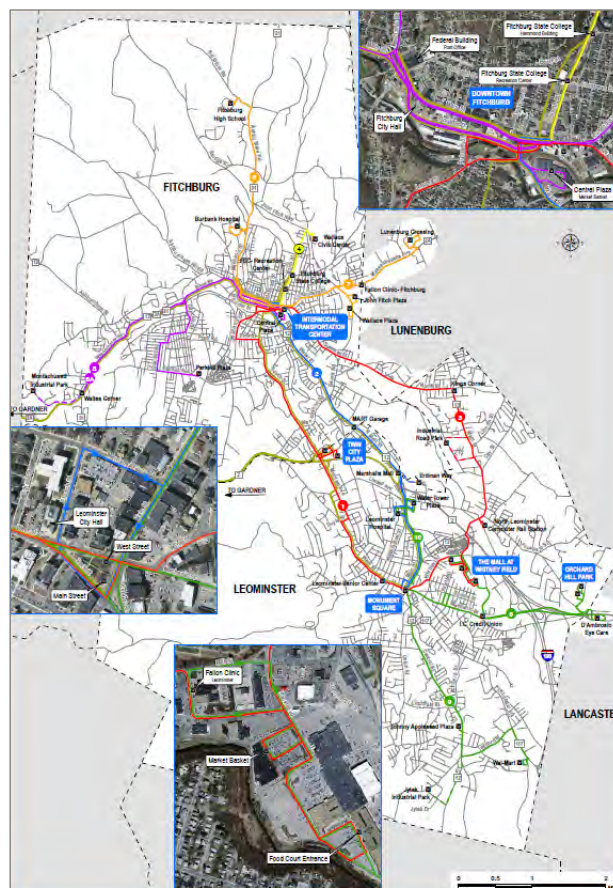
All but one route operates on Saturdays with service available roughly between 9:00 am and 5:00 pm. MART operates one high (15-minute) frequency fixed-route connecting the main Fitchburg State University campus with remote parking facilities; most other routes operate with hourly or 45 minute headways.

MART also operates three longer-distance routes with more limited service. These include a route connecting MWCC in Gardner with Leominster and Fitchburg, and two "G-Link" routes, one of which connects Gardner to Orange and one connects Gardner to Winchendon. G-Link routes operate

MART Service Area



MART Local Fixed-Route Map







approximately every two hours during peak periods (6:00 am to 9:00 am; 12:00 pm to 2:00 pm; 3:00 pm to 6:00 pm). The G-Link buses also connect with FRTA services to provide public transportation along the Route 2 corridor. The MWCC Intercity/Commuter operates with higher frequencies during peak periods and operates with a limited schedule during the summer.

MART provides ADA complementary paratransit city-wide in Fitchburg, Leominster, and Gardner. Outside of these areas, MART provides ADA complementary paratransit within  $\frac{3}{4}$  miles of the fixed-route service. As part of its town-wide ADA service, MART also sells curb-to-curb subscription service to members of the general public. Subscription service fares vary by frequency of use, by origin and destination, and vary from about \$40 to \$102.50 per month.

MART member communities without fixed-route service can work with MART to receive town based demand response services. These services are typically operated by local Council on Aging (COA) organizations and MART provides the vehicle, vehicle maintenance and driver training; fuel reimbursements are also available. As long as the town serves older adults and persons with disabilities they are allowed to operate other services, such as shuttles to/from train stations.

MART also operates a general public shuttle service to medical facilities in Boston and Worcester. Each shuttle has three round trips on weekdays. The bus makes four scheduled stops in the MART service area and travels directly to the medical facilities in Boston and Worcester. Once in Boston and Worcester, the bus operates as a type of deviated fixed-route service and will take the passengers to their requested facilities. MART charges \$12 to Boston and \$10 to Worcester, with slightly lower fares for older adults and persons with disabilities.

## MART REGIONAL CONNECTIONS

Many MART services provide connections to the MBTA Fitchburg Commuter Rail line at the Fitchburg and North Leominster stations. Additionally, MART's Gardner to Orange G-Link route connects to FRTA service in Athol and Orange.

## MART MAJOR FACILITIES

MART's administrative offices are located in a vehicle maintenance and operations facility on the town line between Fitchburg and Leominster. It also owns parking lots and garages at two MBTA rail stations, one at the MBTA Fitchburg commuter rail station and another at the Leominster MBTA commuter rail station. The Fitchburg station, known as the Fitchburg Intermodal Facility, is also the primary bus passenger facility. The HST brokerage function is also located at this facility. MART also recently opened a maintenance and storage facility in Gardner.

In addition to Fitchburg the commuter rail station, MART is coordinating the development of a new MBTA rail station in Littleton MA. MART has also partnered with the MBTA in the planning for the proposed Wachusett station approximately four miles west of the Fitchburg Intermodal Center.

## MART FARES

MART has a basic fare structure that mirrors its primary service types:

- In-city fixed-route service (Fitchburg/Leominster and Gardner services): \$1.00
- Inter-city fixed-routes service: \$1.50
- ADA complementary paratransit: \$1.50 (for local service) - \$3.00 (intercity service - twice the fixed route fare)
- Boston/Worcester medical service shuttle: \$12.00/\$10.00 respectively
- Fares on subscription services vary by use and trip origin/destination

A variety of discounts are available. These include a half-fare discount for people over 60, disabled riders, and those with a Medicare card, and free service for accompanied children under 5, active veterans, and Fitchburg State University faculty, staff, and students with ID. On the Boston and Worcester shuttles, a \$2.00 discount is offered for those with a disability; primary care assistants may ride for half price, and

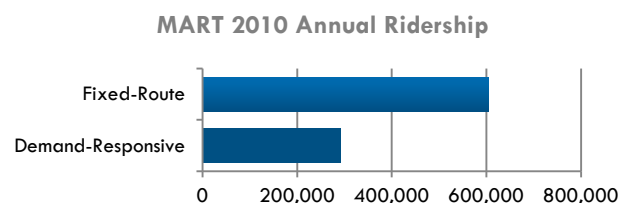
assistants under age 18 or over age 60 may ride for half price minus one dollar, while veterans ride for free. Monthly regular and student passes are also available.

## MART TRENDS

The following figures describe MART's performance in terms of ridership, service levels (revenue hours), farebox revenues and operating costs. It should be noted that beginning in 2009, MART began including ridership and vehicles associated with its HST service into its reporting for demand-responsive services in the NTD. In order to provide data that is more comparable to that being reported by other RTAs, demand-responsive data exclusive of HST service has been collected directly from MART for 2009 and 2010, and is presented in the following sections. (Data for 2001-2008 is from NTD.)

## MART 2010 RIDERSHIP

In 2010, MART carried approximately 860,000 passengers. Approximately 32% of these passengers used demand-responsive services, and 68% used fixed-route services. At this rate, MART carries the highest proportion of any Massachusetts RTA. In total overall ridership, MART lands in the middle of Massachusetts RTA's (seventh lowest volume overall). However, in terms of vehicle hours, MART provides the sixth highest amount of service, which reflects the large proportion of demand-responsive ridership.



## MART 2010 FLEET SIZE

In 2010, MART had 28 vehicles for fixed-route service and 167 vehicles for demand responsive service. MART has the largest demand-responsive fleet among Massachusetts RTAs, and the sixth smallest fixed-route fleet.

## MART 2010 OPERATING EXPENSES AND FARE REVENUES

In 2010, MART's total operating expenses were \$9.2 million dollars. Of this, \$4.7 million or 51% was for demand-responsive service, and \$4.5 million or 49% was for fixed-route service. MART's operating costs are sixth highest among RTAs.

In 2010, fare revenue covered approximately 14.2% of MART's 2010's operating expenses. By type of service, fare revenues cover 17% of demand-responsive costs and 11% of fixed-route service costs. As of 2010, MART collected the median amount of fare revenue among RTAs, and had the seventh lowest farebox return ratio.

## MART EFFECTIVENESS AND TRENDS<sup>12</sup>

MART service levels, costs, and ridership fluctuated during the last decade. Between 2001 and 2010, annual ridership on MART services varied between about 860,000 and 1.2 million, although the trend overall has been downward.

<sup>12</sup> All cost and revenue data is presented in actual year values. Cost and fare revenues for 2001 are in \$2001; operating costs and fare revenues for 2010 are in \$2010.



### MART Ridership

Between 2001 and 2010, annual ridership on MART services varied between about 860,000 and 1.2 million riders. Ridership on demand-responsive services declined during that period by 41%, while ridership on fixed-route services declined by 16%.

### MART Revenue Vehicle Hours

Since 2001, the total amount of service that MART has provided, in terms of revenue vehicle hours, has declined by 15%. This moderate change masks a shift in the type and mix of service provided by MART. Over the past decade the amount of fixed-route service decreased by 47%, while the amount of demand-responsive service increased by 10%. In addition to the broader trend, the amount of fixed-route service varied throughout the decade. Initially (2001 to 2004) fixed-route service hours increased, rising from 78,000 to 114,000; after 2004, however, MART began reducing the amount of fixed-route service provided such that as of 2010, it provides 41,000 revenue vehicle hours of service, nearly two-thirds less than their peak year (2004).

Demand-responsive service hours rose steadily between 2001 and 2005, increasing from around 100,000 to 129,000, and since then have fluctuated, leveling off at about 110,000 for the period between 2008 and 2010.

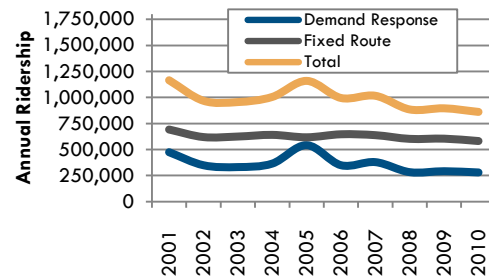
### MART Operating Costs and Fare Revenue

MART's operating costs increased from \$6.9 million in 2001 to \$9.2 million in 2010. This represents an increase of 33% over 10 years, or an average of 3% per year. Fare revenues declined over the same period from \$1.7 million to \$1.3 million, or by 21%.

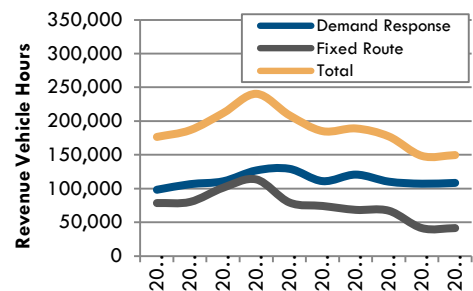
### MART Operating Cost per Passenger

MART's operating cost per passenger for fixed-route service increased from \$5.58 to \$7.81, or by 40%. MART currently ranks seventh among the RTAs in terms of highest fixed-route operating cost per passenger. MART's operating cost per passenger for demand-responsive service increased from \$6.49 to \$16.72, or by 144% between 2001 and 2010. Yet, MART still has the fourth lowest cost per passenger for demand-responsive service among all RTAs. However, because MART has a relatively high proportion of riders on demand-responsive services, which are more expensive on a per-passenger basis, its overall operating cost per passenger is fifth highest.

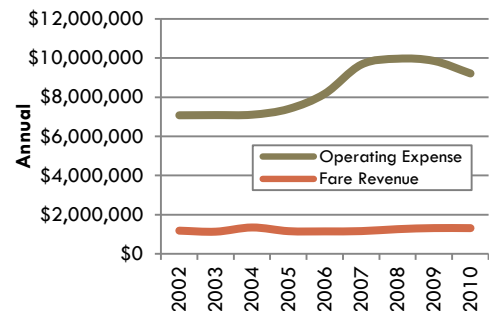
MART Ridership Trends



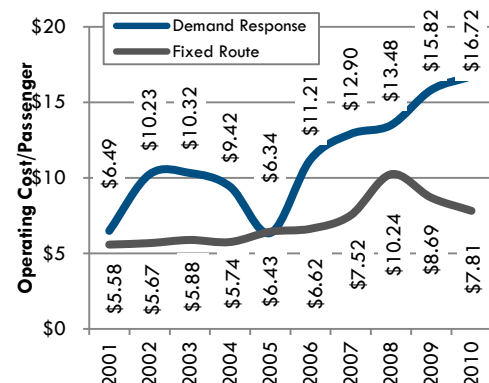
MART Vehicle Service Hour Trends



MART Operating Cost and Farebox Revenue



MART Operating Cost per Passenger Trends





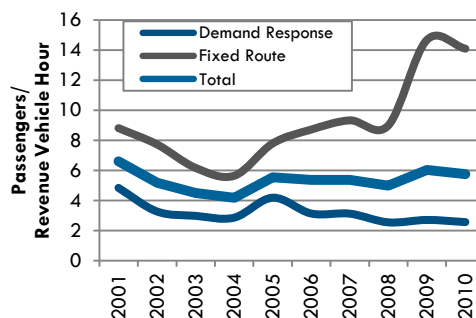
## MART Passengers per Revenue Vehicle Hour

Between 2001 and 2010, the number of passengers that MART carried per passenger hour varied between 4.2 and 6.6. Overall, the rate of passengers per hour has fluctuated somewhat widely from year to year.

Revenue hours on fixed-route services dropped significantly between 2004 and 2010 (dropping by 64%); ridership on fixed-route services decreased during this time period, but only by 9%. In 2001, MART carried 8.8 fixed-route passengers per revenue vehicle hour. Service declined to a low of 5.6 passengers per revenue vehicle hour in 2004, and then increased to 14.1 in 2010. MART currently ranks seventh lowest in terms of fixed-route passengers per hour.

On demand-responsive services, the rate of passengers per hour dropped from 4.8 in 2001 to 2.6 in 2010. The decline in demand responsive passengers carried per hour declined fairly steadily over the decade and has been about 2.5 to 2.8 passengers per hour for the past five years. MART is currently ranked as the fourth highest RTA in terms of demand-responsive passengers per revenue vehicle hour.

MART Passengers per Revenue Vehicle Hour Trends

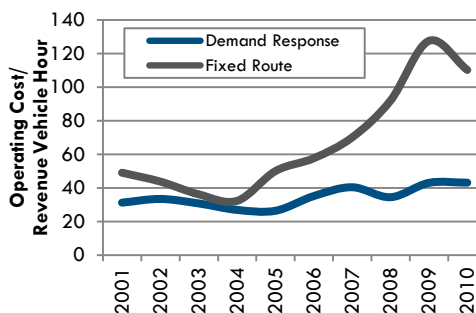


## MART Operating Cost per Revenue Vehicle Hour

Between 2001 and 2010, MART's operating cost per revenue vehicle hour for all services increased by an average of 6.0% per year. While the overall cost per hour of fixed-route service increased by 124% in that period, costs for demand-responsive service increased by just 38%.

Between 2001 and 2007, fixed-route service costs remained relatively steady. In 2008 and 2009, however, the hourly cost for fixed-route service rose sharply, rising from \$70.10 to \$127.43; after this peaked in 2009, costs declined somewhat to \$110.15 per hour. Costs for demand-responsive services, however, remained steady for most of the time period and only began to rise more significantly after 2009. As of 2010, MART's demand-responsive operating cost per hour is fifth lowest among RTAs, but it has the highest fixed-route operating cost per hour.

MART Operating Cost per Revenue Vehicle Hour Trends



## MART KEY FACTS/NOTABLE INITIATIVES

- MART has an extensive Intelligent Transportation System (ITS), including real-time passenger information systems. Upcoming projects include new fareboxes and CharlieCard fare payment integration, which will include swipe payment options for paratransit/demand response riders.
- Over the course of several years, MART has developed several innovative services, including general public subscription demand response, longer distance medical shuttles and university shuttles.
- MART owns and operates parking facilities at two MBTA commuter rail stations and is currently working with the MBTA to re-develop a MBTA commuter rail station in Littleton.
- MART provides human service transportation for a large part of Massachusetts, including the Boston metropolitan area.





## Nantucket Regional Transit Authority

The Nantucket Regional Transit Authority, known as The Wave, provides seasonal fixed-route service and year-round demand-responsive service in Nantucket. Routes serve the eastern and western areas of the island, public beach, Nantucket Memorial Airport, mid-island areas and downtown Nantucket in close proximity to the ferry docks.

### THE WAVE SERVICES

The Wave provides two types of services:

- Fixed-route service
- Demand-response

The Wave fixed-route service is comprised of nine routes that serve downtown Nantucket from various points of the island. Most service operates from mid-May to early October. Most WAVE routes begin operations at 7:15 am and end at 11:30 pm, and fixed-route services operate seven days a week during the months that they operate. Headways tend to be shorter between June and September, usually 15-30 minutes, and longer in May and October, about 30-60 minutes on average.

The Wave's demand-response service, Your Island Ride, provides year-round transportation to persons with disabilities and seniors over 60. When The Wave provides fixed-route seasonal service, the Island Van also provides ADA complementary paratransit.

The Wave Service Area



The Wave Route Map



### THE WAVE REGIONAL CONNECTIONS

The Wave is limited in the number of regional connections it is able to offer. Routes serve the ferry terminals and the airport. Regional connections are possible via:

- Year-round ferry service to Hyannis. Public transportation connections in Hyannis available via CCRTA.
- Seasonal service ferry service to Harwich.
- Seasonal ferry service to Martha's Vineyard. Public transportation connections in Martha's Vineyard available via VTA.
- Direct airline service to Hyannis, Boston, Providence, and New York-LaGuardia, Martha's Vineyard, New Bedford, and Provincetown.

### THE WAVE MAJOR FACILITIES

All but two of The Wave routes stop at or near the Greenhound Transit Center, located off of Washington Street, just south of Main Street. The other two routes stop a few blocks away.

### THE WAVE FARES

NRTA has a tiered fare structure for its primary types of service:

- Fixed-route for Loops/Routes: \$1.00 (Mid-Island Loop, Miacomet Loop, Jetties Beach)
- Fixed-route for Routes: \$2.00 (Madaket Route, Sconset Routes, Airport Route, Surfside Beach)
- Demand-responsive: \$1.00 for in-schedule trips/\$2.00 for out-of-schedule trips

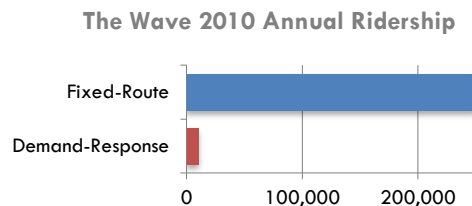


A variety of discounts are available: on fixed-route, half-fare discounts are available to seniors 65 and older and persons with disabilities, and on four of the routes, passengers pay half-fare when traveling for part of the route (to/from Crooked Land/Town on the Madaket Route and to/from Rotary on the Sconset Route). Children 6 and under ride free. One, three, seven, and 30 day passes, and season passes, are also available. Student and senior/disabled passes are also available. NRTA does not offer free or discounted transfers.

Demand-response customers may purchase a pass for unlimited trips for \$50 per quarter.

## THE WAVE 2010 RIDERSHIP

In 2010, The Wave carried nearly 240,000 passengers. Approximately 96% of these passengers used fixed-route services and the remainder used demand-response. As of 2010, The Wave carried the second lowest number of riders (only higher than FRTA). This is largely because The Wave only provides seasonal service.



## THE WAVE 2010 FLEET SIZE

In 2010, The Wave had 18 vehicles for fixed-route service and four vehicles for demand-responsive service. Compared to other RTAs, The Wave has the smallest fleet, with 22 total vehicles.

## THE WAVE 2010 OPERATING EXPENSES AND FARE REVENUES

The Wave's total operating expenses are \$1.3 million. Of this, \$1.1 million or 84% was for fixed-route service, and 16% was for demand-responsive service. As of 2010, The Wave's operating costs were the lowest among all RTAs.

Fare revenue covers approximately 24% of The Wave's 2010 operating expenses. By type of service, fare revenues cover 28% of fixed-route costs and 4% of demand-responsive costs. Overall, The Wave has the third highest farebox recovery ratio.

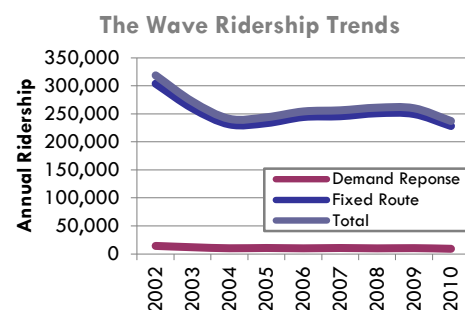
## THE WAVE EFFECTIVENESS AND TRENDS<sup>13</sup>

From 2002 to 2010, The Wave's overall ridership has decreased. Over the same period, service levels have decreased, but to a lesser extent. Costs have also risen slightly for fixed-route and demand-responsive services.

### The Wave Ridership

Between 2002 and 2010, fixed-route ridership decreased from 304,000 to 228,000 riders, a decrease of 25%. Demand-responsive ridership decreased from 14,500 annual riders to 9,200.

(However, it should also be noted that although not reflected in the numbers presented above, The Wave rebranded itself from "The Shuttle" to "The Wave" in 2011, and this subsequently produced a 5% ridership increase.)



<sup>13</sup> All cost and revenue data is presented in actual year values. Costs and fare revenues for 2001 are in \$2001; operating costs and fare revenues for 2010 are in \$2010.



## The Wave Revenue Vehicle Hours

Service hours decreased slightly for both types of service. Fixed-route hours of service decreased by 7% and demand-response decreased by 9%.

## The Wave Operating Costs and Fare Revenue

Operating costs increased slightly overall and by type of service by 3%. Over the same period, farebox revenues increased by 52%. The farebox recovery ratio for fixed-route service has increased, from 16% in 2002 to 24% in 2010. This indicates that even though The Wave is providing fewer hours of service and therefore has higher operating costs, fares have increased to help cover costs.

From 2002 to 2010, operating costs have slightly increased by 3%. Over the same period, farebox revenues have increased by about 52%. Revenues have increased for fixed-route service by 53% and for demand-response by 12%.

## The Wave Operating Cost per Passenger

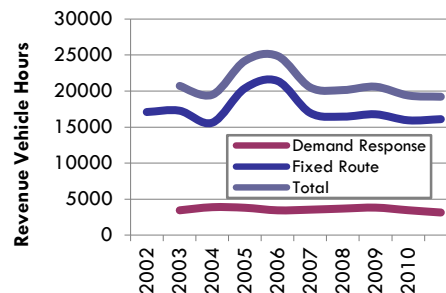
From 2002 to 2010, fixed-route costs per passenger increased by about 37% from \$3.56 to \$4.88. The Wave's operating cost per passenger for demand-response service has increased to a greater extent, from \$14.76 in 2002 to \$23.69, or by 61%. In 2010, The Wave's costs were just below the average of all RTAs, ranking sixth lowest for fixed-route cost per passenger and seventh lowest for demand-response cost per passenger.

## The Wave Passengers per Revenue Vehicle Hour

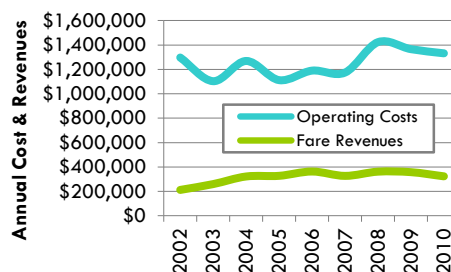
Between 2002 and 2010, the number of passengers carried per revenue vehicle hours declined. For fixed-route service, 17.6 passengers were carried per hour in 2002, compared to 14.2 in 2010. This is a 19% decrease. For demand-response service, there were 4.2 passengers per service hour in 2002, and 3.0 passengers in 2010, for a decline of 30%. This indicates that fewer trips are being grouped and/or trip lengths are increasing. Most of the declines occurred between 2002 and 2005. Ridership per hour increased between 2004 and 2005, and has been relatively stable since that time.

In 2010, The Wave ranked about in the middle of all RTAs (eighth highest) for passengers per fixed-route service hours, and second highest for demand-response.

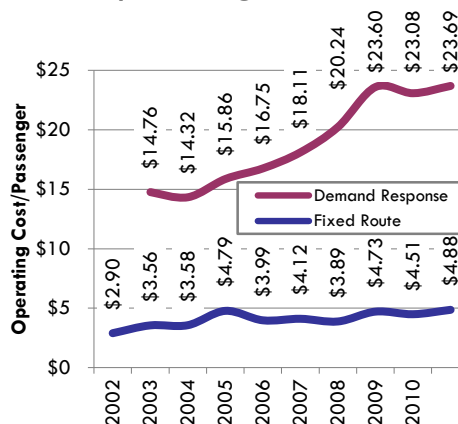
The Wave Vehicle Service Hour Trends



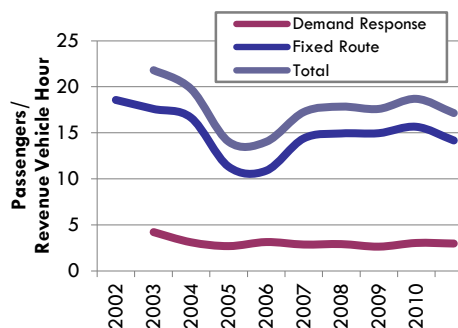
The Wave Operating Cost and Farebox Revenue



The Wave Operating Cost per Passenger Trends



The Wave Passengers per Revenue Vehicle Hour Trends





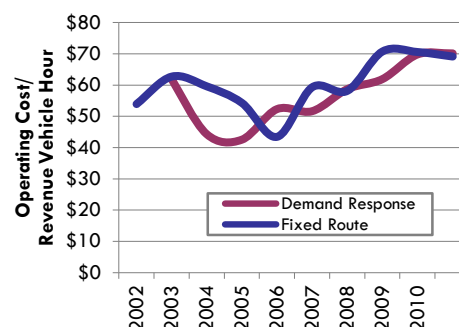
## The Wave Operating Cost per Revenue Vehicle Hour

Overall, The Wave's operating cost per revenue vehicle hour increased by 11% between 2002 and 2010. This represents an average annual increase of only 2.2%, which is very low.

By mode, fixed-route operating costs per hour have increased by 10%, or from \$62.74 to \$69.15. For demand-response, operating costs per service hour have increased by 13% from \$62.01 to \$70.09. Both rates of increase were low.

In 2010, The Wave's fixed-route operating cost of operating cost per hour of \$69.15 was below average for RTAs. For demand-response service, NRTA's cost of \$70.09 was above average and the third highest among RTAs.

The Wave Operating Cost per Revenue Vehicle Hour Trends



## THE WAVE KEY FACTS/NOTABLE INITIATIVES

- The Wave has a high farebox recovery ratio, particularly for fixed-route service.
- The Wave provides real time information on bus routes, available on the Internet or smart phone at <http://live.nrtawave.com/>.
- NRTA introduced "The Wave" branding in the summer of 2011, as well as a new look, new hybrid buses, and a new website. This resulted in a 5% increase in passenger boardings, as well as an increase in pass sales.
- The Wave has a strong partnership with the Greenhound Foundation, which has helped it implement improvements such as the rebranding effort, purchase of a hybrid vehicle, purchase of a building to allow NRTA to use as its downtown bus stop and information center, and NRTA's real-time passenger information system.





## Pioneer Valley Transit Authority

The Pioneer Valley Transit Authority (PVTA) is the largest RTA in Massachusetts and serves 24 communities in the Pioneer Valley. The service area borders central Connecticut to the south and includes portions of Hampden, Hampshire, and Franklin counties. PVTA service is focused around several hubs, including Springfield, Holyoke, Northampton, and Amherst/UMass, and includes urbanized as well as very rural areas. PVTA also operates several college shuttles and has a high demand from student riders during the academic year.

### PVTA SERVICES

PVTA provides three types of services:

- Fixed-route bus service
- ADA complementary paratransit
- Dial-a-ride “Senior Service” for adults aged 60 or older

PVTA fixed-route service is comprised of 44 routes, including town shuttles, college shuttles, and express routes. Routes are classified by color and number. Most service is organized around Springfield, but routes are also organized around smaller hubs in Holyoke and Northampton. PVTA routes generally begin operations between 4:45 am and 7:30 am, and end between 6:00 pm and 8:00 pm. Weekday headways are typically between 30 and 45 minutes. Most routes operate on Saturdays, with headways that average 60 minutes. Sunday service is also available for many routes.

ADA complementary paratransit service is available within 3/4 mile of fixed-route service and is available during the same days and hours as fixed-route.

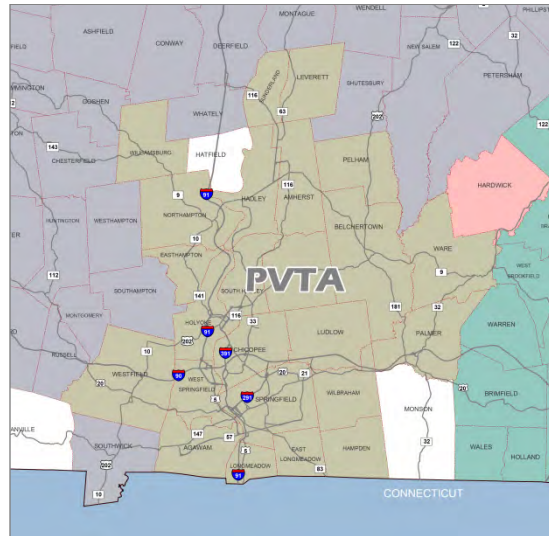
PVTA services also include door-to-door accessible van dial-a-ride service, which is available for seniors over 60 in all of PVTA's communities. Trips are provided from 8:00 am to 4:30 pm Monday to Friday, on a space available basis. Seniors must register for the service to ride.

### PVTA REGIONAL CONNECTIONS

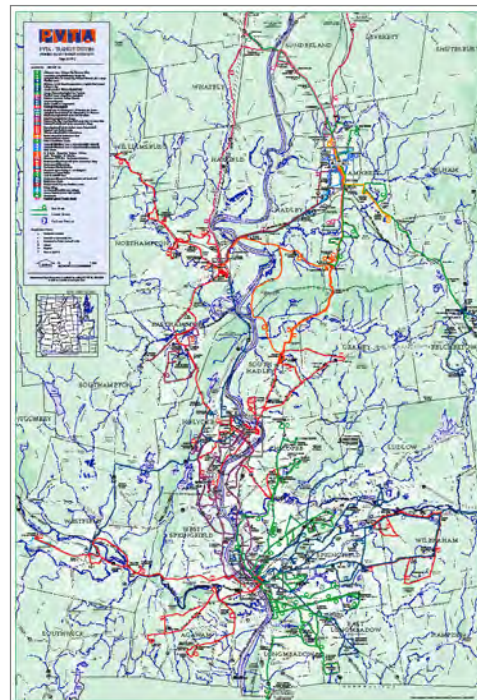
Connections to regional services from PVTA's various hubs and other locations in the Pioneer Valley are available:

- Regional intercity bus service is provided by Peter Pan with connections from PVTA communities (Amherst, UMass, Chicopee, Deerfield, Holyoke, Northampton, South Hadley, and Springfield) to regional destinations such as New York, Boston, Albany, Hartford, and New Haven (among others). Peter Pan is also headquartered in Springfield at the Peter Pan Bus Terminal.
- Regional intercity bus is also provided by Megabus, from Amherst and Holyoke to Hartford and New York.

PVTA Service Area



PVTA Route Map





- Amtrak intercity rail service stops in Springfield and Amherst:
  - Springfield Amtrak service at Springfield Union Station is one block from the PVRTA Bus Terminal. Three Amtrak routes stop at the station: the Lake Shore Limited that runs daily from Boston to Chicago; the Northeast Regional that connects multiple times per day through New York to Washington, DC and southern Virginia; and the Vermonter that runs daily from Washington, DC to northern Vermont.
  - Amtrak service in Amherst includes the Vermonter service, linking Washington, DC and New York to Amherst, and terminating in northern Vermont.
  - The New Haven-Springfield Line is owned by Amtrak and serves commuter trips between New Haven and Springfield, including Hartford. There are approximately seven daily round trips.
- PVRTA connects to the Franklin Regional Transit Authority (FRTA) at the UMass Haigis Mall stop, the Academy of Music in downtown Northampton, and at South Deerfield. Connections are available on weekdays only.
- PVRTA also connects with Connecticut Transit (CT Transit) Route 5/13 at Mass Mutual in Enfield, CT. Route 5/13 provides express service on weekdays between Enfield and downtown Hartford via Route 91.

## PVRTA MAJOR FACILITIES

The Pioneer Valley has two major intermodal facilities: the Peter Picknelly Transportation Center, otherwise known as the Springfield Bus Terminal and the Holyoke Transportation Center.

The Springfield Bus Terminal, located in downtown Springfield, is PVRTA's service headquarters. The bus terminal is one block from Springfield's Union Station, which is scheduled to receive a \$75 million renovation during 2012-3. The two facilities combined will provide access to local and regional bus and rail services. The Holyoke Transportation Center is the recently renovated former Holyoke Fire Department Headquarters and is served by PVRTA, Peter Pan, and Megabus. The Center also includes daycare and preschool programs, and space for Holyoke Community College.

PVRTA has maintenance and garage facilities in Northampton, Springfield, and at UMass. Administrative functions are currently housed in Springfield at the PVRTA garage.

## PVRTA FARES

PVRTA has the following fare structures for its primary types of service:

- Fixed-route service: \$1.25 (\$1.15 if a ticket is purchased at the Customer Service Center in Springfield)
- ADA complementary paratransit: \$2.50, \$3.00 or \$3.50 depending on location
- Senior Service: \$2.50, \$3.00 or \$3.50 depending on location

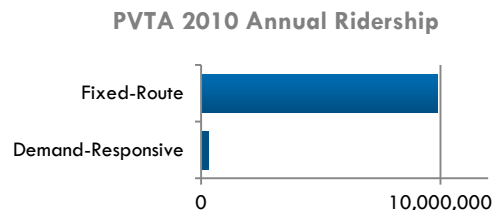
A variety of discounts are available on fixed-route service. Half-fare discounts are available to seniors over 60, 75¢ fares are available to children ages 6 to 12, and children under 6 ride free. Transfers are 25¢. One day, seven day, and monthly passes are also available. For ADA and the Senior Service, pre-paid booklets of tickets and a 31-day pass are available.

Students, faculty and staff attending one of the Five Colleges (Amherst, Hampshire, Mount Holyoke, Smith, and UMass) ride local PVRTA buses and shuttle services by showing their student ID cards. Five Colleges Inc. pays the local share assessment for the routes that serve the colleges.



## PVTA 2010 RIDERSHIP

In 2010, PVTA carried just over 10 million passengers, 97% of which used fixed-route services, with the remaining 3% on demand-responsive service. PVTA carries – by far - the most passengers among Massachusetts' RTAs. PVTA's ridership is nearly three times that of the next highest RTA (WRTA).



## PVTA 2010 FLEET SIZE

In 2010, PVTA had 169 vehicles for fixed-route service and 143 vehicles for demand-responsive service. PVTA has the largest fixed-route fleet and second largest demand-responsive fleet among the RTAs.

## PVTA 2010 OPERATING EXPENSES AND FARE REVENUES

PVTA's 2010 operating expenses were \$35.7 million. Of this, \$27.7 million or 78% was used to provide fixed-route service, and 22% was for demand-responsive service. As of 2010, PVTA's overall operating costs were the highest among RTAs.

PVTA's fare recovery rate was 18%. By type of service, fare revenues cover 21% of fixed-route costs and 8% of demand-responsive costs. With the highest ridership, PVTA also collects the highest amount of fare revenue among RTAs, but has only the eighth highest farebox return ratio, slightly below average of the RTAs. The lower farebox return may reflect the high number of student riders who pay for service through fees rather than directly into the farebox.

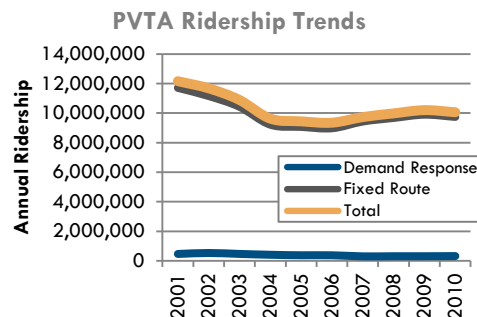
## PVTA EFFECTIVENESS AND TRENDS<sup>14</sup>

PVTA's overall ridership trends in the past ten years decreased, with both fixed-route and demand-responsive services carrying fewer passengers in 2010 than in 2001. Loss in ridership is consistent with declines in the amount of service provided. Service costs also increased over the time period, with costs for fixed-route service increasing more substantially than demand-responsive.

### PVTA Ridership

Between 2001 and 2010, ridership on the fixed-route services decreased from 12.2 million to 10.1 million. Most of the loss of ridership occurred from 2001-2002 until 2005-2006, when ridership reached its lowest point (about 9.3 million) in the decade; since that time ridership has been increasing slowly.

During the ten year period, ridership on demand responsive service decreased from about 460,000 riders to 320,000. Ridership remained relatively steady throughout the decade, with the fewest demand-responsive passengers in 2007 (about 300,000).



<sup>14</sup> All cost and revenue data is presented in actual year values. Costs and fare revenues for 2001 are in \$2001; operating costs and fare revenues for 2010 are in \$2010.

## PVTA Revenue Vehicle Hours

Since 2001, the total amount of service PVTA provided, in terms of revenue vehicle hours, decreased by 24%. This decrease is attributed to a 20% decrease in revenue vehicle hours for fixed-route service and a 31% decrease in demand-responsive service hours. The decrease over the ten year period obscures the fact that most of the loss in service hours occurred early in the decade.

## PVTA Operating Costs and Fare Revenue

PVTA's operating costs increased from \$25.5 million in 2001 to \$35.7 million in 2010. Fixed-route operating costs increased by 50%, while demand-responsive costs only increased by 12%.

Over the same period, fare revenues also increased, but by a lesser extent. Since 2001, fixed-route fare revenues increased by 90%, as compared to demand-responsive fare revenues, which increased by 10%.

## PVTA Operating Cost per Passenger

Between 2001 and 2010, PVTA's operating cost per passenger for fixed-route service increased from \$1.57 to \$2.84, or by 81%. PVTA's operating cost per passenger for demand-responsive service increased from \$15.39 to \$25.15, or by 63%.

PVTA's 2010 operating cost per passenger is the lowest of all RTAs for fixed-route service and fifth highest for demand-responsive service.

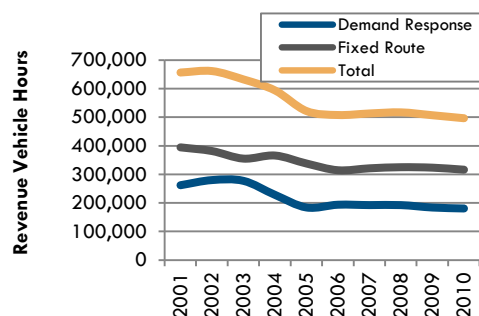
## PVTA Passengers per Revenue Vehicle Hour

As PVTA decreased the amount of service, ridership also declined. The number of passengers carried per revenue hour, however, increased slightly, from 18.5 to 20.3, or by 9%.

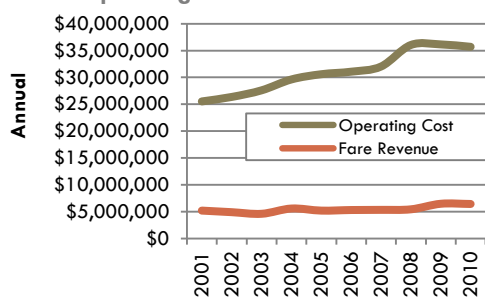
For demand-responsive service, PVTA decreased the hours of service provided by 24%, and ridership decreased by 31%. Thus, passengers per revenue hour decreased from 1.9 to 1.8, or 9%.

As of 2010, PVTA carried the highest number of passengers per revenue vehicle hour among the RTAs for their fixed-route service. PVTA ranks 13<sup>th</sup> out of the 15 RTAs in the number of passengers per hour carried on demand response service.

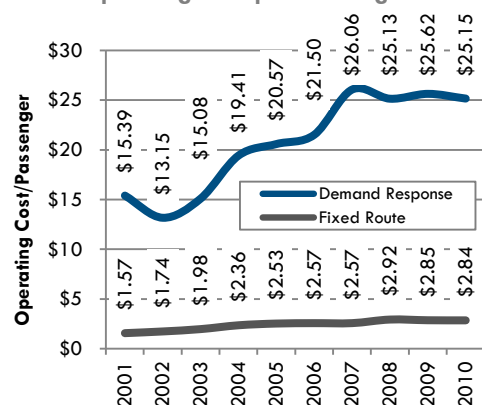
PVTA Vehicle Service Hour Trends



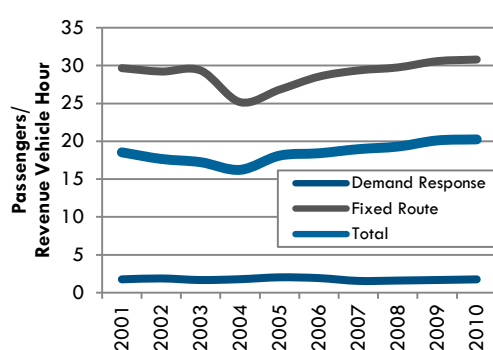
PVTA Operating Cost and Farebox Revenue



PVTA Operating Cost per Passenger Trends



PVTA Passengers per Revenue Vehicle Hour Trends

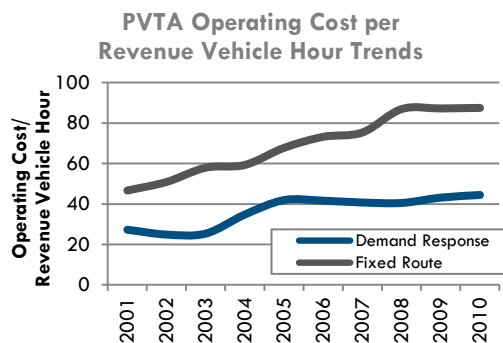






## PVTA Operating Cost per Revenue Vehicle Hour

As PVTA's overall operating costs increased, cost per revenue vehicle hour for fixed-route and demand-responsive service also increased. Costs per vehicle hour on fixed-route increased by 87% and costs for demand-responsive service by 63%. As of 2010, PVTA ranked eighth in operating cost per revenue vehicle hour for fixed-route, and ninth for demand-responsive.



## PVTA KEY FACTS/NOTABLE INITIATIVES

- PVTA is the largest RTA in the state, providing more than 10 million rides in 2010.
- PVTA recently opened the Holyoke Transportation Center, an intermodal facility in downtown Holyoke. The project was developed as a public-private partnership with the City of Holyoke, PVTA and Peter Pan Bus Lines; Peter Pan acted as the developer. The facility offers passengers a state of the art transfer facility and also contributes to Holyoke's economic development and downtown revitalization efforts. Construction of this project was managed by the developer and PVTA.
- PVTA partners with several institutions to increase agency funding and ridership. These partnerships include the Five Colleges, Westfield State University and the Springfield and Holyoke school districts, as well as the Department of Health and Human Services. PVTA also works with FRTA to coordinate service.
- Springfield's Union Station will be the northern terminus for the planned commuter rail line from Union Station in New Haven. The line is expected to be operational by 2015 and will reach speeds of 110 mph. Sixteen daily trains are expected at start-up, with 30 minute peaks, building up to 35 trains daily with 15 minute headways during peaks.
- PVTA is about to implement a full suite of Intelligent Transit System (ITS) products including cameras, automatic passenger counts, automatic vehicle locators, mobile data terminals and fareboxes. The agency also currently hosts a mobile website (<http://m.pvta.com/>), making it easy for customers with smart phones to view bus schedules and has route information uploaded in Google Trip Planner.

## Southeastern Regional Transit Authority

The Southeastern Regional Transit Authority (SRTA) serves 10 communities in the most southern area of Massachusetts, bordering eastern Rhode Island. The majority of service is focused in Fall River and New Bedford; in addition, other providers serve the area with bus connections to Boston and Providence.

### SRTA SERVICES

SRTA provides two types of services:

- Fixed-Route
  - Local fixed-route
  - Tripper service to/from local schools
- Demand-Response
  - ADA complementary paratransit

Most of SRTA's fixed-route service is focused on Fall River and New Bedford. There are 16 routes in the Fall River area, 14 of which operate to and from Fall River Terminal, and 15 routes in the New Bedford area, 12 of which operate to New Bedford Terminal. In addition, one route operates between Fall River and New Bedford via Route 6. Local services generally operate from 6:30 am to 7:00 pm on weekdays and Saturdays. Local service is not provided on Sundays and holidays. Most service operates every 30 minutes on weekdays and 60 minutes on Saturdays.

School tripper service (public transportation that is designed to accommodate the needs of school students and personnel) is available to and from Durfee High School, New Bedford High School, Roosevelt Middle School, and Keith Middle School. Tripper service is offered only when school is in session.

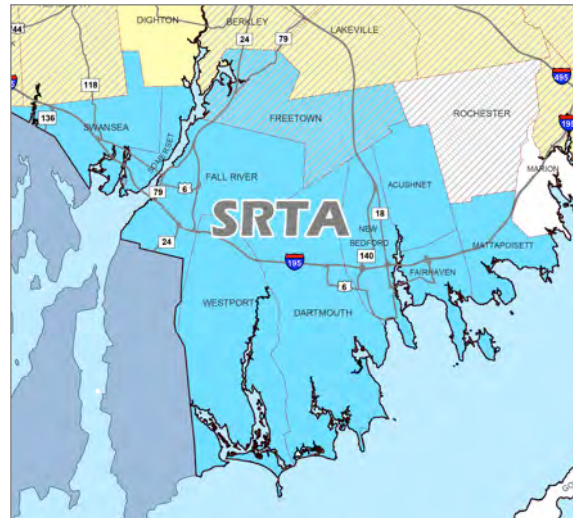
SRTA's demand-responsive service, ADA complementary paratransit service, operates the same hours as fixed-route

service and is available to individuals who are unable to use fixed-route services due to a disability. SRTA does not provide any paratransit service that goes beyond ADA requirements.

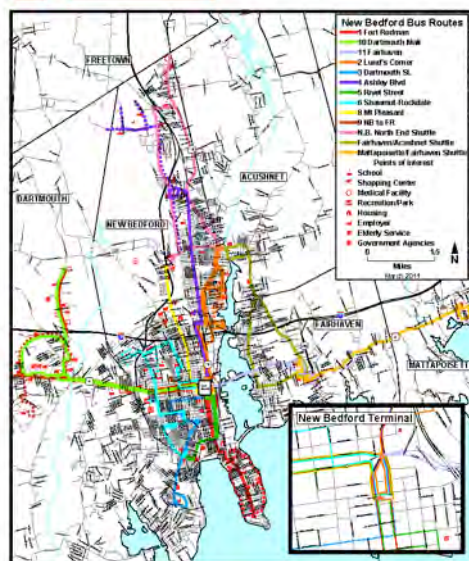
### SRTA REGIONAL CONNECTIONS

Most SRTA routes operate to and from either the New Bedford Terminal or the Fall River Terminal. Connections to regional services from these two hubs are available:

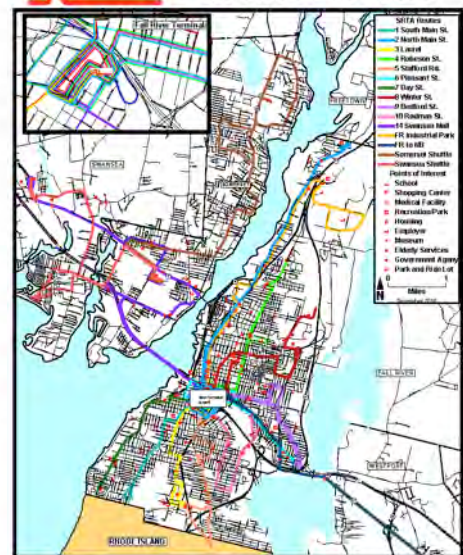
SRTA Service Area



**SRTA New Bedford Routes**



**SRTA Fall River Routes**





- DATTCO private carrier bus service between New Bedford and Boston's South Station via the New Bedford Park and Ride Lot and DATTCO's Fairhaven Terminal.
- Peter Pan service between New Bedford and Fall River and Providence, Boston, and New York City.
- New Bedford - Martha's Vineyard ferry service, which operates from New Bedford's State Pier, which is a short walk from the New Bedford Terminal.
- New Bedford - Cuttyhunk ferry service, which also departs from State Pier in New Bedford.

The current MassDOT South Coast Rail Project has a preferred corridor alignment that will bring commuter rail service to Freetown, Fall River Depot, Battleship Cove in Fall River, and King's Highway and Whale's Tooth in New Bedford.

## SRTA MAJOR FACILITIES

As described above, most service operates to and from the New Bedford Terminal or the Fall River Terminal, which are SRTA's major passenger facilities. SRTA's administrative offices are located in the New Bedford Terminal. SRTA also has a garage and maintenance facility in both Fall River and New Bedford.

## SRTA FARES

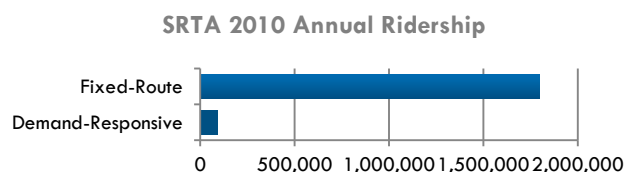
SRTA's basic fare is \$1.25 per zone. Zones are closely related to town boundaries; the maximum fare a rider would pay is \$5.00 (New Bedford to Fall River). Discounts are offered, including a 50% discount (60¢ fare) for senior citizens, registered disabled riders, Medicare cardholders, and children between ages 6 and 11. Children under 6 ride for free. Passes are also available, including a 10-zone pass for both fixed-route and demand-responsive services, and 40-zone and unlimited monthly passes for fixed-route. A student pass is also available.

## SRTA 2010 RIDERSHIP

In 2010, SRTA carried approximately 1.9 million passengers. Approximately 95% of these passengers used fixed-route services and the remainder used demand-responsive. As of 2010, SRTA carried the fifth highest volume of riders among Massachusetts RTAs and provides the seventh highest amount of service (in terms of vehicle hours).

## SRTA 2010 FLEET SIZE

In 2010, SRTA had 61 vehicles for fixed-route service and 22 vehicles for demand-responsive service. Compared to other RTAs, SRTA has the sixth largest fixed-route fleet, and the fifth smallest demand-responsive fleet.



## SRTA 2010 OPERATING EXPENSES AND FARE REVENUES

In 2010, SRTA's total operating expenses were \$12.1 million. Of this, \$9.4 million, or 77%, was for fixed-route service, and 23% was for demand-responsive service. As of 2010, SRTA's operating costs were the fourth highest among RTAs (behind PVRTA, WRTA, and BAT).

Fare revenue covered approximately 13% of SRTA's 2010 operating expenses. By type of service, fare revenues covered 15% of fixed-route costs and 6% of demand-responsive costs. SRTA collected the fifth highest amount of fare revenue among RTAs, but had only the sixth lowest farebox return ratio.



## SRTA EFFECTIVENESS AND TRENDS<sup>15</sup>

Over the past 10 years, SRTA's ridership and productivity has declined. Most declines occurred between 2001 and 2006, with modest improvements since that time.

### SRTA Ridership

Between 2001 and 2010, total ridership has declined from 2.4 million to 1.9 million passengers per year. All of those declines represent declines in fixed-route ridership, and demand-response ridership has increased slightly. Fixed-route ridership declines were particularly steep between 2001 and 2006, when ridership declined by 34% from 2.4 million passengers per year to 1.6 million. Between then and 2010, it recovered slightly to 1.8 million.

### SRTA Revenue Vehicle Hours

Since 2001, the total amount of service that SRTA has provided, in terms of revenue vehicle hours, has remained relatively stable. However, within the overall totals, fixed-route service hours have been reduced by almost 20%, while demand-responsive service hours have increased by 90%. With these changes, demand-response service now comprises 34% of all SRTA service.

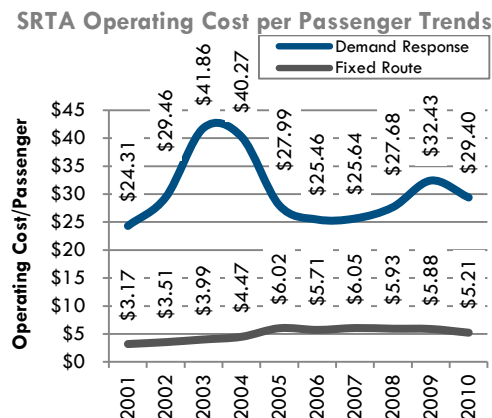
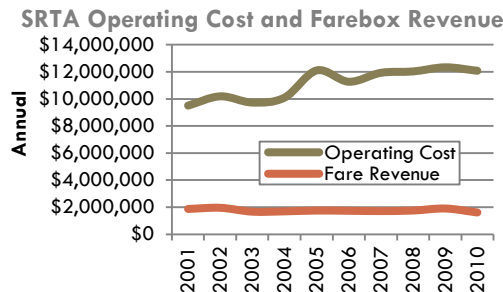
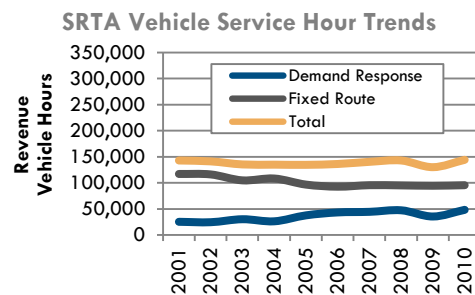
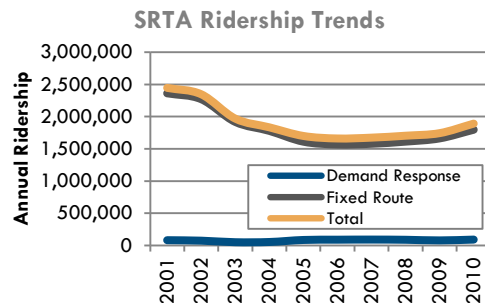
### SRTA Operating Costs and Fare Revenue

SRTA's operating costs increased from \$9.5 million in 2001 to \$12.0 million in 2010. This represents an increase of 27% over 10 years, or an average of 3% per year. By type of service, fixed-route costs increased by 25% and demand-responsive costs increased by 35%.

With large declines in ridership, farebox revenues have declined. Fixed-route fare revenues decreased by 15%, and demand-responsive fare revenues decreased by 6%.

### SRTA Operating Cost per Passenger

Between 2001 and 2010, SRTA's operating cost per passenger for fixed-route service increased from \$3.17 to \$5.21, or by 64%. SRTA's operating cost per passenger for demand-response increased to a lesser extent, from \$24.31 to \$29.40, or by 21%. Operating costs per passenger have increased to a greater extent than total operating costs due to an overall decline in ridership. SRTA's 2010 operating cost per passenger is the eighth highest for RTAs.



<sup>15</sup> All cost and revenue data is presented in actual year values. Costs and fare revenues for 2001 are in \$2001; operating costs and fare revenues for 2010 are in \$2010.





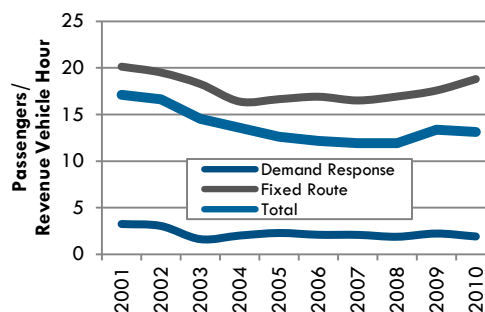
## SRTA Passengers per Revenue Vehicle Hour

Between 2001 and 2010, the total number of passengers that SRTA carried per revenue vehicle hour has declined from 20.1 to 18.8. There are two primary reasons for this: (1) large fixed-route ridership declines, and (2) a shift in the use of resources from fixed-route service to demand-response service. Fixed-route ridership declines (24%) were greater than fixed-route service reductions (20%), and demand-response ridership increases (12%) were much smaller than demand-response service increases (90%). In terms of passengers per revenue vehicle hour, the shift away from fixed-route service toward more demand-response service has made SRTA less productive.

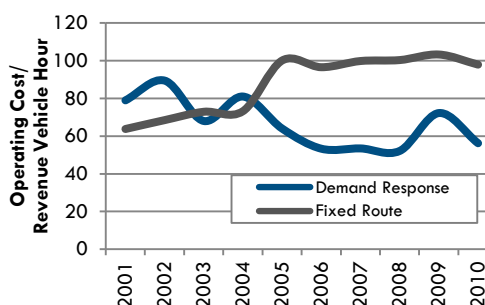
## SRTA Operating Cost per Revenue Vehicle Hour

Between 2001 and 2010, SRTA's fixed-route operating cost per service hour has increased by 54% from \$63.81 to \$97.97, while demand-response costs decreased by 29% from \$78.89 to \$56.14. Compared to other RTAs, in 2010, SRTA had the fifth highest fixed-route operating cost per revenue vehicle hour, and the sixth highest demand-response cost.

SRTA Passengers per Revenue Vehicle Hour Trends



SRTA Operating Cost per Revenue Vehicle Hour Trends



## SRTA KEY FACTS/NOTABLE INITIATIVES

- A number of actions have been taken recently to improve SRTA's performance. These include management assistance from the Administrator of Brockton Area Transit (BAT), the recent hiring of a new Administrator and CFO, and a change to a new operating contractor (First Transit).
- A new bus terminal will be built in Fall River, right around the corner from the current site. The new terminal has been awarded federal funds to support its development. It is expected to be complete in 2012.
- SRTA recently used an American Recovery and Reinvestment Act assistance grant to replace about 26 buses in its fleet.
- SRTA will soon join other RTAs (CCRTA, MWRTA, and PVRTA) by uploading its schedules onto Google Transit.
- SRTA is currently updating its website to be more attractive and user-friendly. The agency is soliciting input from the public during the re-design. SRTA is also updating its route schedules with additional bus stops and time points.



## Worcester Regional Transit Authority

The Worcester Regional Transit Authority (WRTA) provides transit service for 35 communities, covering 509,764 people in 866 square miles of Central Massachusetts within the greater Worcester region. Local fixed-route service is provided within 12 communities (Auburn, Brookfield, East Brookfield, Holden, Leicester, Millbury, Oxford, Shrewsbury, Spencer, Webster, West Boylston, and Worcester). Paratransit service is available to eligible individuals in the larger 35-community service area.

### WRTA SERVICES

WRTA provides four different types of fixed-route and demand-response services:

- Fixed-Route
  - Local fixed-route service
- Demand-Response
  - ADA complementary Paratransit
  - Non-ADA Paratransit
  - Elder Shopper

WRTA operates 23 local fixed-routes that operate on weekdays from early morning (5:00 am - 8:15 am) to evening (7:50 pm - 9:05 pm) on weekdays, 10:00 am to 9:00 pm on Saturdays, and 9:30 am - 6:00 pm on Sundays on some routes (some weekend routes operate earlier and/or later). Although service operates in 12 communities, it is heavily focused in Worcester, and all routes operate to and from Worcester.

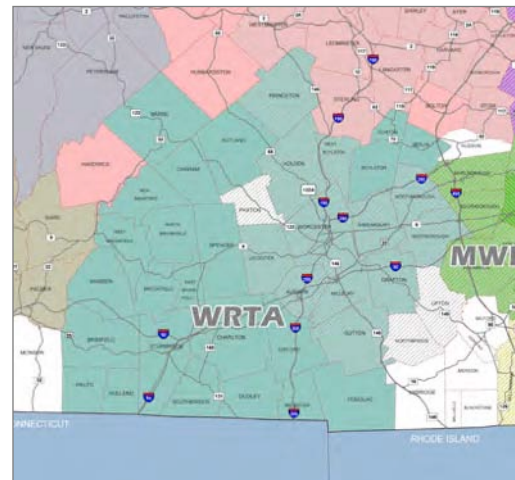
WRTA provides two levels of paratransit service: basic ADA complementary service, and expanded paratransit that serves a 35-community area that is geographically larger than required by ADA. ADA complementary paratransit operates in the entire City of Worcester and within 3/4 mile of fixed-route services outside the City. This service operates during the same days and times as fixed-route services. Non-ADA paratransit service is available for elders and people with disabilities in all 35 member communities, with service hours varying by community or eligibility, but always at least on Monday to Friday from 8:00 am to 5:00 pm. Depending on the community this service is provided by either a Council on Aging or South Central Mass ElderBus

WRTA also operates an Elder Shopper service for Worcester residents aged 60 and over. Onboard volunteer helpers assist passengers with groceries.

### WRTA REGIONAL CONNECTIONS

Most WRTA services converge downtown at City Hall, Union Station or both. The WRTA is investing in a new \$12 million hub facility at Union Station that will serve all routes, and house WRTA headquarters. Union Station in Worcester is also the terminus for the MBTA Framingham/Worcester Commuter Rail Line, and is served by Amtrak. Additional transfers can also be made to private coach bus services at Union Station, which is owned by the Worcester Redevelopment Authority.

WRTA Service Area



WRTA System Map



## WRTA MAJOR FACILITIES

The WRTA is also developing a new facility for storage, maintenance and operations on Quinsigamond Avenue in the City of Worcester. It will replace the current headquarters, operations center and maintenance facility, which was originally built in 1927 to house streetcars. The new center will be built adjacent to Union Station and will also be a WRTA owned facility.

## WRTA FARES

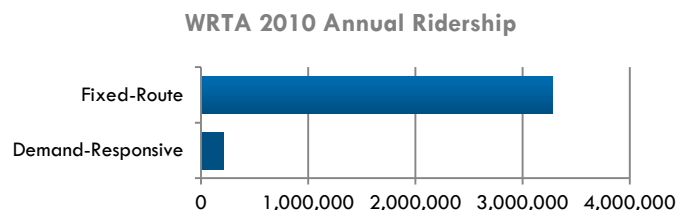
WRTA has three basic fare structures for its three primary types of service:

- Fixed-route service: \$1.50
- Elder Shopper: \$0.50
- Paratransit (ADA complementary and non-ADA): \$2.25 within town, \$2.50 one town away, \$2.75 two towns away, \$3.00 three or more towns away

WRTA does not offer free transfers between fixed routes. A variety of discounts are provided for local fixed-route services. These include a 50% discount for people aged 60 and over, disabled riders, those with a Medicare card, and children aged 5 to 13, and free service for accompanied children under 5. Single day passes, 31-day passes, and 10 ride transit passes are also offered to the general public. WRTA offers a UPASS service for \$100 per semester to students with a valid ID. No discounts are offered for ADA paratransit or Elder Shopper.

## WRTA 2010 RIDERSHIP

In 2010, WRTA carried just under 3.5 million passengers. Of these, almost 3.3 million (or 94%) used fixed-route services, and 209,000 (or 6%) used demand-responsive services. In total, WRTA carries the second highest volume of riders among Massachusetts RTAs (only fewer than PVRTA, which carries 10.8 million passengers), and provides the second highest volume of service in terms of vehicle hours.



## WRTA 2010 FLEET SIZE

WRTA has 47 vehicles for fixed-route service and 69 vehicles for paratransit/demand responsive service. WRTA has the second-largest demand-responsive fleet among RTAs, but only the sixth largest fixed-route fleet.

## WRTA 2010 OPERATING EXPENSES AND FARE REVENUES

In 2010, WRTA's total operating expenses were \$18.9 million dollars. Of this, \$14.3 million or 76% was for fixed-route service, and \$4.6 million or 24% was for demand-response service. WRTA's operating costs are the second highest among RTAs, lower only than those of PVRTA.

Fare revenue covered approximately 17% of WRTA's 2010 operating expenses. By type of service, fare revenues cover 18% of fixed-route costs and 10% of demand-responsive costs. WRTA collects the third highest amount of fare revenue among RTAs and has the seventh highest farebox return ratio.



## WRTA EFFECTIVENESS AND TRENDS<sup>16</sup>

WRTA has the second highest ridership among all RTAs, in spite of a decline in ridership experienced between 2002 and 2005. Overall efficiency, however, was not greatly affected by this decline because vehicle hours were adjusted simultaneously. WRTA's service efficiency may be influenced by the large service area in which dial-a-ride services are provided.

### WRTA Ridership

Between 2001 and 2010, total ridership decreased from 4.8 million passengers to 3.5 million passengers per year, or by 28% overall. Overall ridership declined sharply from 2002-2005—by 44% in three years. However, it increased in 2006 and has stabilized since that point.

While most of the fluctuation in ridership was on fixed-route services, demand-responsive ridership also dropped between 2001 and 2010, decreasing from 319,000 to 209,000 passengers, or by 34%. WRTA's demand-responsive ridership decreased throughout most of the 2000s.

### WRTA Revenue Vehicle Hours

Since 2001, the total amount of service that WRTA has provided, in terms of revenue vehicle hours, has decreased by 36%. Both fixed-route and demand-responsive services decreased in hours, although demand-responsive service declined by somewhat more (45%) than fixed-route service (29%). In 2010, WRTA's demand-responsive services accounted for 38% of the service hours, but only 6% of the ridership.

### WRTA Operating Costs and Fare Revenue

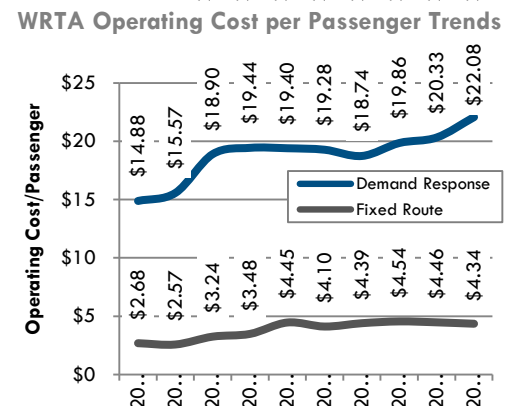
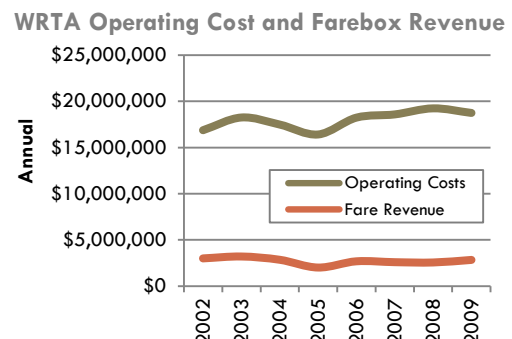
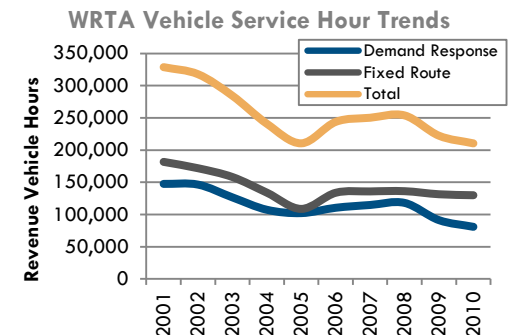
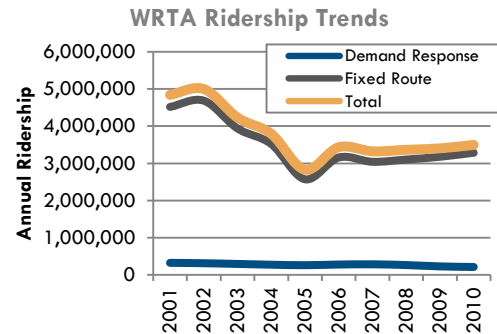
WRTA's operating costs increased from \$16.9 million in 2001 to \$18.9 million in 2009. This represents an increase of 12% over 10 years, or an average of only 1% per year.

From 2002-2010, overall fare revenues decreased from \$3.4 million to \$3.2 million, or by 5%.

### WRTA Operating Cost per Passenger

Between 2001 and 2010, WRTA's operating cost per passenger for fixed-route service increased from \$2.68 to \$4.34, or by 62%. WRTA has the fourth lowest cost per passenger for fixed-route service among RTAs.

WRTA's operating cost per passenger for demand responsive service has also increased, from \$14.88 to \$22.08, or by 48%. At this cost, WRTA has the sixth lowest demand-responsive cost per passenger among all RTAs. Its operating cost per total passenger grew from \$3.49 in 2001 to \$5.41 in 2010, which ranks eleventh overall.



<sup>16</sup> All cost and revenue data is presented in actual year values. Costs and fare revenues for 2001 are in \$2001; operating costs and fare revenues for 2010 are in \$2010.





## WRTA Passengers per Revenue Vehicle Hour

Between 2001 and 2010, the number of passengers that WRTA has carried per revenue vehicle hour has varied between 13.2 and 15.7. Demand-responsive services have remained extremely steady, carrying between 2.1 and 2.5 passengers per revenue hour, while fixed-route services have varied somewhat more, carrying between 22.4 and 27.3 passengers per revenue hour. This means that WRTA has the second highest level of ridership per hour among RTAs for fixed-route service, and the fifth highest for demand-responsive service.

## WRTA Operating Cost per Revenue Vehicle Hour

Between 2001 and 2010, WRTA's operating cost per revenue vehicle hour for all services has increased by an average of 6.6% per year. Between demand-responsive service and fixed-route services, cost increases have been very similar. WRTA's operating cost per hour for fixed-route service is the second highest among all RTAs, only a few cents per hour less expensive than that of MART. The cost for demand-responsive service is fourth highest.

## WRTA KEY FACTS/ NOTABLE INITIATIVES

- WRTA has stabilized finances, operations and budgets over the last few years, with balanced budgets three years running, and a trust fund for pension obligations.
- Most of WRTA's ridership (93%) is on fixed-route services. Overall, WRTA has the second highest ridership of any RTA, surpassed only by PVTA. However, ridership dropped by almost half between 2002 and 2005 and although it has increased by 12% in recent years, is still down by about one-third since 2001.
- The large majority of all fixed-route ridership (75% - 80%) is in Worcester.
- While ridership on WRTA's demand-responsive services is relatively low, these services account for almost two-thirds of the vehicle fleet, 41% of the service hours, and 24% of operating costs

