Brockton Area Transit Authority

Comprehensive Regional Transportation Plan





Comprehensive Regional Transportations Plan

For

Brockton Area Transit Authority

September 2015



Prepared by

Old Colony Planning Council 70 School Street Brockton, MA 02301

This report was prepared under contract with the Brockton Area Transit Authority (bat).

The contents of this report reflect the views of the Old Colony Planning Council, which is responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policy of the Brockton Area Transit Authority.

Acknowledgments

The Old Colony Planning Council would like to thank the following members of the Brockton Area Transit Authority and East Coast Transit for their participation and assistance with this project.

Reinald Ledoux, Jr. Kathy Riddell Linda Sacchetti Kelly Corbett Andrew Wiley Michael Blondin Michael Damon Jeff Doten

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Executive Summary

The Brockton Area Transit Authority (BAT) is one of fifteen (15) regional transit authorities operating within the Commonwealth of Massachusetts, serving eleven (11) member communities as well as several additional communities through a coordinated human service delivery system, and also provides a critical link to the Central Business District (CBD) of Boston. BAT operates twenty (20) fixed routes, a comprehensively coordinated paratransit system, a deviated "flex ride" service, and a supported, regional Council on Aging (COA) transportation network. BAT's operating budget for Fiscal Year (FY) 2016 is approximately sixteen (16) million dollars, while the authority transports an estimated three (3) million riders annually in terms of passenger trips.

This study was initiated as the result of the Commonwealth's transportation finance bill H.3535 that required all regional transit authorities to develop a study, with its appropriate regional planning agency, for the purpose of ensuring that regional transit authorities most effectively serve regional needs. The purpose of the Comprehensive Regional Transportation Plan put together for BAT by the Old Colony Planning Council (OCPC) is to examine the transit authority's existing operations and current ridership tends, and to understand the market it services to see how the system can be streamlined further for greater efficiency, attracting new ridership, and providing faster service to the riding public.

BAT CRTP Study Goals:

- Ensure BAT services meet and support community needs.
- Ensure that the fixed route service and paratransit services are a viable and increasingly attractive option for more people in the service area.
- Ensure that the fixed route service and paratransit services are operated in the most cost effective and efficient manner possible.

The elements of this study were reviewed through a multipronged approach using quantitative and qualitative methods. Route ridership was reviewed utilizing available ridership data for the last five fiscal years. FY2014 ridership data was finalized in June of 2015, and used as part of the public participation process, while FY2015 data was not yet available to be included in the process. The results demonstrate that despite a dip in ridership during the recession, BAT's service remained remarkably productive. Onbus field observations were conducted to better understand where BAT passengers were getting on and off the bus along each route to understand route performance. Service area demographics were collected via U.S. Census data, and through direct passenger engagement in the form of a passenger survey and comments received during public outreach sessions. OCPC, along with BAT, held a series of stakeholder meetings to field a better understanding of community, educational, and business needs in regards to public transportation services. Labor was also consulted to gain insight into bus operators' thinking with regard to service improvements as a result of their daily experience operating the system, including comments they have heard from passengers. Below are the different elements reviewed and the information that was sought out for this study.

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- Review and utilization of BAT's Performance Measures Dashboard.
- Collect ideas, comments and thoughts from stakeholders, members of the public, and people who are currently utilizing BAT services.
- Market Analysis Review the demographic and socio-economic characteristics of the BAT service area to identify the best markets for transit service.
- Route Evaluations Conduct a detailed analysis of each BAT bus route, including number of riders on routes, at stops and at different times of days, to determine if changes are needed.
- Service Guidelines Service guidelines are general rules for how services should be organized and designed, and how hours of service and frequency should be determined.
- Recommendations Create a series of service improvement scenarios that offer options for how the system might be improved.

Service Recommendations

The Brockton Area Transit Authority is a very mature system servicing the biggest and only city in Plymouth County, Brockton, along with its suburbs. Given that Brockton is an older industrial city without an interstate highway running through it, the city has maintained dense urban land uses along with the walkability that comes with this form of development pattern, making it the most conducive municipality in which to operate bus service in the BAT service area. Due to the nature of Brockton's street grid development, there are few direct north/south and east/west roads leading into and out of the city. With only a few continuous roads within Brockton, there are only a handful of roads in which BAT can operate service efficiently. In Brockton's suburbs, fixed route service is sparse, and for good reason. Most of Brockton's suburbs have very low-density development patterns, do not possess a street network with appropriate walking infrastructure, or have few public transit dependent populations. Therefore, BAT should only expand services in the handful of locations most conducive to public transit usage, and strive to increase mode shift opportunities within the region by maintaining its present focus on effectiveness and efficiencies.

The major issues cited by many BAT passengers are that service is slow, wait times long, span of service hours not conducive to travel needs, and there are locations people desire to reach via transportation that are not currently reachable as the system exists today. To address some of these issues, the Old Colony Planning Council has put forth a number of system improvement suggestions to meet the demands of the riding public.

Current Routes

- Reduce number of stops along existing routes to reduce bus dwell time and speed up service.
- Realign some routes for improved efficiency, and serve underserved or unserved destinations.
- Consolidate some routes experiencing ridership decline for cost savings and improved system efficiency.
- Continue to maintain service to identify routes that may underperform.
- Break up routes experiencing significant delays into two routes to improve on-time performance.

- Increase service on lines experiencing overcrowding or growing ridership.
- Seek to identify corridors and communities were service can be expanded or established to meet community needs.
- Continue to meet or exceed BAT performance measures.

Service Expansion Opportunities

- Consider the possibility of Stoughton Route 14 servicing the BAT Centre every trip. Service between Westgate Mall and BAT Centre should be drop off only, no boardings for speedier service.
- Consider the possibility of terminating Rockland Flex Route at Abington Wal-Mart, or transitioning service into paratransit service.
- Consider the possibility of extending Bridgewater State University's Route 28 from Brockton K-Mart terminus to the BAT Centre.
- Study the possibility of establishing public transit service in Downtown Easton, providing service to Stonehill College, Queset Commons, and Easton Target via Center Street and Depot Street.
- Study the possibility of establishing a route in Easton that connects to Brockton's Veterans Administration Hospital and the Shop and Stop/Shaw's Plazas. Consider the opposite end of the line connecting to Stoughton, making stops at the Roche Bros. Plaza and Stoughton Center.
- Consider the possibility of splitting Route 8 into two lines, establishing a new route 7 in the lower eastside of Brockton.
- Study the possibility of establishing bus service on Forest Ave in Brockton, providing more service to Brockton High School, servicing the proposed Brockton Casino, and terminating at the Westgate Mall.
- Study the possibility of establishing service from Whitman along Route 18 and terminating at the South Shore Hospital.
- Study the possibility of establishing service between Brockton and Taunton.
- Monitor future viability of service to Avon and West Bridgewater Industrial Parks through partnership with Mass Rides Inc.
- Consider reestablishing "guaranteed ride home" service in partnership with Massasoit Community College.

BAT Centre Recommendation

- Provide more secure bicycle parking.
- Provide more indoor seating for passengers, especially during winter months.
- Encourage connections of MBTA Ride and DIAL-A-BAT service out of the BAT Centre.

BAT Media Recommendations

• Have system map on buses.

- Provide printed schedules for those that aren't tech savvy, with mid-point approximate arrival times in all BAT service area LEP languages.
- Develop digital ride guide for each line.
- Improve social media presence.

Fare Collection Opportunities

- Consider raising cash fares by 25 cents.
- Increase Charlie Card usage by lowering fare for card users by 50 cents.
- Consider installing a Ticket Vending Machine (TVM) at Westgate Mall.
- Provide web-based access to Charlie Card account so passengers can reload card over web and review balance.

Paratransit Service Recommendations

- Increase customer engagement so they understand the service and where it goes.
- Only assist passengers to the first floor of drop off location.
- Moving the paratransit system to 10/20 drop-off/pick-up windows. Paratransit vehicles dropping off passengers at their destination 10 minutes early or 20 minutes past their quoted arrive or pick up time are considered on-time arrivals.
- Travel-train paratransit passengers to understand and encourage greater fixed route usage.

Future Funding

The Brockton Area Transit Authority (BAT) is reliant on stable funding from various sources including but not limited to the Federal Transit Administration (FTA), the Commonwealth of Massachusetts, local communities, agency partnerships, private contracts and, of course, our customers.

BAT's service has benefited from increased state funding over the past two fiscal years, relatively stable federal funding through the negotiated urbanized area funding formula, local community assessments that are increased by 2 ½ percent per year under Proposition 2 ½ and more for new service, modestly growing fare revenues generated by stable and modest ridership growth and increases in parking and advertising revenues. Therefore, the recent environment of funding operating expenses will also permit BAT to use federal funds in an effort to maintain a "State of Good Repair" (SOGR) with additional assistance from the Commonwealth. Additional assistance from the Commonwealth. Additional assistance from the Commonwealth will be necessary to aid BAT with its fleet replacement and modernization efforts, expand its rolling stock if services identified under the Comprehensive Regional Transit Plan (CRTP) are instituted and to meet technological advancements as well as other system infrastructure needs.

BAT has implemented services over the past several years through federal funding sources distributed by the Commonwealth that have contract ending dates. These short-term funding sources have been eliminated under recent federal reauthorization and will no longer be available in future years. BAT has successfully demonstrated the effectiveness and productivity of the service and has identified these services as a priority within the CRTP with input given from the stakeholder group. Therefore, the importance of the services provided and the elimination of the federal programs presents a funding challenge for BAT.

Introduction

The Brockton Area Transit Authority (BAT) is one of fifteen (15) regional transit authorities operating within the Commonwealth of Massachusetts, serving eleven (11) member communities as well as several additional communities through a coordinated human service delivery system, and also provides a critical link to the Central Business District (CBD) of Boston. BAT operates twenty (20) fixed routes, a comprehensively coordinated paratransit system, a deviated "flex ride" service, and a supported, regional Council on Aging (COA) transportation network. BAT's operating budget for Fiscal Year (FY) 2016 is approximately sixteen (16) million dollars, while the authority transports an estimated three (3) million riders annually in terms of passenger trips.

This study was initiated as the result of the Commonwealth's transportation finance bill H.3535 that requires all regional transit authorities to develop a study, with its appropriate regional planning agency, for the purpose of ensuring that regional transit authorities are most effectively serving regional needs. The purpose of the Comprehensive Regional Transportations Plan put together for BAT by the Old Colony Planning Council (OCPC) is to examine the transit authority's existing operations, current ridership tends, and to understand the market it services to see how the system can be streamlined further for greater efficiency, attract new ridership, and provide faster service to the riding public. Following the system review, recommendations were put forth to assist BAT in this streamlining process.

Goals of BAT CRTP Study:

- Ensure BAT services meet and support community needs.
- Ensure that the fixed route service and paratransit services are a viable and increasingly attractive option for more people in the service area.
- Ensure that the fixed route service and paratransit services are operated in the most cost effective and efficient manner possible.

One difference between BAT's CRTP and those produced by the other 14 regional transportation authorities is that BAT, with the help of OCPC, reviewed its own paratransit service. The 14 other regional transportation authorities contracted out their paratransit portion of their CRTP. The Pioneer Valley Transit Authority (PVTA) completely contracted out their CRTP, both fixed route and paratransit service. BAT's CRTP was drafted in consultation with a number of stakeholders from the business, labor, passenger, educational, medical, senior, and disability communities. Beyond consulting with these stakeholder groups, additional outreach was conducted with the regional coordinating council and community groups. Elements studied and reviewed as part of this process are listed below:

- Review and utilization of BAT's Performance Measures Dashboard.
- Collect ideas, comments and thoughts from stakeholders, members of the public, and people who are currently utilizing BAT services.
- Market Analysis Review the demographic and socio-economic characteristics of the BAT service area to identify the best markets for transit service.
- Route Evaluations Conduct a detailed analysis of each BAT bus route, including number of riders on routes, at stops and at different times of days, to determine if changes are needed.
- Service Guidelines Service guidelines are general rules for how services should be organized and designed, and how hours of service and frequency should be determined.
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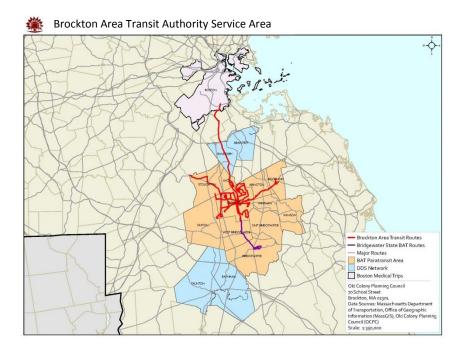
Study Methodology and Report Organization

The CRTP took over a year to complete, with the study starting in October of 2014. Each element in the plan has a methodology used to complete the section described within it. A summary of the methodologies for each of the main elements is listed below:

- **Fixed Route Ridership** was collected utilizing BAT's fare box system software and a random sampling of dates determined using a randomizer from UMTA Circular 2710.1A. Days with snow emergencies, service-stopping events, and non-service holidays were removed from the list of sampling days. The collected data was then analyzed for trends in ridership spanning five years of information to gain insights into route performance.
- **Paratransit Ridership** was collect by BAT and provided to OCPC, and is a 100% sample of its paratransit service. Just like fixed route ridership, paratransit ridership was analyzed looking at a five year period to discover ridership trends and determine systems performance.
- Fare Structure and Analysis was conducted by comparing BAT to the 14 other regional transit authorities within in the Commonwealth and peer public transportation agencies of comparable size in New England. Fare changes and their effects on ridership and revenue were calculated using the autoregressive integrated moving average (ARIMA) model.
- Market Analysis was conducted utilizing mapping of the BAT service area, and taking into account service area demographics, individual income, household income, car ownership, major employers, population density, and passenger surveys. Maps with these elements were then overlaid with the BAT system map to see where gaps exist. In addition, passenger surveys were used to augment mapped data to gain further understanding of BAT's market area.

Brockton Area Transit Authority (BAT)

The Brockton Area Transit Authority (BAT) was established in 1974, and is one of 15 regional transit authorities in the Commonwealth, providing public transportation for the Greater Brockton Area of the South Shore and service between Brockton and Ashmont Station, Dorchester. BAT services 17 communities with some form of transit service, whether it is fixed route bus service or paratransit service. BAT's fixed route service includes the municipalities of Avon, Abington, Bridgewater, Brockton, Easton, Milton, Stoughton, Randolph, Whitman and Ashmont Station in Boston.



BAT transported an average of 10,257 weekday passengers on its fixed route portion of the system during FY2014. (This ridership figure was finalized in the spring of 2015, and was included as part of the public participation process.) The Ashmont route 12 is the authority's busiest line with an average of 2,029 boardings per day, and make up 20% of BAT's fixed route daily ridership. BAT operates passenger service 7 days a week excluding New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. Fixed route service hours span from 4:50am to 12:20am Monday through Friday, Saturday service hours span 5:05am to 11:40pm, and Sunday service hours span from 10:10am to 7:30pm.

The paratransit system carries a combined ridership of 192,013. This combined ridership includes all regular DIAL-A-BAT service, ADA service, Council on Aging transportation services, and contracted paratransit service BAT operates. DIAL-A-BAT alone carries the majority of BAT paratransit ridership with

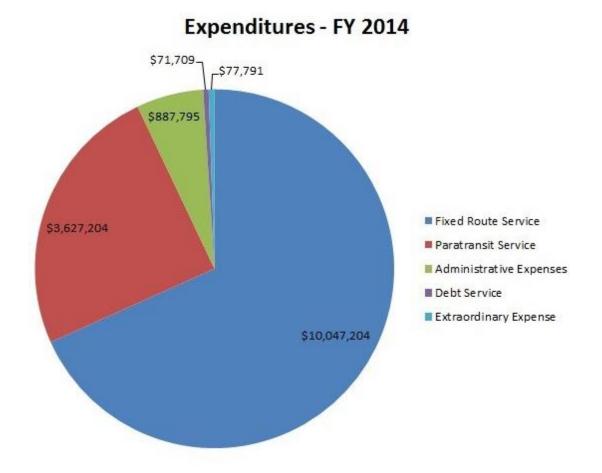
a 160,072 boardings in FY2014. Paratransit service operating hours vary depending on the type of paratransit service being operated. Regular 65 years and older paratransit service operates from 9:30am to 4:30 pm Monday through Friday, while ADA service operates between 6:00am and 9:05pm Monday through Friday. Saturday ADA service is provided between 7:20am and 9:15pm, while on Sunday service operates from 11:40am to 6:05pm. Paratransit service is not available for non-ADA passengers on the weekend.

BAT has approximately \$16.2 million in operating funding in FY2016 from a variety of sources. The largest source of funding for BAT service comes from the Commonwealth, making up 39% of BAT operating funding. The next largest source comes from fare box revenue and other reimbursements, making 26% of funding. The third largest source of funding comes from BAT member communities making up 18% of the total \$14 million. After these three largest sources of funding, other income is from the Federal Transit Administration and auxiliary sources.



Funding Sources - FY 2014

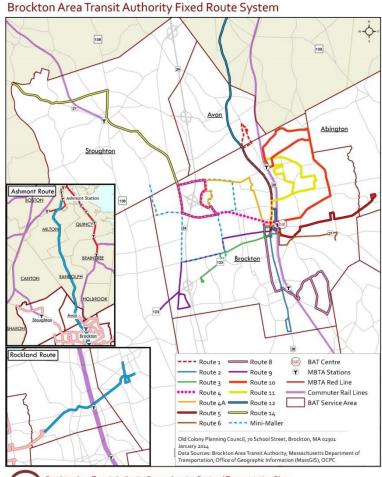
BAT's total expenditure for FY2016 was budgeted at approximately \$16.2 million, and as would be expected BAT's largest capital expenditures were providing transportation services. Sixty-eight percent of BAT funding goes toward its fixed route bus service. The next largest expenditure goes to funding the paratransit service, on the order of 25%. Remaining funding allocations include 6% for administration costs, 0.5% going towards debt service, and 0.5% going to extraordinary expenses.



Fixed Route System

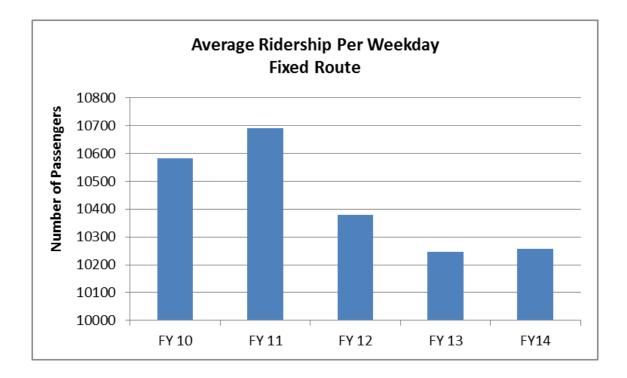
The Brockton Area Transit Authority operates 20 fixed route bus lines in the Greater Brockton Area, along with service to the MBTA Ashmont station in Boston. In addition to these 20 transit lines, BAT also provides buses to Bridgewater State University for campus transportation. The fixed route system services the towns of: Avon, Abington, Easton, Milton, Stoughton, Rockland, Randolph, and the cities of Boston and Brockton.

Most of the transit lines are concentrated in the city of Brockton, with the ends of routes entering neighboring communities and just a few lines operating deeper in the boundaries of other municipalities. Those lines that operate deeper into other communities are the 12 Ashmont that services the Ashmont station in Boston, the Rockland flex route which services the Town of Rockland, and Stoughton's Route 14.



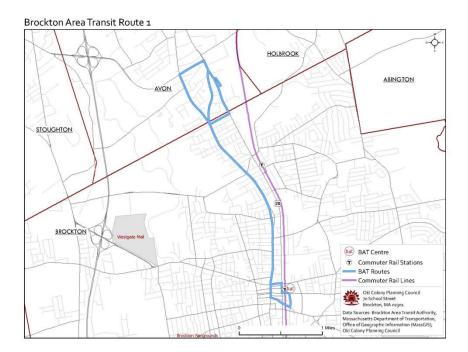


System ridership has been falling for the past couple of years. Since FY2010, fixed route ridership has fallen by 3%. If we look at ridership between FY2011 and FY2014, where FY2011 saw a jump in system ridership, average ridership per weekday is down by 4% from the high in FY2011 compared to FY2014. However, not all lines are experiencing a decrease in ridership. For example, the 12 Ashmont saw an increase in ridership by 19.8% between FY2010 and FY2014. It could also be argued that some of the ridership decline can be attributed to extreme weather events which suppressed BAT usage.

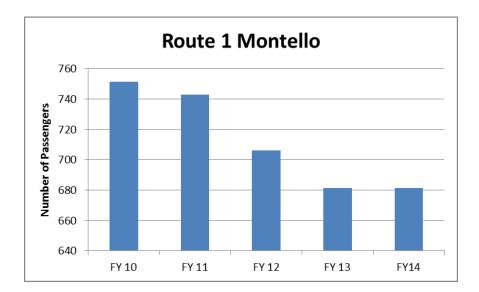


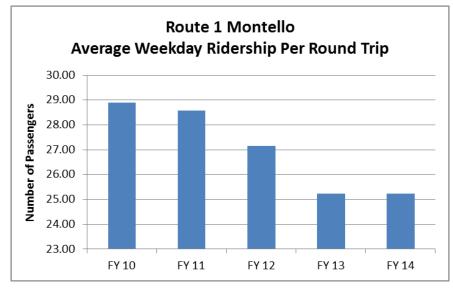
Route 1 Montello Street via North Main Street

BAT's Route 1 operates primarily within the City of Brockton. The line departs the BAT Centre and then travels up Main Street, entering the Town of Avon with the line terminating at the Avon Wal-Mart. Route 1 operates Monday through Friday from 6am to 5:40pm, Saturday from 7:20am to 9:15pm, and then Sunday from 11:20am to 6:25pm. It should be noted that Monday through Friday after the 5:40pm departure of Route 1 from the BAT Centre, the Route 12 Ashmont local bus service substitutes for Route 1 until the end of the service day.

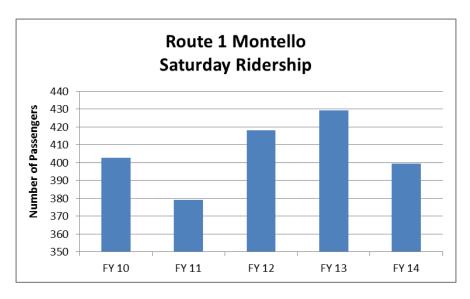


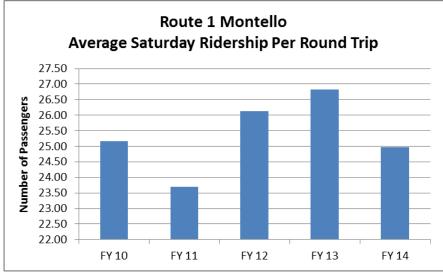
Ridership on Route 1 has been following the overall downward trend of system wide usage. Ridership on this particular line has experienced declining ridership for the past few years, and has flat lined for the past two. From FY2010 to FY2014, average weekday ridership on Route 1 fell by 9.32%. It could be argued that in past years ridership was partially depressed by extreme weather events.



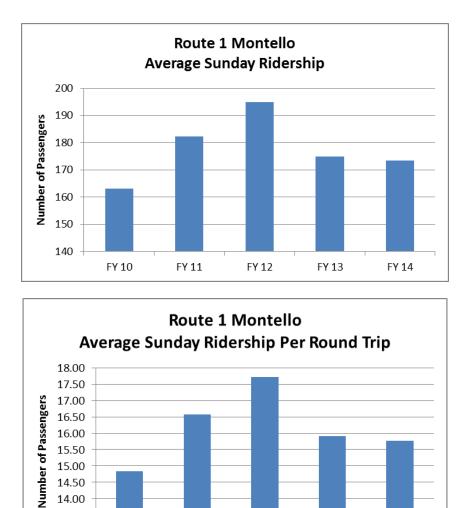


From FY2010 to FY2014, average ridership differed during Saturday service from the ridership trends present in weekday service. While average Saturday ridership is down from FY2013 and just slightly lower than FY2010, falling ridership has not been the trend with weekday ridership. After the fall in ridership in FY2011 from FY2010, ridership jumped by 13% by FY2013 with an average of 27 passengers per round trip. In FY2014 ridership fell by 6.89% from FY2013, and over the five year period from FY2010 to FY2014 ridership was only down by 0.75%.





Sunday ridership on Route 1 has not seen the same steady decline in passengers since FY2010 as has weekday service, but has experienced falling ridership for the past two years of service. In FY2012 ridership had been on the rise by 19% from FY2010. Then after FY2012 ridership began to drop off, falling by 0.86% from FY2012 to FY2014 to 174 average daily boardings. It should be noted that ridership has plateaued for the past two years at 174 to 175 average daily boardings, and is still 6.33% higher than ridership in FY2010.



16.00 15.50 15.00 14.50 14.00 13.50 13.00

FY 10

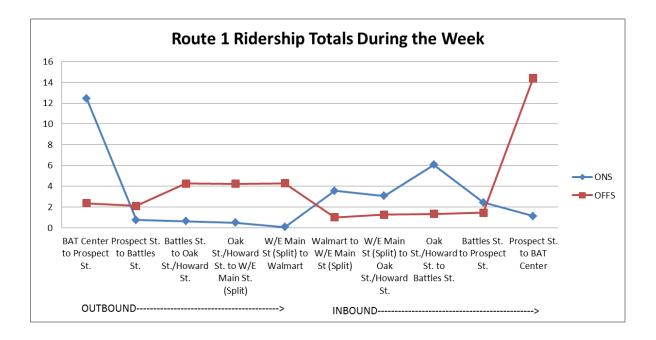
As part of Route 1 analysis, OCPC looked at the route broken down into five segments to better understand passenger usage of the line. The reason for this segmentation of the line was to understand where passengers are boarding and alighting. Gaining the understanding of passengers' habits can help BAT determine if the route should be realigned along a different road, or be shortened to better match boarding and alighting trends on the line.

FY 12

FY 13

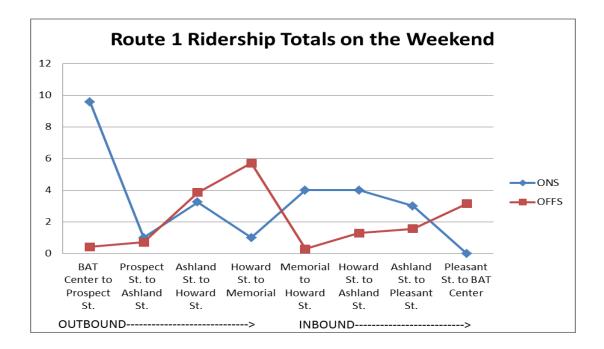
FY 14

FY 11

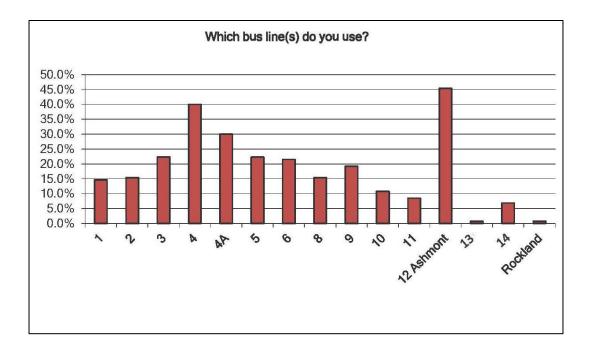


When we look at boarding and alighting along Route 1, we can see that passenger boarding and alighting is distributed evenly along the line, with the most boardings and alighting taking place at the BAT Centre. It should be noted that due to the pulse nature of the BAT fixed route system, the BAT Centre will always represent a high level of boarding and alighting of passengers. During the route segment sampling periods, on average no more than one person boarded the route on the outbound direction after the BAT Center, and most activity was alightings with an average of four to five passengers getting off the bus. On the inbound direction most passenger activity is boardings, with average of four to six boardings and the majority of boarding taking place on the inbound direction along the Oak Street to Battles Street segment. This segment tends to be a big boarding area due to passengers walking up from the Montello train station after getting off the MBTA's 230 bus, as well as the presence of a high concentration of multi-family dwellings around the area particularly clustered near the intersection of Oak Street and Main Street.

Weekend route segment analysis yielded similar results when compared to the weekday route segment analysis. While the two route segment analyses are similar, they are not without their differences. For example, on the outbound direction of Route 1 during the weekend an average of three people boarded the bus in the Ashland Street to Howard Street segment. When we look at this same segment during the weekday there is an average of only one person boarding the bus in this segment. On the inbound direction the boarding and alighting patterns are near identical with most people alighting from the bus at the BAT Centre and boarding at the Wal-Mart.



OCPC also fielded a passenger survey to gain an understanding of passenger usage of the system in June 2014. According to the survey results, fewer than 15% responded that they use Route 1. One possible reason for the low response rate of passengers stating they use Route 1 could be the fact that the 12 Ashmont has stops at the northern end of the Route 1 line, in effect giving passengers an express trip to the far north of Brockton and the Avon town line. This particular area where the line operates is very dense, with more than 5,000 persons per square mile, making it a very walkable district in Brockton and possibly negating the need to take the bus to get around the area. While there are a lot of single family and multifamily homes in the area in which Route 1 travels, there is only one major shopping destination, the Avon Wal-Mart. Most shopping and business establishments along the route are small mom-and-pop shops with particular specialties, and none are major trip generators as exist on other lines in the BAT system.

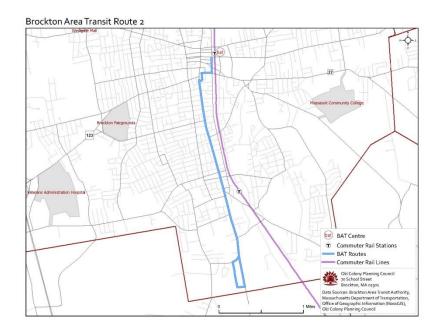


The OCPC recommendation to increase ridership on the line is to reduce the number of stops to increase bus speeds along the route. Currently there are many of stops along the route, with effectively one stop every block in certain segments. The large number of stops along the line contributes to longer travel times, especially on a route that experiences significant automobile traffic.

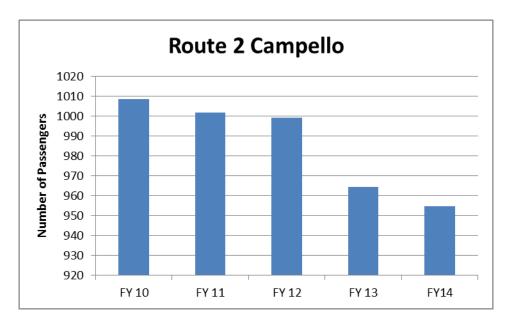
When one reviews the ridership data over the last five years, ridership on the line has been falling, although this is true only for the last two to three years on the weekends. If ridership continues this downward trend, BAT should study Route 1 further to better understand what is causing this continued downward slide through passenger surveys and the possible usage of BAT's annual ridership report to gain insight on the line. With the 12 Ashmont already substituting for Route 1 service in the evening, if the slide in ridership continues BAT should study the possibility of eliminating the line and transitioning passengers to the 12 Ashmont for service along the Route 1 service area.

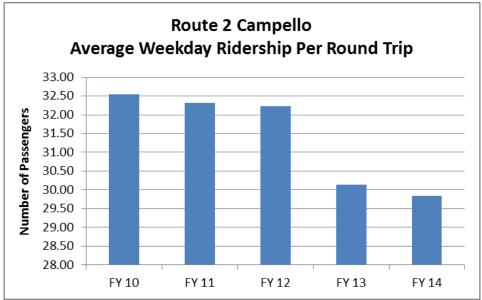
Route 2 S. Plaza/Campello via Main Street

Route 2 operates entirely within the City of Brockton along a very dense corridor. After departing the BAT Centre, Route 2 makes its way through Downtown Brockton to Main Street and then operates south on Main Street terminating at the K-Mart on Brockton's far south side. It is at the K-Mart where Route 2 meets up with Bridgewater State University's Route 28, giving Brockton residents access to Bridgewater State University and the Town of Bridgewater, while also providing Bridgewater State University students access to the City of Brockton and the Greater Brockton Area via the BAT system. This line operates Monday through Friday from 6:00am to 9:05pm, on Saturdays from 7:15am to 9:15pm, and on Sundays from 11:20am to 6:25pm.

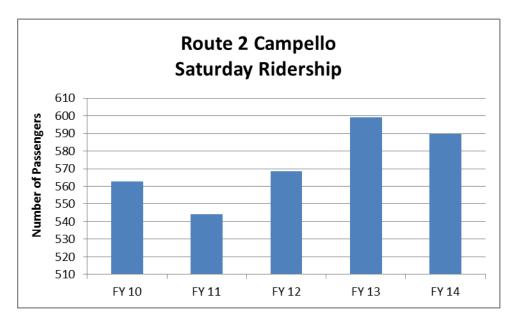


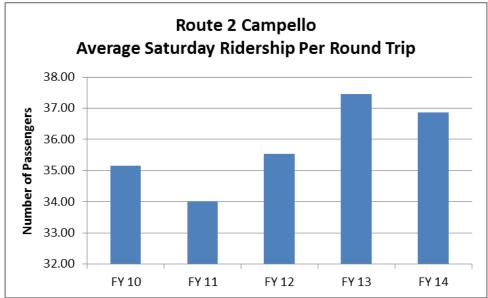
Ridership on Route 2 fell between FY2010 to FY2014, and has not plateaued for the last two years like Route 1. While some of these drops can be attributed to foul weather, especially during the past two winter months, these drops in ridership should not be ignored. When we look at average weekday ridership for the past five years, ridership from FY2010 to FY2014 is down by the 5.35%. Moreover, the passenger per round trip count is down by 8.30%, going from 33 persons per round trip in FY2010 to 30 persons per round trip in FY2014.





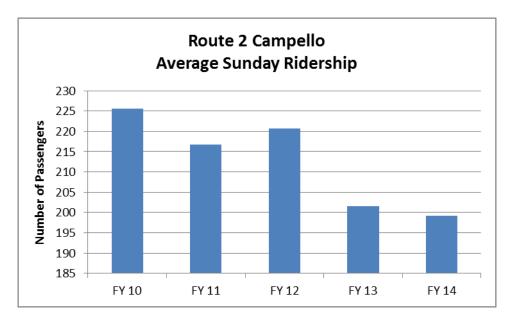
Average ridership for Route 2 on Saturdays mirrors in some sense the ridership trends of Route 1. When we look at average Saturday ridership from FY2010 to FY2014, ridership has risen by 4.83% with an average Saturday ridership of 590 passenger trips. However, the steady rise in ridership has not been a constant climb. After FY2010, Route 2 took a 3.28% dip ridership in FY2011, then experienced steady ridership growth from FY2011 to FY2013, jumping by 10.13%. In FY2014, Route 2 experienced another drop in average Saturday ridership from FY2013, falling by 1.59%. Average passengers per trip on Route 2 from FY2010 to FY2014 has risen by the same percentage amount as average Saturday ridership, by 4.83%, or from 35 passengers per trip to 37 passengers per trip.

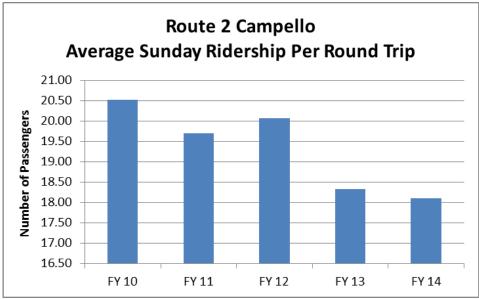




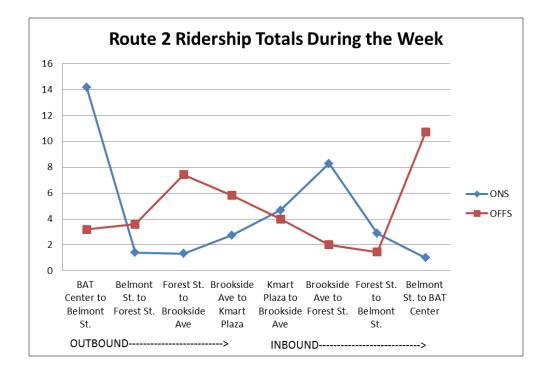
When we look at average Sunday ridership on Route 2, the route decreases in ridership from FY2010 to FY2011, falling by 3.95% or from 226 passenger trips to 217 passenger trips. After this drop in ridership from FY2010 to FY2011, ridership takes an upswing in FY2012 to only decline once more between FY2012 and FY2014. Average passengers per round trip for FY2014 was around 18 persons on Sundays, falling from a high in FY2010 of 20 persons per round trip.

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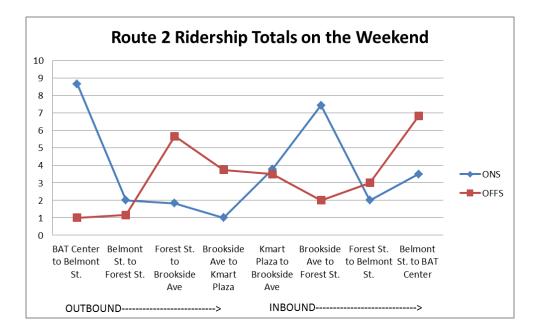




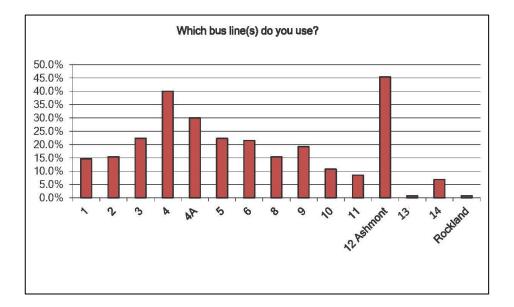
As part of its Route 2 analysis, OCPC looked at the route broken down into four segments to better understand passenger usage of the line.



When we look at Route 2 and the habits of passengers boarding and alighting, we can see that segments that include the BAT Centre in them always have the largest portion of boardings and alightings. As stated previously, this large portion of ons and offs at the BAT Centre has to do with the nature of the BAT system, being a pulse-style transfer system. The next segment that experiences significant portions of boarding and alighting of passengers is between Forest Street and Brookside Avenue. Along this segment, there are many small mom-and-pop stores along with a major ethnic grocery store that see high patronage. In addition to these operations, there is a large number of multi-family dwellings along with a public housing complex near Brookside Avenue. After Brookside Avenue, alightings tend to decline as there is not much economic activity on the southern portion of the line, and the density of housing drops off.



When we look at boarding and alighting along Route 2 on the weekends, there is not a large difference when compared to the weekday, although there are some subtle differences. One such difference is on the inbound direction where there are a greater number of individuals alighting from the bus compared to boarding it, different from what can be seen in the weekday analysis.



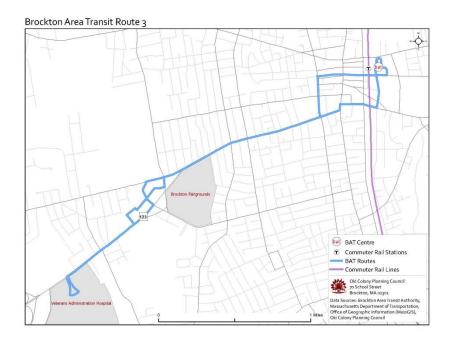
Just like Route 1, when passengers were surveyed and asking which lines they use, Route 2 was selected by just over 15% of those that responded to the passenger survey. This low response rate by passengers

stating which line they use could be the result of the fact that half of Route 2 operates in a lower density section of the City of Brockton that has large pockets of underperforming commercial and industrial space. Route 2 also travels through a very walkable portion of the city, where individuals can walk to places to handle daily needs. Additionally another bus line, Route 8, operates one street to the west. The presence of this additional route might be drawing away potential ridership as those that find that Route 8 is closer to their home, or travels more directly to their destination, opt for this bus route.

Route 3 VA Hospital via Belmont

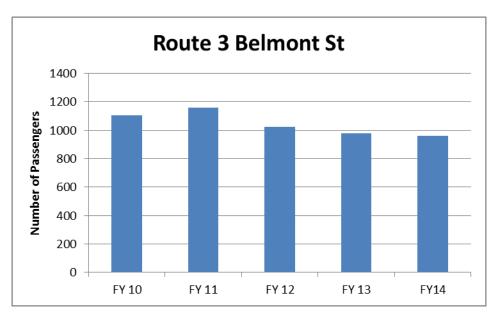
Route 3 operates from the BAT Centre in the City of Brockton, and travels through Downtown Brockton via Legion Parkway and Warren Avenue to reach Belmont Street. Once on Belmont Street it travels west, servicing many commercial locations, two major grocery stores, and Brockton High School before terminating at the Veteran Administration Hospital. Route 3 travels on the most heavily used corridors in the City of Brockton. Belmont Street sees high levels of automobile and tractor trailer traffic due to being one of two routes that connects directly to Route 24. As a result, Belmont Street experiences significant traffic delays that directly affect Route 3 and its on-time performance.

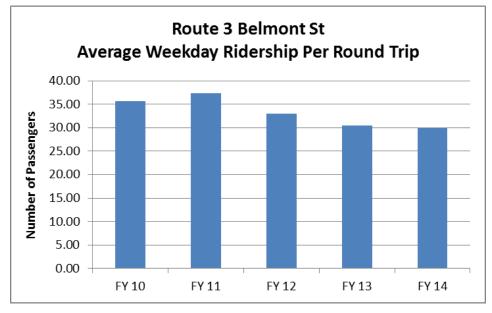
Route 3 operates Monday through Friday from 6:00am to 9:05pm, Saturday from 7:20am to 9:15pm, and Sunday from 11:20am to 6:25pm. In addition to regularly scheduled weekday service, BAT also operates two additional buses during the Brockton High School academic year. These additional buses are operated as express service departing from the BAT Centre and traveling non-stop to Brockton High School. One bus departs the BAT Centre at 6:40am heading to the high school and the second bus departs the high school at 2:20pm heading to the BAT Centre. Regular fare and service policies apply to student riders.



Ridership on Route 3 declined slowly for the five years from FY2010 to FY2014; however it has not been a consistent decline. During the two-year period of FY2010 to FY2011, average Saturday passenger ridership rose from 1,104 to 1,159 passengers or a 5.02% increase in ridership during this two year period. After FY2011, ridership began its slow decline from the high of 1,159 average weekday passenger boardings to 959 boardings in FY2014.

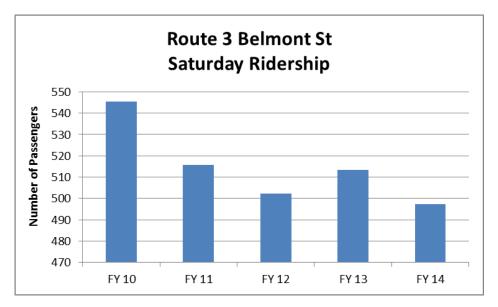
Average passengers per trip always mirrors average weekday ridership since the data is the average weekday passenger ridership analyzed by trip. Just like average weekday ridership, average passengers per trip experienced the same rise from FY2010 to FY2011, a 5.02% gain in passengers per trip or 36 passengers per trip to 37 passengers per trip. From FY2011 to FY2014 passenger boardings declined to 30 passengers per trip in FY2014, or a decrease of 9.36%. It can be argued that some of the ridership decline is attributed to extreme weather events which suppressed overall BAT usage.

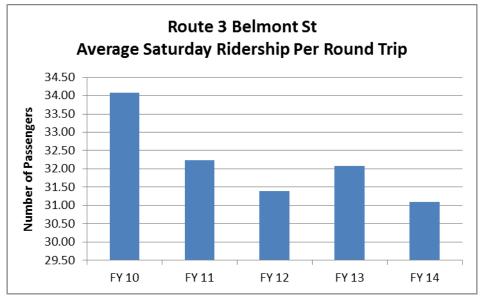




Saturday ridership experienced a steady decline from FY2010 to FY2012, a drop in ridership by 7.92%. After this fall in ridership, usage of Route 3 experienced a jump during FY2013 with a 2.21% increase in passengers. With that said, Route 3 experienced another drop in ridership from FY2013 to FY2014, a

drop of 3.10% from an average of 513 passengers per Saturday to an average of 497 passengers per Saturday. Overall ridership is down for the last five years, a drop of 5.88% or by an average ridership of 545 passengers in FY2010 to 497 average passengers in FY2014. When we look at average passengers per round trip, the trend is the same. Average passengers per round trip during this five year period, FY2010 to FY2014, fell by 8.8% or from 34 passengers per round trip in FY2010 to 31 passengers per round trip in FY2014.

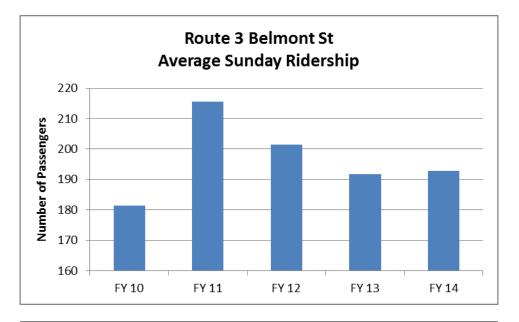


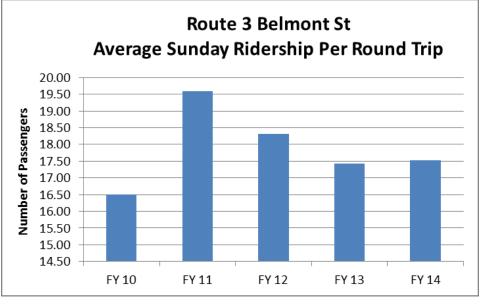


Sunday average ridership, while mirroring both Saturday and weekdays to some degree, does have some differences when compared to the other two categories. While Saturday ridership data depicted a decline in average ridership from FY2010 to FY2014, with a modest uptick in ridership during FY2013, Sunday services does not follow this pattern. After FY2010, Route 3 takes a large jump in ridership in

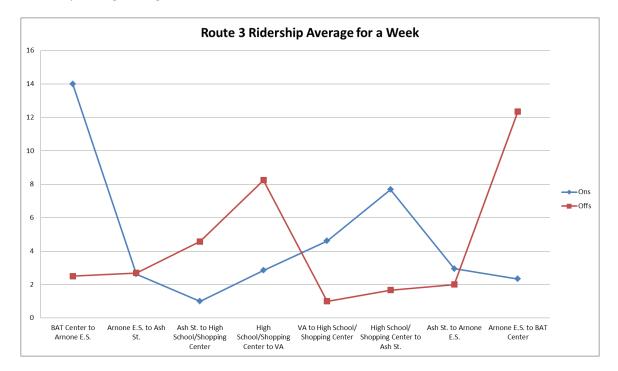
FY2011, an increase in passengers by 18.75%, or going from an average of 182 passengers per Sunday to 216 passengers per Sunday. Then from FY2011 to FY2013 ridership falls off by 11.03%, or going from 216 average passengers per Sunday to 192 passengers per Sunday. In FY2014 ridership decline was halted, and even rose slightly by 0.52% to an average of a 193 passengers per Sunday.

From FY2010 to FY2011 average passengers per trip rose from 17 to 20 per trip on Sundays. Then average passengers per trip falls from the FY2011 high to 17 passengers per trip in FY2013. In FY2014 average passengers per trip for Sunday stabilized, and gained a little coming in at 18 passengers per trip, showing the possibility of climbing ridership.

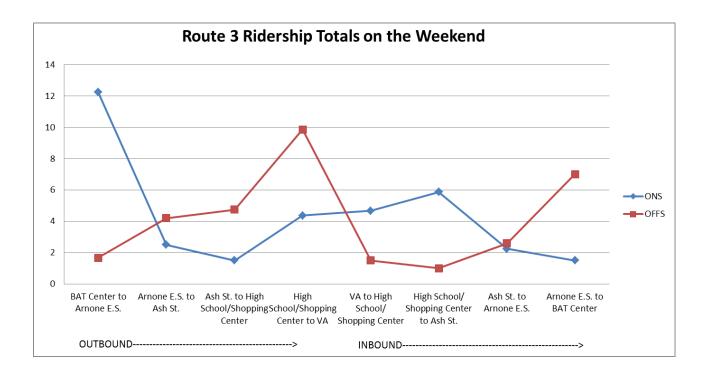




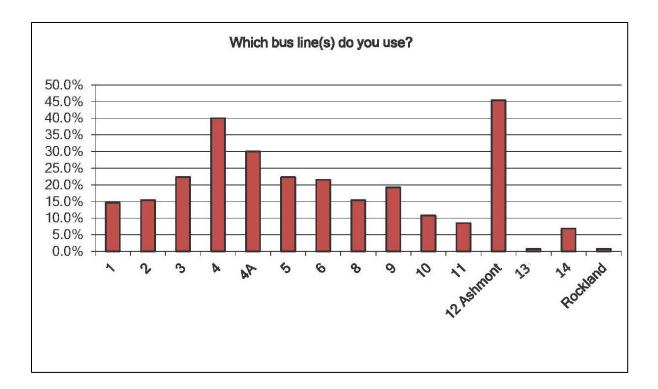
As part of Route 3 analysis, OCPC looked at the route broken down into four segments to better understand passenger usage of the line.



When we look at Route 3 and the habits of passengers boarding and alighting along this route, we can see that segments including the BAT Centre in them will always have the largest portion of boardings and alightings. The reason for this high number or boarding and alightings at the BAT Centre was mentioned earlier in the report. The next segment that experiences a significant portion of alightings is between the high school/shopping center and Veterans Administration stops. The main ridership destinations along this segment are the two shopping plazas, Belmont West and Shaw's. This particular location experiences a high number of ons and offs due to two major grocery stores, the Stop and Shop and Shaw's grocery stores, along with high school students boarding and alighting from the bus at these locations in the outbound direction. On the inbound direction, a significant number of passengers get on the bus at these shopping plazas along with the Brockton High School stop to return back to the BAT Center to transfer to other bus routes to complete their trips.



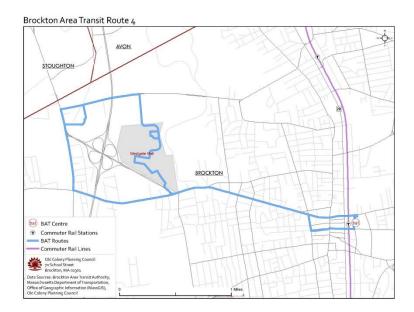
On the weekends there is no significant difference in the patterns of alighting when compared to the average weekday pattern. The only slight difference in alighting between the weekend and weekday patterns is at the BAT Centre. On the inbound direction, fewer passengers got off at the BAT Centre than got on, and by a larger gap when compared to the weekday alightings at the BAT Centre. When we look at boardings round trip on Route 3 during the weekends, it is at the end of the outbound and on the inbound we see boarding to be spread out more evenly on the line compared to weekday data. This leveling out of boardings is the result of passengers taking care of daily needs, and traveling for personal and entertainment reasons rather than for work trips.



According to the passenger survey fielded to individuals, just a little over 20% of those who took the survey stated they used Route 3. The reason for this greater portion of passengers stating they use Route 3 is due to the major destinations along the route. Along this route are two major grocery stores, Stop and Shop and Shaw's, providing shopping destinations and large employment providers to BAT passengers. Brockton High School also lies along the route and spurs substantial ridership during the school year from students. There is also the Veterans Administration Hospital at the end of the line. In addition to these major ridership generators are many smaller businesses along Route 3 providing additional employment opportunities, and there is a small elementary school contributing to ridership generation.

Route 4 Westgate via Pleasant

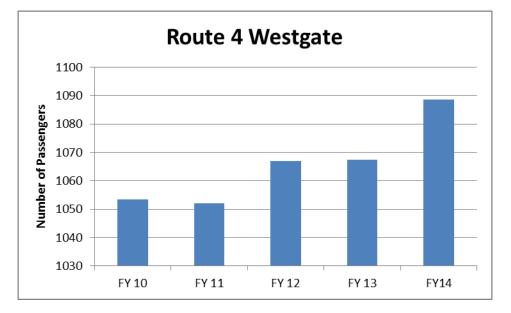
Route 4 operates Monday through Friday from 6:00am to 9:05pm, Saturday from 7:20am to 9:15pm, and Sunday from 11:20am to 6:25pm. It should be noted that route 4 is combined with Route 4A as a single line operating Sunday service. The route runs between the BAT Centre in Downtown Brockton and terminates at the Good Samaritan Hospital traveling via Pleasant Street. Route 4 travels through a very housing-dense corridor, and one plagued by significant traffic due to Pleasant Street being one of two roads leading to Route 24. Major destinations along this line are the Westgate Shopping Plaza, Wal-Mart, and the Good Samaritan Hospital. Besides these major destinations this route services, it also provides a transfer connection between it and Route 14 to Stoughton, Route 4A, Route 13 Mini-Maller, and a connection to Bloom Bus commuter service to Boston.

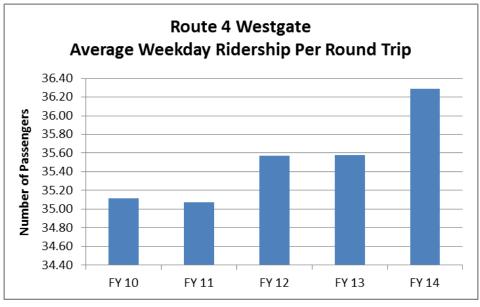


Route 4 did not experience the decline in ridership as has been the trend for the three routes we have already covered. While there was a small tick down in ridership by 0.13% from FY2010 to FY2011, ridership since has been on the climb. When we look at ridership from FY2011 to FY2014, passenger usage of the line has risen by 3.48%. When we look at Route 4 over the course of five years' worth of ridership data, the route has gains of 3.34%, or 1054 passenger boardings in FY2010 compared with 1089 passenger boardings in FY2014.

Average passengers per round trip have been steady over the course of five years, with just a small climb. From FY2010 to FY2011, average passengers per round trip were at 35 persons. Then in FY2012, average passengers per round trip hops to 36 and stays at this level until the most current year of

available data, FY2014. Route 4 could have seen higher ridership during this period had there not been system shut downs due to extreme weather events.

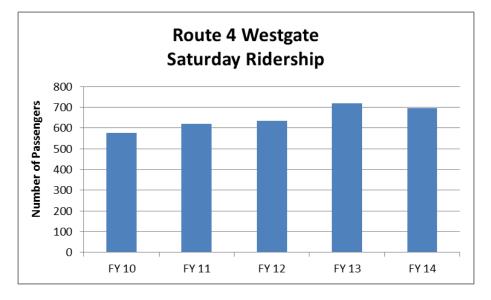


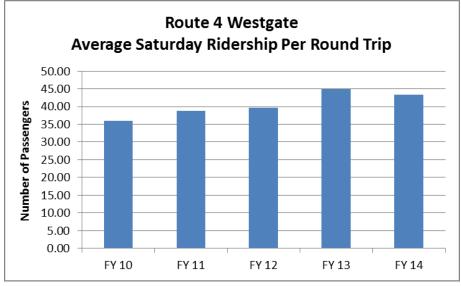


Saturday ridership on Route 4 has seen a steady increase in passengers, but not the large gains as seen in the weekday average charts, and experienced a small drop in boardings between FY2013 to FY2014. From FY2010 to FY2012, boarding increased by 10.08%, or from 577 passengers per round trip to 635 passengers per round trip. Then in FY2013 ridership takes another jump from 635 passengers per round trip to 719 passengers per round trip, a 13.18% increase in passengers. After the spike in ridership in FY2013, average passengers per round trip takes a small dip to 695 passengers per round trip, a 3.32%

decrease. Overall, when Saturday's ridership is reviewed over the last five years of data, ridership grew by 20.46% between FY2010 to FY2014.

When we look at average passengers per round trip, the climb in that number has been a little steadier each year than overall Saturday ridership numbers. For each year with the exception of FY2014, average passengers per round trip went up by roughly four to five passengers. In FY2014 average passengers per round trip fell by 3.32% to 43 average passengers per round trip. Over the five years reviewed, passengers per round trip went up by 20.46%.

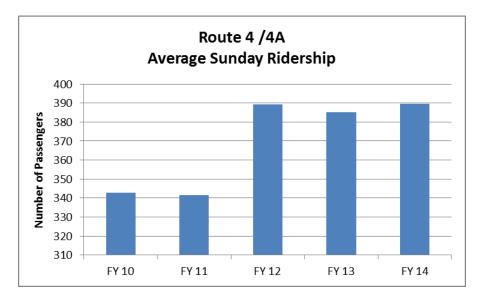


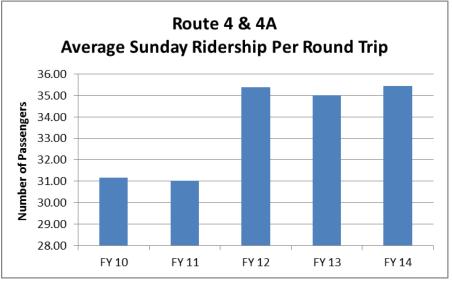


Until FY2014, Route 4 was combined with Route 4A operating as the Route 4/4A on Sundays. Due to the combined operation of these two routes, there was a difference in ridership when compared to

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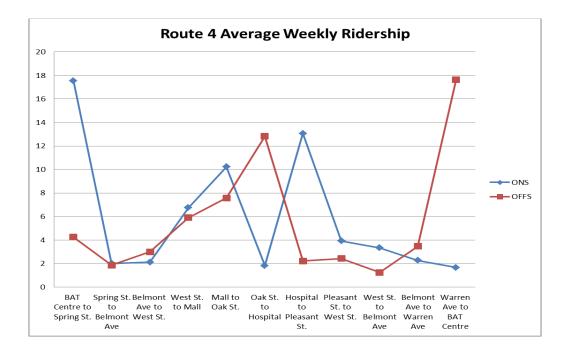
weekday and Saturday average passenger ridership. From FY2010 to FY2011, ridership on Route 4/4A fell by 0.38%, but then from FY2011 to FY2012 the line took a jump in ridership climbing from an average of 341 passengers per Sunday to 389 passengers per Sunday trip — a 14% increase. From FY2012 to FY2014, ridership remained relatively flat with a slight dip in ridership in FY2013 that can be attributed to weather events that kept passengers over the past five years. From FY2010 to FY2014, ridership has grown from an average of 343 passengers per Sunday to 390 passengers per Sunday, an increase by 13.69%. When we look at average passengers per round trip on Sunday, this number has climbed from 31 to 35 persons per round trip. As a result of these five years of increased ridership, BAT had chosen to operate the route as individual lines as it does during Monday through Saturday service to decrease overcrowding on the line and provide a better customer experience.



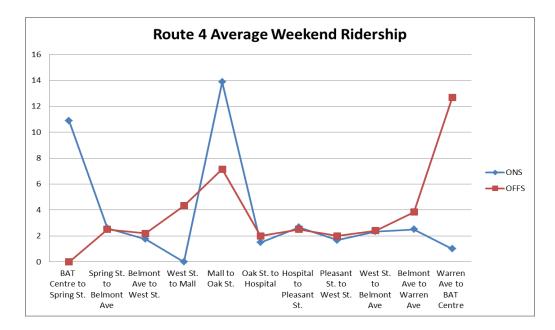


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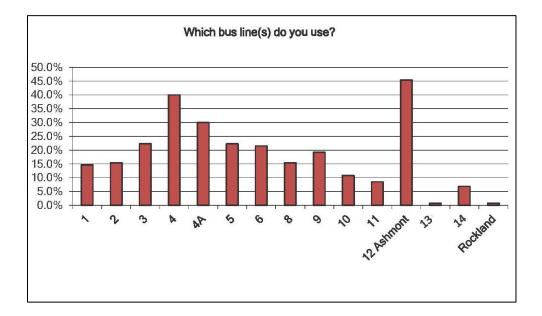
When we look at ridership along the line through its route segment analysis, after the BAT Centre the mall segment receives a significant share of the boardings and alightings along the line. As to be expected, the segment that contains the Westgate Mall shopping area experiences large portions of ons and offs along this line due to the multiple shopping destinations and the presence of a popular grocery store. It is also at the Westgate Mall segment where passengers can transfer to other routes and other transportation services that pick up there. After the mall segment, the next spike of boarding and alightings along Route 4 is on the Oak Street/Hospital segment. Along this section of the route segment can be found Wal-Mart and the Good Samaritan Hospital, both major destinations in their own right along with being major employers in the area.



When we look at the Route 4 weekend segment analysis, boardings and alightings along the line flatten out. However, the Westgate Mall to Oak Street segment continues to have a large number of ons and offs on the weekend too. The Westgate Mall to Oak Street segment is a major draw during the weekend as it provides a place for passengers to shop during the weekend, and find entertainment as well as employment.

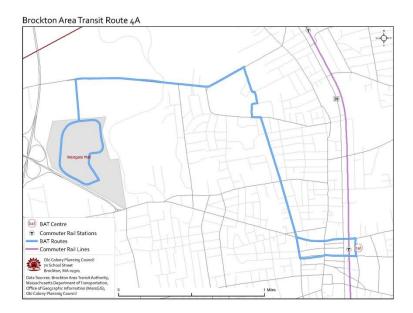


According to the passenger survey fielded to individuals, about 40% of those who took the survey stated they used Route 4, the second most stated line after Route 12 Ashmont. The reason for this large portion of passengers stating they use Route 4 is due to the Westgate Mall, Wal-Mart, and the Good Samaritan Hospital being along this route. Another reason for the high number of respondents stating they use this route is the ability to transfer to the Stoughton route and Mini-Maller.



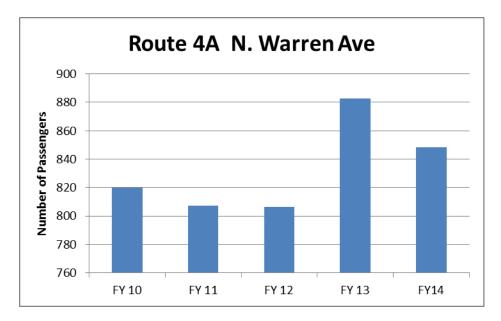
Route 4A Westgate Mall via N. Warren

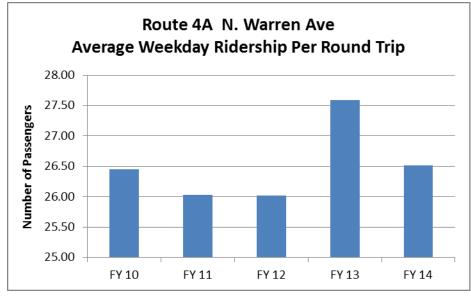
Route 4A is a line that terminates at the Westgate Mall, operating on North Warren Ave and Oak Street, traveling through Downtown Brockton via Legion Parkway. Route 4A services some of the densest areas of Brockton, with many multi-family homes along with small independent retailers and chain stores along the route. Major destinations are the Brockton Neighborhood Health Center, Brockton City Hall, two Brockton Schools, the Fuller Craft Museum, D.W. Field Park, and the Westgate Mall. Route 4A operates Monday through Friday from 6:00am to 9:05pm, Saturday from 7:20am to 9:15pm, and Sunday from 11:20am to 6:25pm. It should be noted that Route 4A was combined with Route 4 forming a loop during Sunday service from FY2010 through FY2013. In FY2014 this combined Route 4/4A Sunday service was decoupled, and now operates as independent routes.



For the last five years Route 4A has been a mixed bag of growth and decline. Some of these swings in ridership could be the result of system shut downs due to extreme weather. From FY2010 to F2011, ridership dropped by 1.56%, then remained steady at an average of 807 boardings per day until FY2012. Then in FY2013 ridership on Route 4A took a large jump, rising from the 807 average daily boardings in FY 2013 to 883 average daily boardings, a 9.45% increase. Despite this large jump in ridership in FY2013, ridership took another dip in FY2014 to an average of 849 daily boardings, or a 3.88% decrease in daily boardings. When Route 4A ridership is reviewed for the last five years, from FY2010 through FY2014, ridership is up by 3.49%, or increased from 820 average daily boardings in FY2010 to 849 average daily boarding in FY2014.

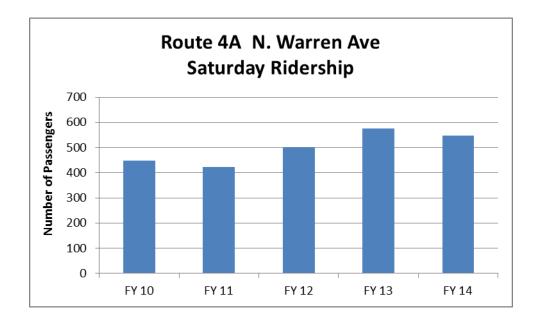
The average weekday passengers per round trip from FY2010 through FY2012 remained rather constant at about 26 passengers per round trip. Then in FY2013, average weekday passengers per round trip climbed to around 28. In FY2014 average passengers per round trip fell to 27. Overall average passengers per round trip climbed only modestly, from 26 average passengers per round trip to 27 average passengers per round trip, an increase of 0.25%.

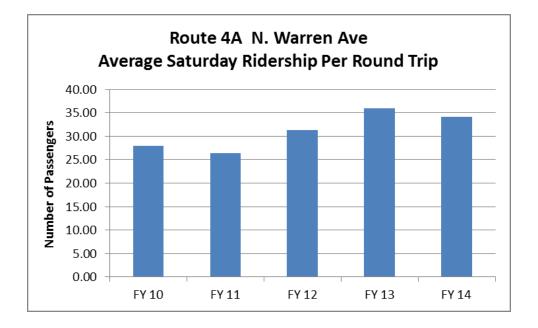




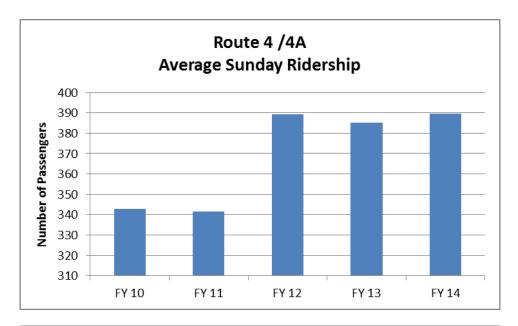
Saturday average ridership on Route 4A does not follow all of the same trends when compared to average weekday ridership. From FY2010 to FY2011, ridership on Saturday did see a decline in ridership, but not at the same rate as average weekday ridership. While average weekday ridership on Route 4A fell by 1.56% from FY2010 to FY2011, average Saturday ridership fell during the same time fell by 5.47%. Then in FY2012, average ridership began to climb, rising by 18% and then again by 15% in FY2013, or going from 501 average Saturday boardings to 576 average Saturday boardings. In FY2014, ridership experienced another dip, falling by 5.08% from FY2013 or declining from 576 average Saturday boardings to 547 average Saturday boardings. Overall ridership on Saturdays has grown over the past five years by 22% on Route 4A.

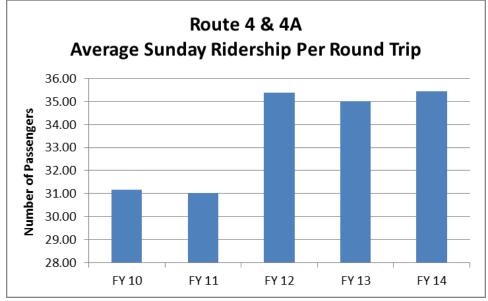
Route 4A average Saturday passengers per round trip fluctuated greatly over the five year period FY2010 to FY2014. FY2013 experienced the highest number of passengers per round trip on Saturdays, with an average of 36 passengers per round trip. The lowest rate of passengers per round trip on Saturday took place in FY2011, with an average of 26 passengers per round trip. When we analyze ridership over the course of the five year study period, average ridership per Saturday rose by 22%.



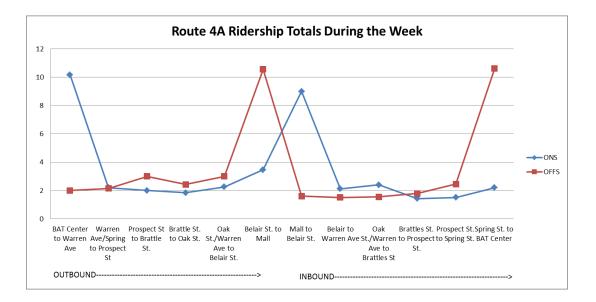


Until FY2014, Route 4A was combined with Route 4 operating as the Route 4/4A on Sundays. Due to the combined operation of these two routes, there were differences in ridership when compared to weekday and Saturday average passenger ridership. From FY2010 to FY2011, ridership on Route 4/4A fell by 0.38%, but then from FY2011 to FY2012 the line took a jump in ridership climbing from an average of 341 passengers per Sunday to 389 passengers per Sunday trip – a 14% increase. From FY2012 to FY2014 ridership remained relatively, flat with a slight dip in ridership in FY2013 that can be attributed to weather events that kept people home and unable to ride the service. Route 4/4A over the past five years has experienced considerable growth in passengers. From FY2010 to FY2014 ridership has grown from an average of 343 passengers per Sunday to 390 passengers per Sunday, an increase by 13.69%. When we look at average passengers per round trip on Sunday, this number has climbed from 31 to 35 persons per round trip. As a result of these five years of increased ridership, BAT had chosen to operate the route as individual lines as it does during Monday through Saturday service to decrease overcrowding on the line and provide a better customer experience.

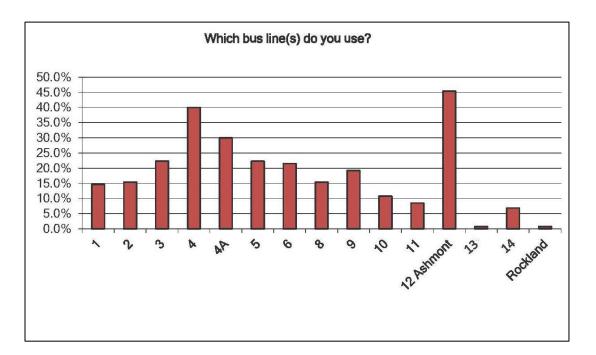




When we look at where people get on and off along Route 4A, we can see the majority of the boardings and alightings taking place occur primarily in two places – the BAT Centre and the Westgate Mall. These locations of large boardings and alightings are understandable, with the BAT Centre producing a large percentage of ons and offs, because of the nature of the pulse system on which BAT operates. The mall is another high generator of ons and off because of the number of shopping destinations producing trips for shopping, entertainment, and employment reasons.

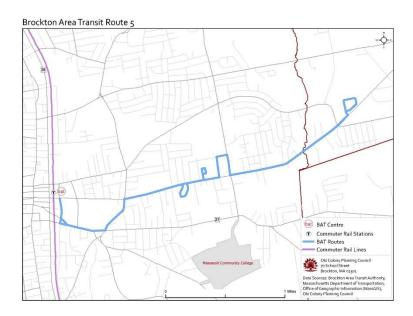


According to the passenger survey fielded to individuals, about 30% of those who took the survey stated they used Route 4A, the third most utilized line in the BAT system. The reason for this large portion of passengers stating they use Route 4A is due to the Westgate Mall. Another reason for the high number of respondents stating they use this route is due to those that transfer to the Stoughton route and Mini-Maller.

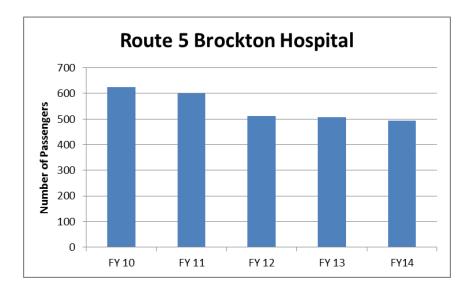


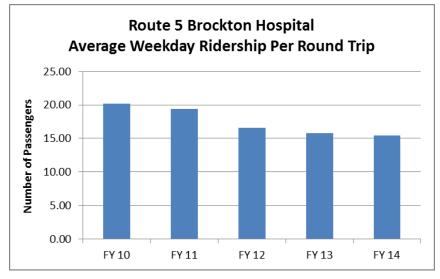
Route 5 Brockton Hospital via Centre St.

Route 5 operates predominantly along Centre Street, one of the few eastbound routes that takes passengers directly out of Brockton. Route 5 makes its way to Centre Street from the BAT Centre via Perkins Street, Crescent Street, and Lyman Street, and terminates at the Abington Wal-Mart where it makes a connection with the Rockland Flex Route. Major destinations along Route 5 are East Jr. High School, Brockton Hospital, and the Wal-Mart in Abington. Besides these three major destinations, along the route are many smaller business, multi-family homes and densely located single family homes. Route 5 operates Monday through Friday from 6:00am to 9:05pm, Saturday from 7:20am to 9:15pm, and Sunday from 11:20am to 6:25pm. It should be noted that Route 5 is combined with Route 6 forming a loop during Sunday service.

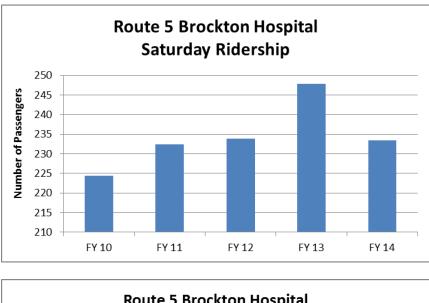


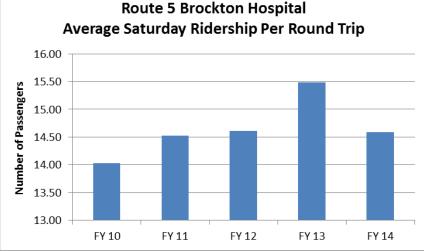
Route 5 over the course of the past five years has seen declining ridership. While some of these drops in ridership can be attributed to weather related suspension of bus operation, the trend over time still points to decline. From FY2010 to FY2014, passenger boarding fell by 21%. However, the fall in ridership has not been a steep or steady decline over the course of these five years. From FY2010 to FY2011 passenger usage fell by 3.79%, but from FY2011 to FY2012 ridership fell by a larger percentage — 15%. From the period of FY2012 through FY2014, the decline in passenger usage slowed to 3.88%. This slowing might be the beginning of ridership starting to find its footing and beginning to stabilize. Average passengers per round trip for the weekday, like average ridership, fell over the course of these five years. From FY2010 to FY2014, average passengers per round trip for the set average passenger per round trip fell from high of 20 passengers per round trip to 15. Then from FY2012 through FY2014, there was a decline by an average of 1 passenger per round trip per year. It could also be argued that some of the ridership decline can be attributed to extreme weather events which suppressed route ridership.



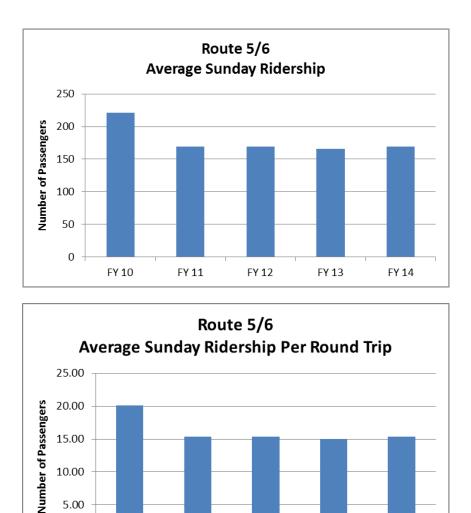


Route 5 average Saturday ridership has a different five year trend when compared to average weekday passenger usage. While average weekday ridership has been on the decline for the past five years, average Saturday ridership over these same years has been on the ascendancy, with the exception of FY2014. From FY2010 to FY2013, ridership steadily climbed by 10%. Then between FY2013 and FY2014 ridership fell off by 6%, most likely due to weather related system shut downs. Overall ridership has grown between the years of FY2010 and FY2014 by 4%. When we look at average ridership per round trip for Saturday, ridership has grown from 14 to 15 passengers per round trip.





Route 5 is combined with Route 6 on Sundays to form a loop service. In this particular configuration, known as Route 5/6, the route travels outbound via the path of Route 5 and then returns to the BAT Centre via the path of Route 6. After ridership fell between FY2010 to FY2011, a 23% drop in ridership, passenger usage stabilized with a small drop in FY2013. When we analyze for average passengers per round trip on Sundays, average passengers per round trip between FY2010 and FY2014 fell from 20 average passengers per round trip to 15.



When we look at the route segment analysis for Route 5, during the week the majority of passengers getting on the route tend to do so at the BAT Center, with boardings dropping off to a few scattered locations as the line proceeds outbound to its terminus. On the inbound direction the route picks up the majority of its passengers along the Brockton Hospital/East Jr. High School segment, followed by the Wal-Mart/Brockton Hospital section, with most of the boardings occurring at the Abington Wal-Mart within this segment. Alightings tend to be light on the outbound direction, with few riders getting off until the route reaches the Brockton Hospital/Wal-Mart segment. The reason for this spike in alightings on the last leg of the line has to do with two major destinations in this segment, the hospital and the Abington Wal-Mart. It should be also noted that it is at the Abington Wal-Mart where passengers can transfer to the Rockland Flex Route and proceed deeper into the Town of Abington and then into the Town of Rockland.

FY 12

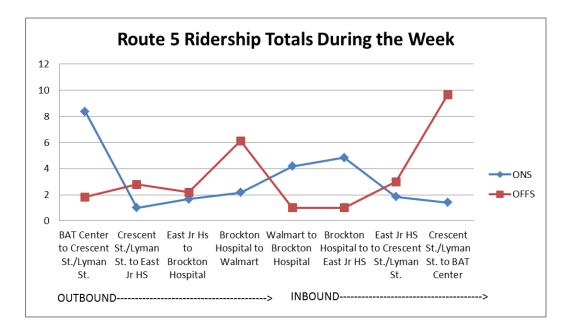
FY 13

FY 14

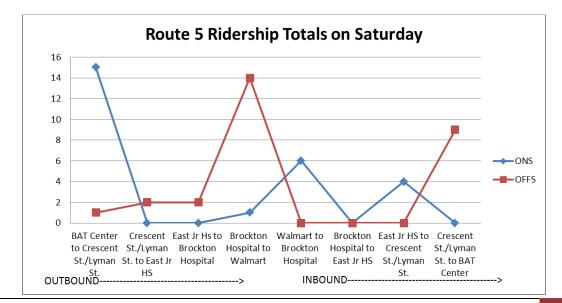
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FY 10

FY 11

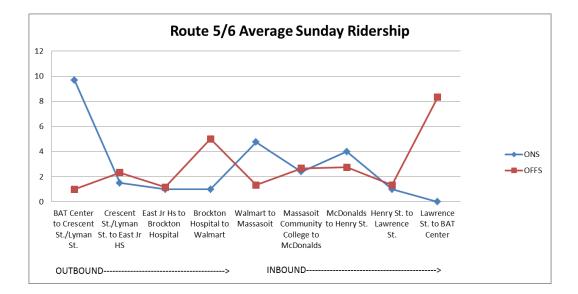


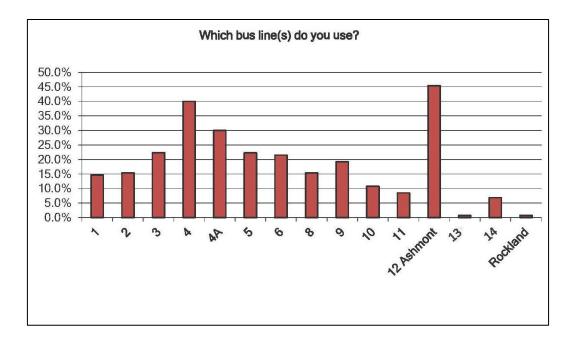
Boardings and alightings have greater spikes on Saturday when compared to weekdays. On the outbound direction the majority of boardings take place on at the BAT Centre with almost no ons after leaving the Centre. Alightings on the outbound direction spike within the Brockton Hospital/Wal-Mart section, with the majority of those offs occurring at the Wal-Mart and a few alightings taking place elsewhere along the line. On the inbound direction a large portion of the boardings take place within the Wal-Mart/Brockton Hospital segment mostly due to the Abington Wal-Mart, and then again within the East Jr. High School segment where there are a number of homes abutting the route. On the inbound direction almost all alighting taking place at the BAT Centre, and this has to do with those looking to transfer to other bus routes to reach other destinations throughout the system.



The Sunday route segment analysis is wildly different when compared to the Saturday analysis, but very much mirrors weekday segment analysis patterns. It should be understood that Route 5 is combined with Route 6 to form a loop line. The route, known as Route 5/6, operates on the Route 5 path on the outbound and Route 6 path on the inbound. When we look at the Route 5/6 on the outbound, the majority of the boarding takes place at the BAT Centre, and then ons quickly fall off to an average of 1 boarding along the route until it reaches the end of the line at the Abington Wal-Mart. Alightings on the outbound are minimal, with an average of 1 to 2 offs along the route until we reach the Brockton Hospital/Wal-Mart segment, where the majority of the alighting takes place at the Abington Wal-Mart.

On the inbound direction the route picks up a large portion of its ridership along the Wal-Mart/Massasoit Community College segment, with most of those boardings taking place at the Wal-Mart. The next spike in boardings takes place on the inbound direction within the McDonalds/Henry St segment of the analysis. The reason for the spike in boarding here is due to the Brockton East Shopping Plaza and Crescent Shopping Plaza located in this segment. At these two shopping plazas, one would be able to find shopping and dining destinations, along with banking services. Alightings along the line are fairly level, with a slight rise along two segments, the Massasoit Community College/McDonalds and McDonalds/Henry St segments, which is where both the Brockton East Shopping Plaza and Crescent Shopping Plaza are, while most offs takes place at the BAT Centre.

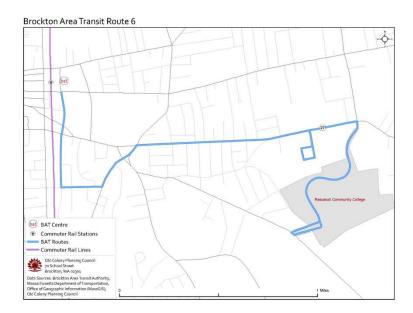




According to the passenger survey fielded to individuals, about 23% of those who took the survey stated they used Route 5. The reason this route is mentioned more than several others has to do with destinations along the route. Passengers can reach East Jr. High School, Brockton Hospital, Abington Wal-Mart, and various other small retail chains along with independent retailers.

Route 6 Massasoit via Crescent St.

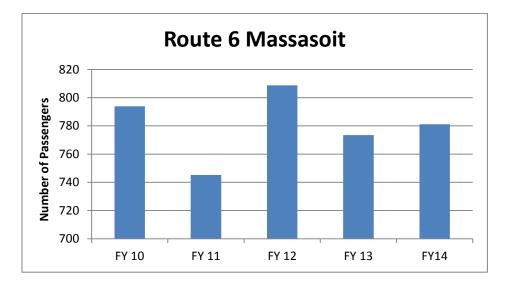
Route 6 operates predominantly along Crescent Street, one of the few east bound routes that takes passengers directly out of Brockton. Route 6 makes its way to Crescent Street from the BAT Centre via Perkins Street, Lawrence Street, and Lyman Street, and terminates at Massasoit Community College. Major destinations along Route 6 are the Brockton East Shopping Plaza, Crescent Street Plaza, and Massasoit Community College. Besides these three major destinations, along the route are many smaller businesses and many multi-family homes, along with densely packed single-family homes and city blocks. Route 6 operates Monday through Friday from 6:00am to 9:05pm, Saturday from 7:20am to 9:15pm, and Sunday from 11:20am to 6:25pm. As stated previously, it should be noted that Route 6 is combined with Route 5 forming a loop during Sunday service.

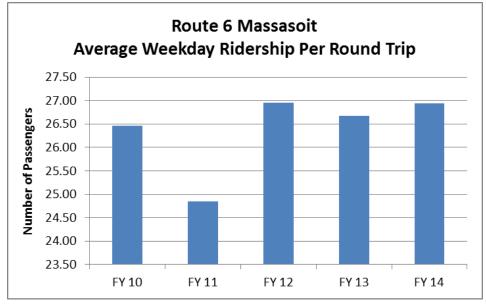


Average ridership on Route 6 has had a mixed track record over the five years FY2010 through FY2014. In FY2010 average ridership on Route 6 was around 794 passengers, then in FY2011 ridership fell to 745, a 6.1% drop. In FY2012 ridership on the route took a big jump increasing by 8.53%, climbing to a peak of 809 passengers. Then right after the sharp spike in ridership in FY2012, ridership again fell by 4.36%, or from 809 passengers to 774 average passenger boardings. In FY2014 ridership began to rise again with a gain of 1%, climbing to 781 average boardings. When ridership on Route 6 is looked at holistically over the course of five years, boarding on the route is down by 1.6%.

When we look at average passengers per round trip for Route 6, we do not see the swings in ridership like we have seen in average passenger ridership data. While the dip in ridership in FY2011 is present along with the sharp uptick in FY2012, and by the same percentage, the peaks and valleys in ridership

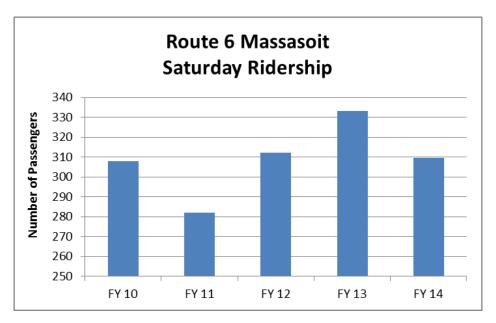
trends are not as sharp after FY2012. When we look at average passengers per round trip after FY2012, ridership does fall like average ridership, but by a smaller percentage. Boardings fell by 1% to around 27 passengers by FY2013. Then between FY2013 and FY2014, average passengers per round trip climbed by the same percentage as average passenger ridership, staying roughly around 27 passengers per round trip. Holistically, average passengers per round trip climbed by 1.8% through the course of five years. These peaks and valleys in Route 6 ridership might be the results of extreme weather events forcing a shut down of the system.

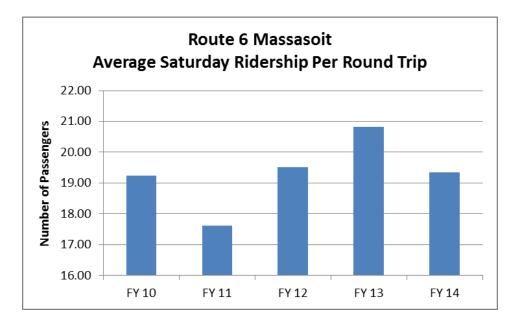




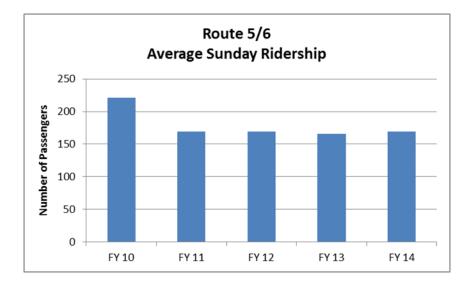
Average Saturday ridership on Route 6 has experienced different peaks and similar valleys when compared to weekday data. One similarity in average ridership between weekday and Saturday data is between the years FY2010 and FY2011. Between FY2010 and FY2011 average Saturday ridership took a dip like average weekday ridership, but by a larger percentage. Average Saturday ridership dropped from 308 passengers in FY2010 to 282 passengers in FY2011, an 8.4% decline. In FY2012, average ridership made a climb, rising from the low of 282 passengers in FY2011 to 312 passengers, or a 10.6% jump. In FY2013 route ridership climbed by 6.76% from 312 passengers to 333 passengers. Then after FY2013 ridership fell by 7% to 310 average Saturday passengers.

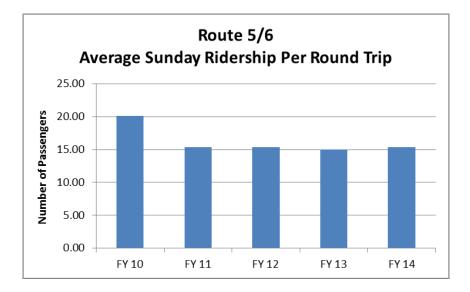
As is the usual case, average ridership per round trip mirrors overall ridership trends. When we account for the dip in ridership from FY2010 to FY2011, ridership droped off by 8.4% like overall average ridership, and average passengers per round trip fell from 19 passengers to 18 passengers. In FY2012 average Saturday ridership recovered to rise to 20 passengers per round trip. FY2013 continued the trend of climbing passengers per round trip, rising to 21. However, this trend was reversed in FY2014 when passengers per round trip fell to 19.



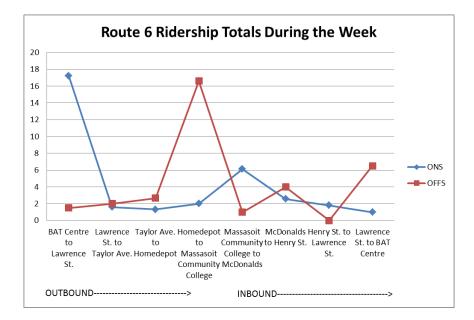


Route 6 is combined with Route 5 on Sundays to form a loop service. In this particular configuration, the line known as Route 5/6 travels outbound via the path of Route 5 and then returns to the BAT Centre via the path of Route 6. After ridership fell between FY2010 and FY2011, with a 23% drop in ridership, passenger usage has since then stabilized with a small drop by a few passengers in FY2013. When we analyze for average passengers per round trip on Sundays, between FY2010 through FY2014 there was a decline from 20 average passengers to 15.

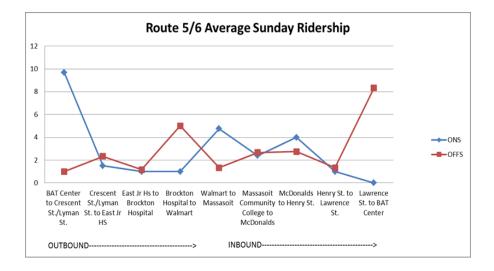




When we look at where individuals board and alight along Route 6, the majority of them do so at the BAT Centre, while the other large location for boarding and alightings is within the Massasoit Community College. It is understandable that the Massasoit Community College segment would have a large number of ons and offs due to the large student body at the college, but also due to the large amount of retail establishments along Centre Street within the Massasoit segment. Another location along the line that sees a small uptick in boardings and alightings takes place within the McDonalds/Henry Street segment. This segment is just outside the Massasoit segment, and is essentially an extension of the shopping plazas that are a part of the retail establishments within Massasoit.

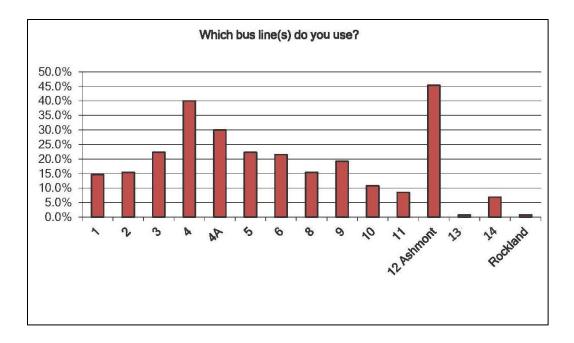


Saturday route segment analysis is unavailable for Route 6 due to technical difficulties experienced when on-bus video recordings being used in lieu of physical observation were found to be digitally corrupt.



The Sunday route segment analysis very much mirrors weekday segment analysis patterns. It should be understood that Route 5 is combined with Route 6 to form a loop line. The route known as Route 5/6 operates on the Route 5 path on the outbound and Route 6 path on the inbound. When we look at the Route 5/6 on the outbound, the majority of the boarding takes place at the BAT Centre, and then ons quickly fall off to an average of 1 boarding along the route until it reaches the end of the line at the Abington Wal-Mart. Alightings on the outbound are minimal, with an average of 1 to 2 offs along the route until we reach the Brockton Hospital/Wal-Mart segment, where the majority of the alighting takes place at the Abington Wal-Mart.

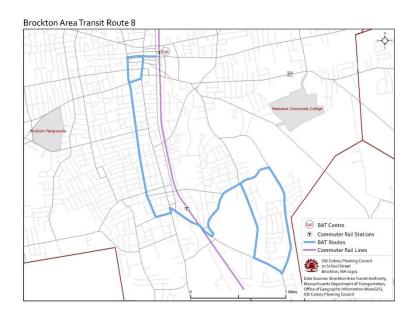
On the inbound direction the route picks up a large portion of its ridership along the Wal-Mart/Massasoit Community College segment, with most of those boardings taking place at the Wal-Mart. The next spike in boardings takes place on the inbound direction within the McDonalds/Henry St segment of the analysis. The reason for the spike in boarding here is due to the Brockton East Shopping Plaza and Crescent Shopping Plaza. At these two shopping plazas one would be able to find shopping and dining destinations along with banking services. Alightings along the line are fairly level, with a slight rise along two segments, the Massasoit Community College/McDonalds and McDonalds/Henry St segments, which is where both the Brockton East Shopping Plaza and Crescent Shopping Plaza are. The most alightings take place at the BAT Centre.



According to the passenger survey fielded to individuals, about 21% of those who took the survey stated they used Route 6. The reason why individuals stated they used the line was primarily to get to Massasoit Community College. After travel to the college, other reasons stated for use of Route 6 were to get to work, shop at the two major shopping plazas on Crescent Street, or head home.

Route 8 Southfield via Warren & Plain St.

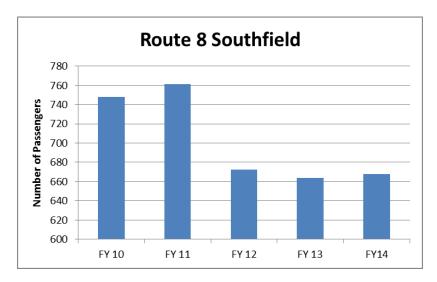
Route 8 operates predominantly along Warren Avenue, one of Brockton's main north/south corridors. Warren Avenue contains many multifamily housing units and densely concentrated single family homes abutting the corridor. Route 8 makes its way to Warren Avenue from the BAT Centre via Legion Parkway, and terminates in the south eastside of the city at Backlund Drive and East Street. Route 8 is a unique line in that there is no large single ridership generator except for the BAT Centre, but primarily sees passenger generation from those living along the line and the two elementary schools along the route. Route 8 operates Monday through Friday from 6:00am to 9:05pm, Saturday from 7:20am to 9:15pm, and Sunday from 11:20am to 6:25pm.

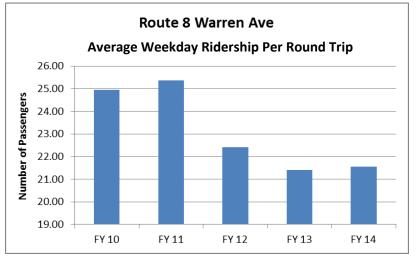


When we look at average weekday ridership on Route 8, we can see that ridership has fallen off considerably. Some of the drop in ridership can be contributed to system shut downs due to extreme weather. Between FY2010 and FY2011 average weekday ridership on Route 8 climbed by 1.72%, or from 748 average weekday riders to 761 average weekday riders. Then ridership took a tumble in FY2012, falling from 761 average weekday riders to 673, an 11.62% decline. Ridership on Route 8 continued the trend of decline in FY2013, falling by 1.33% to 664 average weekday riders. In FY2014 ridership did rebound a bit, rising by .67% to 668. Overall, average weekday ridership is down by 10% on Route 8.

Average weekday passengers per round trip on Route 8 between FY2010 and FY2011 did not move much, staying roughly around 25 average weekday passengers per round trip, rising by a modest 1.72%.

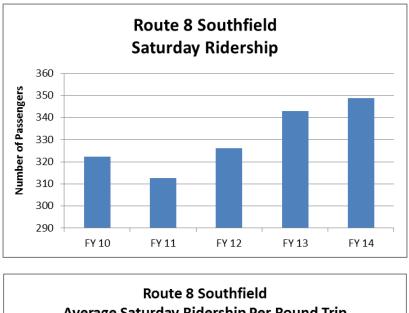
In FY2012 average passengers per round trip fell to 22, and the decline continued in FY2013 with ridership falling further to 21, a 4.51% drop. FY2014 saw a small climb to 22 passengers per round trip. When we look at Route 8 average weekday passengers per round trip over the full five years, ridership was down by 14%.

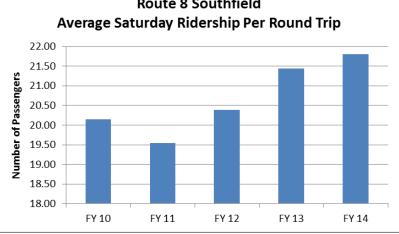




Average Saturday ridership on Route 8 has been experiencing the polar opposite of its average weekday ridership, having climbed for the past five years. The rise in Route 8 average Saturday ridership, however, has not been a steady one. Between FY2010 and FY2011, Route 8 average Saturday ridership actually fell by 2.97% from 322 passengers in FY2010 to 313 passengers in FY2011. In FY2012 average Saturday ridership reversed the trend and rose by 4.32% to 326 passengers. Ridership again climbed in FY2013, jumping by 5.16% to an average of 343 passengers. The continued climb in average Saturday ridership was seen in FY2014 as it grew by 1.7% to 349 passengers.

Just like average Saturday ridership, average ridership per round trip on Saturdays has experienced the same trends. From FY2010 to FY2011 average passengers per round trip fell by 2.97%, but still hovered around 20 passengers per round trip. In FY2012 average passengers per round climbed by 4.32%, and then in FY2013 climbed again by 5.16% to 21. FY2014 continued the trend in rising average ridership per round trip, increasing 1.7% to 22 passengers. When we look at Route 8 from FY2010 to FY2014, average ridership per round trip per round trip was up by 8.25%.

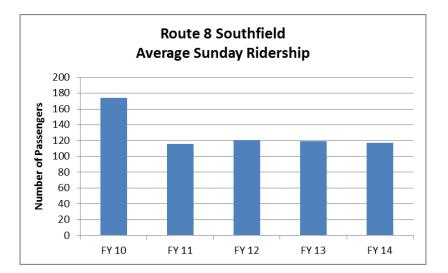


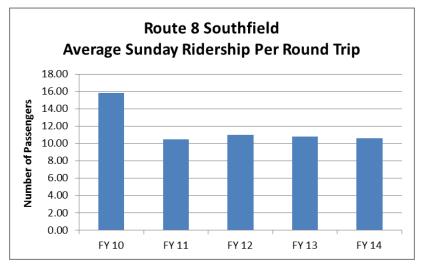


Route 8 average ridership per round trip on Sunday takes on a totally different data trend when we compare it to weekdays and Saturdays. After FY2010 average ridership per round trip fell and remained somewhat steady, with small dips and rises for the following four years. In FY2011 average ridership per round trip fell by a large 34%, bringing the ridership down from 174 passengers to 116 passengers. In FY2012 ridership made small gains, moving up to 121 passengers per Sunday. Then in FY2013 average ridership on Sundays began to slip again, falling to 119 passengers and then further to 117 passengers in

FY2014. Over the course of the five year of ridership data we are reviewing here, Route 8 average Sunday ridership has fallen by 33%.

Just like overall Sunday average ridership, average ridership per round trip takes on the same data trends. After FY2010, average ridership per round trip on Sundays fell to 11 in FY2011 from the high of 16 in FY2010. Then from FY2011 through FY2014, average passengers per round trip on Sundays hovered around 11 passengers per round trip.

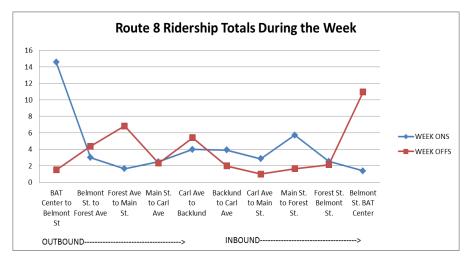


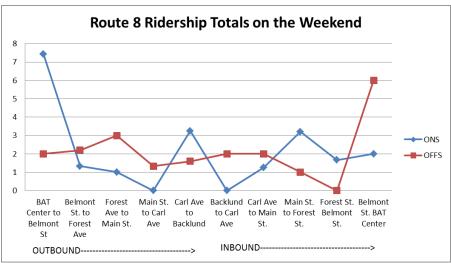


Boardings and alightings along Route 8 are spread pretty evenly along the line, with the majority of boarding taking place at the BAT Centre and along the Main St/Forest St segment of the route in the inbound direction. When we look at alightings along the route, the majority of them take place at the BAT Centre and at two different segments along the line in the outbound direction. The two other significant alighting locations are the Forest Ave/Main St segment and the Carl Ave/Backlund segment.

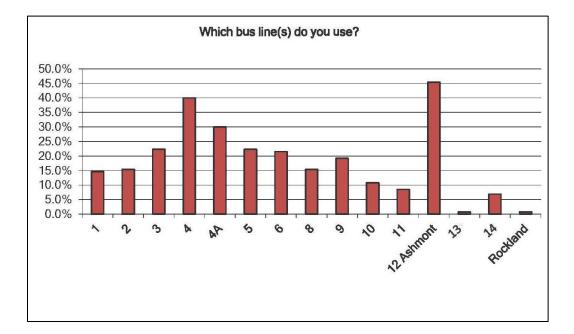
Within Forest Ave/Main St, one finds many densely packed single family homes along with numerous multifamily homes. Also within the Forest Ave/Main St segment can be found the Huntington Elementary School. Within the Carl Ave/Backlund segment of the route can be found a cluster of multifamily housing units called Davis Commons, the May Institute, and the Davis Elementary School.

When we analyze weekend boarding and alighting, there are far greater spikes in ons and offs along the route. One notices that the same segments with the spikes in boardings and alightings during the weekday are the locations seeing the large spikes of ons and offs during the weekend. Generally speaking, overall boardings and alightings are lower during the weekend, but the spikes are greater during the weekend service for the Carl Ave/Backlund and Forest St/Main St segments. When we look at the outbound direction, the majority of the activity is alighting and most of it takes place within the Forest Ave/Main St segment. On the inbound direction most ridership activity is boardings taking place within the Main St/Forest Ave segment.



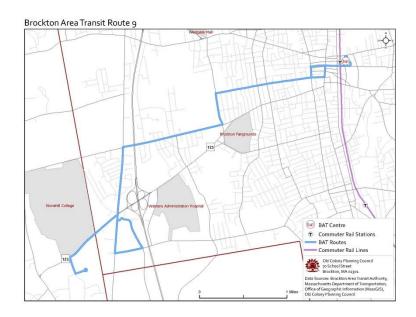


According to the passenger survey fielded to BAT passengers, 15% of the respondents expressed that they utilized Route 8. Most individuals stated they were using the bus line to get home or to the BAT Centre to transfer to another line in the system. Some passengers stated they wish to see Route 8 start earlier in the morning and operate later into the evening.



Route 9 Pearl via W. Elm & Torrey

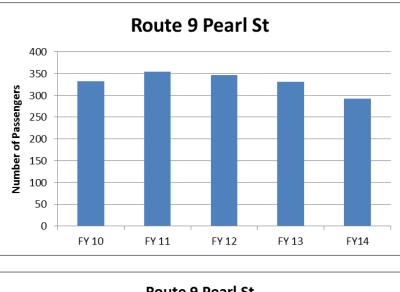
Route 9 operates primarily on W. Elm Street, Torrey Street, and Pearl Street. Route 9 transverses Downtown Brockton via Legion Parkway and Warren Avenue to access its main service corridors. Along the majority of Route 9's service area are many single family and multifamily homes on W. Elm Street, while the western end of Torrey Street along with Pearl Street is dominated by low density suburban style houses. On the western end of Route 9, especially on sections of Torrey Street and Pearl Street, are many ridership generators. On Torrey Street, Route 9 operates by three major shopping plazas containing three major grocery stores, along with numerous, smaller national retailers and small local businesses. Along Pearl Street, Route 9 encounters two smaller strip malls and at the end of the line there is Liberty Shelter, medical offices, small retail establishments and small manufacturers. Route 9 operates Monday through Friday from 6am to 6:05pm. There is no service on the weekends.

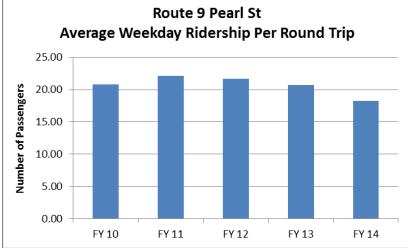


As we analyze route ridership for Route 9, passenger usage of the line has been very consistent. Over the course of the five years of data reviewed, ridership has been meandering between 300 and 350 passengers per weekday. From FY2010 to FY2011, ridership on Route 9 climbed to 354, a gain of 6.29%. However, after FY2011 ridership on Route 9 had a steady decline. In FY2012 passenger usage of the line fell by 2% to 347 average passengers per weekday. In FY2013 this trend in declining ridership continued, falling off by 4.55% to 331 average passengers per weekday, and then stumbled further to 292 passengers in FY2014. From FY2010 through FY2014, average passengers per weekday ridership dropped by 12%.

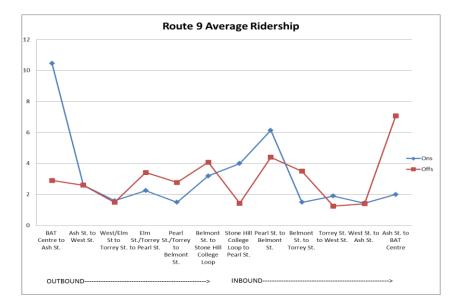
Average passengers per round trip on Route 9 has been seeing the same small but steady decline over the course of these five years. From FY2010 to FY2011, average passengers per round trip rose from 21

passengers to 22 passengers. In FY2012 average passengers per round trip remained relatively steady hovering around 22 passengers, but fell by an average of one passenger per round trip in FY2013 to 21. FY2014 experienced a drop in average passengers per round trip by four to 18.

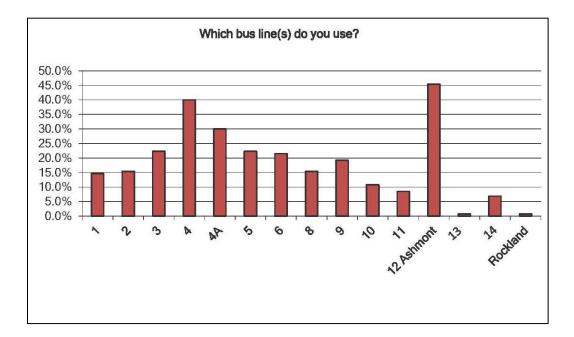




As we review boarding and alighting along Route 9, there are many peaks and valleys. This rise and fall in boarding and alighting reflects the number and variety of different ridership generators along the line. As always, the BAT Centre stands out as the largest single location of boardings and alightings. After the BAT Centre, the next location of significant of boarding and alighting takes place within the Belmont St/Stone Hill College Loop segment in the outbound direction. Within this segment one finds a number of different ridership generators, two of these major generators being the Liberty Shelter and the Easton Industrial Park. The next large boarding and alighting location is the Pearl St/Belmont St segment. Lying in the Pearl St/Belmont St segment is Liberty Shelter, Shoe City, and a number of small strip malls.

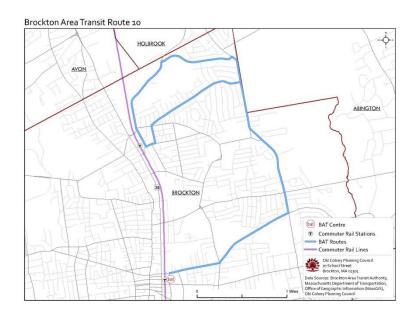


According to the passenger survey fielded to BAT passengers, almost 20% of those canvased stated they use Route 9. According to further data analysis, the majority of people were using the route to access service at the Liberty Street Shelter, the strip mall containing the Brockton Starbucks, and the West Jr. High School. The rest of the passengers were trying to reach the three shopping plazas at Torrey St and West St, or heading to the BAT Centre to transfer to another line.



Route 10 Pearl Lisa & Howard via N. Quincy & Court

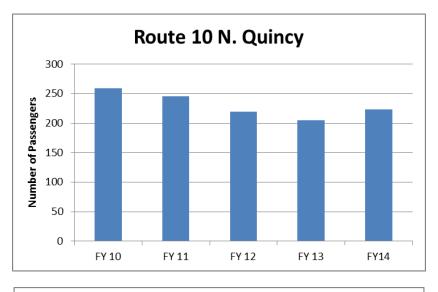
Route 10 operates primarily on Court Street and N. Quincy Street in the northeast side of Brockton. This particular bus route operates in one of the lowest density sections of Brockton, with the majority of the housing stock being suburban style homes. This section of the city also has some of the highest percentages of multicar ownership per household in the entire city. Route 10 has a limited number of ridership generators along the line. The most notable ridership generators are the four schools along the bus route and the Montello MBTA Station, where passengers can transfer to the MBTA's Middleborough Line or the MBTA's 230 bus to Quincy. Route 10 operates Monday through Friday from 6:00am to 9:05pm, Saturday from 7:20am to 9:15pm, and Sunday from 11:20am to 6:25pm. It should be noted that Route 10 is combined with Route 11 during the weekend to form a loop style route. The Route 10 portion of the loop is operated on the outbound direction.

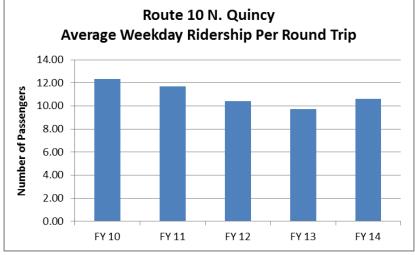


Ridership on Route 10 has been experiencing decline since FY2010. From FY2010 to FY2011, ridership fell from 259 passengers per average weekday to 245, a 5.28% drop. In FY2012, passenger usage of the line experienced another drop in ridership by 10.70%, bringing average passengers to 219 per weekday down. Then in FY2013 average ridership per weekday took another dip, falling to 205 passengers for a 6.55% drop. FY2014 did see a climb in ridership, rising by 9.12% or to 223 average passengers per weekday. Overall average Route 10 ridership per weekday was down by 13.75% over five years. It could also be argued that some of the ridership decline can be attributed to extreme weather events which suppressed BAT usage.

As we look at average ridership per round trip for Route 10, the number of passengers fell along with average weekday ridership data. From FY2010 to FY2011, average ridership per round trip fell by 5.28%, but still hovered around 12 passengers per round trip. In FY2012 average passengers per round trip fell

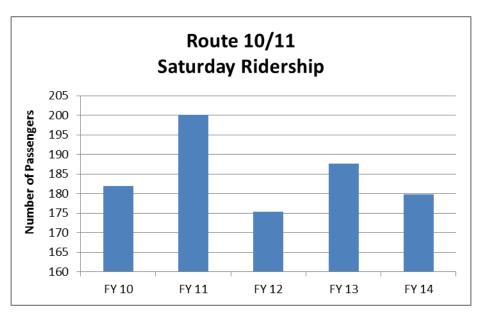
10.70% to an average of 10. Then in FY2013, average ridership per round trip fell by 6.5%, sticking around the average of 10 passengers. FY2014 saw an uptick in ridership, climbing by 9.12% to an average of 11 passengers per round trip. Overall average passengers per round trip on Route 10 was down by 13.75%.

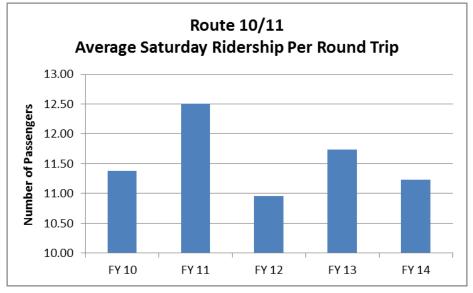




On Saturdays Route 10 is combined with Route 11 to form the Route 10/11 loop. Ridership on this combined route has seen a mixed bag of gains and losses. From FY2010 to FY2011, ridership climbed by 9.92% from 182 passengers to 200 average passengers per Saturday. Then in FY2012 Saturday took a large stumble, falling by 12.35% to 175 average passengers per Saturday. After this decline, ridership made a reversal in FY2013, rebounding to 188 passengers, a 7.07% jump. Unfortunately, ridership was down once again, falling by 4.26% to an average ridership on Saturdays of 180 passengers in FY2014. Overall average Route 10/11 ridership per weekday was down by 1.24%.

Average ridership per round trip on Saturdays has been experiencing the same up and downs in ridership as overall average Saturday ridership. In FY2011 ridership rose by 10% to 13 average passengers per round trip from 11 in FY2010. Then in FY2012 average passengers per round trip fell by 12% to 11. Average passengers per round trip rebounded in FY2013, climbing to 11 passengers, or by 7.07%. FY2014 experienced another drop in average passengers per round trip, declining by 4.26% to 11.

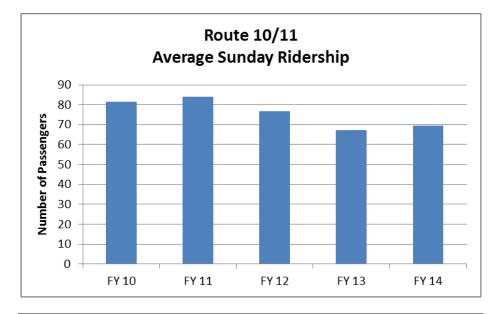


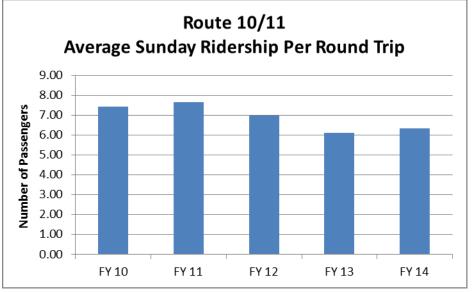


On Sundays Route 10 is combined with Route 11 to form the Route 10/11 loop. Sunday average ridership mirrors average weekday Route 10 ridership. From FY2010 to FY2011, average ridership rose from 82 passengers on Sundays to 84 passengers, a modest 3% increase. After FY2011 average ridership began a slow, steady decline for the next two years, falling to 77 passengers in FY2012 and 67 passengers in FY2013. Like average weekday ridership, FY2014 Sunday ridership saw a resurgence, rising

to 70 average passengers. When we look at average ridership for these five years, ridership was down by 14.81%.

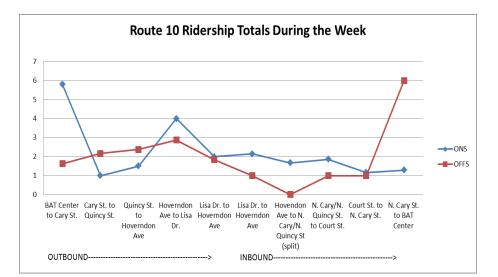
As expected, average passengers per round trip for Route10/11 experienced the same trends as average Sunday ridership. From FY2010 to FY2011 the average number of passengers per round trip rose from 7 passengers to 8 passengers, a 3% increase. In FY2012, average ridership per round trip took an 8.81% dip to 7 passengers. Average passenger ridership per trip in FY2013 fell once again, this time by 12.34% to 6 passengers per round trip. FY2014 saw a modest 3.47% bounce in average passenger ridership per round trip, but the number continues to be around 6 passengers per trip.

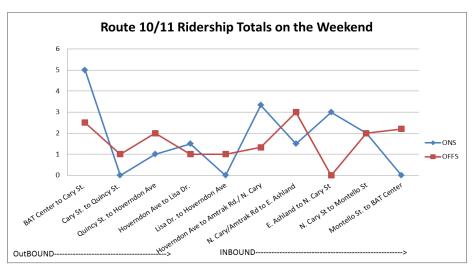




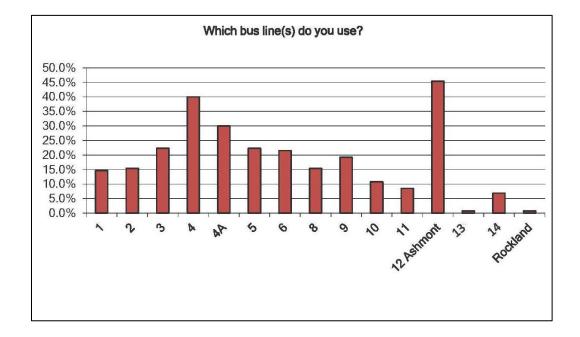
As we look at the route segment analysis for Route 10, outside the usual situation with the BAT Centre being a location of high boarding and alighting numbers, Route 10 experiences a significant number of boardings and alightings along the Hoverndon Ave/Lisa Drive segment. Along this section of the route the bus meets the MBTA Commuter Rail Station and the MBTA bus 230, which spurs transfers of passengers heading north to Boston or Quincy. Also found along this section are a few industrial employers along with a number of multifamily housing units.

Weekend service according to the route segment analysis has a more spread out boarding and alighting pattern when compared to the weekday segment analysis. Outside the BAT Centre, there are significant portions of passengers alighting and boarding the bus within the Hoverndon Ave/Amark Rd/N. Cary segment. The boardings and alightings in this segment are generated by a number of multifamily homes within this area, along with the ability to transfer to the MBTA Commuter Rail line and the MBTA 230 bus to Quincy. There is also a good portion of boarding along the E. Ashland/N. Cary St segment, with passengers that are heading to the BAT Centre to transfer to other bus lines in the system.



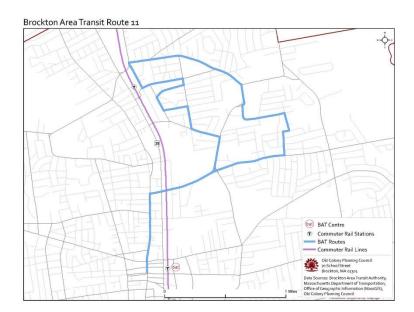


According to the passenger survey fielded to BAT passengers, around 11% of those surveyed stated they use Route 10. The lower response rate can be attributed to the low ridership on the line. As was stated earlier, Route 10 and its combined weekend service, Route 10/11, operates within one of the lowest density areas in Brockton with a high degree of multi-car owning households. It should also be understood that the area where Route 10 and the combined Route 10/11 operates has an average median income higher than the City of Brockton as a whole, and far higher than BAT's usual passenger demographics, at \$61,196. With these household demographics in the Route 10 and Route 10/11 service area, it is not unexpected that route usage would be low.



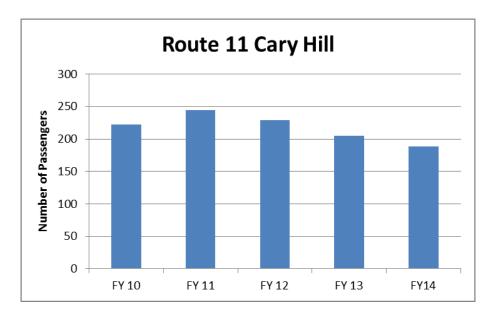
Route 11 Cary Hill and the Village

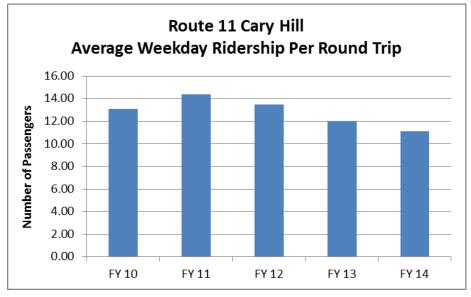
Route 11 operates in the northwest section of Brockton. No one corridor is dominated by Route 11 operation, but the line meanders along a number of roads within the densest section of this portion of the city. Route 11 operates Monday through Friday from 6:00am to 9:05pm, Saturday from 7:20am to 9:15pm, and Sunday from 11:20am to 6:25pm. It should be noted that Route 11 is combined with Route 10 during the weekend to form a loop style route. The Route 11 portion of the loop is operated on the inbound direction. Route ridership has been suffering on this route for a number of years, partially due to few ridership generators along the route, and the fact automobile ownership in this area is high.



Route 11 has been experiencing declining ridership since FY2011. During the period from FY2010 to FY2011, average weekday passenger ridership rose by 9.7% from 223 to 244 passengers. After this brief period in ridership gains, this increase made a reversal and passenger usage has been falling ever since. From FY2011 to FY2012, ridership declined from the average weekday high of 244 to 229 passengers, a reduction of passenger usage by 6.27%. Then ridership along the route fell further, this time by 11% to 205 average passengers per weekday, in FY2013. In FY2014, this trend continued with average weekday ridership falling 7.62% to 189. Overall average weekday ridership for Route 11 was down by 15% for this five year period.

When we look at Route 11 average passengers per round trip, it is apparent that these numbers mirror the average weekday ridership trends. From FY2010 to FY2011, average passengers per round trip rose from 13 passengers to 14 passengers, a 9.7% increase. In FY2012, average passenger ridership per round trip fell back to 13 passengers, a 6.27% drop. In FY2013 ridership continued the decline, further falling by 11% to an average passenger ridership per round trip of 12. FY2014 average passengers per round trip fell again to 11.

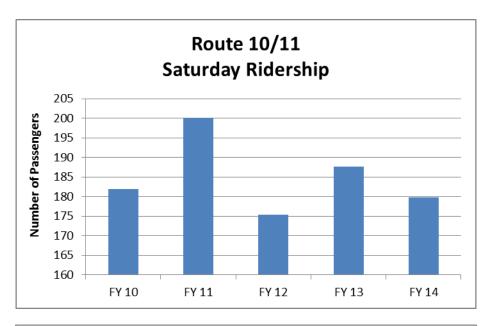


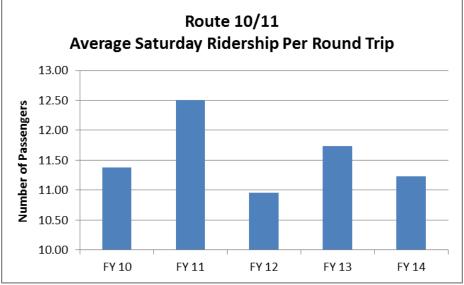


On Saturdays Route 11 is combined with Route 10 to form the Route 10/11 loop. Ridership on this combined route has seen a mixed bag of gains and losses. From FY2010 to FY2011, ridership climbed by 9.92% from 182 passengers to 200 average passengers per Saturday. Then in FY2012 Saturday took a large stumble falling by 12.35% to 175 average passengers. After the fall in in FY2012, ridership made a reversal in FY2013 rebounding to 188 passengers, a 7.07% jump. Unfortunately ridership was down once again in FY2014, falling by 4.26% to an average ridership on Saturdays of 180 passengers. Overall average Route 10/11 ridership per weekday was down by 1.24% for the five year period.

Average ridership per round trip on Sundays has been experiencing the same ups and downs in ridership as overall average Saturday ridership. In FY2011, Sundays rose by 10% to 13 average passengers per round trip from 11 in FY2010. Then in FY2012 average passengers per round trip fell by 12% to 11

passengers. Average passengers per round trip rebounds in FY2013, climbing to 11 passengers per round trip, or by 7.07%. FY2014 experienced another drop, declining by 4.26% to 11 passenger per round trip.

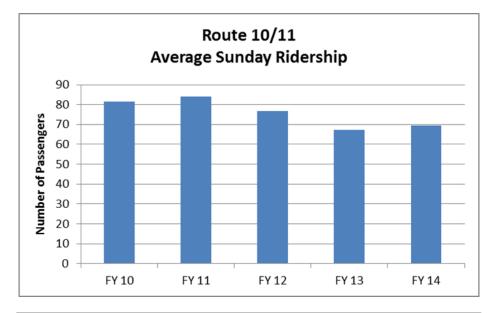


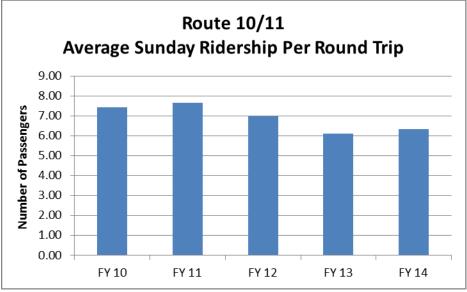


On Sundays Route 11 is combined with Route 10 to form the Route 10/11 loop. From FY2010 to FY2011 average ridership rose from 82 passengers per Sunday to 84 passengers, a modest 3% increase. After FY2011 average ridership began a slow, steady decline for the next two years, falling to 77 passengers in FY2012 and 67 passengers in FY2013. FY2014 saw a resurgence in ridership, rising to 70 average passengers on Sunday. When we look at average ridership for the past five years, ridership is down by 14.81%.

81

Average passengers per round trip for Route10/11 experienced the same trends as average Sunday ridership, since average passenger per round trip is just another measure of total Sunday ridership. From FY2010 to FY2011 average number of passengers per round trip rose from 7 passengers to 8 passengers, a 3% increase. In FY2012 average ridership per round trip took an 8.81% drop to 7 passengers. Average passenger ridership per trip in FY2013 fell once again, this time by 12.34% to 6 passengers. FY2014 saw a modest 3.47% bounce in average passenger ridership per round trip, ridership continues to be around 6 passengers per trip.

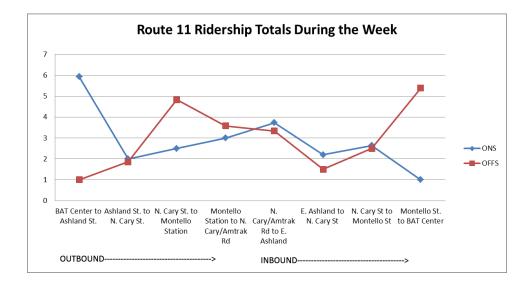


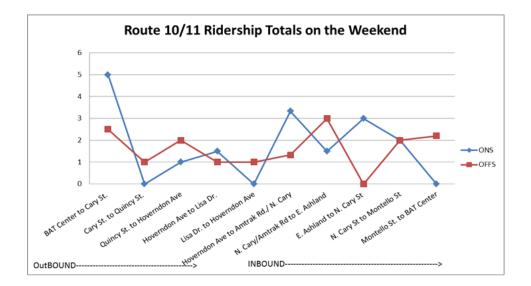


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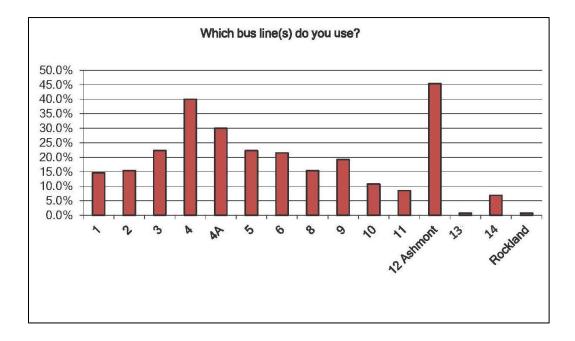
When we look at our route segment analysis for Route 11 during the week, there are two spikes in boardings and alightings outside the normal spikes represented by the BAT Centre. Looking at the ons and offs in the outbound direction, a number of passengers alight from the bus within the N. Cary St/Montello Station segment. The reason for the high number of alightings in this segment is the result of industrial jobs and a number of multifamily homes and dense packed, single family houses. On the inbound direction a number of passengers board and alight on Route 11 within the N. Cary/Amark Rd/E. Ashland segment. In this segment is a shopping plaza as well as a number of homes.

Weekend service according to the route segment analysis has a more spread out boarding and alighting pattern when compared to weekdays. Outside the BAT Centre, there are significant portions of passengers alighting and boarding the bus within the Hoverndon Ave/Amark Rd/N. Cary segment. The boardings and alightings in this segment are generated by number of multifamily homes along with the ability to transfer to the MBTA Commuter Rail line and the MBTA 230 bus to Quincy. There is also a good portion of boarding along the E. Ashland/N. Cary St segment with passengers that are heading to the BAT Centre to transfer to other bus lines in the transit system.



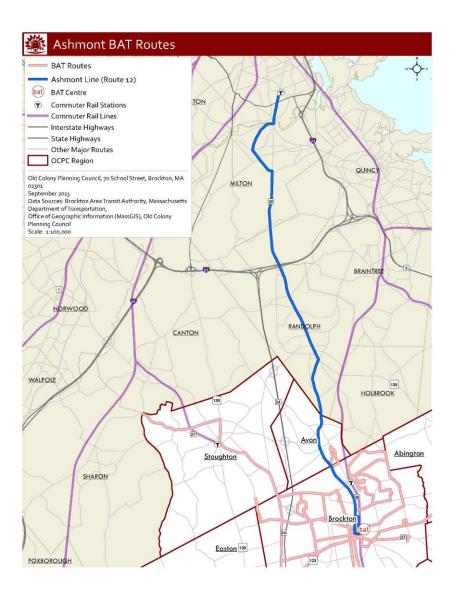


According to the passenger survey fielded to BAT passengers, around 7% of those surveyed stated they use Route 11. The lower response rate can be attributed to the low ridership on the line. As was stated earlier, Route 11 and its combined weekend service, Route 10/11, operates within one of the least dense areas in Brockton with a high degree of multi-car households. It should also be understood that the area where Route 11 and the combined Route 10/11 operates has an average median income higher than the City of Brockton as a whole and far higher than BAT's usual passenger demographic at \$60,059. With these household demographics in the Route 11 and Route 10/11 service area, it is not unexpected that route usage would be low.



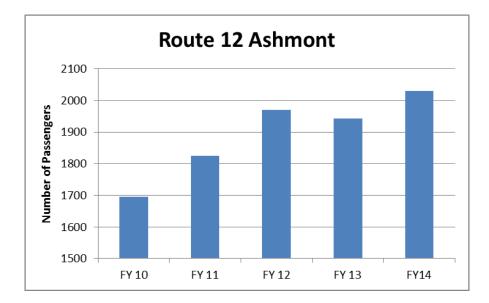
Route 12 Ashmont

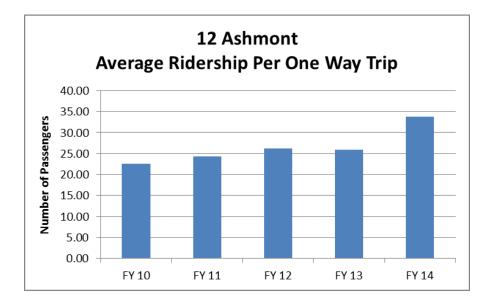
The 12 Ashmont is a route that operates between Brockton and the MBTA's Ashmont Station in Boston. The route travels primarily along route 28 and passes through multiple towns. Those towns are Avon, Randolph, and Milton, before the bus arrives at Ashmont Station in the Dorchester section of Boston. It should be noted that after 6pm, Route 12 operates as a local service along Main St in Brockton in the stead of Route 1. Route 12 is one of BATs most productive routes in the transit system. Just in FY2014 the 12 Ashmont carried an average of 2,029 passengers per weekday. Route 12 also has BATs longest operating service day. Route 12 operates Monday through Friday from 4:50am to 12:20am, Saturday from 5:05am to 11:40pm, and Sunday from 10:10am to 7:30pm.



Route 12 has been experiencing growing ridership for the last five years. The only year that did not experience ridership growth was FY2013. From FY2010 to FY2011 average weekday ridership rose from 1,694 to 1,824 passengers, a 7.65% increase in usage. The following year ridership on Route 12 once again demonstrated gains in passengers, climbing by 8% to 1,970 boardings. The only outlier of this five years' worth of ridership data is FY2013. In FY2013 average weekday ridership dropped to 1,943 passengers, a 1.36% decline. Then in FY2014 ridership rebounded climbing to a high of 2,029, a 4.41 increase. Overall ridership has risen over the last five years by 20%.

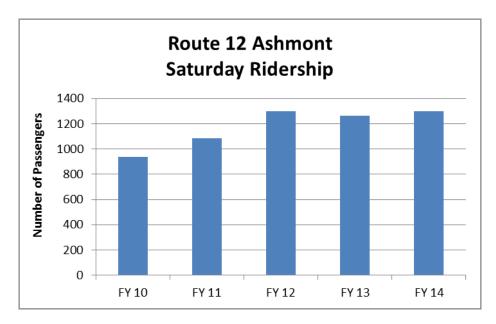
Average passengers per one way trips saw even larger percentage gains. From FY2010 to FY2011 average passengers per one way trip rose from 23 passengers to 24 passengers. In FY2012 average passengers per one way trip climbed to 26 passengers and maintained the same level in FY2013. FY2014 saw the average passengers per one way trip jump to 34 passengers, a 31% increase. When we look at the five most recent years of data, average passengers per one way trip rose by almost 50%.

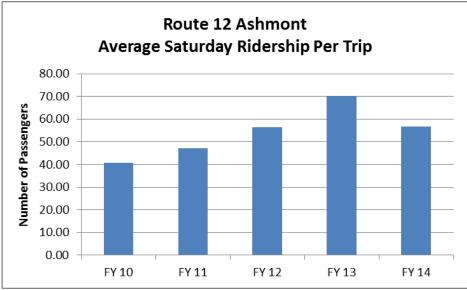




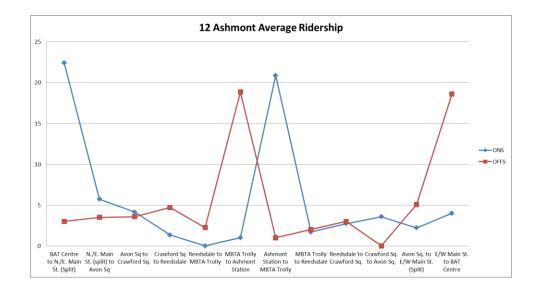
Saturday average ridership data also shows passenger gains, but not to the same degree as weekday ridership. From FY2010 to FY2011 average Saturday ridership rose from 937 passengers to 1085 passengers or a 16% increase. In FY2012 average Saturday ridership rose by 20% to 1,297 passengers, but unfortunately ridership dropped off by 2.53% to 1,264 passengers in FY2013. Average Saturday ridership in FY2014 reversed the decline in passengers in FY2013, climbing by 2.91% to 1,301 passengers. Overall, for the last five years ridership is up by 39%.

When we look at average Saturday ridership per trip, the data trends do not take the same pattern as overall ridership. From FY2010 to FY2011 average ridership per trip climbed from 41 passengers per trip to 47 passengers and again climbed by 20% to 56 passengers per trip in FY2012. FY2013 average Saturday passengers per trip data takes on a total different data trend than total average Saturday ridership data. In FY2013 total average Saturday ridership fell 2.53%, but when we look at average Saturday ridership per trip, it is up by 25%. Average Saturday ridership rose from 56 average passengers per trip to 70 passengers per trip in FY2013. FY2014 average Saturday ridership fell from the 70 passengers per trip in FY2013 to 57 passengers per trip. As we holistically review average Saturday ridership per trip from FY2010 to FY2014, ridership is up by 39%.

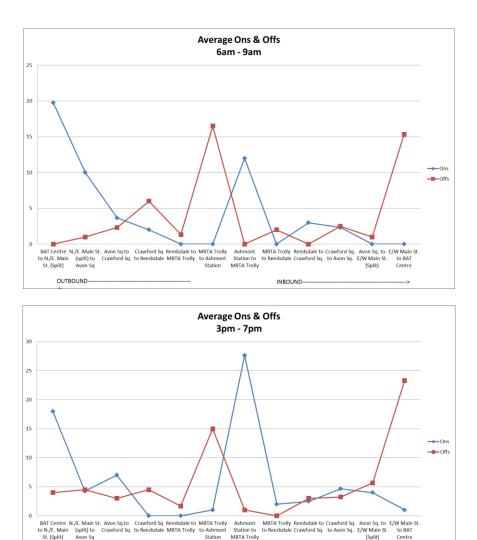




Until FY2015 there was no Sunday service on the Route 12 Ashmont. During the course of this CRTP, via the study's public outreach process, it has come to the attention of BAT that riders wanted to see Sunday service established. With this information gathered from surveys and interactions between BAT passengers, OCPC and BAT staff, BAT has since established Sunday service.



When one looks at the at the route segment analysis for the Route 12 Ashmont service, it is clear where passengers are boarding and alighting the most. The majority of ons and offs take place at the BAT Centre. After the BAT Centre, the next highest location of boarding and alightings takes place at the MBTA Ashmont Red Line Station. Then after the Ashmont Station and BAT Centre, a number of ons and offs take place at Crawford Square in Randolph. The rationale for the large number of boardings and alightings at these three locations stems from a number of reasons. Brockton and the Boston neighborhood of Dorchester have historical connections, including many individuals having family members living in both communities. There are also the economic reasons for travel between Dorchester and Brockton, as workers look for cheaper means of transportation into the Boston area for work (or entertainment), since taking the MBTA's Commuter Rail service is uneconomical for those of modest means. In regards to the third major boarding and alighting location, Crawford Square in Randolph, there are number of ons and offs here since this is a major transfer point to MBTA service heading up to the South Shore Plaza in Braintree along with a number of multifamily homes in close proximity to the square.



One thing unique in the route segment analysis of Route 12 Ashmont is that additional analysis was conducted during the peak work commute period. While nothing has changed in regards to where the majority of passengers got on and off the bus, there are differences in passenger travel patterns given the time of day. When we look at early morning travel during the morning commute period, the majority of Route 12 passengers are heading into Boston. Then during the evening peak commute period the travel pattern on the route reverses direction with the majority of passengers boarding the bus heading to Brockton and getting off at the BAT Centre. Given this ridership data, we can clearly see a large number of individuals are using the Route 12 Ashmont to get to jobs or access services during the usual commute periods.

Station

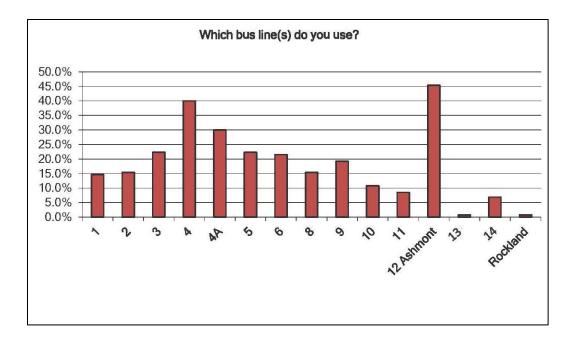
MBTA Trolly

(Split)

Centre

St. (Split)

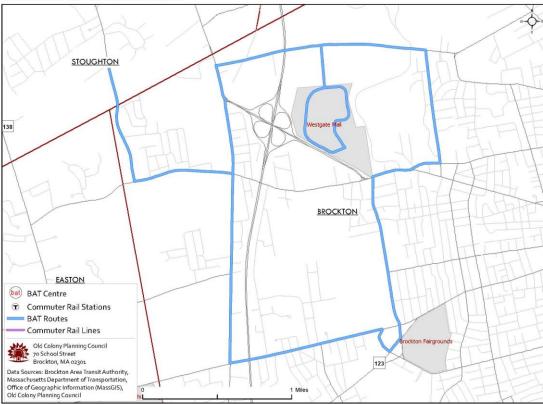
OUTBOUND



When we refer to the passenger survey conducted during the CRTP study, Route 12 Ashmont was mentioned by just over 45% of those canvassed as being one of the lines they use. This information corresponds with available ridership data that tells us that 20% of the ridership is generated by the Route 12 Ashmont alone. It is clear that Route 12 Ashmont is the most travelled route of the BAT system.

Route 13 Mini-Maller

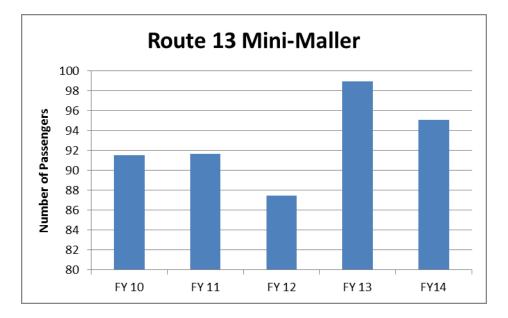
The Route 13 Mini-Maller is a unique route in that it is not a part of the of the BAT pulse scheduling practice. This line is also unique in that it also does not travel through any part of Brockton's downtown. Moreover, this route was designed to travel between all the major shopping destinations and healthcare facilities on the west side of Brockton, along with servicing a number of dense housing towers. Route 13 operates Monday through Friday from 9:40am to 4:40pm, and on Saturdays from 10:40am to 5:10pm. There is no service on Sundays.

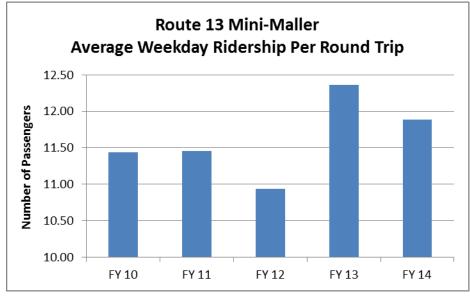


Brockton Area Transit Mini-Maller

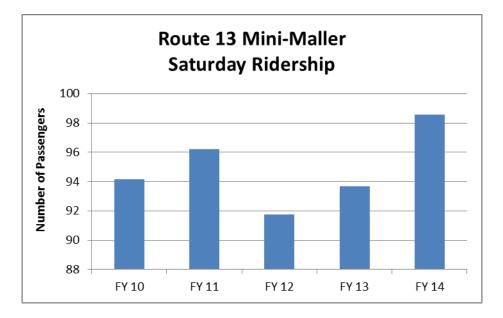
Ridership on Route 13 Mini-Maller depicts a bit of a rollercoaster ride when one looks at the data for the last five years, of which extreme weather events that kept people indoors and shut the BAT system down could be contributing factors. From FY2010 to FY2011 average weekday passengers rose by 0.17% to 92 passengers. However, in FY2012 average weekday ridership took a dip, dropping to 88 average weekday passengers or a decline by 4.53%. Then in FY2013 average weekday ridership experienced a leap in passenger usage, climbing to 99, a 13.05% gain. After the ridership gains in FY2013, these gains were reversed in FY2014, with a fall by 3.88% to 95 passengers.

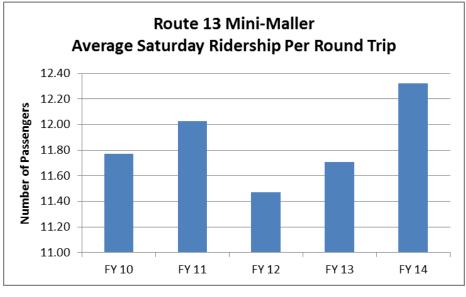
Average passengers per weekday round trip on route 13 mirrors average weekday ridership. From FY2010 to FY2011 average passengers per weekday round trip remained relatively the same, hovering around 11 passengers. In FY2012 there was no movement, with round trips staying around 11 passengers per trip. FY2013 sees average weekday passengers per round trip rise to 12 passengers, a 13.05% gain. In FY2014 average weekday ridership per round trip continued this trend, with ridership around 12 passengers per round trip. Overall average weekday ridership was up by 3.92% over the course of these five years.



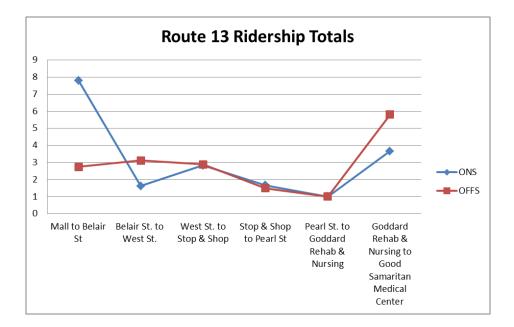


When we look at Route 13 Mini-Maller average Saturday ridership data, the charts take on a totally different pattern when compared to average weekday data, with Saturday ridership clearly being higher. From FY2010 to FY2011 average Saturday ridership rose from 94 passengers to 96, or or a 2.18% increase. Then in FY2012 average Saturday ridership dropped by 4.65% to 92 passengers. Even with this ridership drop during FY2012, ridership during the year was still higher than average weekday ridership. FY2013 did see a reversal in the decline in average Saturday ridership experienced in FY2012, climbing to 94 passengers, a 2.09% increase. In FY2014 there was an increase in ridership compared to declining ridership during the weekday ridership during this same fiscal year. In FY2014 ridership continued to gain ground, going up by 5.25% to 99 passengers. Overall average Saturday ridership was up by 4.69% in FY2014 when compared to FY2010.

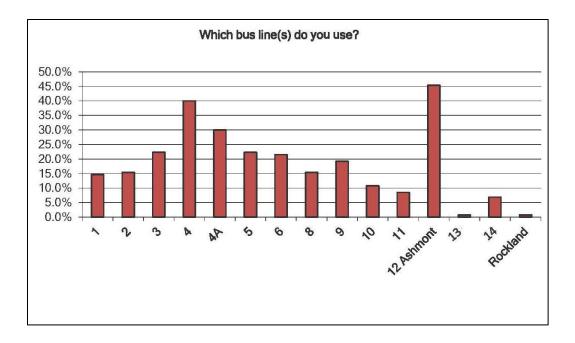




Currently there is no service Route 13 Mini-Maller on Sundays.



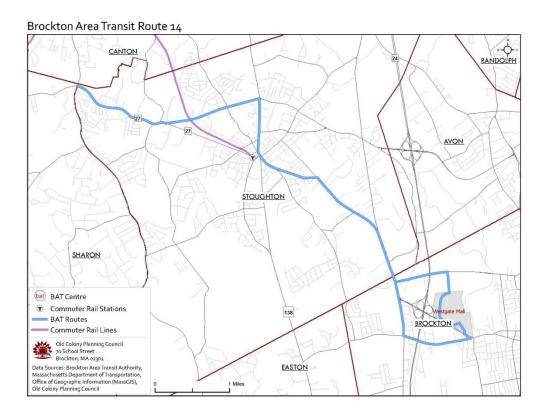
Due to the nature of Route 13 Mini-Maller operations being a service that runs in a loop-style travel path, the route segment analysis graph looks different than those previously seen. As we look at where passengers get on and off Route 13 Mini-Maller, a large number of people board the bus within the Mall to Belair St. segment. After this segment, the next location seeing significant alightings and boardings is the Goddard Rehab & Nursing/Good Samaritan Medical Center segment. The third location seeing a large number of ons and offs is within the West St/Stop & Shop segment, which could be understood due to the number of grocery stores and shopping destinations within the segment.



As we review the responses from the passenger surveys, less than five percent of those that took the survey conveyed they used Route 13 Mini-Maller. While one would assume that few people take the route due to the low response rate, there is more to this story. It is true that ridership is low on this particular route, contributing to the low survey response rate, but the survey was conducted solely at the BAT Centre. Given that the Route 13 Mini-Maller does not service the BAT Centre, those that would normally ride it may not have been reached with this survey.

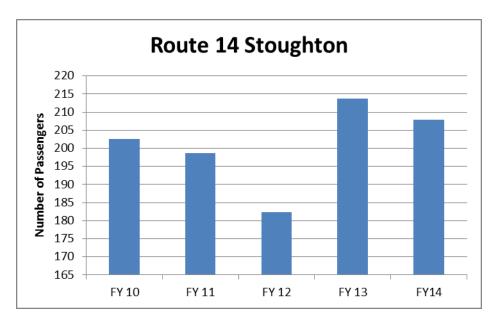
Route 14 Stoughton

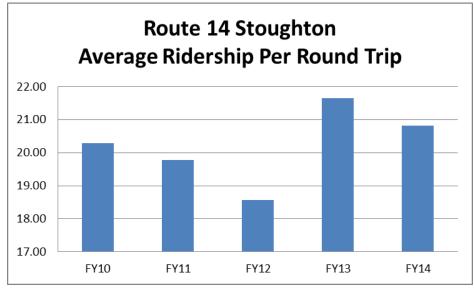
Route 14 Stoughton operates between the City of Brockton and the Town of Stoughton, ending along the town line in Canton's Cobbs Corner shopping center. Route 14 Stoughton operates primarily along Route 27, and does not service the BAT Centre on every trip, but only on four select trips spread throughout the day. For the majority of trips, passengers traveling between Brockton and Stoughton must transfer to or from Route 14 via the Westgate Mall in Brockton. Route 14 Stoughton operates Monday through Friday from 6am to 5:55pm, and on Saturday from 6am to 5:30pm. There is no service on Sundays.



In analyzing average weekday ridership for Route 14 over the last five years, ridership rose and fell like other routes in the system. From FY2010 to FY2011, average weekday ridership fell from 203 passengers to 199, or a 1.9% drop. In FY2012, Route 14's declining ridership continued, falling by an additional 8.29% to 182 passengers. Then in FY2013 Route 14 ridership reversed course making a steep climb by 17% to 214 passengers. FY2014 passenger usage declined once more to 208 passengers. Over the course of five years, ridership was up by 2.59%. It could also be argued that some of the ridership decline during certain fisical years can be contributed to extreme weather events which suppressed BAT usage.

Average ridership per round trip on Route 14 is up by 2.66% when we take a look at five years' worth of historical data, although initially, from FY2010 through FY2012, average ridership per trip had been falling. Between FY2010 and FY2011 average ridership per trip stayed roughly around 20 passengers per trip, and in FY2012 average ridership per trip fell to 19 passengers. Ridership rebounded in FY2013 to 22 passengers per trip, a 17% gain. Then in FY2014 average ridership per trip fell to 21 passengers.

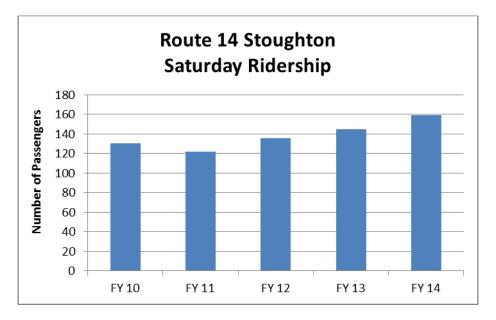


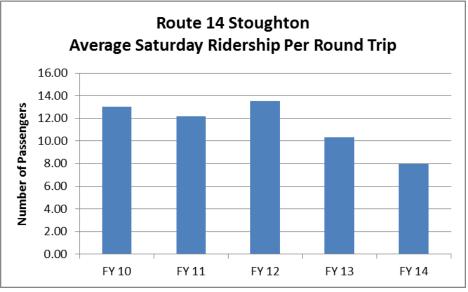


Saturday average ridership has been a story of steady gains. From FY2010 through FY2014 average ridership has climbed by 22%. When we look at this five years' worth of data year by year, we can see that average Saturday ridership did fall by 6.47% from 131 passengers to 122 passengers between

FY2010 through FY2011. In FY2012 average Saturday ridership truns around the drop in ridership, climbing to 135 average passengers on Saturday, an 11% gain in ridership. FY2013 contiues this climb in ridership, inching up to 145 passengers, and then again in FY2014 ridership grew to 159 passengers.

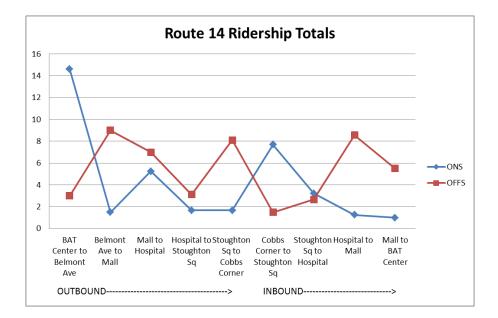
As we review average ridership per trip, the data takes on a different trend pattern when compared with average Saturday ridership, as over the course of the past fiver years, average passengers per trip on Saturdays has been falling. From FY2010 to FY2011 average ridership fell from 13 passengers per trip to 12 passengers per trip. FY2012 was the only year to see average ridership per trip go up, climbing by 11% to 14 passengers. In FY2013 ridership continued its overall trend of declining ridership going down to 10 passengers per trip and fell further in FY2014 to 8 passenger per trip. From FY2010 to FY2014 average passenger per trip on Saturdays was down by 39%.



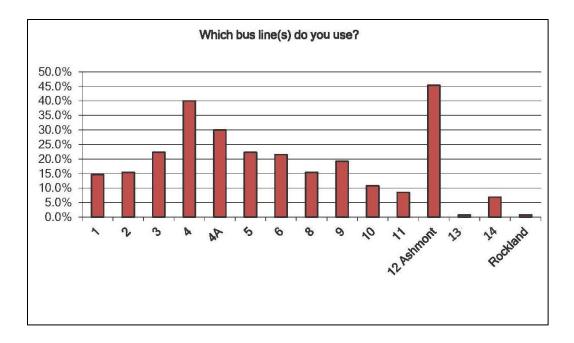


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Currently there is no service on Route 14 Stoughton on Sundays.



When we look at where Route 14 passengers get on and off the bus along its route, we can see there are a number of highly utilized locations. This analysis conveys that a majority of passengers get on and off the bus at three locations: the BAT Centre, Westgate Mall, and Cobbs Corner. The BAT Center would come up as a major location for boardings and alightings to due to the nature of the BAT system being a pulse style transfer system. Westgate Mall comes up as a large boarding and alighting location because passengers are required to transfer from or to Route 14 to another route servicing the mall to access the rest of the BAT system. In addition to requiring Route 14 passengers to transfer, the Mall is a destination for those utilizing the line for employment, shopping and entertainment purposes. Likewise, Cobbs Corner is a major boarding and alighting location due to the number of shopping and dining destinations here.



According to our passenger survey results, just over 7% of people that took the survey stated they use Route 14 Stoughton. The low response rate concerning Route 14 could stem from a number of reasons. These reasons include the fact that not all Route 14 trips end at the BAT Center, as well as the limited number of service hours and days.

Suggested Fixed Route Service Improvements

The Brockton Area Transit Authority is a mature system that services the city of Brockton and its surrounding suburbs in an efficient manner. The system services the densest commercial and housing corridors within Brockton and the neighboring communities it travels through. That said, even the most streamlined system can benefit from a review of the lines it operates to see how they can be made more efficient.

As part of the OCPC review of the BAT system, OCPC fielded passenger surveys to BAT riders to understand how they would like to see BAT improved. One constant concern from BAT passengers was that it takes a long time to get to destinations on the bus. Part of the issue with the travel times is not in the control of BAT administration, since past and current land use patterns concerning places of employment, entertainment, shopping, and services has involved pushing these places to the urban fringe and suburbs surrounding Brockton. The result is longer travel times for public transit passengers in the BAT system.

Since BAT has no control over the land-use decisions made by the communities it services, it can do things operationally to help reduce the travel time for passengers. One recommendation OCPC suggests is a reduction in bus stops along each line. Currently, BAT has bus stops located on each block in certain sections of some routes. While having bus stops located every block is great for passenger convenience, there must be a careful balance so that travel times are not expanded by buses having to stop too frequently. OCPC encourages BAT to review its bus stop siting procedures to reduce the redundancy of stops in order to decrease bus route travel times. In addition to the reduction in bus stops to achieve reduced bus travel times, BAT should encourage greater use of the Charlie Card to help speed up boardings and alightings. If more passengers would use Charlie Cards there would be fewer delays caused by individuals tying up the bus as it has to wait for a passenger to pay their cash fare.

In addition to reducing the number of stops and encouraging passengers to utilize the Charlie Card, some lines need more direct attention and some communities would like to see transit service established in their towns, or passengers would like access to others. Riding the bus alone does not make up the passenger experience and is not the only focus of recommendations presented in the report. Below are the recommendations for existing fixed route service and the fixed route passenger experience.

Existing Service Improvements

route.

casino is built.



Route 3:VA Hospital via Belmont

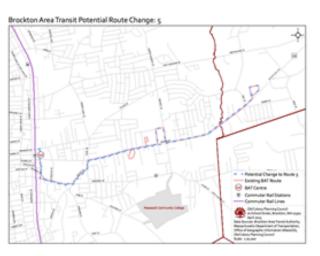
Route 4: Westgate via Pleasant

- Reduce number of stops to facilitate faster service.
- No longer service Sears . entrance
- Potentially provide service to new Vicente's Market



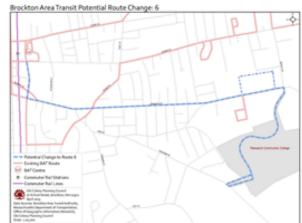
Route 5: Brockton Hospital via Centre St.

- Reduce number of stops to facilitate faster service.
- No longer service emergency room.
- Eliminate deviation into Centre Plaza



Route 6: Massasoit via Crescent St.

- Reduce number of stops to facilitate faster service.
- Potentially eliminate leg of line that operates down Perkins, Lawrence, & Grove.
- Add stops at nursing center & other mid-points for express service.
- Possibly provide direct service to Brockton East Shopping Plaza



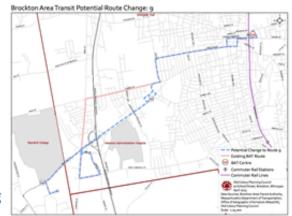
Route 8: Southfield via Warren & Plain St.

- Potentially terminate line at Campello MBTA Commuter Rail Station if service expansion is implemented
- Will help reduce delay and increase line speed.
- Reduce travel time.



Route 9: Pearl via W. Elm & Torrey

- Realign route along Belmont due to potential fairground redevelopment or casino construction.
- Provide direct service to Stop & Shop – Shaws Market Plaza
- Provides safe RT 24 crossing link.



Routes 10 & 11

- Combine routes for greater efficiency.
- Reduce number of stops to facilitate faster service.
- Serve MBTA 230 only at Montello Station



Route 12: Ashmont Service

- Continue to expand express bus service where needed.
- Space out stop locations for greater efficiency.
- No longer service East Main St. due to safety concerns.



Route 13: Mini Maller

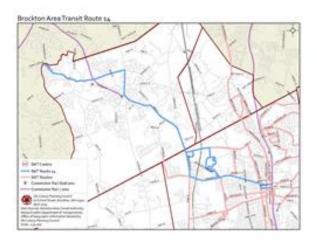
- Ridership has been growing slowly for past 5 years
- Covers gaps in service on the Westside of Brockton
- Rotate between Goddard Rehab and Roche Bros.
 Plaza every other trip or service Roche Bros full-time.
- Recommend promotion of line



Route 14: Stoughton via Brockton

Service Recommendations

- Operate route 14 to BAT Centre every trip.
- Service between Westgate Mall and BAT Centre would be drop off only.



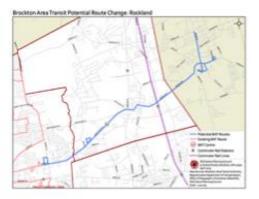
Rockland Flex Service

Service Issues

- Low ridership
- Route travels through low density resident not conducive to transit
- Service hours limited

Service Recommendation

- Terminate service at Walmart
- Or transition service to paratransit operations
- · Maintain route as life-line service



BSU Route 28

Service Recommendation

- Currently provides service from Bridgewater State University to Kmart Plaza in Brockton
- Requires students to transfer from Route 2 to get to Bridgewater State University
- Recommendation is to bring line to BAT Centre as an express from Bridgewater to Brockton.



Potential Service Expansion

E1: Downtown Easton

- Expands service in Easton
- Provides link to major commercial corridors and centers
- Establishes bus service to potential South Coast Rail Station
- Service to Queset Commons
- Operate as flex ride service



E2: Easton to Stoughton

- Gives Brockton and Easton residents access to businesses, shopping and medical service along RT 138
- Services Roche Bros. plaza
- Services potential South Coast Rail Station
- Provides transit link between Stoughton and Easton
- Operate as flex ride service



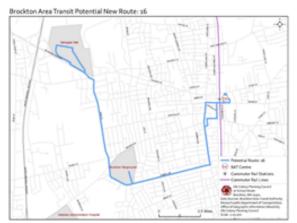
New Route 7

- Relieves pressure off RT 8
- Provides southeastern Brockton with faster BAT Centre access.
- Services residential areas not currently served.



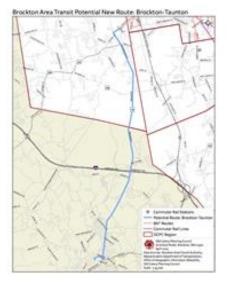
New Route 16

- Establishesroute on Forest Ave
- Additionaltravel options to High School and Stop & Shop/Shaws Plaza
- Provides connection to Westgate Mall from Brockton High School and for Forest Ave residents.
- Establishesconnection to potential casino
- Reduces walk time for those living south of Forest Ave.



Brockton – Taunton Line

- Provides desired link between Taunton and Brockton
- Provides greater regional mobility
- Possible connection at Raynham Wal-Mart/Market Basket
- Provides an affordable option for residents to get from Greater Brockton Area to far South Shore



In addition to these existing route and potential new route recommendations, there had been few requests by some riders to travel to the Avon Industrial Park where there are a number of shopping destinations and potential job opportunities. Service to this area did at one time exist and was fully funded by the Ikea Swedish home goods store that resides in part of the industrial park. However, after lackluster ridership performance, the service was suspended to the Avon Industrial Park. BAT should review these requests for service to the Avon Industrial Park coupled with a review of providing public transit service to the new Amazon distribution center with access to either Stoughton town center or Crawford Square in Randolph. It should be also noted that the Rockland Flex Route is what they call a lifeline service, a transit line that provides service to destinations like grocery stores and medical facilities that do not currently exist in the Town of Rockland.

BAT Centre Improvement Recommendations

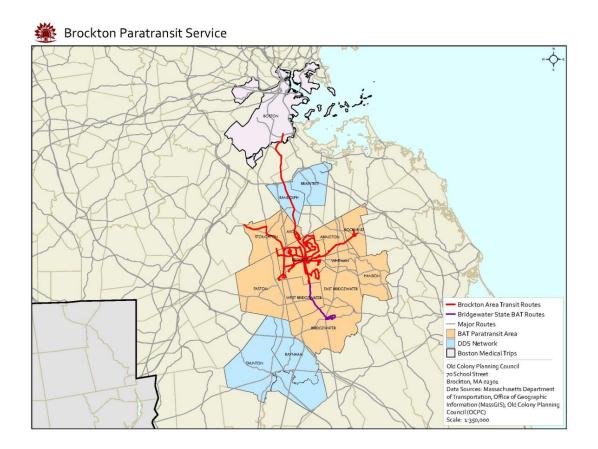
Beside the experience of riding the bus, the next largest interaction passengers have with the BAT system comes via the BAT Centre. Given the nature of the BAT system as a pulse style transfer system, almost all passengers have to pass through the BAT Centre before they arrive at their intended destination. With the voluminous amount of people passing through the BAT Centre, special attention should be given to making the experience of it as pleasant and inviting as possible. While BAT does a great job in providing passenger amenities, there is room for improvement at the BAT Centre.

BAT does a great job in providing a lot of seating at the BAT Centre for passengers, which consists of indoor and outdoor seating areas. BAT can improve on the passenger waiting experience by providing more seating indoors especially during the winter months when outdoor sitting cannot be utilize. Currently in the winter months, many passengers have to stand as they wait for the bus which can be as long 45 minutes in extreme cases. By providing additional indoor seating during the winter months, BAT could improve the passenger experience significantly by offering greater comfort to its passengers.

In addition to more seating, BAT should also explore the possibility to diversify its retail offerings at the BAT Centre. There are three retail spaces at the BAT Centre occupied by one retail owner. In one space the retailer operates a coffee shop of sorts providing drinks to the riding public. In the second space, the retailer operates a fast food storefront offering a limited range of fast food options. In the third retail space, the retailer operates a convince store of sorts selling varied items and snack. All three locations offer lackluster conveniences to BAT patrons, reduces the quality of the passengers experience at the BAT Centre, and at times contributes to a disruptive element at the Centre due to employees of this retail not being managed appropriately.

DIAL-A-BAT Service

Along with the robust fixed route system BAT operates, it also operates a paratransit system known as DIAL-A-BAT that is equally as robust. The primary riders of BAT's paratransit service are seniors at least 65 years and older as well was those that have a disability which makes using the fixed route difficult. The latter groups are eligible to receive complementary transit services that are comparable to the scope of the service area and service hours of the fixed route service according to the American with Disabilities Act (ADA). In addition to these general transportation trips for seniors and those with disabilities, BAT provides medical transportation to over 40 medical facilities located within and outside the BAT service area. It should be noted that DIAL-A-BAT provides more than 16,000 passenger trips per month.

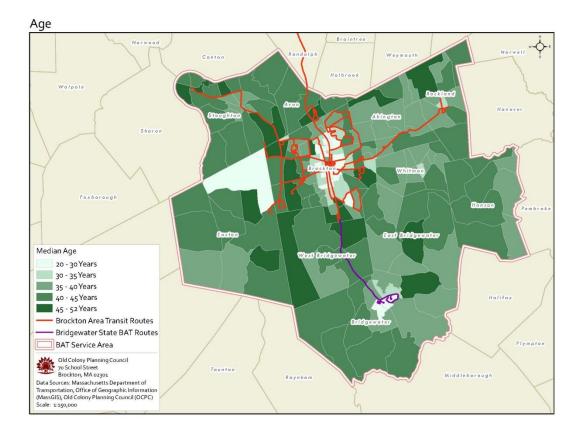


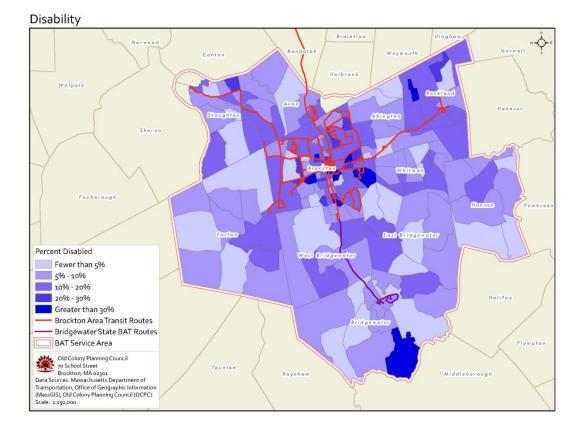
DIAL-A-BAT service operates Monday through Friday from 6am to 9am, Saturdays from 7:20am to 9:30pm, and on Sundays from 11:20am to 6:30pm. Passengers can ride with a personal care attendant if required without a fee, or can ride with a companion for a full DIAL-A-BAT fare. BAT meets the demands for DIAL-A-BAT service by operating 37 vehicles in service, along with providing 16 paratransit vehicles to Councils on Aging. In addition to operating DIAL-A-BAT for paratransit service needs, BAT contracts with private transportation companies to provide the riding public with additional service as needed.

DIAL-A-BAT Service Area Demographics

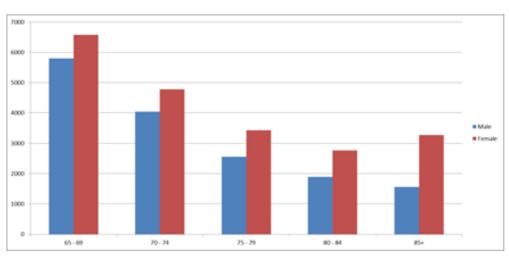
The majority of eligible DIAL-A-BAT individuals are between the ages of 65 and 69 years of age, ethnically predominantly white, have an income between \$35,000 and \$75,000 per annum. In this age group, females make up the majority of eligible DIAL-A-BAT passengers. When we take this demographic information and cross-tabulate it with available demographic information on each community in the BAT service area, three towns as well as Brockton stand out as having particularly large groups of eligible DIAL-A-BAT populations. The Town of Stoughton leads the way, having the largest group of eligible DIAL-A-BAT riders at over 5,000 individuals. This figure is expected to climb to almost 6,000 people by the

year 2019. After Stoughton the next largest population eligible for DIAL-A-BAT is in the City of Brockton. Currently, Brockton possesses an eligible DIAL-A-BAT population of 4,000 individuals, which is projected to rise to just over 5,000 persons by year 2019. Easton is the third community with a large eligible DIAL-A-BAT population, with about 3,500 eligible individuals, expected to climb to just fewer than 4,000 by year 2019. The next community with a large eligible DIAL-A-BAT population is the Town of Bridgewater. Currently, Bridgewater has an eligible DIAL-A-BAT population of just over 3,000 people, rising to about 3,500 individuals by year 2019.

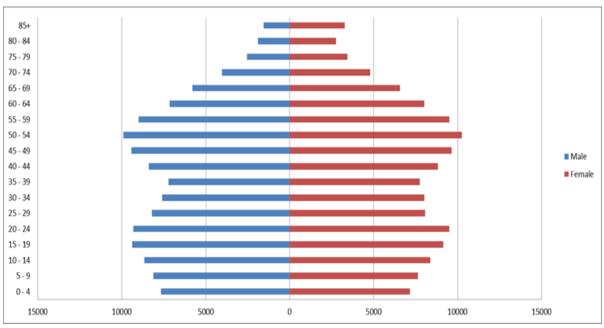




Paratransit Service Area Demographics

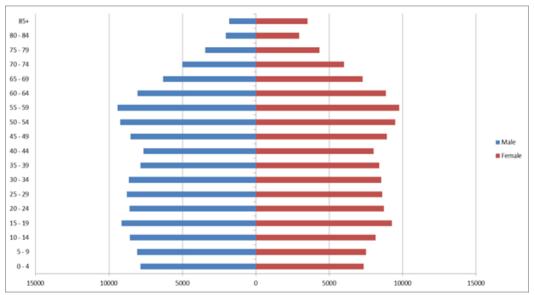


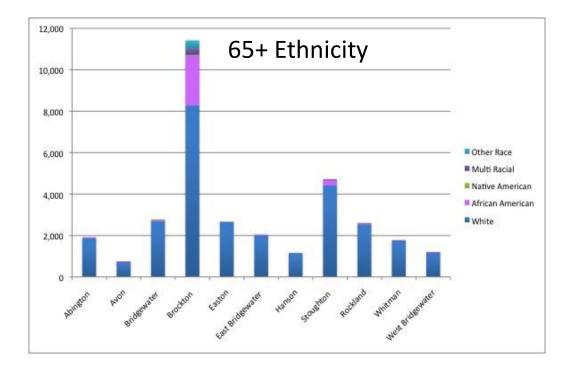
65+ Age & Gender



Paratransit Service Area Age Demographic Change 2014

Paratransit Service Area Age Demographic Change 2019

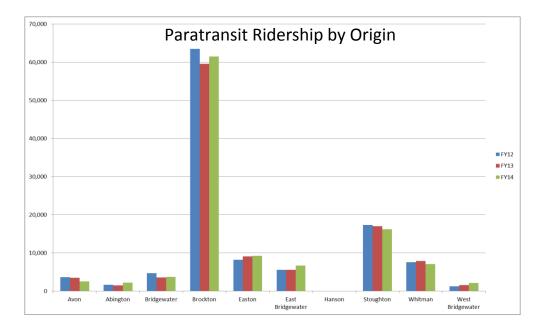




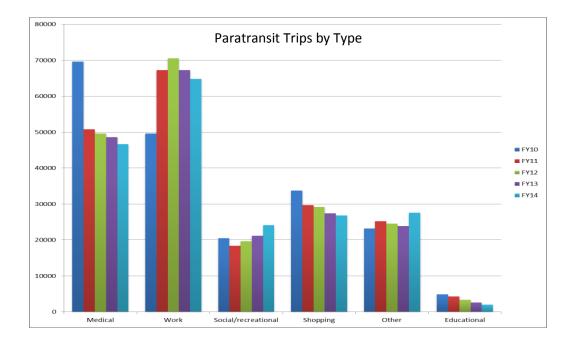
DIAL-A-BAT has been seeing falling ridership for the last five years, but this trend could be coming to an abrupt end with the coming demographic changes in the DIAL-A-BAT service area. When we review the demographic data of the BAT service area, we can see that the baby boom population will be moving into the DIAL-A-BAT eligible category in much larger numbers by year 2019. This large pool of individuals may put additional strain on the paratransit system, meaning there will be a need for additional capital and operating resources to meet this pool of potential ridership. The demand for DIAL-A-BAT service will be further compounded since a large portion of the baby boom population lives in suburban communities outside the reach of fixed route service, and is not conducive to fixed route operation.

DIAL-A-BAT Ridership

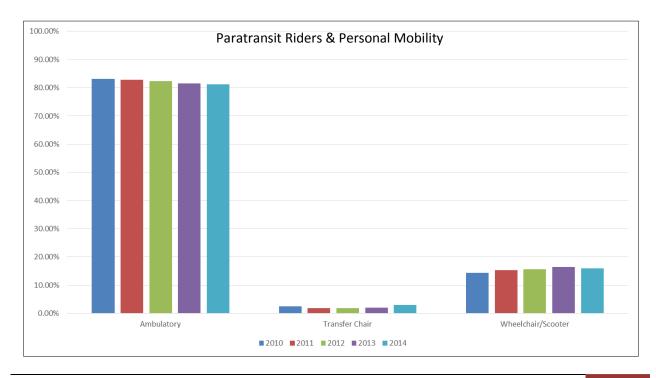
Primary reasons for DIAL-A-BAT's falling ridership since FY2010 are the lag from the recent economic recession, foul weather suspending services, and declines in usage not easily explained by one variable. While overall DIAL-A-BAT ridership is down, this trend of falling ridership is not universal throughout all the communities served by DIAL-A-BAT. When we break out ridership by each community, there are some communities that have reversed this declining ridership trend. For example, in FY2014 average ridership on DIAL-A-BAT reversed course in Brockton and began to climb once again. In the Town of Easton ridership has been seeing gains for the last three fiscal years, as has been the case with West Bridgewater. In other communities, such as Abington and East Bridgewater, ridership has returned to growth after having experienced no growth since FY2012.



When we look at DIAL-A-BAT usage based on the type of trip taken by passengers, the majority of trips are for work or medical purposes. With that said, trips taken for work and medical purposes have been falling for the last five fiscal years. Trips reasons that have seen growing requests have been for recreational and entertainment purposes, or some other purpose not able to be categorized in any single category.



When we review DIAL-A-BAT ridership and the mobility challenges riders face, we can see that the majority of passengers are ambulatory and need no more than a cane to get around. According to available data, just over 80% of DIAL-A-BAT passengers are ambulatory. Ten percent of passengers using DIAL-A-BAT need a wheelchair or mobility scooter to get around, and about 1% of DIAL-A-BAT riders need a transfer chair to be able to utilize the paratransit service.



DIAL-A-BAT Performance

BAT has two main performance measures for DIAL-A-BAT: passengers per revenue hour and on-time performance. The Commonwealth's paratransit passenger per revenue hour standard is 2.25 passengers per revenue hour. BAT's own standard is more ambitious at 2.75 passengers per revenue hour. For FY2014, BAT's average passengers per revenue hour did exceed the Commonwealths standard of 2.25 passengers per revenue hour, but unfortunately did not meet the more ambitious goal of 2.75 passengers per revenue hour.

DIAL-A-BAT's on-time performance goal is also more stringent than the standard paratransit on-time performance goal found throughout the Commonwealth. While the standard goal is 85% on time performance, DIAL-A-BAT aims to be on time at a rate of 90%. Here again, DIAL-A-BAT consistently beats the Commonwealth's paratransit on-time performance standard while coming up shy of its own goal. It should be noted that due to the nature of paratransit service transporting people from the door of their point of origin to the door of their destination, this leaves the system open to delays as a result of passengers not being prepared at their scheduled pick-up time. Also, DIAL-A-BAT has to operate in suburban communities where there are few direct ways to get from Point A to Point B, contributing to increased travel time that can affect the system's on-time performance.

This study's recommendation to improve performance with regard to DIAL-A-BAT's goals is to move more passengers to fixed route service, and end some of its' more generous customer service practices. With the potential influx of eligible baby boomer riders, there will be additional strain on DIAL-A-BAT. BAT should move all those passengers that are physically able and near a fixed route to using the fixed route system. By moving as many people to fixed route as possible, pressure will be taken off the DIAL-A-BAT system, helping it stay on time and giving it more capacity to service those communities where no fixed route services exist. BAT should also only assist passengers to the first floor of a building rather than the current practice of assisting passengers up to three floors within a building.

DIAL-A-BAT Service Recommendations

Besides the aforementioned surge in ridership from baby boomers, there are other areas of concern, as well as opportunities to improve service for DIAL-A-BAT passengers. According to the Regional Coordinating Council (RCC), a group of stakeholders looking at how to improve service for transit users, they found paratransit patrons want more service in the evening for medical appointments. RCC surveys also found that paratransit patrons in the BAT service area want more service to the Towns of Stoughton, Canton, East Bridgewater, and West Bridgewater. In addition to these identified service request, respondents also stated they would like to see more paratransit service outside the ADA corridor, service to the Avon Industrial Park, and more service for employment opportunities.

BAT should further investigate these service demands and determine their ability to meet them. Expanding service hours and access to high-demand destinations can spur ridership growth and increase desire to use the system. Providing expanded service hours and service area also enriches the lives of DIAL-A-BAT passengers by allowing them to reach places of employment and enjoy entertainment and recreational activities without having to worry about how to get home.

DIAL-A-BAT has experienced difficulty maintaining a pool of commercially-licensed operators, an issue plaguing the nation at large. A lack of qualified drivers puts DIAL-A-BAT operations at a disadvantage because this deficit of drivers will make it harder for DIAL-A-BAT to meet service demands. BAT should investigate forming partnerships with local vocational schools and other schools specialized in training individuals to become commercial drivers to meet this need.

While DIAL-A-BAT vehicles have traditionally been diesel-powered, a recent shift in paratransit vehicle production has meant many more gasoline-powered vehicles in the fleet, and this transition has put some strain on BAT's paratransit operation. This additional strain on DIAL-A-BAT comes from the need to pull gasoline-powered buses from service and have operators drive vehicles to a commercial gas station for refueling, contributing to 1,400 hours of lost productivity per year. To address this issue and gain back these lost hours of productivity, BAT should seek funding to install gasoline pumps at its' maintenance garage.

BAT is known among its' DIAL-A-BAT passengers as provider of great customer service. An example of this commitment to great customer service is DIAL-A-BAT's willingness to allow drivers to accompany passengers into a few doctor office buildings, and proceed with their passenger as far as the third floor. While this willingness to go above and beyond is appreciated by passengers, it is not without its cost. Assisting passengers to this degree into a building contributes to lost productivity in the DIAL-A-BAT system for obvious reasons. BAT should curtail this practice by only accompanying passengers no further than the doorway of the first floor, and suggest that passengers ride with a companion or personal care attendant if more help is needed getting deeper into a building.

BAT uses multiple paratransit contractors to meet the transportation needs of DIAL-A-BAT customers that it cannot meet with its buses alone, but has had a hard time finding qualified paratransit

contractors to meet this transportation demand. BAT should work with companies looking to become qualified paratransit providers to help it meet the paratransit community's transportation needs, and should solicit the help of MassDOT to help find these qualified companies.

BAT interfaces with other paratransit providers in its service area as passengers transfer between different providers in the region. On occasion, when DIAL-A-BAT is interfacing with another transit authority to pick up a passenger traveling on the other authority's vehicle, the other authority does not tell BAT when their passenger has canceled the trip. This leaves DIAL-A-BAT without the knowledge they are traveling to a pickup location where there will be no passenger. This lack of communication between the two agencies leads to a loss in productivity and money for DIAL-A-BAT. To address this problem between BAT and these other transit authorities, BAT should actively engage the other authorities with the help of MassDOT to reduce the instances of miscommunication.

If ridership does indeed grow due to baby boomers transitioning into paratransit usage, there will be more phone scheduling activity as passengers call BAT to schedule DIAL-A-BAT rides, which could lead to passengers experiencing busy signals or longer wait times to get their appointments. To address this issue of possible phone capacity issues, BAT should invest in upgrading their phone system to meet this potential demand.

Finally, DIAL-A-BAT trips are far more expensive than fixed route bus trips at \$18.47 per passenger for paratransit compared to \$2.57 per passenger for a fixed route. With this potential surge in ridership from the baby boom generation, there is the potential for DIAL-A-BAT expenses to balloon. While not all passengers will be able to ride the fixed route system, BAT should transition as many individuals as possible to using the fixed route system for most trips, especially since 80% of DIAL-A-BAT passengers are ambulatory. BAT should achieve this goal through increased travel training that will teach DIAL-A-BAT passengers how to utilize the fixed route system, and denying trips to passengers that are capable of using the fixed route system when the destination they are traveling to is accessible by fixed route service.

Fare Structure and Analysis

BAT's current fare structure is divided by the mode of transportation - fixed route or paratransit services. The core of BAT's fixed routes service is in Brockton, Stoughton, Easton, Abington, and Avon, for which passengers are charged a base fare of \$1.25 per trip. The fare on the commuter route to the Ashmont MBTA Station is based upon the distance a passenger travels on that route. Transfers are free and valid for 1 hour in the BAT Centre, but are not valid for a return trip. Paratransit services include ADA complementary paratransit service and non-ADA paratransit service. Per Federal Transit Administration regulations, ADA complementary paratransit services are available for individuals with a qualifying disability traveling within three-quarters of a mile of existing fixed route services during fixed-

route operating hours. Non-ADA paratransit services are demand-response services for seniors and persons with disabilities living in Brockton and communities within the BAT service area.

BAT's fare structure has two components per mode of transportation. Fixed route buses are \$1.25, except on Ashmont, where a Brockton to Ashmont trip will cost a passenger \$2.00. Paratransit service, for both ADA complementary and non-ADA complementary transit services cost \$2.50 per trip within a community, and \$3.50 for travel between communities. Table 1 below shows BAT's fare structure.

Table 1: BAT Existing Fare Structure						
Cash Fares						
Local Fixed-Route	\$1.25					
Ashmont Route	\$2.00					
Transfers within local routes	Free					
Passes and Multi-Ride Fares						
Daily - City Routes	\$3.00					
7 day - City Routes	\$10.00					
7 day - Ashmont	\$20.00					
31 day - City Routes	\$35.00					
31 day - Ashmont	\$60.00					
Paratransit- ADA and Non-ADA Fa	ares					
Within the same community	\$2.50					
From one community to another	\$3.50					

Source: BAT

BAT offers daily passes for \$3.00, which allows travel on all routes except Ashmont. There are also 7 day passes for \$10.00 for travel on all routes except Ashmont, and a \$20.00 pass that includes travel on all routes including Ashmont. Thirty-one (31) day passes are offered for \$35.00, which allows travel on all routes except Ashmont, while a \$60.00 pass provides access to all routes including the Ashmont route. Currently there are no student passes sold at a discount.

It should be noted that at these levels, fares cover only a fraction of BAT's costs. As of 2014, for fixedroute service, BAT's total operating costs per passenger are \$2.57, with the average fare paid by passengers, including discount fares, covering \$0.77 of those costs, or 30% of the total. Costs of paratransit service are significantly higher, at \$18.47 per passenger. Fares therefore do not generate a profit for BAT, but are a necessary source of revenue to provide high quality, reliable transit services.

Peer Review

The Old Colony Planning Council conducted a peer review of 12 transit authorities in the Commonwealth of Massachusetts and New England to understand how other regional transit authorities faced with similar challenges, set fares and adopt fare collection strategies. Of these transportation authorities, one is located in Manchester, New Hampshire, another is located in Bridgeport, Connecticut and 10 are located in the Commonwealth. The survey results provide an overview of fare policy, pricing, and strategy in New England.

Adult Cash Fares

BAT's cash fare is currently set at \$1.25 for all local trips (excluding Ashmont service). This is less than the peer group average of \$1.47, and less than 7 members of the peer group surveyed. One of the peer agencies charges \$1.25, similar to BAT, and the remaining four peer agencies charge less than BAT with a fare of \$1.00. Table 2 is a comparison of BAT single ride fares as compared to the peer transit agencies.

Table 3 indicates the number of one way local trips a monthly pass will provide in order for a passenger to "break even" on the cost of the pass. A monthly pass that provides good value is important to customers who use public transportation every day. A competitively priced pass will provide great value for the consumer, and a consistent riding population to the transit authority. At the same time, a transit authority needs to be careful not to "give the store away" in their pass pricing strategies while ensuring a good value for riders.

BAT's 31 day pass breaks even at a very competitive 28 trips. The average for the 10 peer agencies that offer a monthly pass of some type is 30.4 trips. Break even points among the peer agencies varied from as high as 40 trips to as low as 20 trips per monthly pass.

Table 2: Regional Transit Authority Single Ride Fare Comparison

		.	Reduced	Full Fare
	Adult	Notes about Fare	Fare	Transfer
			1/2 Full	
Cape Ann Transportation Authority	\$1.00	per zone	Fare	Free
		\$2 additional for deviated	1/2 Full	
Cape Cod Regional Transit Authority	\$2.00	route	Fare	Free
Greater Attleboro Taunton Regional			1/2 Full	
Authority	\$1.00		Fare	\$1.50
			1/2 Full	
Greater Bridgeport Transit Authority	\$1.75		Fare	Free
			1/2 Full	
Lowell Regional Transit Authority	\$1.00		Fare	Free
Montachusett Regional Transit			1/2 Full	
Authority	\$1.00		Fare	Free
,			1/2 Full	No
Manchester Transit Authority	\$2.00		Fare	Transfers
Massachusetts Bay Transportation	•			
Authority	\$2.10		0.80	Free
MetroWest Regional Transit			1/2 Full	
Authority	\$1.50		Fare	Free
Pioneer Valley Transportation			1/2 Full	
Authority	\$1.25		Fare	\$0.25
Southeastern Regional Transit	7		1/2 Full	Free
Authority	\$1.50		Fare	
Worchester Regional Transit	÷1.00		1/2 Full	No
Authority	\$1.50		Fare	Transfers
	\$1.47	 	1.0.0	
Average	ŞI.47		4 /2 5	
	64.00		1/2 Full	
Brockton Area Transit	\$1.25		Fare	Free

Sources: Regional Transit Authorities

Prepared By: Old Colony Planning Council, March 2015

Table 3: Regional Transit Authority Monthly Pass Break Even Comparison

		Monthly	Break Even (# of
	Adult	Pass	trips)
Cape Cod Regional Transit Authority	\$2.00	\$60.00	30.0
Greater Attleboro Taunton Regional Authority	\$1.00	\$30.00	30.0
Greater Bridgeport Transportation Authority	\$1.75	\$70.00	40.0
Lowell Regional Transit Authority	\$1.00	\$35.00	35.0
Montachusett Regional Transit Authority	\$1.00	\$20.00	20.0
Manchester Transit Authority	\$2.00	\$60.00	30.0
Massachusetts Bay Transportation Authority	\$2.10	\$50.00	23.8
Pioneer Valley Transportation Authority	\$1.23	\$45.00	36.6
Southeastern Regional Transit Authority	\$1.50	\$40.00	26.7
Worchester Regional Transit Authority	\$1.50	\$48.00	32.0
Average	\$1.51	\$45.80	30.4
Brockton Area Transit	\$1.25	\$35.00	28.0

Sources: Regional Transit Authorities

Prepared By: Old Colony Planning Council, March 2015

Paratransit Fares

According to the Federal Transit Administration (FTA), paratransit fares cannot exceed double the amount of the fixed route fare. The peer agency group members were compared on a local intracommunity fare, where zone fares were compared as similar to a single community trip. The average fare for an intra-community ride is \$2.13, which is slightly lower than BAT's fare of \$2.50 for an intracommunity ride. Four of the surveyed transportation authorities, including BAT, charge 200% of the base fare as their ADA fare. Lowell Regional Transit Authority and Southeastern Regional Transit Authority are the only transit authorities to charge the same for ADA service as that of fixed route service and the remaining six agencies charge between 125%-150% of their fixed route fare.

There are no federal guidelines for non-ADA transportation regarding the pricing of fares. BAT's fares currently are the same as the ADA fares. BAT also offers medical transportation to Boston on Wednesdays and Fridays for a fare of \$7.50 each way. Table 4 compares ADA fares among the agencies analyzed.

Table 4 is a comparison of peer agency ADA fares.

		Bus	
	ADA Fare	Fare	%
Cape Ann Transportation Authority	\$2.00	\$1.00	200%
Cape Cod Regional Transit Authority	\$2.50	\$2.00	125%
Greater Attleboro Taunton Regional			
Authority	\$1.25	\$1.00	125%
Greater Bridgeport Transportation			
Authority	\$3.50	\$1.75	200%
Lowell Regional Transit Authority	\$1.00	\$1.00	100%
Montachusett Regional Transit			
Authority	\$1.50	\$1.00	150%
Manchester Transit Authority	\$2.50	\$2.00	125%
Massachusetts Bay Transportation			
Authority	\$3.00	\$2.10	143%
MetroWest Regional Transit			
Authority	\$2.00	\$1.50	133%
Pioneer Valley Transportation			
Authority	\$2.50	\$1.25	200%
Southeastern Regional Transit			
Authority	\$1.50	\$1.50	100%
Worchester Regional Transit			
Authority	\$2.25	\$1.50	150%

Table 4: Regional Transit Authority Paratransit Fare Comparison

based on single zone/ intra

community trips

ADA regulations states that the complementary Paratransit Service Fare can be up to %200 of Fixed Route Fare

Average	\$2.13	\$1.47	146%
Brockton Area Transit	\$2.50	\$1 .25	200%

Peer Agency Fare Increases

Over the last six years, five of the twelve peer agencies have had a fare increase. Some agencies, such as the MBTA, have raised their fares again in a short period of time. The MBTA increased their fares in July of 2012, and did so again in July of 2014. Of the seven agencies surveyed that have not recently had a fare increase, three have been studying the implications of a fare increase and are currently considering restructuring. Of all the agencies interviewed, four have not increased their fares recently and are not considering an increase to their fares in the near term. Table 5 shows fare increases and dates among the five agencies that have raised fares in the last six years.

	Date of Fare Increase	Adult Cast- Old Fare	Adult Care - New Fare	Percent Increase
Greater Bridgeport Transportation				
Authority	October 2010	\$1.00	\$1.25	25%
Manchester Transit Authority	July 2014	\$1.50	\$2.00	33%
Massachusetts Bay Transportation				
Authority	July 2014	\$2.00	\$2.10	5%
Southeastern Regional Transit				
Authority	January 2013	\$1.25	\$1.50	20%
Worchester Regional Transit				
Authority	January 2009	\$1.25	\$1.50	20%
Average		\$1.40	\$1.67	21%

Table 5: Peer Agencies with Recent Fare Increase

Sources: Regional Transit Authorities

Prepared By: Old Colony Planning Council, March 2015

Fare Change Alternatives

As part of this Comprehensive Regional Transportation Plan, BAT has been studying the effects of a \$0.10 or \$0.25 increase to the base fare of \$1.25, bringing the cost of the full fare to either \$1.35 or \$1.50, respectively. This would result in an increase of the Ashmont fare to either \$2.10 or \$2.25, and increase the 31 day pass to \$43/\$63 or \$48/\$67.50, respectively. A forecast of the impact to both the ridership and revenue a fare change may have on the system was created by utilizing the autoregressive integrated moving average (ARIMA) model.

According to the model, if BAT maintains the current fare structure and simply applies that fare increase of \$0.10 appropriately across the different fare rates, the projected overall impact to ridership would be a decrease of 3.12% or approximately 72,171 riders, and the revenue increase would be approximately \$101,813 or a 5.53% increase. If BAT were to do the same exact procedure for the \$0.25 increase, the overall impact to ridership would be a decrease of 8.16% or approximately 188,549 riders, and the revenue increase would be approximately \$196,932 or a 10.70% increase. If one of these fare increases was implemented and timed appropriately, this revenue increase should be able to offset the cost to BAT of reprograming the fare boxes in order to implement this change. Tables 6 and 7 show the results of the ARIMA modeling.

						(ARIMA	Change)	(Percent	t Change)
Condition	Fare Structure		System	Revenue	Ridership	Revenue	Ridership	Revenue	Ridership
	Brockton System	Ashmont System	Brockton	\$1,681,296.94	2,193,303	N/A	N/A	N/A	N/A
Existing	Full Fare = \$1.25 1/2 Fare = \$.60 Monthly Pass = \$35.00	Full Fare = \$2.00 1/2 Fare = \$ 1.00 Monthly Pass = \$60.00	Ashmont	\$159,992.00	118,412	N/A	N/A	N/A	N/A
	·	-	Total	\$1,841,288.94	2,311,715	N/A	N/A	N/A	N/A
	Full Fare = \$1.35 1/2 Fare = \$.65	Full Fare = \$2.10 1/2 Fare = \$1.05	Brockton	\$1,778,469.78	2,123,501	\$97,172.84	-69,802	5.78%	-3.18%
Alternative	Monthly Pass = \$43.00	Monthly Pass = \$63.00	Ashmont	\$164,631.77	116,044	\$4,639.77	-2,368	2.90%	-2.00%
			Total	\$1,943,101.54	2,239,544	\$101,812.60	-72,171	5.53%	-3.12%

TABLE 6: SUMMARY OF FARE ANALYSIS ALTERNATIVE 1

KEY: Full Fare = (Adults)

1/2 Fare = (Senior Citizens/Disabled, under 12) Under 5 = Free

						(ARIMA	Change)	(Percent	t Change)
Condition	Fare Structure		System	Revenue	Ridership	Revenue	Ridership	Revenue	Ridership
	Brockton	Ashmont							
	System	System	Brockton	\$1,681,296.94	2,193,303	N/A	N/A	N/A	N/A
	Full Fare = \$1.25	Full Fare = \$2.00	Ashmont	\$159,992.00	118,412	N/A	N/A	N/A	N/A
Existing	1/2 Fare = \$.60 Monthly Pass = \$35.00	1/2 Fare = \$ 1.00 Monthly Pass = \$60.00							
			Total	\$1,841,288.94	2,311,715	N/A	N/A	N/A	N/A
	Full Fare = \$1.50 1/2 Fare = \$.75	Full Fare = \$2.25 1/2 Fare = \$1.10	Brockton	\$1,867,229.84	2,010,675	\$185,932.90	-182,628	11.06%	-8.33%
Alternative	Monthly Pass = $$48.00$	Monthly Pass = $$67.50$	Ashmont	\$170,991.45	112,491	\$10,999.45	-5,921	6.88%	-5.00%
			Total	\$2,038,221.29	2,123,166	\$196,932.35	-188,549	10.70%	-8.16%

KEY: Full Fare = (Adults)

1/2 Fare = (Senior Citizens/Disabled, under 12)
Under 5 = Free

A fare analysis of the Charlie Card was created by utilizing the same autoregressive integrated moving average (ARIMA) model. Instead of looking at a fare increase with regard to use of the Charlie Card, the Comprehensive Regional Transportation Plan has incorporated looking at the effects of a decrease in Charlie Card fares by 10% and 30%. The current fare for the Charlie Card is \$1.15. Using the two fare increases of \$1.35 and \$1.50, a decrease of 10% would change the fares to \$1.20 and \$1.35, respectively. With a decrease of 30% those fares would change to \$0.95 and \$1.05, respectively.

According to the model, if BAT simply applies that Charlie Card fare decrease of 10% appropriately across the different fare rates, the projected overall impact to ridership for the \$1.35 fare would be an increase of 4.44% or approximately 99,395 riders, and the revenue decrease would be approximately \$48,789 or 2.51%. If BAT were to do the same exact procedure for the 30% decrease, the overall impact to ridership would be an increase of 8.77% or approximately 196,424 riders, and the revenue decrease would be approximately \$223,752 or 11.52%.

If BAT applies that Charlie Card fare decrease of 10% appropriately across the different fare rates the projected overall impact to ridership for the \$1.50 fare would be an increase of 7.35% or approximately 156,107 riders, and the revenue decrease would be approximately \$19,781 or 0.97%. If BAT were to do the same exact procedure for the 30% decrease, the overall impact to ridership would be an increase of 12.27% or approximately 260,592 riders, and the revenue decrease would be approximately \$187,805 or 9.21%. Although in all of these Charlie Card fare decreases, the ridership increases, the huge deficit BAT would face over lost revenue would be much more significant. In addition, the cost to BAT of reprograming the fare boxes in order to implement this change would create another cost that would add to the revenue deficit.

TABLE 8: FARE ANALYSIS USING CHARLIE CARD ALTERNATIVE 1A

						(ARIMA	Change)	(Percent Change)	
Condition	Fare St	ructure	System	Revenue	Ridership	Revenue	Ridership	Revenue	Ridership
	Brockton	Ashmont							
	System	System	Brockton	\$1,778,469.78	2,123,501	\$97,172.84	-69,802	5.78%	-3.18%
			Ashmont	\$164,631.77	116,044	\$4,639.77	-2,368	2.90%	-2.00%
Existing	Full Fare = \$1.35	Full Fare = \$2.10							
			Total	\$1,943,101.55	2,239,545	\$101,812.61	-72,170	8.68%	-5.18%
			Brockton	\$1,731,765.63	2,221,481	(\$46,704.15)	97,980	-2.63%	4.61%
Alternative	Chalie Card Fare = \$1.20	Charlie Card Fare = \$1.90	Ashmont	\$162,547.29	117,458	(\$2,084.48)	1,414	-1.27%	1.22%
			Total	\$1,894,312.91	2,338,940	(\$48,788.64)	99,395	-2.51%	4.44%

TABLE 9: FARE ANALYSIS USING CHARLIE CARD ALTERNATIVE 1B

						(ARIMA	Change)	(Percent Change)	
Condition	Fare St	ructure	System	Revenue	Ridership	Revenue	Ridership	Revenue	Ridership
	Brockton	Ashmont							
	System	System	Brockton	\$1,778,469.78	2,123,501	\$97,172.84	-69,802	5.78%	-3.18%
			Ashmont	\$164,631.77	116,044	\$4,639.77	-2,368	2.90%	-2.00%
Existing	Full Fare = \$1.35	Full Fare = \$2.10							
			Total	\$1,943,101.55	2,239,545	\$101,812.61	-72,170	8.68%	-5.18%
			_						
			Brockton	\$1,565,149.97	2,316,424	(\$213,319.81)	192,923	-11.99%	9.09%
Alternative	Chalie Card Fare = \$0.95	Charlie Card Fare = \$1.45	Ashmont	\$154,200.09	119,545	(\$10,431.68)	3,501	-6.34%	3.02%
			Total	\$1,719,350.05	2,435,969	(\$223,751.50)	196,424	-11.52%	8.77%

TABLE 10: FARE ANALYSIS USING CHARLIE CARD ALTERNATIVE 2A

						(ARIMA	Change)	(Percent	Change)
Condition	Fare Structure S		System	Revenue	Ridership	Revenue	Ridership	Revenue	Ridership
Existing	Brockton System Full Fare = \$1.50	Ashmont System Full Fare = \$2.25	Brockton Ashmont	\$1,867,229.84 \$170.991.45	2,010,675	\$185,932.90 \$10.999.45	-182,628 -5,921	11.06% 6.88%	-8.33%
Laisting	1 un 1 ul = \$1.50	1 un 1 ulo – \$2.25	Total	\$2,038,221.29	, .	\$196,932.35	-188549	\$0.18	-0.1333
			Brockton	\$1,888,194.30	2,164,482	\$20,964.46	153,807	1.12%	7.65%
Alternative	Charlie Card Fare = \$1.35	Charlie Card Fare = \$2.00	Ashmont	\$169,807.96	114,791	(\$1,183.49)	2,300	-0.69%	2.04%
			Total	\$2,058,002.26	2,279,273	\$19,780.97	156,107	0.97%	7.35%

					(ARIMA Change)		(Percent Change)		
Condition	Fare Structure		System	Revenue	Ridership	Revenue	Ridership	Revenue	Ridership
	Brockton System	Ashmont System	Brockton	\$1,867,229.84	2,010,675	\$185,932.90	-182,628	11.06%	-8.33%
Existing	Full Fare = \$1.50	Full Fare = \$2.25	Ashmont	\$170,991.45	112,491	\$10,999.45	-5,921	6.88%	-5.00%
			Total	\$2,038,221.29	2,123,166	\$196,932.35	-188549	\$0.18	-0.1333
			Brockton	\$1,689,031.97	2,267,020	(\$178,197.87)	256,345	-9.54%	12.75%
Alternative	Charlie Card Fare = \$1.05	Charlie Card Fare = \$1.55	Ashmont	\$161,384.25	116,738	(\$9,607.20)	4,247	-5.62%	3.78%
			Total	\$1,850,416.22	2,383,758	(\$187,805.07)	260,592	-9.21%	12.27%

TABLE 11: FARE ANALYSIS USING CHARLIE CARD ALTERNATIVE 2B

Title VI, Environmental Justice, and Limited English Proficiency Analysis of Proposed Fare Changes

1) What service and/or fare changes does BAT propose? Please describe the nature of the change, the basis or rationale for the change, the modes of service impact, and the communities affected by the change.

BAT is not proposing a fare increase. This is merely a study to see how a fare increase would affect ridership and revenue if, in the future, BAT decided to increase the fare. If this fare increase was implemented, it would be an across-the-board fare increase affecting both fixed route and paratransit services. Fare increases are needed to offset rising costs, and to provide revenue that ensures a sustainable financial future. BAT will likely not be able to meet the demand for improved or expanded services within its existing revenue structures and other revenue streams without a fare increase at some point in the future.

This study is looking into the effects of the base or adult cash fare for fixed route bus services increasing from either \$1.25 to \$1.35, an 8% increase, or \$1.25 to \$1.50, a 20% increase. If this were to happen, fares for Ashmont Service would increase from \$2.00 to \$2.10, or \$2.00 to \$2.25, respectively. 31 day passes would increase from either \$35.00 to \$43.00, or \$35.00 to \$48.00, for Brockton area service, and the Ashmont pass would increase from either \$60.00 to \$63.00, or \$60.00 to \$67.50, respectively. The 31 day pass (excluding Ashmont) would be priced to provide a 53% discount from the equivalent cash fare for 60 rides, for either a \$0.10 or \$0.25 fare increase. Under this study a reduced fare or "half-fare" (either \$0.65 or \$0.75, respectively) would be charged to seniors and persons with a disability. It should be noted that fare rates for BAT services have not increased since 2011.

2) What are the impacts of the fare change on minority and/or low income communities?

Based on available ridership data by fare type used, 64% of transit users pay their fare directly with cash when boarding the bus, and 23% indirectly use cash via a stored-value Charlie Card. Of those cash payments, minority riders use cash 64% of the time and low-income riders make cash payments 64% of the time. Overall, 12% of transit fares are paid for with a BAT 31 day pass. Minority riders use a 31 day pass for payment 12% of the time, while low-income riders use a 31 day 14% of the time.

The overall high use of cash fares can be partially attributed to the cost of a 31 day pass; while reasonably priced, it can be difficult for some customers to make that one-time payment. Additionally, although 62% of BAT users are making work commute trips, the remaining 38% are using the service for school, shopping, medical and other trips, and a monthly pass may not be the best fit for their use.

A few years ago, BAT acquired a new revenue collection system; with that new revenue collection system, BAT instituted the use of one day and 7 day passes. These pass options were created to give a more manageable option for people living on limited income, or for those that use transit with less regularity than the work commuting population. The utilization of these pass options has been rather low, with only 2% of passengers using one day and 7 day passes.

3) What are the transit alternatives available for riders who would be impacted by proposed fare changes?

BAT will continue to work with social services agencies providing low cost transportation to low-income persons and families. Even if one of the fare increases were to be implemented in the future, BAT would still be the least expensive travel alternative available in the Greater Brockton Area, in addition to other services BAT provides to the local communities. BAT would also still have fares in line with other transit agencies, and remain below the average across the Commonwealth, if fares are increased by \$0.10 or \$0.25.

4) What, if any, measures would BAT take to avoid, minimize, or mitigate any adverse effects of the service and/or fare change on minority population and/or low-income populations? What, if any, enhancements or offsetting benefits would BAT implement in conjunction with the service and/or fare changes?

BAT has a discounted 31 day, 7 day, and one day pass program. This offers the opportunity to purchase a 31 day, 7 day, and one day unlimited use pass at a substantial discount. If there were a fare increase in the future, this program would still offer a substantial discount to the frequent rider utilizing a 31 day, 7 day, or one day pass.

5) Would the proposed service and/or fare changes have a disproportionately high and adverse effect on minority populations and/or low-income populations?

BAT's fixed route service utilizes a radial route pattern throughout the city. These bus route patterns run in and out of low income and minority population areas. For this reason, coupled with a system wide

fare increase, there is no way to single out a particular population or location in the city when implementing a fare increase in the future.

6) What steps does BAT plan to take to seek out and consider the viewpoints of minority and lowincome populations in the course of conducting public outreach and involvement activities.

Since this is a preliminary study, and no fare increase is scheduled at this time for Brockton Area Transit, no actions have yet been taken to seek out and consider the viewpoints of minority and low-income populations. However, if the fare was to be increased in the future BAT would hold public hearings. These hearings would be held at an accessible location at different times of day, enabling those with different work schedules and family commitments the opportunity to comment publically. Additionally, BAT would consider any comments submitted to the authority via email, mail, and telephone in regards to any proposed changes.

7) How does BAT provide information and accessibility to those Limited English Proficient persons? What steps to provide information in languages other than English does BAT propose?

BAT has drivers that speak over 9 languages employed in the workforce. During any public hearings regarding any fare increases in the future, drivers would be on hand to provide translation services for any LEP individuals. Additionally, the BAT website can be translated through Google Translate into a multitude of languages, and many of BAT's informational postings are available in English, Haitian Creole, Spanish, and Portuguese.

BAT Market Analysis

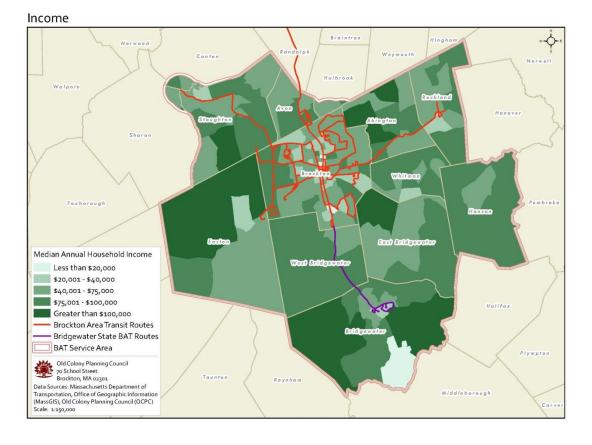
A transit market analysis was performed to help the Brockton Area Transit Authority (BAT) better understand the market the transit system serves. The market analysis was also performed to examine where the system could possibly expand in the future. There are a number of different elements that affect ridership, with particular implications for the fixed route system. Elements like density, income, car ownership, employment, and land-use patterns all affect the usage of the public transit system. This market analysis seeks to understand how these five elements affect the BAT system, and how they can be used to make the system more efficient than it already is to help BAT provide better service to its customers.

Methodology

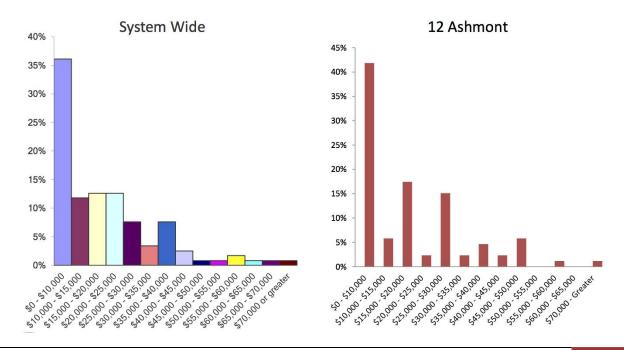
The methodology used for this market analysis was to consider the mapped elements of density, income, car ownership, employment, and land-use with regard to their relationship with the fixed route system. In addition to the utilization of these mapped elements, surveys were fielded to passengers over the course of a few weeks at the BAT Centre, the Ashmont MBTA station, and on buses, and over the phone for paratransit users. Post cards were also handed out to passengers that were unable to give their time to fill out a paper survey. The post cards contained a Survey Monkey web address so that these individuals could participate at their convenience. Additional market information was gathered via the U.S. Census American Fact Finder website and through ESRI Business Analyst online software.

Existing BAT Service Area Demographics

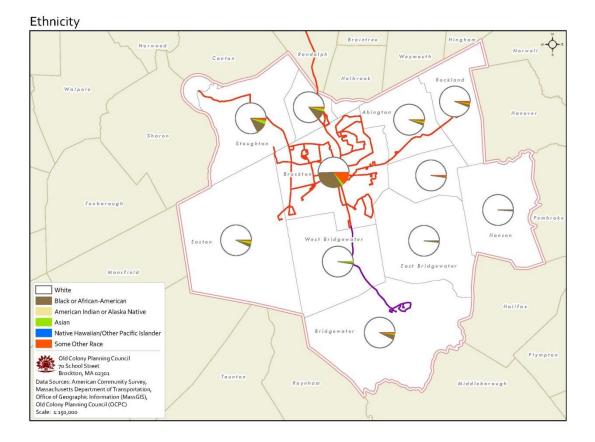
The Brockton Area Transit Authority (BAT) has a service area population of 253,685, with an average median age of 40 and average median household income of \$77,584 per year. In regards to employment, the BAT service area has approximate 96,535 jobs. The demographics that make up the BAT service area are far different than the demographics that actually ride the public transit system. While the BAT service area is predominantly white in ethnic makeup, the majority of those that use the system are people of color. In regards to the average median income of \$20,000 or less per year.



Passenger Income



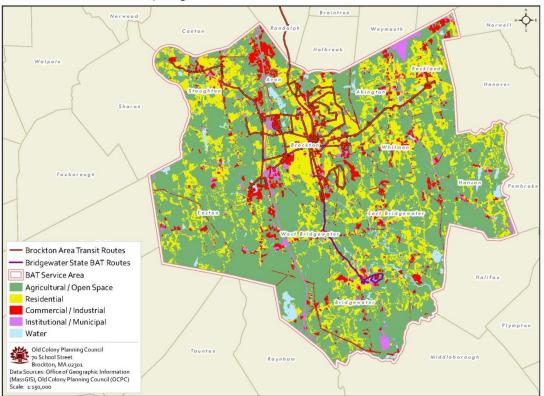
Considering the paratransit system in regards to service area demographics, those results of the paratransit survey indicated that a majority of riders are ethnically white and have a median income of \$10,000 to \$15,000 per year. It is not surprising the paratransit survey produced such results, since the majority of the riding population of the paratransit system is 65 years and older, and this age demographic tends to be ethnically white due to historical ethno-demographics of the BAT paratransit service area. In regards to median income, the same can be said about this category as was stated about the ethnic makeup. It was not surprising that those who ride the paratransit service have median household incomes of \$10,000 to \$15,000 per year due to riders being seniors or those with disabilities, and often on fixed incomes.



Existing BAT Service Area Land-Uses

Land-use patterns, reflecting the kinds of development in a given town or city, play a major factor in the performance of public transit services, and can dictate how successful public transit can be in a given area. In an area of suburban single-family homes, public transit tends to have a harder time attracting ridership due to the rather small population pool and the distances one usually has to travel to reach places of employment, shopping, entertainment, and other services. When land use in a given area tend to have many apartments and multifamily homes in a denser, urban environment, public transit service

tends to benefit due to the larger pool of potential riders and the close proximity of services and places of employment.



BAT Service Area Land Use, 2005

As can be seen in the map above, BAT operates in some of the most concentrated areas of residences and institutional/municipal services, as well as commercial and industrial locations. While it may appear that there are corridors of all these land-use types BAT does not currently serve, this does not necessarily means these corridors are appropriate for public transit service.

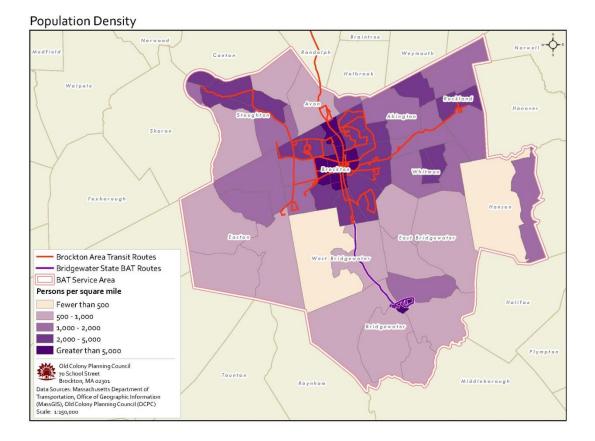
Outside the City of Brockton, most of the BAT service area can be characterized as suburban or rural in nature, with some towns having small urban centers. Commercial corridors tend to be strip malls, with very little or no residential uses mixed in. The towns to the south of Brockton, like West Bridgewater and East Bridgewater, would be very hard to service with traditional fixed route bus service, and are better left to demand response services. Despite the land-use characteristics for areas outside of Brockton, there are pockets of opportunity for fixed route service. Whitman's town center is fairly compact, and exhibits the urban land-use development types found in Brockton that are conducive to fixed route bus service. Service in Whitman should be explored to determine the feasibility of establishing a fixed route transit line. The Town of Easton has expressed interest in seeing an expansion of fixed route bus service within its town as well. BAT should explore the possibility of expanding service in Easton, and determine which corridors would be the ones conducive to fixed route bus service, if any. Specific attention should

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be given to the feasibility of operating service in downtown Easton (North Easton Village), along Washington St (Route 138), and on Belmont St (Route 123). Restoring service to the Avon Industrial Park, with the possibility having the line potentially service the new Amazon distribution facility, is something worth considering.

Existing BAT Service Area Density

BAT services one of the densest areas in Plymouth County and its only city, Brockton. BAT core fixed routes operate in an area with a population density greater than 5,000 persons per square mile, very conducive to transit ridership. Outside the city of Brockton's core area, the next densest areas BAT runs service would be the north, south, and eastern parts of Brockton followed by areas along route 27 in Stoughton, Whitman center, and downtown Bridgewater. Central Rockland has a rather dense core of 2,000 to 5,000 persons per square mile; however, the town has not produced much ridership on the BAT Rockland Flex Route.



Currently the city of Brockton is starting to experience the early signs of a resurgence in downtown city living. New apartment buildings are being constructed in downtown Brockton, and older industrial buildings are being used as residential properties. This renewed interest in downtown living in Brockton

will surely increase the area's density making it even more conducive to public transit use as this area becomes more desirable and residents take part in walking around the district to the shops and restaurants that will eventually come. It would be prudent for BAT to keep track of these changes, and promote its service to residents in the area to gain ridership.

Brockton is not the only municipality experiencing this growth in their downtown. Easton for example has experienced a renewed interest in its downtown, also called North Easton Village, and has seen new restaurants and shops open up since the expansion of sewer service in the area. It has also been expressed in Easton's master plan, *Envision Easton*, as the town seeks to intensify the density of this area in order to protect its rural and suburban neighborhoods from development. As the density of shops and residents increases in this section of Easton, BAT should consider the feasibility of providing fixed route service to this area, as its central location will be easy to serve.

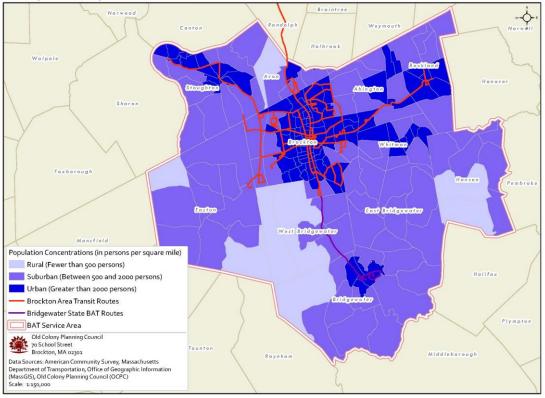
Stoughton is another town in the BAT service area experiencing a renewed interest in its downtown core. As part of the Stoughton master plan, the town hopes to reinvigorate its center with more housing and commercial development. Some of this renewed interest in Stoughton Center is already evident with a new apartment building in the area and others currently under construction. These new developments, and the potential of Stoughton Center once again becoming a place of economic activity, could provide ridership gains for BAT's Route 14, and might warrant additional service to the area in the future.

Downtown Bridgewater is an additional location with high density development patterns that is being eyed for its redevelopment potential. Downtown Bridgewater has been a part of numerous studies that seek to understand how the area can take advantage of Bridgewater State University, and become a center of economic growth for the town. With that in mind, the town of Bridgewater seeks to bring new business to its downtown, and increase its resident population to help support these new businesses. As the resident population grows, and new businesses find themselves in downtown Bridgewater, BAT will need to take a fresh look at the area to see if ridership gains could be made here.

Existing BAT Service Area Urbanism

One should not confuse density for urbanism, nor urbanism as being only dense development. There are many locations across the Commonwealth that have great urbanism, but are not very dense. Then there are areas that have density but no real urbanism. Just like density, urbanism plays a major role in the success of a public transportation system. The BAT service area can be characterized as mostly suburban, with small portions of rural land and concentrations of urbanism in a few locations. Without question, the majority of the urbanism in the BAT service area lies within the center of the City of Brockton. After Brockton, other locations of significant urbanism may be found in the towns of Stoughton, Whitman, parts of Rockland and Abington, and downtown Bridgewater.

Urban, Suburban, and Rural Areas

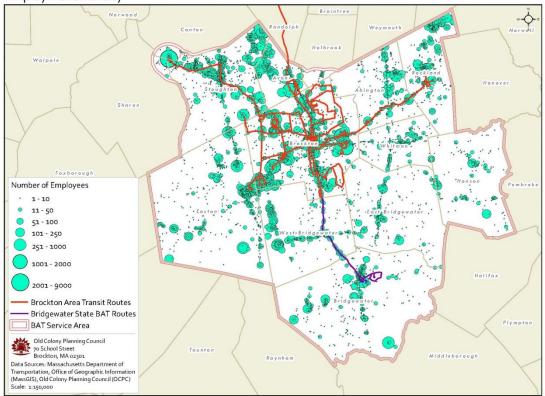


As was just mentioned, particular towns and Brockton are looking to increase their urbanism. Brockton is looking to strengthen its downtown, improving the urban condition in this district of the city. The recent building boom will only strengthen its identity as an urban center, and a place for those seeking urban living in the BAT service area. Along with Brockton, the towns of Stoughton, Bridgewater, and Easton are looking to increase urbanism in their respective towns. Each of these communities has recently produced master plans or targeted reports on improving their downtowns or town centers. Easton through its *Envision Easton* master plan has selected downtown Easton, also known as North Easton Village, for the enhancement of urbanism. The residents of Stoughton have likewise determined they would like to see the urbanism of their town center enhanced. Stoughton's master plan, along with many reports before it, calls for seeking out ways to improve the center's economic development opportunities as well as bring more residents to the area. The town of Bridgewater has chosen its downtown to increase urbanism by attracting new business and increasing the residential pool to prop up the business they hope to attract. With a large student population, the town of Bridgewater hopes to capitalize on the spending power they possess by having a more urban and vibrant downtown.

BAT should be mindful of those municipalities increasing their urbanism, as it could lead to potential ridership gains. As urbanism increases in these locales, enabling people to shop and take care of daily needs in their neighborhoods, public transit usage will be more attractive within and to these areas. BAT should be sure to market the transit system to these new residents.

Existing BAT Service Area Employment Density

BAT services some of the areas with the highest employment densities, with a significant density of jobs concentrated in the City of Brockton. That said, there are areas of opportunity where high concentrations of jobs exist. For example, the Avon Industrial Park contains substantial job densities on both the west side and east side of the park.



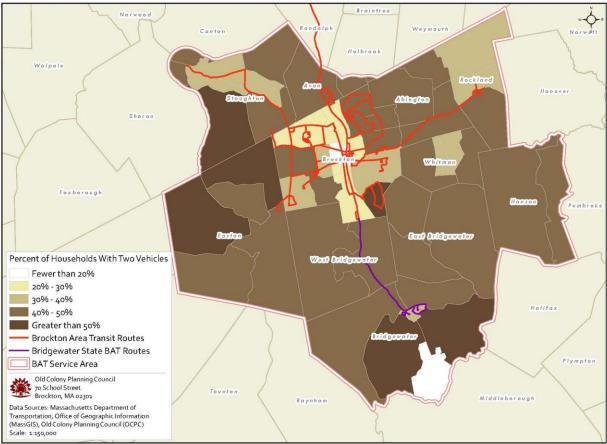
Employment Density

BAT has provided service to the western side of the industrial park in the past with not much success in spurring ridership, but it might be time to explore service to this industrial park again. A number of jobs lie along Washington St, also known as route 138. BAT should investigate the feasibility of establishing service along this corridor from Easton to Stoughton. Route 18 is another corridor where a high concentration of employment exists, especially in Abington, and should be analyzed to determine if it would be a good candidate for fixed route bus service in the future. If a bus route is ever established heading south to Taunton, the feasibility study for this route should consider the possibility of deviating from route 138 to Manley Street in West Bridgewater where there is a significant concentration of jobs. Central Bridgewater too has large number of jobs near its downtown. Currently the downtown area of Bridgewater is serviced by the Bridgewater State University (BSU) bus system. While the BSU bus system does connect to the BAT system at the Brockton Kmart, the service is sparse, and limited based on the

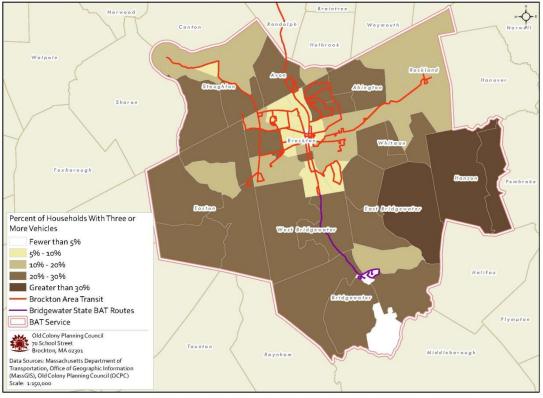
university's academic calendar. Establishing full-year service with a stop at the BAT Centre would allow greater access to this concentration of jobs around downtown Bridgewater, and could potentially generate more ridership for BAT.

Existing BAT Service and Car Ownership

Given the suburban nature of most of the BAT service area, and the relatively high average incomes, car ownership is very high. Forty to fifty percent of the households in the service area are two-car households, and in some communities the share of households with three or more cars is as high as 30%. The prevalence of such high automobile ownership poses significant ridership generation issues for public transportation.



Percent of Households With Two Vehicles

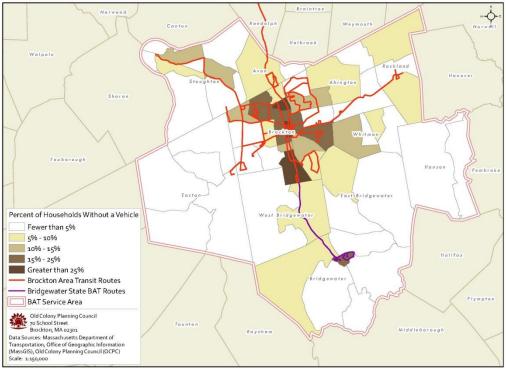


Percent of Households With Three or More Vehicles

On the other hand, BAT operates its fixed route bus system in areas with some of the lowest car ownership rates in Plymouth County, providing the system with significant ridership. Most of BAT's ridership is within the City of Brockton, which has a majority of the carless households in the region. In the City of Brockton there are sections of the city where households without a car can be greater than 25%, and other neighborhoods where households without cars can be 15% - 25%. Outside of Brockton, the ratio of households in the service area without cars falls to anywhere from 10% - 15% in some communities, dipping in others to 5% or less.

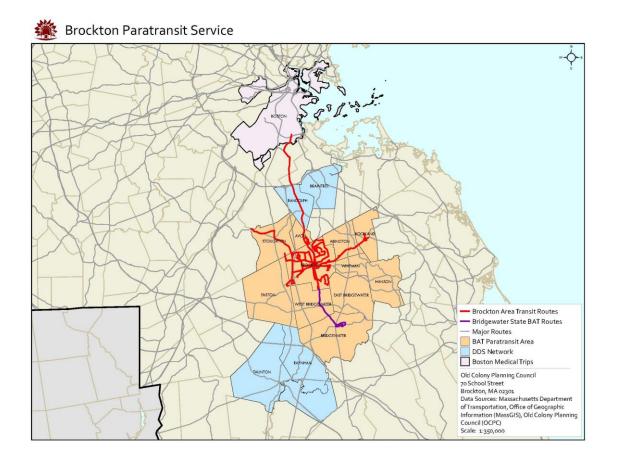
With private vehicle ownership so high in many communities that make up the BAT service area, BAT should continue its focus on areas that are most conducive to fixed route bus service. Bus service extended to these other high-car-ownership communities and neighborhoods will most likely yield very little ridership. However, if service is extended to these high-vehicle-ownership communities in the future, service should operate on the densest corridors of these communities, and strict attention should be paid to make sure it services neighborhoods with potential riding populations.

Percent of Households Without a Vehicle



Existing BAT Paratransit Service Area

DIAL-A-BAT, BAT's paratransit service, operates in 11 communities, and provides service to three additional communities outside the main service area. Due to rules that dictate who can ride paratransit service, only those who are 65 years and older, or have a disability that prevents them from using regular fixed route service, can ride DIAL-A-BAT. While DIAL-A-BAT ridership has been roughly the same for the last three years, hovering just over 190,000 trips per year, there is the possibility that ridership will expand in the coming years as the oldest set of baby boomers start to become eligible to ride paratransit services. According to recent data collection, by 2019 a much greater portion of the population in the BAT service area will become paratransit service eligible, and could start to put additional strain on the system.



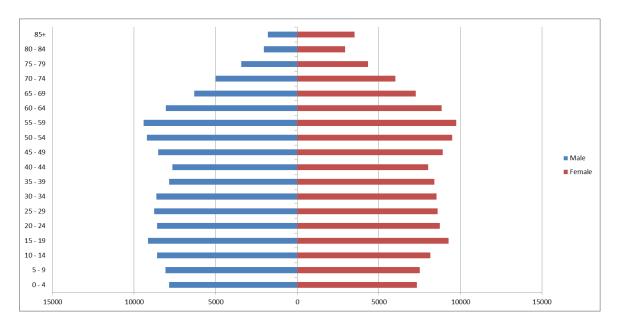
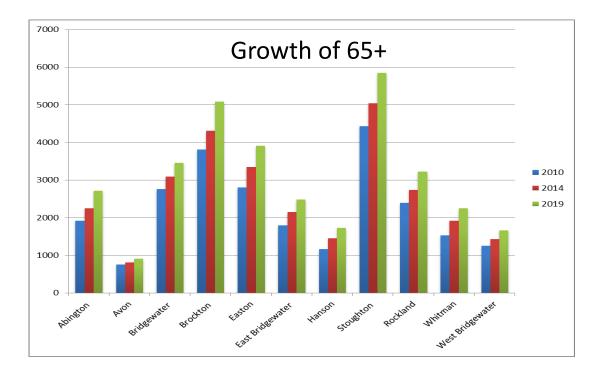


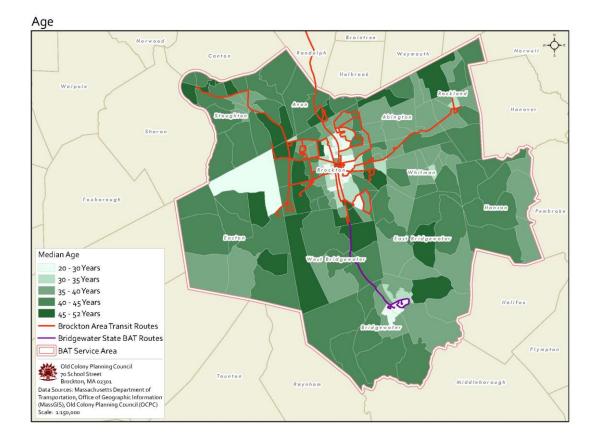
Figure I: Population Age Pyramid of Brockton Service Area

In 2019, the communities utilizing the paratransit service the most will not change much from year 2014. Most ridership will continue to come from Brockton, Stoughton, Easton, and Bridgewater. It should be noted that these communities are also those with the largest populations in the BAT service area, which is the reason why they will continue to dominate the number of paratransit trips.

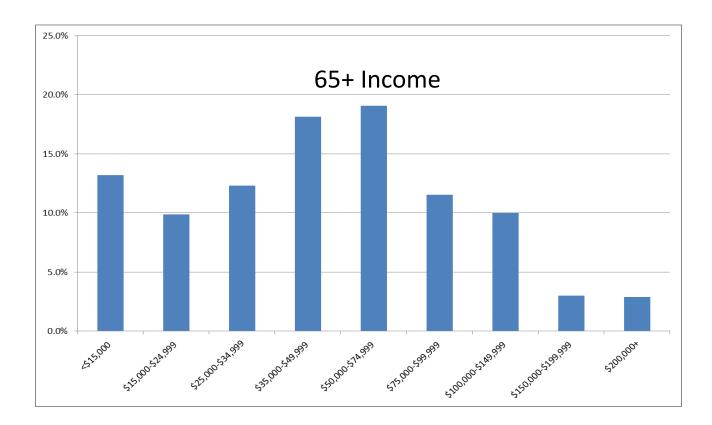


Senior Residence Patterns and Median Income

When we look at where these soon-to-be DIAL-A-BAT eligible populations tend to reside, we can see they mostly live in areas that are suburban in nature. This should not come as a surprise given the suburban development patterns that have been dominant for the last 70 years.

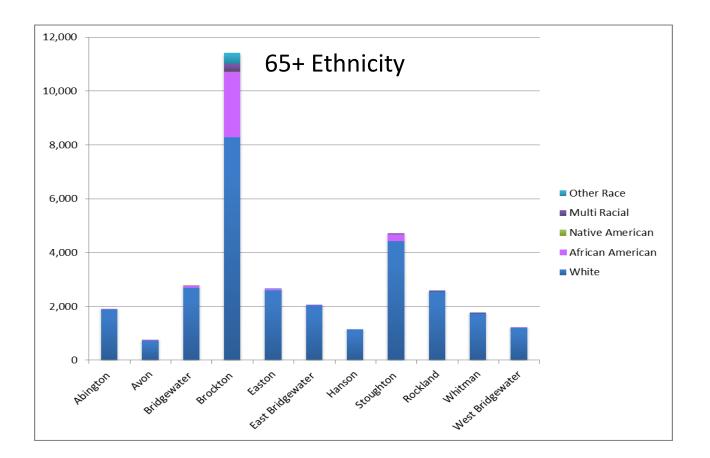


The senior populations in the BAT service area have a wide range of personal incomes. The largest two income groups have an annual income from \$50,000 - \$75,000, and \$35,000 - \$50,000, per annum respectively. After these two groups, the next largest group has an annual income of less than \$15,000 per year.



Ethnic Breakdown

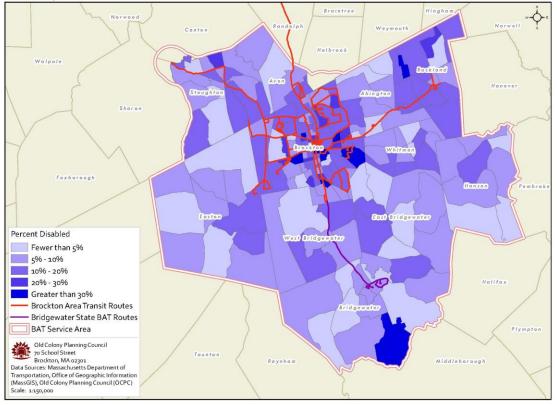
When we take the eligible senior riding population of the paratransit system and look at the ethnic demographics of riders, the majority of eligible Dial-A-BAT ridership is white. The next largest population over 65 that are Dial-A-BAT eligible is the African American community. Then the following eligible community identify themselves as of mixed ethnicity and other race. The largest portions of DIAL-A-BAT eligible minority seniors are concentrated in Brockton and then the town of Stoughton.



Persons with Disabilities

Beside seniors, DIAL-A-BAT also transports individuals with disabilities that are unable to use fixed route bus service as part of the requirements put forth by the Americans with Disabilities Act. The City of Brockton possesses a number of U.S. Census tracts in which households where people with disabilities reside make up 30% of households or more. Besides Brockton, high concentrations of those with disabilities exist in the south side of Bridgewater and on the western side of Rockland. After these communities, most communities in the BAT service area have Census tracts in which households where people with disabilities reside make up no more than 10% - 20% of the population.

Disability



BAT does a highly effective job of servicing dense areas conducive to transit ridership, and has not been pulled into servicing areas of low transit ridership potential. BAT should continue this policy of operating in areas conducive to transit ridership in order to keep operating costs down and ridership high. BAT's concentration of its fixed route service primarily within the City of Brockton should be continued. Brockton possesses land-uses, densities, and a high concentration of employment that are all conducive to public transit ridership. Brockton also contains a number of households of modest means, along with a large youth population and households that do not own automobiles, which are populations that tend to ride public transportation the most. If future expansion is sought due to community demand, especially in the more suburban and rural areas of the BAT service area, only the densest corridors should be serviced.

As communities urbanize, and more individuals and households move towards urban living, BAT will need to evaluate service in these particular areas to determine if service levels are appropriate or if service needs to be established. BAT should also market its services to these new urban dwellers to encourage them to take public transportation and spur ridership growth, as traveling by car in these areas will be more challenging. At the same time, entertainment, shopping and other amenities will be geographically close, and made more accessible utilizing public transit. It would be worthwhile for BAT

to conduct periodic market surveys in these urban districts to see where residents would like to see public transport go, and what would make them ride the system.

Finally, BAT needs to start preparing for a possible wave of new ridership that will stem from the baby boom generation that is beginning to retire and become eligible to use DIAL-A-BAT services. As this population begins riding DIAL-A-BAT, every effort should be made to move this population to the fixed route system where possible to offset the high cost per trip of paratransit service. BAT should aggressively market its fixed route service to these baby boomers that live in areas with fixed route service, as they could be a large pool of potential ridership generation.

Public Participation

Public outreach and participation is taken very seriously by BAT, and that was no different with the CRTP. BAT has a comprehensive public participation process, and it was this document that drove the public outreach component of the study. As part of the study, OCPC and BAT conducted seven public outreach sessions either at the BAT Centre or the Ashmont MBTA station to understand the public's transportation needs. These outreach sessions distributed surveys to passengers, and explained the study and its goals. After initial examination generated a series of recommendations, additional public meetings were held during the midpoint of the study, and at the 90% completion point, to get passenger feedback on the proposed recommendations. These meetings were announced via signs posted at the BAT Centre, Ashmont MBTA station, on buses, and in the Brockton Enterprise newspaper. In addition, BAT translated all meeting notices and surveys into the three LEP languages as required by MassDOT and the federal government. At these meetings, passengers were engaged by OCPC and BAT staff to solicit their ideas concerning the transit system, and were given comment cards for providing feedback.

Along with reaching out to the riding public, BAT reached out to the business community to gain a better understanding of the transportation needs of employers and employees. OCPC, on behalf of BAT, sent out 250 business surveys in the BAT service area, targeting those businesses with 25 or more employees. The results were then used in the market analysis of the system.

In addition to passenger and business community outreach, BAT and OCPC also enlisted a group of stakeholders in the service area to hear what they thought would improve the transit system, and to understand the transportation needs of their constituents. These stakeholders are leaders in their respective fields of education, health care, social services, and veterans' affairs. This stakeholders group met five times over the course of 18 months while the CRTP was ongoing, providing feedback on ideas and recommendations while reviewing important data findings.

After evaluating the success of the CRTP public outreach and participation process, it is the recommendation of this study that BAT continues its current public participation practices outlined in its public participation guiding document. As time goes on, and new best practices in public participation processes are developed, the document should be updated to reflect these new best practices. When appropriate and available, BAT should utilize the latest in technologies in the public participation

process, presuming they are cost effective and relatively easy for the public to use, no matter their language or physical capabilities.

Transit System Funding

The Brockton Area Transit Authority (BAT) is reliant on stable funding from various sources including but not limited to the Federal Transit Administration (FTA), the Commonwealth of Massachusetts, local communities, agency partnerships, private contracts and, of course, our customers.

BAT's service has benefited from increased state funding over the past two fiscal years, relatively stable federal funding through the negotiated urbanized area funding formula, local community assessments that are increased by 2 ½ percent per year under Proposition 2 ½ and more for new service, modestly growing fare revenues generated by stable and modest ridership growth and increases in parking and advertising revenues. Therefore, the recent environment of funding operating expenses will also permit BAT to use federal funds in an effort to maintain a "State of Good Repair" (SOGR) with additional assistance from the Commonwealth. Additional assistance from the Commonwealth. Additional assistance from the Commonwealth will be necessary to aid BAT with its fleet replacement and modernization efforts, expand its rolling stock if services identified under the Comprehensive Regional Transit Plan (CRTP) are instituted and to meet technological advancements as well as other system infrastructure needs.

BAT has implemented services over the past several years through federal funding sources distributed by the Commonwealth that have contract ending dates. These short-term funding sources have been eliminated under recent federal reauthorization and will no longer be available in future years. BAT has successfully demonstrated the effectiveness and productivity of the service and has identified these services as a priority within the CRTP with input given from the stakeholder group. Therefore, the importance of the services provided and the elimination of the federal programs presents a funding challenge for BAT.

Conclusion

BAT is a mature system that serves many, if not all, of the most conducive public transit areas in the Old Colony Region. When analyzing a system like BAT, and trying to determine how service should be improved, it is about seeing how the system can be made more effective and efficient, how the passenger experience can be improved both on buses and at bus stops, and how interagency connections can be improved. BAT should be cautious when it comes to expanding service area and hours, as many communities in the region are not conducive to fixed route transit use and are best left to a paratransit-style, by-request service. The recommendations put forth in this study, especially those regarding expansion of the service area, need their own individual study, and should be implemented in a cost-conservative manner that considers potential ridership.

The major issues cited by many BAT passengers are that service is slow, wait times long, span of service hours not conducive to travel needs, and locations being not currently reachable as the system exists today. To address some of these issues, the Old Colony Planning Council has put forth a number of system improvement suggestions to meet the demands of the riding public.

Current Routes

BAT should review bus stop placement, and look at reducing the number of stops to reduce bus dwell time and speed up service, especially on the most popular lines. Some routes should be realigned on different streets for improved efficiency, enhanced safety, and to service underserved or unserved destinations. Those routes that are underperforming, in particular Routes 10 and 11, should be further reviewed for possible route consolidation. Those routes experiencing considerable delays should be looked at for possible route realignment, or splitting of routes into two or more routes to reduce bus tardiness and provide more reliable service. Routes experiencing significant ridership, with the potential for overcrowding and safety issues, should have more frequent or bigger buses added to the line to alleviate this problem. BAT should continue to exceed the performance measure standards present throughout the Commonwealth at other regional transit authorities, and persist on meeting and surpassing its own more stringent system performance standards.

Service Expansion Opportunities

While BAT does serve those areas with the greatest propensity for public transit use, this does not mean BAT should not investigate the establishment of new routes or destinations for possible service. BAT should seek to identify corridors and communities where service can be expanded or established to meet community needs. Route 14 should service the BAT Centre every trip, and service between Westgate Mall and the BAT Centre should be drop off only with no boardings for speedier service. Consideration should be given to the possibility of terminating the Rockland Flex Route at the Abington Wal-Mart, or transitioning the service into a paratransit service.

BAT should study the feasibility of establishing service in Downtown Easton, providing service to Stonehill College, Queset Commons, and Easton Target via Center Street and Depot Street. A route connecting Easton with the Town of Stoughton should be examined, connecting the two towns with the Brockton's Veterans Administration Hospital, Brockton's Stop and Shop/Shaw's Plazas, and the Roche Bros. Plaza that is also slated to become a South Coast Rail station.

Consideration should be given to splitting Route 8 into two lines to help Route 8's on-time performance, resulting in the creation of a new Route 7 in the lower eastside of Brockton where route 8 provides service now. New Route 7 would help improve on-time performance for Route 8, and establish a more

direct route for those living on the lower eastside of Brockton to get to the BAT Centre. In addition to the study of splitting route 8 into two possible routes, BAT should study the possibility of operating service along Forest Avenue where no service currently exists. Establishing service along Forest Avenue would provide transit service along a dense housing corridor that has a high school and commercial areas at the western end of the road. Currently, individuals living along Forest Avenue or points south have to walk a significant distance to gain access to the BAT system. Forest Avenue is a corridor that would also service the potential Brockton Casino, if it is built.

BAT should study the possibility of establishing service from Whitman along Route 18 and terminating at the South Shore Hospital. There are many commercial areas long this route, and the center of Whitman possesses land-uses conducive to transit usage. A route along Route 18 would also allow passengers to access the medical services at the hospital.

A transit link between the City of Brockton and the City of Taunton was one of the most requested connections according to study outreach. There are many Commonwealth services in the City of Taunton that passengers would like to access, but passengers currently have no way of getting to those services. BAT should work with the Greater Attleboro Taunton Regional Transit Authority in studying the feasibility of developing service between the two communities.

While at one time the Avon Industrial Park did have transit service, ridership was low and ultimately discontinued due to underperformance. During public outreach, many passengers expressed the desire to see service return to the area. BAT should investigate the prospects of once again operating service into the Avon Industrial Park, which will also connect with the Stoughton YMCA, Target, and the new Amazon warehouse facility.

BAT Centre Recommendation

With the recent addition of bicycle racks on BAT buses, BAT is seeing growth in bicycle usage among its customers. As a result of this growing bicycle usage, BAT should establish more secure and inviting bicycle parking. We recommend that BAT construct a pedal-and-park style facility at the BAT Centre, similar to what the MBTA has at several of its stations, to encourage greater usage of the transit system by cyclists while increasing the Centre's accessibility.

Although BAT does provide ample seating at the BAT Centre, some of this seating is outside. During the winter months and downpours, passengers head indoors to shelter, creating seating capacity problems. BAT should invest in more seating at the BAT Centre to benefit passengers when the weather outside is foul.

BAT should work with the MBTA and the Commonwealth to help bring MBTA buses to the BAT Centre. Currently passengers wishing to travel to points beyond the BAT service area, like the South Shore Plaza, need to transfer between the MBTA and BAT buses. Having the MBTA service the BAT Centre directly gives passengers better service beyond the BAT service area, and does not require transferring between the two systems.

BAT Media Recommendations

Currently, BAT transit maps are not found on buses, or easily at the BAT Centre. BAT should consider displaying its system map onboard all fixed route buses to help passengers understand where they can travel while riding BAT. A system map, or a much larger regional transit map, should be displayed at the BAT Centre to help passengers navigate the BAT system as well as other systems via transfer.

BAT should continue to print route schedules for all its fixed route service for those that are not tech savvy and unable to utilize the Next Bus real-time bus arrival prediction system. Also included on those printed schedules should be an estimated time mid-point to help passengers that are not catching a bus at the BAT Centre, and to help passengers at the end of the line understand when they should go out and wait for the bus. These schedules should be offered in the three LEP languages.

BAT should develop a digital ride guide for each line. These guides should highlight individual lines and the route and destinations they serve. These digital ride guides should also be translated in all three LEP languages.

At the moment, BAT has a very small presence on social media. BAT should investigate which social media platforms it should use to interact with the riding public. Utilizing social media could help BAT get the word out when there are service changes and disruptions, as well as be a tool for notifying passengers of upcoming public outreach events. Using social media could be especially advantageous with younger riders that already use social media to a high degree.

Fare Collection Opportunities

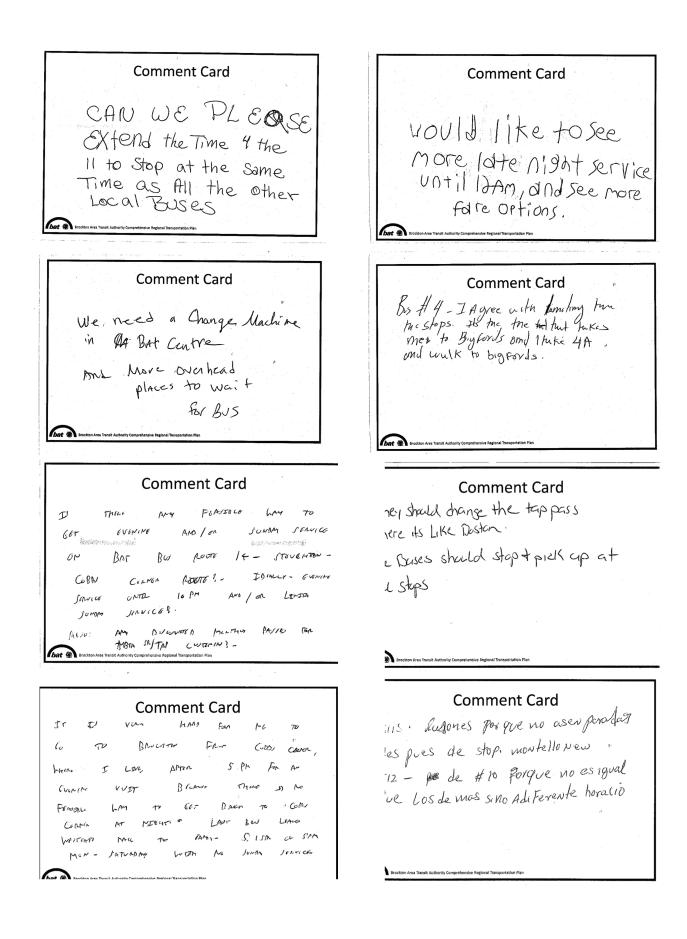
BAT has not raised fares in several years, where other transit systems in the Commonwealth have increased their fare over the last few years. BAT has a highly competitive fare at \$1.25 per ride. The MBTA, which operates partially in the BAT service area, charges \$2.10. BAT should consider raising cash fares by 25 cents while lowering Charlie Card fares by \$0.50. Lowering Charlie Card fares will not only save the passenger money, spurring greater usage of the Charlie Card saves BAT funds in terms of collecting money out of the fare box.

BAT should give serious consideration to install a ticket vending machine (TVM) at Westgate Mall. Having a TVM at this location will help engender greater usage of the Charlie Card, and offer passengers greater convenience in reloading their Charlie Card, especially since the mall is a major transfer point in the BAT system. Web-based access to BAT Charlie Card accounts should also be offered to the passengers so that they can reload their card over the web, and review its balance.

DIAL-A-BAT Service Recommendations

BAT should engage their DIAL-A-BAT passengers in helping them understand the service they receive through DIAL-A-BAT, and where they can travel on the system. Currently BAT accompanies passengers inside buildings, and will assist them as far as the third floor. While accompanying DIAL-A-BAT riders this far into a building is almost certainly appreciated, this practice can cause serious delays in picking up the next passenger. BAT should eliminate this practice, and only assist passengers as far as the first floor of a building. Service providers at the passenger's destination should be able to provide assistance beyond that point. BAT should also move the DIAL-A-BAT system to 10/20 drop-off and pick-up windows. In this framework, DIAL-A-BAT vehicles dropping off passengers at their destination 10 minutes before or 20 minutes after their quoted pick-up and arrival times would still be considered on-time. With the possible surge in demand from baby boomers becoming DIAL-A-BAT eligible, the DIAL-A-BAT system should move passengers capable of using fixed route service - and who live in an area where it is available - through a travel-training and assessment program. Moving more DIAL-A-BAT passengers to fixed route service will reduce costs for the BAT system, and free up available DIAL-A-BAT trips for those unable to utilize the fixed route system.

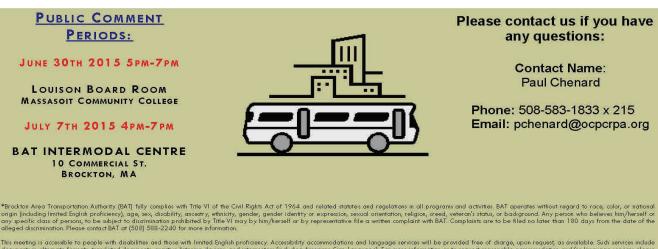
Appendices



GIVE US YOUR THOUGHTS



Come, see, and give us your feedback on service recommendation for the Brockton Area Transit Authority's (BAT) Comprehensive Regional Transportation Plan. Your comments on these recommendations are critical in shaping the public transportation system you want.

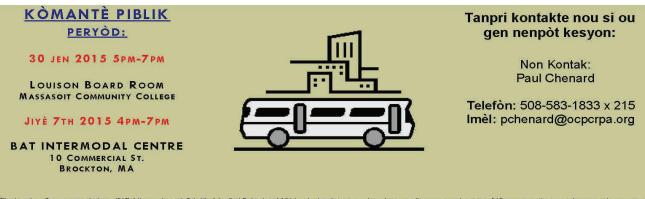


This meeting is accessible to people with disabilities and those with limited English profidency. Accessibility accommodations and language services will be provided free of charge, upon request, as available. Such services include documents in alternate formats, translated documents, assistive listening devices, and interpreters (including American Sign Language). For more information or to request reasonable accommodation and/or language services please contract for another language, please contract BAT at (508) 588-2240. Se sensions are an informação e necessária em outro idlama, por favor pongase en contracto com BAT (508) 588-2240. Si se necessária em outro idlama, por favor pongase en contracto com BAT (508) 588-2240. Si se necessária em autro idlama, por favor pongase en contracto com BAT (508) 588-2240. Si se necessária em autro idlama, por favor pongase en contracto com BAT (508) 588-2240. Si se necessária em autro idlama, por favor pongase en contracto com BAT (508) 588-2240. Si se necessária em autro idlama, por favor pongase en contracto com BAT (508) 588-2240. Si se necessária em autro idlama, por favor pongase en contracto com BAT (508) 588-2240. Si se necessária em autro idlama, por favor pongase en contracto com BAT (508) 588-2240. Si se necessária em autro idlama, por favor pongase en contracto com BAT (508) 588-2240. Si se necessária em autro idlama, por favor pongase en contracto com BAT (508) 588-2240. Si se necessária em autro idlama, por favor pongase en contracto com BAT (508) 588-2240. Si se necessária em autro idlama contracto com BAT em (508) 588-2240. Si se necessária em autro idlama contracto com BAT en (508) 588-2240. Si se necessária em autro idlama contracto com BAT en (508) 588-2240. Si se necessária em autro idlama contracto com BAT en (508) 588-2240. Si se necessária em autro idlama contracto com BAT en (508) 588-2240. Si se necessária em autro idlama contracto com BAT en (508) 588-2240. Si se necessária em autro idlama contracto com BAT en (508) 588-2240. Si se necessária em a

BAY NOU PANSE OU

Hybrid Bu	s	www.ridebat.com
	bat	

Vini non, wè, l'ap ban nou fidbak ou sou rekòmandasyon sèvis pou Brockton Zòn Otorite a Transit la (BAT) Comprehensive Plan Transpò Rejyonal la. Kòmantè ou sou rekòmandasyon sa yo, se kritik nan mete sistèm nan transpò piblik ou vle.



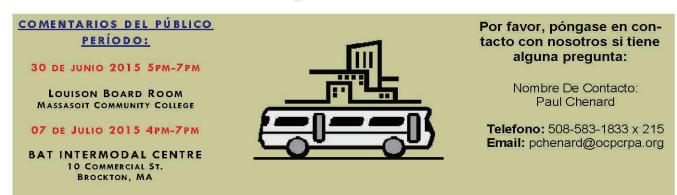
*Brockton Area Transportation Authority (BAT) fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. BAT operates without regard to race, color, or national origin (including limited English proficiency), age, sex, disability, ancerty, ethnicity, ethnicity, gender, gender identity or expression, sexual onentation, religion, areed, veteran's status, or badground. Any person who believes him/herself or any specific dass of persons, to be subject to disamination prohibited by Title VI may by him/herself or by representative file a written complaint with BAT. Complaints are to be filed no later than 180 days from the date of the alleged discrimination. Please contrad BAT at (508) 568-2240 for more information.

This meeting is accessible to people with disabilities and those with limited English profidency. Accessibility accommodations and language services will be provided free of charge, upon request, as available. Such services indude documents in alternate formats, translated documents, assistive listening devices, and interpreters (induding American Sign Language). For more information or to request reasonable accommodation and/or language services please (if this information is needed in another language, please contract BAT at (508) 588-2240. Si is necessita eta informação e encessária em outro idiano, por favor pringase en contrato com BAT em (508) 588-2240. Si is necessita eta informação en otro idiono, por favor pringase en contrato com BAT et (508) 588-2240. Si is necessita eta informação se a nan yan lót lang, tanpri kontakte BAT nan (508) 588-2240.





Venid, ved, y nos dan su opinión sobre la recomendación del servicio de la Autoridad de Tránsito del Área de Brockton (BAT) Plan Regional de Transporte Integral. Sus comentarios sobre estas recomendaciones son fundamentales en la formación del sistema de transporte público que desee.



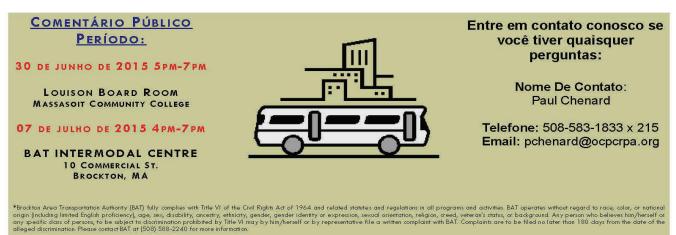
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DÊ-NOS SEUS PENSAMENTOS

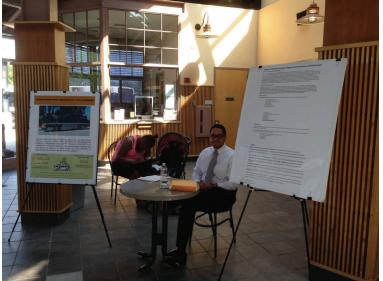


Vinde, vede, e dar-nos o seu feedback sobre a recomendação de serviço para o trânsito da área de Brockton Authority (BAT) Comprehensive Plano de Transporte Regional. Seus comentários sobre estas recomendações são fundamentais na definição do sistema de transporte público que você deseja.



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☆Niccoli Oil Log On For Prices: www.niccolioil.com Joe for Oil" Welcome · Automatic Del. · Self Help Svc/Install · Most Credit Cards (508)588-0979

Automotive Aftermarket \$All Cars Wanted\$ \$ CASH PAID \$ 508-577-0073 BROCKTON **AUTO PARTS** Scale open 7 days or same day pickup.

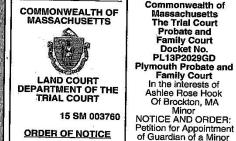
FINC house. Find HOMAS Open flouses Bondos



Legals PUBLIC HEARING NOTICE

The Abington Planning Board will hold a public hearing on Monday, July 6, 2015 at 6:15 P.M. at Abington Town Hall on a Definitive Subdivision Plan of Borrago Estatos Plan of Borrego Estates An Extension of Karen Lane in Abington, Massachusetts" showing Massachusetts' showing a proposed extension to Karen Lane. Property is owned by James Rourke, 466 Plymouth Street, PO Box 41, Abington, MA 02351. The applicant is David Albrecht, Borrego Solar Systems, Inc., 55 Technology Drive, Loweli, MA 01851. The plan is dated May 15 plan is dated May 15, 2015, and was drawn by Prime Engineering, P.O. Box 1088, 350 Bedford Street, Lakeville, MA 02347. The property is located on Assessor's map 22 Lots 35 & 36. Plans may be viewed at Plans may be viewed at the office of the Town Clerk, at the Abington Town Hall Monday thru Friday 8:30 a.m. to 4:30

p.m. Wayne P. Smith Chairman 6/22/15 & 6/29/15 13293716



ORDER OF NOTICE

TO: Azuka E. Onujiogu

and to all persons enti-tied to the benefit of the tied to the benefit of the Servicemembers Civil Relief Act, 50 U.S.C. App. § 501 *et.* Seq.: Wells Fargo Bank, National Association as Trustee for Option One Mortgage Loan Trust 2006-1, Asset-Backed Octificate Secte Option ertificates, Series 2006-1 claiming to have an interest in a Mortgage covering real property in Brockton, numbered 62 Locust Street, given by

Legals

Ing to those individu listed below at loca indicated: 999 Bed St., Whitman, MA 02 (781)447-4376 on Ju 2015 at 2:00PM, Havey #074 (Furni Sylvia Heikkila 1 (Household Item Stephen Ventola 2

in Ventola 218 (equipment, shering, boxes), Jernifer Schnabel #301 (urni-ture), Dawn Bennett How-

(Household furn Loreen McGrath (furniture, clothes household items), MacFarland

MacFarland (Household Ge Daniel Cingolan (N/A), Amanda E #520 (Furniture), F Federico #329 (h hold goods, furr dressers), Stacey #031 (Household (Furniture), Vi

(Household Goods auction will be liste

advertised on www

agetreasures.d

Purchases must made with cash only paid at the above r enced facility in orde

transaction. Extra Sp

Storage may refuse bid and may rescind purchase up until t winning bidder tak possession of the pe

sonal property. 6/22/15 & 6/29/15

Commonwealth of

Massachusetts

The Trial Court Probate and

NOTICE TO ALL INTERESTED PARTIES 1. Hearing Date/Time: A hearing on a Petition for Appointment of Guardian of a Minor filed on 10/24/2013 by Christine M MacFarland of Brockton, MA will be held 07/06/2015 09:00 AM Guardianship of Minor Hearing Located 215

Hearing Located 215 Main Street Brockton MA

2. Response to Petition: You may respond by fil-ing a written response to the Petition or by appear-ing in person at the bear-

02301

Furniture), Gustafson

complete

13295619

BROCKTON AREA RANSIT AUTHORIT PUBLIC MEETING NOTICE: Notice is hereby giver that Extra Space Storag will sell at public auction to satisfy the lien of the owner, personal prope y described below belong Public Meetings to Provide Feedback on ng to those individu

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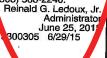
Vi toria 050

S e r v i c e Recommendations for Brockton Area Transit Authority's (BAT) Comprehensive Regional Transportation Plan.

Authority is holding two (2) public meetings, the first on Tuesday, June 30, 2015 from 5 p.m. to 30, 2015 from 5 p.m. to 7 p.m. in the Louison Board Room at Massasoit Community College, 1 Massasoit Blvd., Brockton and a second on July 7, 2015 from 4 p.m. to 7 p.m. at the BAT Intermodal Centre. 10 Commercial Street, Brockton. The purpose of the meetings is to provide feedback on service

feedback on service recommendations for BAT's Comprehensive Regional Transportation Plan. Comments on these recommendations are critical in shaping the public transportation

These meetings are accessible to people with disabilities and those with limited English proficiency. English proficiency. Accessibility accommo-dations and language services will be provided upon request. For more information or to request reasonable accommodations and/or language services please contact BAT (508) 588-2240.





Notice is hereby given that Extra Space Storage will sell at public auction, to satisfy the lien of the Win seli at public auction, to satisfy the lien of the owner, personal property described below belong-ing to those individuals listed below at location indicated: 230 Oak St, Brockton, MA 02301 508-941-0022 on July 7, 2015 at 4PM. Carla S Xavier – 6 (Boxes, Fitness Equipment, Luggage); Marlene Goncalves – 10 (furniture, Pictures); Robert Fuqua – 16 (Furniture, Totes); Jamie Givens – 186 (Freezer, Fitness Equipment, Boxes); Beverly Y Hilare - 212 (Decorations, Trophy's, Clothes, Trophy's, Clothes,



MORTGAGEE'S SALE OF REAL ESTATE

By virtue and in execution of the Power of Sale tained in a certain mortgage given by Peter B. and Eugenia Kerr to Randolph Savings Bank, (December 24, 2003 and recorded with the Plyn County Paristry of Danda in Back 07007. Dounty Registry of Deeds in Book 27327, Pag f which mortgage the undersigned is the pri plder, for breach of the conditions of said mort at for the purpose of foreclosing same will be public auction at 9:00 AM, on July 15, 201 mortgaged premises being known as 46 L ad, Brockton, Massachusetts, being all and ar the premises described in said mortga

ertain parcel of land with the buildings the ated on Lester Road, Brockton, Plym nty, Massachusetts, and being shown as 5 on a plan entitled "Brookfield Heigh kton, Brockton, Mass- dated Nov. 1, 1 ord Saivetz, CE.," duly recorded with Plym stry of Deeds as Plan No. 42 of 1958, to v reference is hereby made for a more parti i toton. sit Co 211 Bro Bra Reg plai des iption.

Con said ining 13,080 square feet of land according lan.

Exce ting and excluding from this convevance said Lester Road, opposite said lot, but t eby granted the right to use the streets fee i is he shown on said plan in common with ot y entitled thereto. wav lawfi Rein

the same premises as conveyed to the r by deed of Braintree Homes, Inc., dated 959, recorded with Plymouth County Rec eds, Book 2714, Page 194. bove described premises will be sold S TO and with the benefit of all restrict. gago 10. of D

<u>JEÇ</u> TO and with the benefit of all restriction ments, improvements, covenants, condition ing and zoning laws, to any and all un s, tax titles, water and sewer charges, muni-ther public taxes, assessments or liens, s of tenants and parties in possession, if any **MS OF SALE:** posit of \$7,500.00 DOLLARS shall be pair successful bidder to the mortgagee in cash fied or by cashier's check at the time and p ne sale as a deposit. The successful bidder eas buil taxe or o righ TEI

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the successful bidder to the mortgagee in cast certified or by cashier's check at the time and p of ne sale as a deposit. The successful bidder be required to execute an Auction Sale Agreer in nediately after the close of the bidding. The a ce of the purchase price shall be paid in cash c riffied check, by cashier's check, or other ct s tisfactory to Mortgagee's attorney within thirty ays thereafter at the offices of BARSH A OHEN, P.C., Attorneys for the Mortgagee, Wells Avenue, Newton, Massachusetts, in excha for which and at such time and place, the deed s be delivered to the purchaser for recording. The Mortgage reserves the right to amend the f going terms of sale by written or oral announcen made before the auction sale, during the sale th of or at the commencement of or during any p poned sale, the right to bid at the sale, to reject and all bids, and to postpone the sale up until time the property is declared sold by the auctione The description of the premises contained in s mortgage shall control in the event of an error in Notice of Mortgagee's Sale or its publication. OTHER TERMS TO BE ANNOUNCED AT THE TIME AND PLACE OF THE SALE.

TIME AND PLACE OF THE SALE. Dated: June 16, 2015

6, 2015 Signed: Randolph Savings B Present Holder of said Mortg By its Attorne Barsh and Cohen, F Lawrence P. Cohen, Esq Attorney for the Mortga 70 Wells Ave Newton, Massachusetts 02459-3: (617) 332-4 (617) 332-4.

13295911 6/22,29,7/6, 2015



NOTICE OF PUBLI SALE OF PERSONA PROPERTY

Notice is hereby giv that Extra Space Stora will sell at public aucti



Brockton Area Transit Authority Comprehensive Regional Transportation Plan

MEMORANDUM

TO:	Members of the BAT Comprehensive Regional Transportation Plan
FROM:	Ray Ledoux, BAT Administrator
DATE:	May 12, 2015
SUBJECT:	Next CRTP Meeting

BAT has scheduled its fourth CRTP planning meeting for Wednesday, May 20th at the Louison Room at Massasoit Community College. The meeting will begin at noon with a light lunch served. The Old Colony Planning Council will be presenting a series of preliminary service recommendations for both the fixed route and paratransit service.

Thank you so much for participation and input. Would you please RSVP with Paul Chenard at <u>pchenard@ocpcrpa.org</u> or 508-583-1833 Ext: 215. We need an accurate count of attendees to plan for lunch.

Topics for discussion will include:

- Preliminary service recommendations for fixed route and paratransit services
- Discussion of what a proposed fare increase would look like
- Installation of bicycle racks on buses
- Future Public Hearings

Again, thank you so much for your participation and interest in shaping the transportation needs of the region.



Brockton Area Transit Authority Comprehensive Regional Transportation Plan

Brockton Area Transit Authority Comprehensive Regional Transit Plan Final Stakeholder Meeting Agenda 12pm – 2pm

- 1) Meeting convenes and introductions
- 2) Presentation on final draft service recommendations
 - Review of final Fixed Route service recommendations
 - Review of final Paratransit service recommendations
 - Review of possible future fare change analysis
 - Review of BAT's Market Analysis
 - Review of public outreach conducted
 - Review of final possible passenger experience improvements
- 3) Participant comments
- 4) Discussion of the next steps in the submitting of the final report
- 5) Closing remarks

Appendix B: Stakeholders Meeting — Stakeholders List

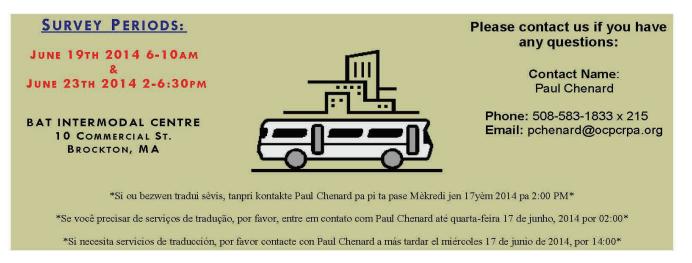
Individual	Organization
Phillip Shepard	Massasoit Community College
Dr. Charles Wall	Massasoit Community College
Bill Mitchell	Massasoit Community College
Lydia Camara	Massasoit Community College
Mike Thomas	Brockton Public Schools
Thomas Schivone	MassDOT
Fred Clark	Bridgewater State University
Mia Carey	Bridgewater State University
Mary Waldron	Bridgewater State University
Mike Jacques	Brockton Neighborhood Healthcare
Sue Joss	Brockton Neighborhood Healthcare
Shaynah Barnes	City of Brockton—City Council
Diane Kendrick	Mass Rehabilitation Commission
Mark Donahue	Donahue Associates
Cathie Klabish	BAT– Consumer Advisory Committee
Kim Hollon	Signature Healthcare—Brockton
Chris Cooney	Metro South Chamber of Commerce
Dennis Carmen	United Way—Plymouth
Jim Pinkham	Utility Workers Union of America
Steven Higgins	Independent Associates
Dave Farrell	Veteran Affairs—Brockton
William Morse	Mutual Bank—Brockton

-

GIVE US YOUR THOUGHTS ON BAT



The Brockton Area Transit Authority (BAT) and the Old Colony Planning Council (OCPC) are conducting a Comprehensive Regional Transportation Plan (CRTP). The goal of the CRTP is to insure that BAT is more efficient and dependable. Anything you can tell us to help us to better serve you, the customer, is appreciated. Remember, we are all in this together.



BAN NOU PANSE OU SOU BAT



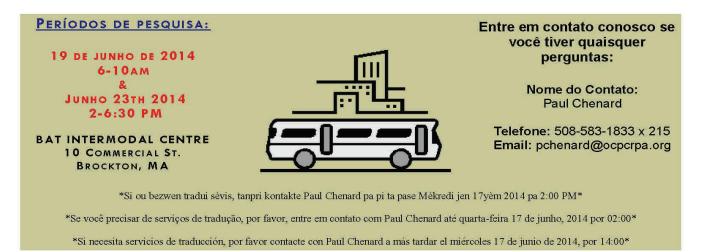
Transpò Piblik Otorite a Brockton Zòn (BAT) ak Old Koloni Konsèy la Planifikasyon (OCPC) yo fè yon Plan Transpò Rejyonal Comprehensive (CRTP). Objektif la nan CRTP a se asire ke BAT se pi plis efikas ak konfyans. Nenpòt bagay ou ka di nou ede nou pi byen sèvi ou, kliyan an, se apresye. Sonje byen, nou tout nou nan sa a yo ansanm.



DAR EUA SEUS PENSAMENTOS SOBRE BAT



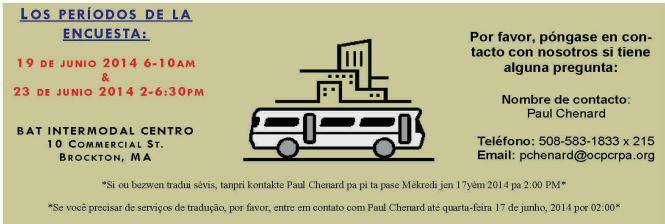
A Autoridade de Trânsito Brockton Área (MTD) e do Conselho de Planejamento Colônia Velha (OCPC) estão realizando um Plano de Transporte Regional Global (CRTP). O objetivo da CRTP é para garantir que BAT é mais eficiente e confiável. Qualquer coisa que você pode nos dizer para nos ajudar a melhor atendê-lo, o cliente, é apreciado. Lembre-se, estamos todos no mesmo barco.



DANOS TUS OPINIONES SOBRE LAS BAT



La Autoridad de Tránsito del Área Brockton (BAT) y el Consejo de Planificación de la Colonia Antiguo (OCPC) están llevando a cabo un Plan Regional de Transporte Integral (CRTP). El objetivo de la CRTP es asegurar que BAT es más eficiente y confiable. Cualquier cosa que nos puede decir que nos ayuden a mejorar el servicio a usted, el cliente, es de agradecer. Recuerde, estamos todos juntos en esto.



Si necesita servicios de traducción, por favor contacte con Paul Chenard a más tardar el miércoles 17 de junio de 2014, por 14:00



BAT Comprehensive Regional Transportation Plan Passenger Survey

Brockton Area Transit Authority (BAT) is conducting a Comprehensive Regional Transportation Plan (CRTP) to evaluate the current transit system and potentially implement service changes. In an effort to continually improve the passenger experience on the transit system, BAT is looking for your feedback. Please take a moment to help improve the BAT system by completing this passenger survey. BAT thanks you in advance for your participation.

1. Where do you usually start your BAT trip? (Please provide an address, cross streets, or general location)	7. How often do you ride BAT a week?
2. Where does your usual BAT trip end? (Please provide an address, cross streets, or general location)	8. During what time of the day do you normally ride BAT 6am - 9am 10am - 12pm 1pm - 3pm 4pm - 7pm 8pm - 10pm 11pm - 1am 9. Do you own a car? Yes No 10. Which bus line(s) do you use?
3. What is your usual BAT trip purpose? Work Shopping Medical School Entertainment / Recreation Other (Please explain):	1 2 3 4 4A 5 6 8 9 10 11 12 14 MM Rockland 11a. Do you have to transfer buses to get to your destination? Yes No
 4. How do you pay your bus fare? Charlie Card Cash Other (Please explain): 5. Where do you wish the bus went (please explain)? 	11b. If yes, please tell us which lines you use to get to your destination? 1 2 3 4 4A 5 6 8 9 10 11 12 14 MM Rockland MBTA 240 MBTA 238 MBTA Commuter Rail BSU Bus System
6. If more bus service could be added, what days, which bus lines, and where should service be added?	12. What is your annual income: \$0 - \$10,000 \$10,000 - \$15,000 \$15,000 - \$20,000 \$20,000 - \$25,000 \$25,000 - \$30,000 \$30,000 - \$35,000 \$35,000 - \$40,000 \$40,000 - \$45,000 \$45,000 - \$50,000 \$50,000 - \$55,000 \$55,000 - \$60,000 \$60,000 - \$65,000 \$65,000 - \$70,000 \$70,000 or Greater \$70,000 or Greater

Thank you for participating in helping BAT improve the transit system. If you would like to know more about the Comprehensive Regional Transit Plan (CRTP), please visit the project's website at: <u>http://www.ocpcrpa.org/crtp.html</u> or call project manager Paul Chenard at 508-583-1833 Extention 215 or email at pchenard@ocpcrpa.org

Appendix D Continued: General Passenger Survey — Haitian Passenger Survey



BAT Comprehensive Plan Transpò Rejyonal Sondaj pasaje

Transit Authority Brockton Zòn (BAT) ap fè yon Plan Transpò Rejyonal Comprehensive (CRTP) nan evalye sistèm transpò a pral kounye a ak potansyèlman aplike chanjman sèvis. Nan yon efò yo toujou amelyore eksperyans nan pasaje yo sou sistèm nan transpò piblik, BAT se kap chèche fidbak ou. Tanpri pran yon moman ede amelyore sistèm nan BAT pa ranpli sondaj pasaje sa a. BAT mèsi ou davans pou patisipasyon ou.

1. Ki kote ou anjeneral kòmanse vwayaj BAT ou a?	7. Konbyen fwa ou monte BAT yon semèn?
(Tanpri bay yon adrès, lari kwa, oswa kote jeneral)	🗌 1 - 2 jou 🔲 3 - 4 jou 🗌 4 - 5 jou 🔲 6 - 7 jou
	8. Pandan sa ki lè nan jounen an la ou nòmalman monte BAT?
	🔲 6am - 9am 🛛 🗌 10am - 12pm 🗍 1pm - 3pm
2. Ki kote abityèl vwayaj BAT ou yo fini?	🔲 4pm - 7pm 📗 8pm - 10pm 🔲 11pm - 1am
(Tanpri bay yon adrès, lari kwa, oswa kote jeneral)	9. Ou posede yon machin?
	🔲 Wi 🔛 Non
	10. Ki liy otobis ou itilize?
	🗌 1 🔲 2 🔲 3 🗌 4 🔲 4A 🔲 5 🔲 6 🔲 8 💭 9 🔲 10
3. Ki sa ki se dabitid objektif vwayaj BAT ou a?	🗌 11 🔲 12 🔲 14 🔛 MM 🔲 Rockland
🗌 Travay 🔲 Shopping 🔲 Medikal 🔲 lekòl la	11a. Ou oblije transfere otobis
Nan Lwazi-/ Rekreyasyon Lòt (tanpri eksplike):	jwenn nan destinasyon ou an?
	Wi Non
	11b. Si se wi, tanpri fè nou konnen ki liy ou itilize yo ka resevwa
4. ki jan ou peye pri tikè otobis ou a?	nan destinasyon ou an?
Charlie Card 🔲 Lajan Kach 📄 Lòt (tanpri eksplike):	11 12 14 MM Rockland BSU Bus System
	MBTA 238 MBTA 240 MBTA Commuter Rail
5. Ki kote ou vle otobis la ale (tanpri esplike)?	12. Ki sa ki se revni anyèl ou:
	🔲 \$0 - \$10,000 🛛 \$10,000 - \$15,000 🗌 \$15,000 - \$20,000
	☐ \$20,000 - \$25,000 ☐ \$25,000 - \$30,000 ☐ \$30,000 - \$35,000
	□ \$35,000 - \$40,000 □ \$40,000 - \$45,000 □ \$45,000 - \$50,000
6. Si ta ka plis sèvis otobis dwe ajoute, ki sa ki jou,	☐ \$50,000 - \$55,000 ☐ \$55,000 - \$60,000 ☐ \$60,000 - \$65,000
ki otobis liy, ak ki kote yo ta dwe sèvis dwe ajoute?	🔲 \$65,000 - \$70,000 🛛 \$ 70,000 oswa pi plis

Mèsi pou patisipe nan ede BAT amelyore sistèm nan transpò piblik. Si ou ta renmen konnen plis bagay sou Plan an Comprehensive Rejyonal Transpò Piblik (CRTP), tanpri ale sou sit wèb pwojè a nan: http://www.ocpcrpa.org/crtp.html oswa rele manadjè pwojè Pòl Chenard nan 508-583-1833 estansyon 215 oswa voye yon imèl nan pchenard@ocpcrpa.org



Brockton Area Transit Authority (BAT) está realizando um Plano de Transporte Regional Global (CRTP) para avaliar o sistema de trânsito actual e potencialmente implementar mudanças no serviço. Em um esforço para melhorar continuamente a experiência do passageiro no sistema de trânsito, BAT está procurando o seu feedback. Por favor, dedique um momento para ajudar a melhorar o sistema BAT através do preenchimento deste inquérito feito aos passageiros. MTD agradece antecipadamente a sua participação.

	7. Quantas vezes você montar BAT uma semana?
(Por favor, forneça um endereço, ruas transversais, ou localização g	geral) T - 2 days 3 - 4 days
	1 - 5 days 6 - 7 days
	8. Durante o tempo do dia que você normalmente monta?
	🔚 6am - 9am 📄 10am - 12pm 📄 1pm - 3pm
2. De onde vem a sua viagem BAT habitual acabar? (Por favor, forneça um endereço, ruas transversais, ou localização g	geral)
	9. Você possui um carro?
	Yes No
30	0. Que linhas de ônibus que você usa?
3. Qual é o seu propósito viagem BAT habitual?	
Trabalho Compras Médico Escola	11 12 14 MM Rockland
🔲 Entretenimento / Recreação 🦳 Autre (S'il vous plaît préciser):	11a. Você tem que transferir para ônibus chegar ao seu destino?
	🗍 Sim 🥅 Não
4. Como você pagar sua passagem de ônibus?	im, por favor, diga-nos quais as linhas que você usa para entrar para o seu destino?
Charlie Card 🔲 numerário 💭 Outros (explique):	1 2 3 4 4 4A 5 6 8 9 10
	11 12 14 MM Rockland BSU Bus System
E.	MBTA 238 🦳 MBTA 240 🦳 MBTA Commuter Rail
5. Onde você gostaria que o ônibus passou (explique)? 12.	Qual é a sua renda anual:
D	\$0 - \$10,000 📋 \$10,000 - \$15,000 🔲 \$15,000 - \$20,000
	\$20,000 - \$25,000 🔲 \$25,000 - \$30,000 💭 \$30,000 - \$35,000
	\$35,000 - \$40,000 📋 \$40,000 - \$45,000 📋 \$45,000 - \$50,000
6. Se mais serviço de ônibus pode ser adicionado, que dias,	\$50,000 - \$55,000 \$55,000 - \$60,000
6. Se mais serviço de ônibus pode ser adicionado, que dias, que as linhas de ônibus, e onde deve ser reparado ser adicionado?	\$60,000 - \$65,000 \$65,000 \$65,000 \$60,000

Obrigado por participar em ajudar BAT melhorar o sistema de trânsito. Se você gostaria de saber mais sobre o Plano Regional de Trânsito Global (CRTP), visite o site do projeto em: http://www.ocpcrpa.org/crtp.html ou ligue para gerente de projeto Paul Chenard em 508-583-1833 Extensão 215 ou e-mail em pchenard@ocpcrpa.org



Encuesta de Pasajeros del Plan de Transporte Regional BAT Integral

Autoridad de Tránsito del Área Brockton (BAT) está llevando a cabo un Plan Regional de Transporte Integral (CRTP) para evaluar el sistema de transporte actual y potencialmente implementar cambios en el servicio. En un esfuerzo por mejorar continuamente la experiencia de los pasajeros en el sistema de tránsito, BAT está en busca de sus comentarios. Por favor tome un momento para ayudar a mejorar el sistema de BAT al completar esta encuesta mundial de pasajeros. BAT gracias de antemano por su participación.

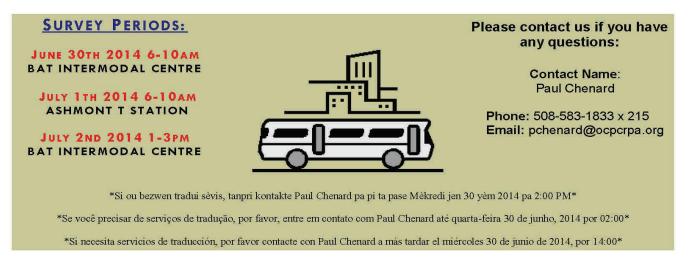
1.¿Dónde suele iniciar su viaje BAT? (Por favor proporcione una dirección, cruces de calles, o la u	bicación general)		
	7. ¿Co	n qué frecuencia	a utiliza BAT a la semana?
	L 1-	2 days 🔲 3 - 4	days 🔲 4 - 5 days 📙 6 - 7 days
2.2Dónde termina su viaje habitual BAT?		8. ¿En qué m normalment	omento del día es lo que e usa BAT?
(Por favor proporcione una dirección, cruces de calles, o la u	bicación general)	🦳 6am - 9am	10am - 12pm 1pm - 3pm
		1 4pm - 7pm	🗍 8pm - 10pm 🦳 11pm - 1am
		9. ¿Tienes un	carro?
		Si No	D
3. ¿Cuál es su propósito usual viaje BAT?	10 Out lines	s de bus que util	line?
Trabajo 🔲 Compras 🔲 Médico 🔲 Escuela	12 11 13 FT 19 12 19 19	2010/02/22/2010/01	
Entretenimiento / Recreación 🧮 Otros (explicar):			M ☐ 5 ☐ 6 ☐ 8 ☐ 9 ☐ 10 M ☐ Rockland
	11a. ¿Tiene qu llegar a su des	e transferir auto tino?	obuses para
4. ¿Cómo se paga el billete de autobús?		NI .	
Charlie Card Efectivo Otros (explicar):	11b. Si es así, j obtener a su d		os qué líneas se utiliza para
5. ¿Dónde desea que el autobús se fue (explicar)?		3 4 4 4	
5. ¿Donde desea que el autobus se fue (explicar) r	11 12 14 MM Rockland BSU Bus System		
	MBTA 238	MBTA 240	MBTA Commuter Rail
	12. ¿Cuál es su ir	ngreso anual?:	
6. Si se podría añadir más servicio de autobús, qué días,	\$0-\$10,000	\$10,000 - \$	15,000 🗍 \$15,000 - \$20,000
que las líneas de autobús, y donde debe reparar añadirse?	\$20,000 - \$25	,000 🗖 \$25,00	0 - \$30,000 🔲 \$30,000 - \$35,000
	\$35,000 - \$40	,000 540,00	0 - \$45,000 🔲 \$45,000 - \$50,000
	\$50,000 - \$55	,000 🗖 \$55,00	0 - \$60,000 🗖 \$60,000 - \$65,000
	\$65,000 - \$70	,000 570,00	0 or Greater

Gracias por participar en ayudar a las MTD mejorar el sistema de tránsito de usted. Si usted desea saber más sobre el Plan Regional de Transporte Integral (CRTP), por favor visite el sitio web del proyecto en: http://www.ocpcrpa.org/crtp.html o llame al director del proyecto Paul Chenard al 508-583-1833 Extensión 215 o al correo electrónico pchenard@ocpcrpa.org

PLEASE SHARE YOUR THOUGHTS ON THE 12 ASHMONT



The Brockton Area Transit Authority (BAT) and the Old Colony Planning Council (OCPC) are conducting a Comprehensive Regional Transportation Plan (CRTP). The goal of the CRTP is to insure BAT's continued efficiency and dependability. Anything you can tell us to help us to better serve you, the customer, is appreciated. Remember, we are all in this together.



BAY US OU PANSE SOU ASHMONT 12



Transpò Piblik Otorite a Brockton Zòn (BAT) ak Old Koloni Konsèy la Planifikasyon (OCPC) yo fè yon Plan Transpò Rejyonal Comprehensive (CRTP). Objektif la nan CRTP a se asire ke BAT se pi plis efikas ak konfyans. Nenpòt bagay ou ka di nou ede nou pi byen sèvi ou, kliyan an, se apresye. Sonje byen, nou tout nou nan sa a yo ansanm.



Appendix E Continued: 12 Ashmont Passenger Survey - Portuguese 12 Ashmont Survey Notice

DONNEZ-NOUS VOTRE AVIS SUR LE 12 ASHMONT



A Autoridade de Trânsito Brockton Área (MTD) e do Conselho de Planejamento Colônia Velha (OCPC) estão realizando um Plano de Transporte Regional Global (CRTP). O objetivo da CRTP é para garantir que BAT é mais eficiente e confiável. Qualquer coisa que você pode nos dizer para nos ajudar a melhor atendê-lo, o cliente, é apreciado. Lembre-se, estamos todos no mesmo barco.



DANOS TU OPINIÓN SOBRE EL 12



La Autoridad de Tránsito del Área Brockton (BAT) y el Consejo de Planificación de la Colonia Antiguo (OCPC) están llevando a cabo un Plan Regional de Transporte Integral (CRTP). El objetivo de la CRTP es asegurar que BAT es más eficiente y confiable. Cualquier cosa que nos puede decir que nos ayuden a mejorar el servicio a usted, el cliente, es de agradecer. Recuerde, estamos todos juntos en esto.

LOS PERÍODOS DE LA
ENCUESTA:30 DE JUNIO 2014 6-10AM
BAT INTERMODAL CENTRO01 DE JULIO 2014 6-10AM
ESTACIÓN ASHMONT02 DE JULIO 2014 1-3PM
BAT INTERMODAL CENTRO03 DE JULIO 2014 1-3PM
BAT INTERMODAL CENTRO04 DE JULIO 2014 1-3PM
BAT INTERMODAL CENTRO05 DE JULIO 2014 1-3PM
BAT INTERMODAL CENTRO05 DE JULIO 2014 1-3PM
BAT INTERMODAL CENTRO05 DE JULIO 2014 1-3PM
BAT INTERMODAL CENTRO06 DE JULIO 2014 1-3PM
BAT INTERMODAL CENTRO07 DE JULIO 2014 1-3PM
BAT INTERMODAL CENTRO08 DE JULIO 2014 1-3PM
BAT INTERMODAL CENTRO09 DE JULIO 2014 1-3PM
BAT INTERMODAL CENTRO09

Se você precisar de serviços de tradução, por favor, entre em contato com Paul Chenard até quarta-feira 30 de junho, 2014 por 02:00

Si necesita servicios de traducción, por favor contacte con Paul Chenard a más tardar el miércoles 30 de junio de 2014, por 14:00

Appendix F: 12 Ashmont Passenger Survey — English Passenger Survey



BAT CRTP Route 12 Ashmont Passenger Survey

Brockton Area Transit Authority (BAT) is conducting a Comprehensive Regional Transportation Plan (CRTP) to evaluate the current transit system and potentially implement service changes. In an effort to continually improve the passenger experience on the transit system, BAT is looking for your feedback. Please take a moment to help improve the BAT system by completing this passenger survey. BAT thanks you in advance for your participation.

1. Where do you board the 12 Ashmont?	6. What is your usual 12 Ashmont trip purpose?
	🗌 Work 🔲 Shopping 🔲 Medical 🔲 School
	Entertainment / Recreation 🔲 Other (Please explain):
2a. Do you use another bus to get to the 12 Ashmont?	7. Do you own a car?
🗌 Yes 🔲 No	Yes No
2b. If yes, please tell us which bus/train lines you use to get to the 12 Ashmont?	8. Have you ridden the 12 Ashmont Express?
	🗌 Yes 🔲 No
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	
MBTA 238 MBTA 240 Other MBTA Bus	9. What do you think of the 12 Ashmont Express Service?
MBTA Red Line MBTA Commuter Rail	Service:
3. Where do you get off the 12 Ashmont?	
	10. Do you think the 12 Ashmont should only operate as an express bus?
4a. Do you transfer to another bus/train once you get off the 12 Ashmont?	11. If you could make changes to the 12 Ashmont, what
Yes 🔲 No	changes would you make (please explain)?
4b. If yes, please tell us which lines you use to get to your destination?	
□ 1 □ 2 □ 3 □ 4 □ 4A □ 5 □ 6 □ 8 □ 9	12. What is your annual income:
🗌 10 🔲 11 🔲 12 🔲 14 📄 MM 📄 Rockland	☐ \$0 - \$10,000 ☐ \$10,000 - \$15,000
🔲 MBTA 238 🔲 MBTA 240 🔲 Other MBTA Bus	☐ \$15,000 - \$20,000
🔲 MBTA Red Line 🔄 MBTA Commuter Rail	☐ \$25,000 - \$30,000 ☐ \$30,000 - \$35,000
	☐ \$35,000 - \$40,000 ☐ \$40,000 - \$45,000
5. How often do you ride the 12 Ashmont a week?	☐ \$45,000 - \$50,000
🗌 1 - 2 days 🔲 3 - 4 days 🔲 4 - 5 days 🔲 6 days	☐ \$55,000 - \$60,000
	🔲 \$65,000 - \$70,000 🛛 \$70,000 or Greater

Thank you for participating in helping BAT improve the transit system. If you would like to know more about the Comprehensive Regional Transit Plan (CRTP), please visit the project's website at: <u>http://www.ocpcrpa.org/crtp.html</u> or call project manager Paul Chenard at 508-583-1833 Extention 215 or email at pchenard@ocpcrpa.org

Appendix F Continued: 12 Ashmont Passenger Survey — Haitian Passenger Survey



BAT CRTP Route 12 Ashmont Sondaj pasaje

Transit Authority Brockton Zòn (BAT) ap fè yon Plan Transpò Rejyonal Comprehensive (CRTP) nan evalye sistèm transpò a pral kounye a ak potansyèlman aplike chanjman sèvis. Nan yon efò yo toujou amelyore eksperyans nan pasaje yo sou sistèm nan transpò piblik, BAT se kap chèche fidbak ou. Tanpri pran yon moman ede amelyore sistèm nan BAT pa ranpli sondaj pasaje sa a. BAT mèsi ou davans pou patisipasyon ou.

1. Ki kote ou monte 12 Ashmont a?	6. Ki sa ki se dabitid 12 Ashmont vwayaj objektif ou a?	
	🗍 Travay 🦳 Shopping 🧮 Medikal 🦵 Lekòl la	
	🔟 Nan Lwazi-/ Rekreyasyon 📔 Lòt (tanpri eksplike):	
2a. W itilize yon lôt otobis pou li ale nan 12 Ashmont a?	7. Ou posede yon otomobil?	
2b. Si se wi, tanpri fè nou konnen ki bis / tren liy ou itilize yo	 8. Éske ou moute depi 12 Ashmont Express la? Wi Pagen 9. Ki sa ou panse nan 12 Ashmont Express Sèvis Lapòs al 	
ka resevwa a 12 Ashmont a?		
1 2 3 4 4A 5 6 8 9 10 11 12 14 MM Rockland MBTA 238 MBTA 240 Other MBTA Bus		
MBTA Red Line MBTA Commuter Rail		
3. Ki kote ou jwenn nan 12 Ashmont a?		
	10. Ou panse 12 Ashmont a ta dwe sèlman opere kôm yon otobis eksprès?	
	🗍 Wi 📋 Pagen	
4a. Ou transfere nan yon lôt otobis / tren yon fwa ou jwenn nan 12 Ashmont a?	₩ Pagen 11. Si ou te kapab fè chanjman nan 12 Ashmont a, ki sa ki chanjman ou ta fè (tanpri esplike)?	
	11. Si ou te kapab fè chanjman nan 12 Ashmont a, ki sa	
nan 12 Ashmont a? Wi Pagen 4b. Si se wi, tanpri fè nou konnen ki liy ou itilize yo ka resevwa nan destinasyon ou an?	11. Si ou te kapab fè chanjman nan 12 Ashmont a, ki sa	
nan 12 Ashmont a? Wi Pagen 4b. Si se wi, tanpri fé nou konnen ki liy ou itilize yo ka resevwa nan destinasyon ou an?	11. Si ou te kapab fè chanjman nan 12 Ashmont a, ki sa ki chanjman ou ta fè (tanpri esplike)?	
nan 12 Ashmont a? Wi Pagen 4b. Si se wi, tanpri fè nou konnen ki liy ou itilize yo ka resevwa nan destinasyon ou an? 1 2 3 4 4 4 5 6 8 9 10 11 12 12 14 MM Rockland	11. Si ou te kapab fè chanjman nan 12 Ashmont a, ki sa ki chanjman ou ta fè (tanpri esplike)? 	
nan 12 Ashmont a? Wi Pagen 4b. Si se wi, tanpri fe nou konnen ki liy ou itilize yo ka resevwa nan destinasyon ou an? 1 2 3 4 4 4 5 6 8 9 10 11 12 14 MM Rockland MBTA 238 MBTA 240 Other MBTA Bus	11. Si ou te kapab fè chanjman nan 12 Ashmont a, ki sa ki chanjman ou ta fè (tanpri esplike)? 12. Ki sa ki se revni anyèl ou: \$0 - \$10,000 \$10,000 - \$15,000	
nan 12 Ashmont a? Wi Pagen 4b. Si se wi, tanpri fè nou konnen ki liy ou itilize yo ka resevwa nan destinasyon ou an? 1 2 3 4 4 4 5 6 8 9 10 11 12 12 14 MM Rockland	11. Si ou te kapab fè chanjman nan 12 Ashmont a, ki sa ki chanjman ou ta fè (tanpri esplike)? 12. Ki sa ki se revni anyèl ou: \$0 - \$10,000 \$10,000 - \$15,000 \$15,000 - \$20,000 \$20,000 - \$25,000	
Image: Page Wi Page 4b. Si se wi, tanpri fe nou konnen ki liy ou itilize yo ka reserva nan destinasyon ou an? 1 2 3 4 4A 5 6 8 9 10 11 12 14 MM Rockland MBTA 238 MBTA 240 Other MBTA Bus MBTA Red Line MBTA Commuter Rail	11. Si ou te kapab fè chanjman nan 12 Ashmont a, ki sa ki chanjman ou ta fè (tanpri esplike)? 12. Ki sa ki se revni anyèl ou: \$0 - \$10,000 \$10,000 - \$15,000 \$15,000 - \$20,000 \$20,000 - \$25,000 \$25,000 - \$30,000 \$30,000 - \$35,000	
nan 12 Ashmont a? Wi Pagen 4b. Si se wi, tanpri fè nou konnen ki liy ou itilize yo ka resevwa nan destinasyon ou an? 1 2 3 4 4 4 5 6 8 9 10 11 12 14 MM Rockland MBTA 238 MBTA 240 Other MBTA Bus	11. Si ou te kapab fè chanjman nan 12 Ashmont a, ki sa ki chanjman ou ta fè (tanpri esplike)? 12. Ki sa ki se revni anyèl ou: \$0 - \$10,000 \$10,000 - \$15,000 \$15,000 - \$20,000 \$20,000 - \$15,000 \$25,000 - \$20,000 \$30,000 - \$25,000 \$25,000 - \$30,000 \$30,000 - \$35,000 \$35,000 - \$40,000 \$40,000 - \$45,000	

Mési pou patisipe nan ede BAT amelyore sistém nan transpô piblik. Si ou ta renmen konnen plis bagay sou Plan an Comprehensive Rejyonal Transpô Piblik (CRTP), tanpri ale sou sit wéb pwojé a nan: http://www.ocpcrpa.org/crtp.html oswa rele manadjé pwojé Paul Chenard nan 508-583-1833 estansyon 215 oswa voye yon imél nan pchenard@ocpcrpa.org Appendix F Continued: 12 Ashmont Passenger Survey — Portuguese Passenger Survey



Levantamento Passageiros BAT CRTP Route 12 Ashmont

Brockton Area Transit Authority (BAT) está realizando um Plano de Transporte Regional Global (CRTP) para avaliar o sistema de trânsito actual e potencialmente implementar mudanças no serviço. Em um esforço para melhorar continuamente a experiência do passageiro no sistema de trânsito, BAT está procurando o seu feedback. Por favor, dedique um momento para ajudar a melhorar o sistema BAT através do preenchimento deste inquérito feito aos passageiros. MTD agradece antecipadamente a sua participação.

1. Onde você embarcar no 12 Ashmont?	6. Qual é o seu objetivo habitual viagem de 12 Ashmont?
	🗌 Trabalho 🗌 Compras 📘 Médico 📔 Escola
	Entretenimento/Recreação 🔲 Outros (explique):
2a. Você usa outro ônibus para chegar ao 12 Ashmont?	
Sim 🔽 Não	7. Você possui um automóvel?
2b. Se sim, por favor, diga-nos quais as linhas de ônibus / trem que você usa para entrar para o 12 Ashmont?	8. Você ter montado a 12 Ashmont Express?
	Sim 🔲 Não
10 11 12 14 MM Rockland	451 - 192
MBTA 238 MBTA 240 Other MBTA Bus	9. O que você acha da 12 Ashmont serviço expresso?
MBTA Red Line MBTA Commuter Rail	
3. Onde você sair do 12 Ashmont?	
	10. Você acha que o 12 Ashmont só deve operar como um ônibus expresso? Sim 🔲 Não
4a. Você transferir para outro ônibus / trem ao chegar a 12 Ashmont?	11. Se você pudesse fazer alterações no 12 Ashmont,
Sim Não	quais mudanças você faria (explique)?
4b. Se sim, por favor, diga-nos quais as línhas que você usa para entrar para o seu destino?	
1 1 2 1 3 1 4 1 4A 1 5 1 6 1 8 1 9	12. Qual é a sua renda anual:
10 11 12 14 MM Rockland	\$0-\$10,000 S10,000 \$15,000
MBTA 238 MBTA 240 Other MBTA Bus	🗂 \$15,000 - \$20,000 🔲 \$20,000 - \$25,000
MBTA Red Line MBTA Commuter Rail	🗂 \$25,000 - \$30,000 🞵 \$30,000 - \$35,000
	🖾 \$35,000 - \$40,000 🖾 \$40,000 - \$45,000
5. Quantas vezes você monta a 12 Ashmont uma semana?	🗂 \$45,000 - \$50,000 🔲 \$50,000 - \$55,000
🗍 1 - 2 dias 🗍 3 - 4 dias 🦷 4 - 5 dias 🦷 6 dias	🗂 \$55,000 - \$60,000 🔲 \$60,000 - \$65,000
	🗍 \$65,000 - \$70,000 📔 \$70,000 or Greater

Obrigado por participar em ajudar BAT melhorar o sistema de trânsito. Se você gostaria de saber mais sobre o Plano Regional de Trânsito Global (CRTP), visite o site do projeto em: http://www.ocpcrpa.org/crtp.html ou ligue para gerente de projeto Paul Chenard em 508-583-1833 Extensão 215 ou e-mail em pchenard@ocpcrpa.org Appendix F Continued: 12 Ashmont Passenger Survey — Spanish Passenger Survey



Encuesta de Pasajeros BAT CRTP Ruta 12 Ashmont

Autoridad de Tránsito del Área Brockton (BAT) está llevando a cabo un Plan Regional de Transporte Integral (CRTP) para evaluar el sistema de transporte actual y potencialmente implementar cambios en el servicio. En un esfuerzo por mejorar continuamente la experiencia de los pasajeros en el sistema de tránsito, BAT está en busca de sus comentarios. Por favor tome un momento para ayudar a mejorar el sistema de BAT al completar esta encuesta mundial de pasajeros. BAT gracias de antemano por su participación.

1. ¿De dónde usted sube al 12 Ashmont?	6. ¿Cuál es su propósito habitual viaje de 12 Ashmont?
· · · · · · · · · · · · · · · · · · ·	🗍 Trabajo 📔 Compras 🗍 Médico 🦵 Escuela
	Entretenimiento / Recreación Otros (explicar):
2a. ¿Utiliza otro autobús para llegar al 12 Ashmont?	
Si 🔲 No	7. ¿Es dueño de un automóvil?
2b. Si es así, por favor diganos qué líneas de autobús / tren que se utiliza para obtener a la 12 Ashmont?	8. ¿Ha montado el 12 Ashmont Express?
	Si No
10 11 12 14 MM Rockland MBTA 238 MBTA 240 Other MBTA Bus	9. ¿Qué piensa usted del 12 Ashmont Express Service?
MBTA Red Line MBTA Commuter Rail	1
3. ¿Dónde se baje del 12 Ashmont?	
4a. ¿Es usted transferir a otro autobús / tren una vez que se baje del 12 Ashmont?	como un autobús expreso?
	cambios harías (explicar)?
Si No	
Si No 4b. Si es así, por favor díganos qué líneas se utiliza para obtener a su destino?	
4b. Si es así, por favor díganos qué líneas se utiliza para	
4b. Si es así, por favor diganos qué líneas se utiliza para obtener a su destino?	cambios harías (explicar)?
4b. Si es así, por favor díganos qué líneas se utiliza para obtener a su destino?	cambios harías (explicar)?
4b. Si es así, por favor díganos qué líneas se utiliza para obtener a su destino? 1 1 2 3 4 4 4A 5 6 8 9 10 11 1 12 14 MM Rockland	cambios harías (explicar)? 12. ¿Cuál es su ingreso anual: \$0 - \$10,000 \$15,000
4b. Si es así, por favor díganos qué líneas se utiliza para obtener a su destino? 1 2 3 4 4A 5 6 8 9 10 11 12 14 MM Rockland MBTA 238 MBTA 240 Other MBTA Bus	cambios harías (explicar)? 12. ¿Cuál es su ingreso anual: \$0 - \$10,000 \$10,000 - \$15,000 \$15,000 - \$20,000 \$20,000 - \$25,000
4b. Si es así, por favor díganos qué líneas se utiliza para obtener a su destino? 1 2 3 4 4A 5 6 8 9 10 11 12 14 MM Rockland MBTA 238 MBTA 240 Other MBTA Bus	12. ¿Cuál es su ingreso anual: \$0 - \$10,000 \$10,000 - \$15,000 \$15,000 - \$20,000 \$20,000 - \$25,000 \$25,000 - \$30,000 \$30,000 - \$35,000
4b. Si es así, por favor díganos qué líneas se utiliza para obtener a su destino? 1 2 3 4 4A 5 6 8 9 10 11 12 14 MM Rockland MBTA 238 MBTA 240 Other MBTA Bus MBTA Red Line MBTA Commuter Rail	12. ¿Cuál es su ingreso anual: \$0 - \$10,000 \$10,000 - \$15,000 \$15,000 - \$20,000 \$20,000 - \$25,000 \$25,000 - \$30,000 \$30,000 - \$35,000 \$35,000 - \$40,000 \$40,000 - \$45,000

Gracias por participar en ayudar a las MTD mejorar el sistema de tránsito de usted. Si usted desea saber más sobre el Plan Regional de Transporte Integral (CRTP), por favor visite el sitio web del proyecto en: http://www.ocpcrpa.org/crtp.html o llame al director del proyecto Paul Chenard al 508-583-1833 Extensión 215 o al correo electrónico pchenard@ocpcrpa.org



Brockton Area Transit Authority Comprehensive Regional Transportation Plan

Memorandum

To: Signature Healthcare

From: Reinald G. Ledoux, Jr, Administrator

Date: May 28th 2014

Subject: Employee Public Transit Usage / Need

Brockton Area Transit Authority Comprehensive Regional Transit Plan

Business Community Survey Public Transit Survey Needs

The Brockton Area Transit Authority (BAT) has embarked on a thorough review of its fixed route and paratransit system. As a part of this review, we are asking the business community to participate in a survey which seeks to determine the transit usage and needs of the major employers in the BAT service area. By completing this survey, you will be helping BAT determine how it should align bus routes and draft bus service schedules in the future. The proper alignment of transit service will help transit riders reach their places of employment or major employment destination as well as facilitate greater economic growth for the BAT service area region.

Accompanying this memo you will find a survey along with an enclosed paid postage envelope. Please complete and return the survey using the provided envelope to Paul Chenard, Transportation Planner at the Old Colony Planning Council by June 9, 2014. If you have any question please feel free to reach out to Paul Chenard at 508-583-1833 Ext: 215 or at <u>pchenard@ocpcrpa.org</u> with any inquires you might have. You can also find out more information concerning the Comprehensive Regional Transit Plan (CRTP) by visiting the project website: <u>http://www.ocpcrpa.org/batcrtp</u>. The survey can also be completed online by following here: <u>https://www.surveymonkey.com/s/CRTP_Business_Survey</u>. Thank you in advanced for your participation and corporation in helping BAT complete this very important review of its fixed route and paratransit system.

NAME AND ADDRESS OF AD	ea Transit Authority gional Transportation Plan
I Dat 22 I	ness Survey
Business Name:	Contact Person:
Business Address:	Contact Phone #:
1)How many employees does your company have:	 8) If public transit was available to your company, would employees be interested in using it? (if you answered yes to question 2, skip this question) Yes No
2) Is your company accessible by public transit?: (If no, skip to question 8)	9) If your company is serviced by public transit, how far is the closet stop? (Give walk time or distance)
3)How many if any of your employees use public transit to get to work	e e
	10) Do you provide parking to your employees?
<u></u>	Yes 🔽 No
 If your employees use public transit to get to work, which transit systems are they using? (ex: MBTA, BAT, GATRA, etc) 	11) If you provide parking to your employees, do you charge them for parking?
	TYes No
5) Does your company provide public transit passes	12) Does your company plan to expand in the next five years?
to your employees that use public transit?	TYes No
Yes No	13) Is your company in contraction or will soon be in contraction?
6) Does your company sponsor or operate a van or car pooling program to transport your employees?	Yes 🔲 No
Yes No	14) Does your company have any plans to relocate?
See Ge	Yes No
 If your employees do not use public transit, why? (ex: no service to work site or home, no desire to use transit): 	15) If you company plans to relocate, where do you plan to relocate to?
Please explain below	Please explain below

Thank you for participating in helping BAT improve the transit system. If you would like to know more about the Comprehensive Regional Transit Plan (CRTP), please visit the project's website at: http://www.ocpcrpa.org/crtp.html or call project manager Paul Chenard at 508-583-1833 Extention 215 or email at pchenard@ocpcrpa.org

Performance Dashboard FY15

Fixed Route	Standard	Goal
Total Passengers		
Pass/Rev Hour	22.00	26.00
Pass/Rev Mile	2.00	2.20
On-Time	95%	98%

Demand Response	Standard	Goal
Total Passengers		
Pass/Rev Hour	2.25	2.75
On-Time	85%	90%

Safety	Standard	Goal
Preventable FR Accidents/		
100K miles	3	2
Preventable DR Acci-		
dents/100K miles	3	2

Maintenance	Standard	Goal
Fixed Route Miles Between Break- downs w/ passenger interruption	20,000	25,000
Demand Response Miles Between Breakdowns w/ passenger inter- ruption	10,000	15,000

Customer Service	Standard	Goal
Valid Complaints /100,000		
FR	8	5
Valid Complaints /10,000		
DR	4	2