

Final 2008 Service Plan:

**Bus, Rapid Transit, and
Boat Service Changes
and
Service Delivery Policy Modifications**

Fall 2008

**Final 2008 Service Plan
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APPENDICES

**Summary Analysis of Routes and Recommended Changes
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INTRODUCTION

This document contains the final service change recommendations of the 2008 service planning process. These recommendations are the result of a two-year planning and analysis effort, as well as extensive public input.

During the spring of 2007, the Service Planning Department began development of the 2008 Service Plan by holding seven public workshops to solicit service change suggestions. The public was also given the opportunity to provide comments via email or in writing.

In addition to suggestions received during the public workshops, the Service Planning Department developed proposals based on on-going customer feedback and on analysis of route performance against service standards in the *Service Delivery Policy*. Proposals were also solicited from other departments within the MBTA, such as Bus Operations.

The proposals in the Preliminary Plan were presented to the public in a series of public meetings in September 2008. Additionally, written comments on the proposals were also accepted. Some proposals presented in this Final Plan have been modified based on input received from the public.

Section I presents an overview of the service planning process.

Section II includes an evaluation of route performance against Service Delivery Policy standards. It also discusses the service change proposals that were presented in the Preliminary Plan and indicates whether the final recommendations vary from the preliminary proposals.

Section III presents service change suggestions that should be considered in the future if/when additional resources become available.

Section IV outlines recommended changes to the *Service Delivery Policy*.

Section V presents the results of the Title VI analysis performed on the Final 2008 Service Plan recommendations.

Appendix A includes summary charts showing the analysis of existing services and the service change recommendations.

Appendix B presents a comparative evaluation of the service change recommendations.

I. OVERVIEW

The MBTA Board of Directors adopted the *Service Delivery Policy* in September 1996. This policy defined service standards and outlined a process to evaluate and modify service. Standards relate to:

- span of service
- frequency of service
- vehicle loading
- schedule adherence
- net cost per passenger

The first Service Plan was implemented in phases in 1998. This resulted in expansion of service and was the first attempt to apply *Service Delivery Policy* standards. A comprehensive data collection effort preceded the analysis. Recommendations were developed using both public comment and quantitative analysis.

Development of the second Service Plan began with public outreach in spring 1999 and concluded with implementation of service changes in summer 2002. This plan brought many changes to routes on the North Shore, and was the first time that these routes had been significantly altered in many years.

The third Service Plan, completed in 2004, included modifications to services in Quincy, new express service to the Back Bay from Brighton, and restructuring of routes in the South Boston Waterfront area due to the introduction of the Silver Line Waterfront.

The fourth service plan was implemented 2006 and included restructuring of Chelsea service to reduce crowding and improve reliability. The 2006 plan for the first time applied service standards to rapid transit as well as to bus service.

The Final 2008 Service Plan was developed in the context of a changing MBTA bus environment.

New low-floor buses have replaced much of the MBTA's oldest buses. 125 new buses are planned for delivery in the spring and summer of 2008. From 2003 to 2008, the average bus fleet age has decreased from 12 years to 5 years.

New technologies are available aboard the buses that allow for enhanced service monitoring and intervention:

Improved run time measurements are available using GPS systems aboard the buses. These allow for more realistic schedules that reflect general congestion trends. Many schedules have been updated, especially on routes with heavy ridership or reliability concerns; Service Planning will continue to update schedules each quarter.

Real-time operational control is now feasible using Computed-Assisted Dispatching / Automated Vehicle Location (CAD/AVL) technology. MBTA Operations is working to refine customized strategies for each route that account for ridership patterns and roadway geometry.

Automated passenger counters (APCs) are available in a pilot installation on certain bus routes. These allow for more frequent observations of ridership and crowding.

New technologies provide additional tools to continue with the mission to provide high-quality, reliable transit service where it is most needed as demonstrated by ridership.

II. BUS, RAPID TRANSIT & BOAT SERVICES AND RECOMMENDED SERVICE CHANGES

This plan reviews routes for their compliance with service standards and suggests areas for improvements.

This plan is designed to be resource neutral. After the public process, some changes in recommendations are likely, and not all proposals in this document will be implemented.

This plan also reviews subway performance and recommends minor schedule adjustments to address deficiencies. This plan does not include major shifts of resources between existing lines, given the different vehicle types and the permanent infrastructure required to operate each rail route.

The review and recommended service change proposals are as follows.

Route 1 Harvard Square - Dudley Station via Mass. Ave.

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	65%	Pass
Sat	Pass	Pass	Fail	72%	Pass
Sun	Pass	Fail	Fail	65%	Pass

Route 1 is a key route that provides service between Dudley and Harvard Stations via Massachusetts Ave. It connects with the Red, Orange, Green, and Silver Lines.

In 2003, an average of up to 5 standees were identified on Saturday and Sunday afternoons. It is recommended that a bus be added to the route from 11:30 AM - 3:30 PM on weekends. This would improve frequency on Saturdays to every 9 minutes rather than 10, and on Sundays to every 13/14 minutes rather than 16.

The Sunday Frequency Standard failure will be addressed by moving the 6:00 AM trip five minutes later.

Route 4 North Station - World Trade Center

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Pass	Pass	58%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

★ **Proposal ALTERED from Preliminary Plan**

Route 4 is a commuter route providing weekday service between North Station and the South Boston Waterfront.

It is recommended that the Route 4 be extended from D St. to Tide St. in the South Boston Waterfront. This extension would provide a one-seat ride between North Station and the Boston Marine Industrial Park (BMIP). Customers currently traveling between North Station and the BMIP now must transfer to the Silver Line. A survey of 80 employees at the BMIP identified that over half take the Commuter Rail through North Station, take the Orange or Green Line, or the bus. A direct connection between these services and the BMIP via the Route 4 would benefit this identified group.

The MBTA is working with the City of Boston to establish a bus stop westbound in front of North Station. This morning-only bus stop would be closer to the commuter rail station than the present North Station bus stop, and would be more convenient for customers. The new stop would allow the morning outbound route to be modified to travel via Atlantic Ave. and Commercial St., rather than Congress St., saving up to 4 minutes per round trip. Most morning trips carry no passengers between the World Trade Center and North Station. This would offset the increased travel time of the BMIP extension in the morning.

In response to public feedback regarding the elimination of Route 6, the Route 4 inbound during the afternoons will be modified to travel from North Station via Commercial Street. Like the morning outbound route, this will provide some service to the North End. Two additional hours will be required for the afternoons, but this will also allow for improved frequency on Route 4.

Route 5 City Point - McCormack Housing

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Fail	Pass	59%	Pass
Sat	Pass	Fail	Pass	59%	Fail
Sun	N/A	N/A	N/A	N/A	N/A

Route 5 is a community circulator route that provides weekday transit access to residents of the McCormack Housing Development.

Schedule changes have been proposed for Fall 2008 to reduce all headways to one hour to pass the Frequency Standard.

To pass the Span of Service Standard, an additional round trip at a cost of one hour would need to be added on Weekdays. Since Routes 10 and 16 provide service along the Route 5 corridor in the remaining portions of the service day, and since the extra trips would attract little ridership, the addition of a round trip is not recommended.

Route 6 South Station - Haymarket Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	59%	Fail
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

★ **Proposal ALTERED from Preliminary Plan**

Route 6 is a commuter route that provides peak period weekday service between the North End and South Station.

Route 6 does not pass the Cost Standard due to low ridership, with each passenger trip costing \$9.22. There are currently 12.5 round trips during peak commute hours serving 83 passengers. The maximum load for inbound and outbound travel is 8 and 13 passengers respectively but the median number of passengers is one and three respectively. Average ridership per one-way trip was 5 passengers in the morning and 1.5 passengers in the afternoon.

It is recommended that this route be eliminated. Although Route 6 is the only bus service to the North End at present, the Route 4 would be extended to provide service between South Station and Haymarket via Commercial St. during the AM and

PM peaks. The Preliminary Plan proposed Route 4 service to the North End only during the AM peak, but this has been modified to include the PM peak as well, in response to public comments. It also should be noted that North Station, Haymarket Station, and Aquarium Station are all within 1/2 mile of the intersection of Hanover and Commercial Streets.

Route 7 City Point - Otis & Summer Streets

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	77%	Pass
Sat	Pass	Pass	Pass	69%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

Route 7 connects South Boston to the Financial District via Summer St. weekdays and Saturdays. Additional service was added in Spring 2008 to accommodate growing ridership. However, subsequent counts show continued ridership growth and crowding. It is recommended that an extra bus be added to the line during the AM and PM peaks.

Route 8 Harbor Point /U Mass - Kenmore Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	58%	Pass
Sat	Pass	Pass	Pass	52%	Pass
Sun	Pass	Pass	Pass	63%	Fail

Route 8 provides circumferential service between UMass Boston and Kenmore Station via JFK/UMass, Newmarket, BU Medical Center, Dudley Square, Ruggles and the Longwood Medical Area.

Due to low ridership on weekend nights, it is recommended that the last two inbound trips and the last outbound trip be eliminated on Saturdays and the last round trip be eliminated on Sundays. It is expected that this change would impact 4 passengers on Saturdays while saving 2 hours, and 4 passengers on Sundays while saving 1.25 hours. The last trips would leave UMass at 11:30 PM or later and leave Kenmore at 12:15 AM or later.

Customers have requested additional service to the South Bay Center (SBC). On Saturday evenings, it is recommended that the 10:45 PM trips inbound and outbound be modified to serve the SBC, since this change can be done without affecting the schedule for the rest of the day.

Additional mall service was added on Sunday mornings in Spring 2007. The additional service plus elimination of the last round trip may help the Route 8 pass the Cost Standard on Sundays.

Route 9 City Point - Copley Square via Broadway Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	69%	Pass
Sat	Pass	Pass	Pass	68%	Pass
Sun	Pass	Pass	Pass	69%	Pass

Route 9 connects South Boston to Copley Square via W. Broadway and Broadway Station. While the weekday ridecheck conducted in 2006 did not show crowding, customer complaints of crowding have been corroborated with pointchecks. It is recommended that 2 hours of service be added during the AM and PM peaks to reduce crowding and improve reliability.

Route 10 City Point - Copley Square Via BU Med Center

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	65%	Pass
Sat	Pass	Pass	Pass	68%	Pass
Sun	Pass	Pass	Pass	64%	Pass

Route 10 provides local bus service between Copley Square and the residential areas of South Boston via Back Bay, the BU Medical Center, and Andrew.

Requests have been made to provide additional service to the South Bay Center (SBC). SBC provides a free shuttle between Andrew Station and the mall. This service runs every 15 minutes during the mid-day and has 30-minute service in the early morning and late evening. It is recommended that only outbound trips in the morning be extended to serve the mall, so as to minimize impact on existing customers. Outbound trips at 8:20 AM, 8:30 AM, 8:52 AM, and 9:00 AM would be extended, which would begin mall service one hour earlier than the present weekday schedule does.

Route 11 City Point - Downtown

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	73%	Pass
Sat	Pass	Pass	Pass	73%	Pass
Sun	Pass	Pass	Pass	73%	Pass

Route 11 provides service between the Bayview area of South Boston and Downtown Boston via Broadway Station and Chinatown. No changes are recommended for the Route 11 at this time.

Route 14 Roslindale Square - Heath Street Loop

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	43%	Pass
Sat	Pass	Pass	Pass	53%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

This route connects Roslindale Sq., Dudley Sq., Jackson Sq., and Heath St. Route 14 does not meet the Frequency Standard because of some 35-minute headways during the AM and PM peak periods. No change is recommended due to low ridership.

Schedule changes from Summer 2008 should improve the schedule adherence, and no further changes are recommended at this time.

Route 15 Kane Square - Ruggles Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	71%	Pass
Sat	Pass	Fail	Pass	64%	Pass
Sun	Pass	Pass	Pass	73%	Pass

Route 15 is a key route connecting Fields Corner, St. Peter's Sq., and Kane Sq. with Dudley Station and Ruggles via Uphams Corner.

The route does not meet the Frequency Standard due to 16-minute headways in the midday. No changes are recommended, as loads are at acceptable levels at this time.

Schedule changes were made in Summer 2008 to ensure 10-minute headways through the PM Peak period.

Saturday morning headways are greater than 20 minutes before 7:00 AM. It is recommended that one vehicle hour be added between 6:00 AM and 7:00

AM to meet the Frequency Standard. The two inbound trips during this period carried 64 passengers total.

In response to customer requests for increased evening and weekend service along Bowdoin St. and Geneva Ave., Fields Corner trips began operating at 7:00 PM—one hour earlier—on weekdays beginning Winter 2008. Midday weekend trips were also modified to serve Fields Corner.

Route 16 Forest Hills Station - U Mass.

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	66%	Pass
Sat	Pass	Pass	Fail	60%	Pass
Sun	Pass	Pass	Pass	62%	Pass

Route 16 is a local route that operates between Forest Hills and Andrew Stations via Columbia Rd. and Uphams Corner and serves the South Bay Center.

Crowding was identified on Saturday afternoons. It is recommended that an additional vehicle be added to reduce crowding and provide 20-minute headways on the route from 2:00 PM - 4:00 PM. This change is expected to attract 130 new customers due to the frequency improvement.

Route 17 Fields Corner Station - Andrew Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	67%	Pass
Sat	Pass	Pass	Pass	66%	Pass
Sun	Pass	Pass	Pass	78%	Pass

Route 17 is a local route that provides service between Fields Corner and Andrew Station via Kane Square, Uphams Corner and Edward Everett Square. No changes are recommended for the Route 17 at this time.

Route 18 Ashmont Station - Andrew Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Fail	Pass	49%	Pass
Sat	Pass	Pass	Pass	66%	Pass
Sun	Pass	Pass	Pass	82%	Pass

Route 18 is a local route that operates between Ashmont and Andrew Stations via Dorchester Ave. This route functions as a local distributor, since most long trips in this corridor would be on the Ashmont branch of the Red Line.

Although the route does not meet the frequency and span standards, no change is recommended due to low ridership projections.

Route 19 Fields Corner Station - Ruggles or Kenmore Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	50%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 19 is a local route that operates from Fields Corner to Kenmore via Geneva Ave. and Warren St on weekdays only.

Route 19 fails the Loading Standard due to high inbound ridership between 6:30 AM and 7:00 AM. Two of four trips during this period are supplemental trips that have very heavy ridership. It is recommended that an additional supplemental trip be added on school days only.

Route 21 Ashmont Station - Forest Hills Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	69%	Pass
Sat	Pass	Pass	Pass	71%	Pass
Sun	Pass	Pass	Pass	75%	Pass

Route 21 connects Forest Hills and Ashmont via Morton St. Since passenger counts show that Route 21 is used more than Route 26 is, it is recommended that some trips in the late evening be shifted to Route 21 on weeknights and Saturday nights. The late-night Blue Hill Ave. extension of route 26 would be eliminated, since this was created in 2005 for those times of day when there was no Route 21

service. This reallocation is expected to cause a net gain of 19 customers per weekday and 18 customers per Saturday, with no change in operating hours. The new schedule would be:

Route 26 weeknight and Saturday departures change from every 30 minutes to every 70 minutes after 9:00 PM.

Route 21 adds new service every 70 minutes between Ashmont and Forest Hills after the current last trip.

The Load Standard failure was due to crowded trips 6:30 PM - 8:00 PM on weekdays. This should now be corrected with a new round trip added in Spring 2008 on Route 21.

Route 22 Ashmont Station - Ruggles Station Via Talbot Ave

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	66%	Pass
Sat	Pass	Pass	Pass	62%	Pass
Sun	Pass	Pass	Pass	71%	Pass

Route 22 is a key route that operates between Ashmont and Ruggles, serving Codman Square, Talbot Ave., Blue Hill Ave., and Grove Hall. Schedules were adjusted in Spring 2008 to improve on-time performance and relieve crowding. No additional changes are recommended for the Route 22 at this time.

Route 23 Ashmont Station - Ruggles Station via Washington Street

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	69%	Pass
Sat	Pass	Pass	Pass	62%	Pass
Sun	Pass	Pass	Pass	62%	Pass

Route 23 is a key route that runs between Ashmont Station and Ruggles Station via Codman Square, Grove Hall, and Dudley Square.

The Route 23 weekday schedule was updated in Spring 2008 to reduce crowding. No additional changes are recommended until future data collection is done to determine the impacts of the new schedule.

Route 24 Wakefield Ave. - Mattapan Station or Ashmont

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	75%	Pass
Sat	Pass	Pass	Pass	69%	Pass
Sun	Pass	Pass	Pass	79%	Pass

Route 24 connects Wakefield Ave. and Truman Highway to Mattapan, while Route 27 connects Mattapan to Ashmont along River Street and Dorchester Ave. They operate as the combined Route 24/27 on nights and weekends.

It is recommended that the Span of Service be increased on combined Route 24/27 on Sunday mornings in response to customer requests. Sunday service would begin at 7:00 AM rather than 9:00 AM. This change is expected to attract 40 customers.

Route 25 Franklin Park - Dudley Station Via Grove Hall

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	60%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 25 runs between Peabody Loop in Franklin Park to Ruggles via Warren St. and Dudley Square. This service was added in Spring 2007 to supplement the Route 28. No changes are recommended for the Route 25 at this time.

Route 26 Ashmont Station - Norfolk & Wash. Belt

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	62%	Pass
Sat	Pass	Pass	Pass	61%	Pass
Sun	Pass	Pass	Pass	61%	Pass

Route 26 operates on a loop from Ashmont, by way of Norfolk St., Gallivan Blvd., Washington St., and Talbot Ave. See Route 21 for a proposal concerning evening service on both Route 21 and 26.

Route 27 Mattapan Station - Ashmont Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	59%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 24 connects Wakefield Ave. and Truman Highway to Mattapan, while Route 27 connects Mattapan to Ashmont along River Street and Dorchester Ave. They operate as the combined Route 24/27 on nights and weekends. See Route 24 for a proposed change on Sunday mornings for the combined route.

Route 28 Mattapan Station - Ruggles Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	70%	Pass
Sat	Pass	Pass	Fail	65%	Pass
Sun	Pass	Fail	Waive	55%	Pass

Route 28 is a Key Route serving Blue Hill Ave. and Warren St. between Mattapan Station and Dudley Square. It then continues to Ruggles via Roxbury Crossing. Outbound the route diverts from Malcolm X Blvd. to Eliot Square between Roxbury Crossing and Dudley Square.

Requests have been made to keep the Route 28 on Malcolm X Blvd. rather than diverting to Eliot Square. This diversion adds an additional 1-2 minutes to the trip time and serves 4% of the Route 28 ridership. The diversion costs over 40 person-hours of additional travel time per day to through-riders. The 103 passengers who board the Route 28 in Eliot Square can take other bus service, including Routes 14 and 41, to Dudley Station. Of the 135 passengers alighting in Eliot Square, those connecting from the Orange Line may choose to transfer to the Routes 14 or 41 at Jackson Square Station or walk less than 1,000 feet from Malcolm X Blvd.

It is recommended that the Route 28 travel via Malcom X Blvd. between Roxbury Crossing and Dudley Square. The time saved will be used to improve reliability on the route and reduce crowding.

Weekday service changes were made to the Route 28 in Spring 2008 in order to refocus vehicle hours

onto the heaviest ridership periods. Future data collection will be done to determine if crowding issues have been resolved.

Although Saturday service adjustments were made during Fall 2007, crowding is still a problem between 7:30 PM and 8:30 PM. It is recommended that an additional 1.5 hours of service be added to provide two additional inbound trips during this period.

Route 28 fails the Frequency Standard on Sundays before 9:00 AM by having 23-minute headways from 7:00 AM to 9:00 AM. It is recommended that an additional vehicle be added for these two hours to provide key-route headways of 20 minutes.

Route 29 Mattapan Station - Jackson Sq Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Waive	Pass	60%	Pass
Sat	Waive	Pass	Pass	73%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

★ **Proposal ALTERED from Preliminary Plan**

Route 29 functions as two distinct routes: it links Mattapan Sta. with Jackson Sq. during weekdays, and Mattapan with Ruggles during the late evening on weeknights and Saturdays. Therefore, the Frequency Standard is Waived for the period between the two variations on weekdays, from approximately 6:30 PM to 8:20 PM. Similarly, the Span of Service Standard on Saturdays is Waived, since only the evening variation operates.

An alteration to the midday service is proposed for Route 29, in conjunction with a proposed restructuring to Route 48 (see Route 48). Route 29 would be diverted during the midday only to serve the Amory Street Apartments, a large Boston Housing Authority complex for elderly and persons with disabilities. The inbound Route 29 traveling north on Columbus Ave. would turn left on Bragdon St., left on Amory St., stop at the Amory Street Apts., and then return to Columbus Ave. via West Walnut Park. This may require the elimination of one or two on-street parking spaces.

This would also mean that the headway during the midday is extended to 75 minutes.

In response to public feedback received during the Service Plan process, it has been agreed that the Route 48 elimination will be postponed for one year.

During this time, the MBTA will work with the City of Boston and other interested parties to determine if alternative transportation is needed. The proposed changes to Route 29 are therefore also delayed for one year.

Route 30 Mattapan Station - Roslindale Square

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	64%	Pass
Sat	Pass	Pass	Pass	71%	Pass
Sun	Pass	Pass	Pass	75%	Pass

Route 30 connects Forest Hills and Mattapan by way of Roslindale Sq. and the Cummins Highway. No changes for Route 30 are proposed.

Route 31 Mattapan Station - Forest Hills Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	68%	Pass
Sat	Pass	Pass	Pass	65%	Pass
Sun	Pass	Pass	Pass	65%	Pass

Route 31 links Mattapan Station with the Orange Line at Forest Hills via Morton Street. Upgrading Route 31 to a Key Bus Route is recommended. Both ends of the route are transit hubs, and there is high ridership demand even during off-peak hours. The service already meets the Key Route requirements for Span of Service and comes close for Frequency. The Key Route status might attract new riders to the transit system, as people could assume that there is frequent service at all times in the Mattapan-Forest Hills corridor. From the added trips and improved headways, 49 new riders are expected on weekdays, 109 on Saturdays, and 98 on Sundays.

In order to meet the Key Route requirements for Frequency, additional resources would be needed during the midday. 2 hours would be added weekday middays, 4.2 hours would be added Saturday nights, and 5 hours would be added Sunday nights.

Route 32 Wolcott Square or Cleary Square - Forest Hills Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	69%	Pass
Sat	Pass	Pass	Fail	74%	Pass
Sun	Pass	Pass	Pass	64%	Pass

This route serves the Hyde Park Ave. corridor, with some trips traveling between Forest Hills and Cleary Sq., and other trips traveling to and from Wolcott Sq.

The Load Standard failure has probably been corrected due to the addition of new trips, although new passenger counts have not been taken.

Route 33 River & Milton Streets - Mattapan Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	59%	Pass
Sat	Pass	Pass	Pass	53%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

★ **Proposal ALTERED from Preliminary Plan**

Route 33 links Mattapan Station with Cleary Sq./Hyde Park Ave. and residential areas of Dedham and Readville.

The proposal from the Preliminary Service Plan for re-routing the bus to Neponset Valley Parkway has subsequently been addressed by other means. One trip in the morning and afternoon now deviates from the regular route to Neponset Valley Parkway to better serve the Academy of the Pacific Rim.

The Frequency Standard failure is due to one 35-minute headway in each direction during the PM peak hours. No change is recommended.

Route 34 Dedham Line - Forest Hills Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	54%	Pass
Sat	Pass	Pass	Pass	60%	Pass
Sun	Pass	Pass	Pass	62%	Pass

Route 34E Dedham Line – Walpole Center

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	46%	Pass
Sat	Pass	Pass	Fail	42%	Pass
Sun	Pass	Pass	Fail	52%	Pass

Route 34 provides local service on Washington St. south of Forest Hills station. Service is coordinated, when practical, with Route 34E, which runs from Walpole to Forest Hills via Washington St. Both Routes 34 and 34E have faced increased running times due to traffic congestion. It is recommended that additional resources be provided weekdays between 5:30 PM and 7:30 PM, and Sundays between noon and 6:30 PM. For the two routes combined, these changes are expected to attract 31 new riders on weekdays, and 159 new riders on Sunday. The added trips should remove the Load Standard failure on Sundays for Route 34E, as well as improve schedule adherence on weekdays and Sundays.

The Load Standard failure between 9:00 PM and 10:00 PM outbound on weekdays should have been corrected with the Spring 2008 addition of a trip on Route 40, which also travels on Washington St. Saturday also has a Load Standard violation between 11:30 AM and 12:30 PM because of some standees, but no change is recommended.

Route 35 Dedham Mall - Forest Hills Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	60%	Pass
Sat	Pass	Pass	Pass	58%	Pass
Sun	Pass	Fail	Pass	60%	Pass

Route 35 connects the Dedham Mall and West Roxbury with Forest Hills. To the extent possible, service is coordinated with Routes 36 and 37, which also share the Washington/Belgrade/Centre St. corridor. The Frequency Standard failure is due to one 75-minute headway in each direction on Sunday

morning. Resources are not currently available to correct this. Recent schedule changes should improve the schedule adherence for this route, and no further changes are recommended at this time.

Route 36 VA Hosp - Forest Hills Station Via Chas. River Loop

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	60%	Pass
Sat	Pass	Pass	Pass	71%	Pass
Sun	Pass	Pass	Pass	63%	Pass

Route 36 serves the VA Hospital, Rivermoor Industrial Park, and parts of West Roxbury, and connects to the Orange Line at Forest Hills. Service is coordinated, to the extent possible, with Routes 35 and 37, which also travel along Washington St., Belgrade Ave., and Centre St. Recent schedule changes should improve the schedule adherence, and no further changes are recommended.

Route 37 Baker & Vermont Streets - Forest Hills Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	68%	Pass
Sat	Pass	Pass	Pass	75%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

Route 37 links West Roxbury with Forest Hills. Service is coordinated with Routes 35 and 36 when possible, since the routes share the Washington/Belgrade/Centre St. corridor. There has been a request for more trips on the variant which extends to LaGrange and Corey Sts. However, the ridership on existing LaGrange/Corey trips is relatively small. Given limited resources, additional trips are not recommended.

Recent schedule changes should improve the schedule adherence.

Route 37/38 Baker & Vermont - F Hills VIA J P Monument

	Span	Freq	Load	On-Time	Cost
Wkdy	N/A	N/A	N/A	N/A	N/A
Sat	N/A	N/A	N/A	81%	Pass
Sun	Pass	Pass	Pass	65%	Pass

This route operates only on Saturday mornings and Sundays, combining Routes 37 and 38. Route 37/38 serves West Roxbury and the Faulkner Hospital, linking them with Forest Hills. No changes are recommended at this time.

Route 38 Wren Street – Forest Hills Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	64%	Pass
Sat	Pass	Pass	Pass	81%	Pass
Sun	N/A	N/A	N/A	N/A	

Route 38 links West Roxbury and Faulkner Hospital with Forest Hills, via Centre St. The Frequency Standard violation is due to headways in the late evening on weeknights, which are greater than 60 minutes. However, correcting this deficiency is not feasible at this time, due to limited resources.

Route 39 Forest Hills Station - Back Bay Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	72%	Pass
Sat	Pass	Pass	Pass	72%	Pass
Sun	Pass	Pass	Pass	61%	Pass

Route 39 connects Forest Hills, Jamaica Plain, the Longwood Medical Area and Copley Square. No changes to this route are recommended here. A separate process is ongoing for proposed changes to Route 39. A Citizens' Working Group is advising EOT, the City of Boston, and the MBTA.

Route 40 Georgetowne - Forest Hills Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	62%	Pass
Sat	Pass	Pass	Pass	69%	Pass
Sun	Pass	Pass	Pass	67%	Pass

Routes 40 and 50 both serve Forest Hills, Washington Street and Roslindale Sq. From there Route 40 serves more of Washington Street and Georgetowne, while Route 50 serves Cleary Sq. The two routes operate a combined loop evenings and Sundays.

One additional inbound trip on weekdays is recommended at 6:00 AM from Georgetowne. There have been requests for earlier service, since the first trip currently leaves Georgetowne at 6:20 AM. All of the morning inbound trips carry high passenger volumes, including the trip at 6:20 AM. Therefore, the added trip is recommended. This will cost 0.8 hours per weekday, and is expected to attract 26 new customers.

The Load Standard violation is due to a single outbound trip at 2:30 PM weekdays, with 58 passengers. This is probably school-related, and the resources to address this violation are not currently available.

Route 41 Centre & Eliot Streets - JFK U Mass Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	56%	Pass
Sat	Pass	Pass	Pass	62%	Pass
Sun	Pass	Pass	Pass	56%	Pass

This route links Jamaica Plain, Dudley Sq., Uphams Corner and JFK/Umass Sta. No changes to Route 41 are suggested at this time.

Route 42 Forest Hills Station - Ruggles Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	62%	Pass
Sat	Pass	Pass	Pass	64%	Pass
Sun	Pass	Pass	Pass	81%	Pass

This route links Forest Hills with Dudley Sq. via Washington St. on Monday through Saturday, and Forest Hills with Ruggles on Sunday. No changes are recommended at this time.

Route 43 Ruggles Station - Park & Tremont Streets

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	62%	Pass
Sat	Pass	Pass	Pass	54%	Pass
Sun	Pass	Pass	Pass	60%	Pass

Route 43 provides local service between Ruggles and Park Street via Tremont and the Back Bay. No changes are recommended for the Route 43 at this time.

Route 44 Jackson Sq Station - Ruggles Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	56%	Pass
Sat	Pass	Pass	Pass	60%	Pass
Sun	Pass	Pass	Pass	62%	Pass

Route 44 provides local service between Jackson Square and Ruggles via Humboldt Ave. and Dudley Square. No changes are recommended for the Route 44 at this time.

Route 45 Franklin Park - Ruggles Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	62%	Pass
Sat	Pass	Pass	Pass	56%	Pass
Sun	Pass	Pass	Pass	64%	Pass

Route 45 provides local service along Blue Hill Ave between Franklin Park and Ruggles. No changes are recommended for the Route 45 at this time.

Route 47 Central Square Cambridge. - Broadway Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	52%	Pass
Sat	Pass	Pass	Pass	62%	Pass
Sun	Pass	Pass	Pass	67%	Pass

Route 47 provides circumferential service between Broadway Station and Central Square, Cambridge via the BU Medical Center, Dudley Square, Ruggles, and the Longwood Medical Area. Run times were updated in Fall 2007 and an additional inbound morning peak period trip was added in Spring 2008. No additional changes are recommended for the Route 47 at this time.

Route 48 Centre & Eliot Streets - Jamaica Plain Loop

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	59%	Fail
Sat	Pass	Pass	Pass	58%	Fail
Sun	N/A	N/A	N/A	N/A	N/A

★ **Proposal ALTERED from Preliminary Plan**

This community circulator route serves the Jamaica Plain commercial and residential areas weekdays and Saturdays. It links the JP Monument with the Orange Line via local streets. The elimination of this route is recommended due to very low ridership and high costs per passenger. The entire route is within a quarter mile of subway or bus service. Despite being in one of the densest areas of the MBTA service area, Route 48 has low ridership and fails the Cost Standard at \$9.23 per passenger on weekdays, and \$14.08 per passenger on Saturdays.

Route 48 operates on a loop route, that begins and ends at the JP Monument. The schedule includes only 13 midday trips on weekdays, and 13 trips on Saturdays. Weekday trips have an average of 7 boardings, and Saturday trips have fewer than 4 boardings on average.

Route 48 is the only direct service to the Amory Street Apartments, a large Boston Housing Authority complex for the elderly and persons with disabilities. It is recommended that this service be replaced during weekdays by diverting Route 29 (see

previous section). No replacement for Saturday service is available, since Route 29 does not operate during the day on Saturday.

Eliminating Route 48 would save 8.6 hours per weekday, and 8.0 hours per Saturday. A total of 85 customers on weekdays and 50 customers on Saturdays would be affected. It is estimated that 16 passengers would be diverted onto Route 29.

In response to public feedback received during the Service Plan process, it has been agreed that the Route 48 elimination will be postponed for one year. During this time, the MBTA will work with the City of Boston and other interested parties to determine if alternative transportation is needed.

Route 50 Cleary Sq - Forest Hills Station Via Metropolitan

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	64%	Pass
Sat	Pass	Pass	Pass	64%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

Routes 40 and 50 both serve Forest Hills, Washington Street and Roslindale Sq. From there Route 40 serves more of Washington Street and Georgetowne, while Route 50 goes to Cleary Sq. The two routes are combined into one loop for some trips. No changes are recommended at this time.

Route 51 Cleveland Circle - Forest Hills Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	70%	Pass
Sat	Pass	Pass	Pass	81%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

Route 51 is a local route that provides service between Forest Hills on the Orange line and Cleveland Circle on the Green Line. No changes are recommended at this time.

Route 52 Dedham Mall - Watertown Yard

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	59%	Fail
Sat	Pass	Fail	Pass	46%	Fail
Sun	N/A	N/A	N/A	N/A	N/A

This route links several bus corridors and the Green Line Newton Centre Station with largely residential areas of Newton and West Roxbury. The route fails the Cost Standard on both weekdays and Saturdays. However, Route 52 serves areas which otherwise would have no transit service, so no changes are proposed. The route also fails the Frequency Standard on weekdays and Saturdays, but improving the frequency is not recommended because of the low ridership and relatively high cost per trip.

Route 55 Queensberry Street - Park & Tremont Streets

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	73%	Pass
Sat	Pass	Pass	Pass	69%	Pass
Sun	Pass	Pass	Pass	60%	Pass

Route 55 runs between the Fenway neighborhoods and the Green Line, either at Copley Square or Park St.

The Route 55 fails the weekday loading standard due to a single midday school-period trip carrying 56 passengers when service is hourly. Preceding and following trips have 8 and 20 passengers respectively. The survey of this trip was conducted on a Friday, when an adjacent high school has early dismissal at 1:00 PM. Additional service is not recommended.

Customers have noted that the area is developing rapidly. Ridership levels will be monitored to determine if additional service is warranted.

Route 57 Watertown Yard - Kenmore Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	71%	Pass
Sat	Pass	Pass	Pass	75%	Pass
Sun	Pass	Fail	Pass	58%	Pass

Route 57 is a key route that runs between Watertown and Kenmore Station via Oak Square, Brighton Center, and Union Square in Allston.

During Fall 2007, evening frequencies were improved from 15 minutes to 12 minutes. Additional ridership information will be collected to determine if this improvement was enough to pass the Loading Standard.

The Fall 2008 Sunday schedule will maintain service every 20 minutes through midnight.

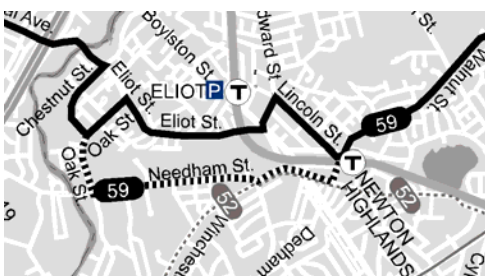
In order to improve reliability during rush hours, it is recommended that some peak period trips via Watertown Yard be modified to terminate at Oak Square instead. This would maintain peak service every 10-12 minutes in Newton and every 5-6 minutes between Oak Square and Kenmore.

Route 59 Needham Junction - Watertown Square

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	63%	Pass
Sat	Pass	Fail	Pass	73%	Pass
Sun	Pass	Fail	Pass	71%	Pass

★ **Proposal ALTERED from Preliminary Plan**

Route 59 provides service between Needham Junction and Watertown Square via Newton Highlands and Newtonville with two route variations. One route variation runs via Eliot St. and a second runs via Needham St.



In the 2006 Service Plan, Saturday service was reduced to operating every 90 minutes, and the

savings allowed for new service on Sundays. This change causes both days to fail the 60-minute Frequency Standard. No action regarding the Frequency Standard is recommended, as the change has improved weekend ridership. As compared to service in 2001, when all 17 round trips were provided on Saturdays only, weekend ridership has increased 28.6%, from 391 passengers to 503 passengers. It is recommended that the Sunday schedule be shifted 45 minutes later to better match the Saturday schedule.

The Preliminary Service Plan recommended shifting some trips from the Eliot St. variation to the Needham St. variation, based on usage data and some customer requests. However, in response to public feedback received during the Service Plan process, this proposal has been withdrawn.

Route 60 Chestnut Hill - Kenmore Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	61%	Pass
Sat	Pass	Pass	Pass	65%	Fail
Sun	Pass	Fail	Pass	57%	Fail

Route 60 provides service between the Mall at Chestnut Hill and Kenmore Square via Boylston St. in Brookline and via Brookline Ave. in Boston.

Sunday travel times allow for service to be scheduled hourly all day long. It is recommended that the schedule be updated to provide hourly service. This would allow for one additional round trip without changing the hours of service.

Route 62 Bedford V.A. Hospital - Alewife Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Fail	Pass	60%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 62 operates weekdays only between Bedford V.A. Hospital or Bedford Center and Alewife via Mass. Ave. in Lexington and Arlington and Route 2.

This route fails the Span of Service and Frequency Standards. No action is recommended on the Span of Service failure, which is the result of the first inbound trip arriving at Alewife at 7:10 AM instead of by 7:00 AM. The route has significant overlap with

Route 76 which starts earlier. No action is recommended on the Frequency failure because the failure is caused by one 40-minute headway inbound in the PM peak and one 45-minute headway outbound in the AM peak when crowding levels are acceptable.

Customer feedback reported reliability problems; the schedule was adjusted for Summer 2008 to address these concerns and provide better co-ordination with Route 76 at Lexington Center to smooth passenger loads across both routes.

Route 62/76 Bedford V.A. Hospital - Alewife Station via Hanscom Air Force Base

	Span	Freq	Load	On-Time	Cost
Wkdy	N/A	N/A	N/A	N/A	N/A
Sat	Pass	Fail	Pass	65%	Fail
Sun	N/A	N/A	N/A	N/A	N/A

Route 62/76 operates Saturdays only between Bedford V.A. Hospital and Alewife via Hanscom Civil Air Terminal, Mass. Ave. in Lexington and Arlington and Route 2.

This route fails the Frequency Standard on Saturday because of 70-minute headways between 8:00 AM and 3:00 PM. No action is recommended due to low ridership.

The route fails the Cost Standard due to high costs and low ridership. It is recommended that the first round trip of the day be eliminated. This would displace 15 passengers, or an average 7.5 customers per trip, and save 2 hours of service.

A request was made to establish Sunday service on this route; however, no change is recommended due to the high net cost per passenger.

Route 64 Oak Square - University Pk. Cambridge

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	68%	Pass
Sat	Pass	Pass	Pass	68%	Pass
Sun	Pass	Pass	Pass	69%	Pass

★ **Proposal ALTERED from Preliminary Plan**

Route 64 runs between Oak Square in Brighton and University Park in Cambridge, along North Beacon

St. and Cambridge St. During weekday peak periods it operates to/from Kendall/MIT.

Due to a lack of consensus among residents to re-route Route 64 via Brooks Street instead of Hobart Street, this proposal has been withdrawn. Two alternative options arose throughout the public process such as limited trips serving Brooks Street or re-route via Parsons Street however none of these are recommended. The MBTA will work with the Boston Transportation Department on improving bus stop signage in the area to improve the path of travel for the bus.

Route 65 Brighton Center - Kenmore Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	54%	Pass
Sat	Pass	Pass	Pass	61%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

Route 65 provides weekday and Saturday service between Brighton Center and Kenmore via Washington St. and Brookline Ave, serving Brookline Village and the Longwood Medical Area.

Requests have been made to provide later service on the Route 65. Current ridership on the final three round trips of the day do not show adequate demand for justifying additional trips.

Route 66 Harvard Square - Dudley Station via Brookline

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	66%	Pass
Sat	Pass	Fail	Fail	54%	Pass
Sun	Pass	Fail	Fail	61%	Pass

Route 66 is a key route that provides circumferential service between Dudley Square and Harvard Square via Brookline Village and Union Square, Allston.

Route 66 does not pass the Frequency Standard due to 16-minute headways during the mid-day, rather than 15. No changes are recommended.

Route 66 fails the Saturday Frequency and Load Standards. The Frequency Standard is violated by one 23-minute headway, which is due to a change in the number of vehicles in service. The load standard is violated for less than one hour around 1:00 PM. It

is recommended that there be no change in Saturday Service on the Route 66.

Sundays also fail the Frequency and Load Standards. The Frequency Standard is violated before 9:00 AM and after 11:00 PM. It is recommended that additional vehicles be added starting at 7:00 AM. In addition, it is recommended that the headways be shortened to between 18 - 20 minutes mid-day to reduce crowding. Providing reliable on-time evening service would be more beneficial than reducing the headways to the 20-minute key route standard.

Route 67 Turkey Hill - Alewife Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	56%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 67 operates weekdays only between Alewife and Turkey Hill, via Pleasant St. and Arlington Center. There are no failures or proposals for this route.

Route 68 Harvard Square - Kendall MIT Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	72%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 68 operates weekdays only between Harvard Sq. and Kendall/MIT along Broadway.

Customer feedback had reported reliability problems on Route 68, however the schedule was changed in Winter 2008 to address these issues.

A request had been made to increase the frequency and expand the hours of service on this route. The current ridership levels do not warrant increased service at this time.

Route 69 Harvard Square - Lechmere Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	63%	Pass
Sat	Pass	Pass	Pass	64%	Pass
Sun	Pass	Pass	Pass	65%	Pass

Route 69 runs between Harvard Sq., Inman Sq. and Lechmere along Cambridge St.

Customers have expressed reliability concerns. As a result, run times were updated and the schedule was changed for the Spring and Summer 2008.

Route 70 Cedarwood - Central Square Cambridge

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	65%	Pass
Sat	Pass	Pass	Fail	65%	Pass
Sun	Pass	Fail	Pass	56%	Pass

Route 70 operates between University Park or Central Sq., Cambridge, and Cedarwood or Central Sq. in Waltham. This route serves Allston, Cambridge, Watertown and Waltham via Western Ave., Arsenal St., and Main St.

Weekday schedule changes were made in Spring 2008 to improve reliability and coordination with Route 70A.

On Saturdays, the route did not pass the Load Standard due to occasional standees. No further action is recommended at this time, and Service Planning will continue to monitor the ridership levels.

On Sundays, the route fails the Frequency Standard fails because of a 63- and 65-minute headway outbound in the late evening. No change is recommended, since loads are at acceptable levels and the addition of a bus is not practical.

The route also failed the Load Standard due to trips with up to 61 passengers aboard during periods of hourly service. In response, the schedule will be updated for Summer 2008 with additional Sunday morning service.

Route 70A North Waltham – University Park Cambridge

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Fail	Pass	57%	Pass
Sat	Pass	Fail	Pass	61%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

Much of Route 70A overlaps with Route 70, with the exception that it terminates at North Waltham

instead of Cedarwood. This route does not operate on Sundays.

Route 70A fails the Frequency Standard on weekdays and Saturdays and the Span of Service Standard on Saturdays. No further action is recommended on these failures as the majority of the route overlaps with the Route 70, which passes these standards.

Route 71 Watertown Square - Harvard Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	74%	Pass
Sat	Pass	Pass	Pass	68%	Pass
Sun	Pass	Pass	Pass	55%	Pass

Route 71 is a Trackless Trolley route connecting Watertown Sq. and Harvard Sq. via Mount Auburn Hospital. No changes are recommended at this time.

Route 72 Aberdeen & Mt. Auburn - Harvard Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	62%	Pass
Sat	Pass	Pass	Pass	58%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

Route 72 is a Trackless Trolley route operating between Aberdeen Ave. and Harvard, via Fresh Pond Parkway, Huron Ave. and Concord Ave. There are no failures or proposals for this route.

Route 72/75 Belmont Center - Harvard Station via Huron Ave

Wkdy	N/A	N/A	N/A	N/A	N/A
Sat	Pass	Pass	Pass	79%	Pass
Sun	Pass	Pass	Pass	76%	Pass

Route 72/75 runs on Sundays only and provides service between Belmont Center and Harvard Station on a modified route serving most parts of the Routes 72 and 75. Aberdeen Ave., Concord Ave. north of Huron Ave., and Fresh Pond Pkwy. are not served. There are no failures or proposals for this route.

Route 73 Waverley Square - Harvard Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	74%	Pass
Sat	Pass	Pass	Pass	65%	Pass
Sun	Pass	Pass	Fail	51%	Pass

This route is a Trackless Trolley route connecting Waverley Sq. and Trapelo Rd. in Belmont to the Mount Auburn Hospital and Harvard in Cambridge.

Route 73 failed the Load Standard on weekdays because of overcrowding observed on PM peak and evening outbound trips; headway improvements were made to address this issue in Winter 2007.

The route failed the Load Standard on Sunday, but frequencies have been improved since the counts were taken. As such, no further action is recommended until further data is collected.

This route technically fails the Span of Service Standard because the first Sunday trip arrives at Harvard Station at 7:09 AM. No further action is recommended.

Route 74 Belmont Center - Harvard Station via Concord Ave

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	63%	Pass
Sat	Pass	Fail	Pass	71%	Fail
Sun	N/A	N/A	N/A	N/A	N/A

Route 74 runs between Harvard and Belmont Center via Concord Ave., north of Fresh Pond.

This route fails the Frequency Standard because of 38-minute headways on weekdays and 70-minute headways on weekends. Much of this route overlaps with Route 75, and because the ridership levels on both routes are relatively low, no further action is recommended at this time.

The route also fails the Cost Standard on Saturdays.

Route 75 Belmont Center - Harvard Station via Fresh Pond Pkwy

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Fail	Pass	65%	Pass
Sat	Pass	Pass	Pass	76%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

Route 75 operates between Harvard and Belmont Center via Concord Ave., south of Fresh Pond.

This route fails the Frequency and Span of Service standards on weekdays. The route has 53-57 minute headways during the AM peak, 80 minute headways during the midday and the first trip arrives at Harvard Station at 7:10 AM. Because much of this route overlaps with Route 74, and the ridership levels on both routes are relatively low, no further action is recommended at this time.

Route 76 Hanscom Air Force Base - Alewife Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	63%	Fail
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 76 operates weekdays only between Alewife and Hanscom Civil Air Terminal/Lincoln Lab, via Mass. Ave. in Lexington and Arlington and Route 2.

This route fails the Cost Standard and Frequency Standard. Increased frequency is not recommended because the failure is only triggered by one 40-minute headway inbound in the PM peak and one 45-minute headway outbound in the AM peak when ridership levels are acceptable.

Customer feedback reported reliability problems; as a result, the schedule was adjusted for Summer 2008 to address these concerns and provide better coordination with Route 62 at Lexington Center.

A customer request was made to alter the direction of travel on the evening inbound route to serve Lincoln Lab after Hanscom Air Terminal. Ridership levels are significantly greater at the Lincoln Lab stop than at Hanscom, therefore this would reduce travel time for most customers. This may attract new riders and help address the route's Cost Failure. In

addition, the MBTA will reach out to Lincoln Lab to market the route to Lincoln Lab employees.

Route 77 Arlington Heights - Harvard Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	70%	Pass
Sat	Pass	Pass	Pass	67%	Pass
Sun	Pass	Pass	Pass	60%	Pass

Route 77 operates between Harvard and Arlington Heights, along Mass. Ave. This route is supplemented by a Trackless Trolley Route 77A, which runs from North Cambridge to Harvard. There are no failures or proposals for this route.

Route 78 Arlmont Village - Harvard Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	57%	Fail
Sat	Pass	Fail	Pass	58%	Fail
Sun	Pass	Pass	Pass	55%	Fail

Route 78 runs between Harvard and Arlmont Village, via Concord Ave. During peak periods the route starts or ends at Arlington Heights.

This route fails the Frequency Standard on Saturday due to 65- and 70-minute headways during the morning and midday. No change is recommended, as this would require adding an extra vehicle.

The route fails the Cost Standard on Weekdays, Saturdays, and Sundays.

Route 79 Arlington Heights - Alewife Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	62%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 79 provides service between Arlington Heights and Alewife via Massachusetts Ave. There are no proposals for this route.

Route 80 Arlington Center - Lechmere Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	67%	Pass
Sat	Pass	Pass	Pass	71%	Pass
Sun	Pass	Pass	Pass	69%	Pass

Route 80 operates between Arlington Center and Lechmere via Boston Ave. in Medford, and Broadway and Mc Grath Highway in Somerville. There are no proposals for this route.

Route 83 Rindge Ave. - Central Square, Cambridge

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	58%	Pass
Sat	Pass	Pass	Pass	61%	Pass
Sun	Pass	Pass	Pass	66%	Pass

Route 83 connects Central Sq., Inman Sq., Porter Sq. and Rindge Ave. in Cambridge.

A request was made to extend Route 83 into Fresh Pond Mall. This suggestion is not recommended due to heavy traffic congestion on Fresh Pond Parkway and the restrictive turns within the mall parking lot.

Route 84 Arlmont Loop - Alewife Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	61%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 84 is a commuter route and operates during weekday peak periods only between Alewife and Arlmont Village.

The last trip of the day at 6:15 PM is the heaviest outbound trip with 32 boardings, and the first afternoon round trip is very lightly used with 4 boardings. As a way to attract more riders, it is recommended that the first outbound trip be eliminated and the resources used to extend evening service. The first outbound trip from Alewife would depart at 3:58 PM instead of 3:25 PM. The new outbound trip would be added at 6:35 PM.

Route 85 Spring Hill - Kendall MIT Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	81%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 85 provides a weekday connection between Kendall/MIT, Union Sq. and Spring Hill in Somerville.

The route fails the Frequency Standard because of 35-40 minute headways during the peak periods. No further action is recommended because the current service levels are sufficient for existing ridership.

A request was made for later weekday and weekend service. Given the low ridership on weekdays, in particular during the off-peak period, it is unlikely that later weekday and weekend service on this route would generate sufficient ridership to support the cost of the additional/new service. No further action is recommended.

Route 86 Sullivan Station - Cleveland Circle

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	47%	Pass
Sat	Pass	Pass	Pass	51%	Pass
Sun	Pass	Fail	Pass	58%	Pass

Route 86 operates between Sullivan Sq. and Cleveland Circle via Union Sq. in Somerville, Harvard Sq., and Brighton Center.

On Sunday the Frequency Standard fails because of 70-75 minute headways during the morning. One bus operates on the line at this time, and it is not possible to increase the frequency without adding another bus. Because the ridership levels are supported by the existing service, no further action is recommended.

Customer feedback has reported general problems of reliability on the route, and a suggestion was made to split the route into two separate routes. Data is currently being collected to review weekday service reliability. Splitting the route is not recommended because of passenger demand to travel through Harvard Square.

Route 87 Clarendon Hill - Lechmere Station via Somerville Avenue

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	64%	Pass
Sat	Pass	Pass	Pass	61%	Pass
Sun	Pass	Pass	Pass	73%	Pass

Route 87 operates between Arlington Center or Clarendon Hill and Lechmere via Broadway, Davis Sq., Union Sq and Somerville Ave.

This route fails the Load Standard on weekdays due to crowding the AM peak, according to counts taken in Winter 06. Follow up counts have shown continued heavy ridership, especially between Clarendon Hill and Davis. It is recommended that short trips on Route 88 between Clarendon Hill and Davis be added to help with crowding. These trips would operate every 15 minutes. It is also recommended that trips via Arlington Center operate every 20 minutes, in order to allow for improved reliability. These changes took effect in Fall 2008.

A request was made to extend service to Arlington Center on Sundays; however, no change is recommended, since the Saturday extension did not attract as many new customers as expected.

Route 88 Clarendon Hill - Lechmere Station via Highland Avenue

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	74%	Pass
Sat	Pass	Pass	Pass	74%	Pass
Sun	Pass	Pass	Pass	78%	Pass

Route 88 runs between Clarendon Hill and Lechmere, via Broadway, Davis Sq. and Highland Ave.

Route 88 passes the Load Standard, although there are some very heavily used trips between Clarendon Hill and Davis in the morning peak. A proposal to add shuttle trips on Route 88 between Clarendon Hill and Davis would help with the Route 87's crowding as well. These changes took effect in Fall 2008.

Route 89 Clarendon Hill or Davis Square - Sullivan Station via Broadway

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	67%	Pass
Sat	Pass	Pass	Pass	67%	Pass
Sun	Pass	Pass	Fail	54%	Pass

Route 89 operates from Clarendon Hill or Davis Square in Somerville to Sullivan Square in Charlestown, serving Powder House Square, Magoun Square, and Winter Hill.

The failure of the Load Standard on Sundays is very slight, and is based on 2002 observations. More recent observations made as part of the pilot APC program show that this overloading is no longer occurring.

In Winter 2005, Route 89 began to alternate service to Clarendon Hill and Davis Square. Currently, the alternation ends just after 7:00 PM on weekdays and 6:00 PM on Saturdays. Ridership counts have shown the Davis Square service to be popular, and there have been several customer requests for later service to and from Davis Square on this route.

Continuing to alternate service between Clarendon Hill and Davis Square during the later evening would leave two hour headways on the unique segments, and is not recommended. Switching all trips 7:30 PM outbound and later to serving Davis instead of Clarendon Hill is possible at no additional cost. This change is projected to attract add 88 passengers while losing 30-36 others, many of whom may switch to other buses such as the Route 87 and Route 88. This change could also be implemented at no cost on Saturdays beginning with the 7:00 PM outbound trip. On Saturdays, it is projected that this change would attract 108 passengers and lose 48, for an addition of 60 new passengers.

Route 90 Davis Square Station - Wellington Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	59%	Pass
Sat	Pass	Pass	Pass	55%	Pass
Sun	Pass	Pass	Pass	70%	Pass

Route 90 operates weekdays and Saturday from Davis Square in Somerville to Wellington Station in Medford, also serving Somerville Hospital, Sullivan Square, and Assembly Square Mall.

Sunday service was recently instituted for this route. Ridership counts from Fall 2007 show that ridership for this new service has developed and meets the Load and Cost Standards.

The weekday Frequency Standard failures are part of a timetable that was designed to improve reliability. Additional resources to bring the weekday schedule to full frequency compliance are not recommended due to limited ridership. Nearly all of the Route 90 corridor is also served by other buses, including the Route 88 on Highland Avenue and the Route 89 on Broadway.

Route 91 Sullivan Station - Central Square, Cambridge

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	70%	Pass
Sat	Pass	Pass	Pass	64%	Pass
Sun	Pass	Pass	Pass	63%	Pass

Route 91 operates from Sullivan Square in Charlestown to Central Square in Cambridge, serving Union Square and Inman Square.

Route 91 passes all of the service standards except for the Schedule Adherence Standard. There are no changes recommended for this route.

Route 92 Assembly Square Mall - Downtown Via Main Street

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	55%	Pass
Sat	Pass	Pass	Pass	58%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

Route 92 provides service weekdays and Saturday from Assembly Square Mall or Sullivan Square via Main Street and City Square in Charlestown, to Haymarket Station or Downtown Crossing in Boston.

Route 92 passes all of the service standards except for the Schedule Adherence Standard,. Running times will be examined to make sure that midpoints are appropriately scheduled, but no other changes are recommended at this time.

Route 93 Sullivan Station - Downtown Via Bunker Hill

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	60%	Pass
Sat	Pass	Pass	Pass	57%	Pass
Sun	Pass	Pass	Fail	60%	Pass

Route 93 provides service from Sullivan Square via Bunker Hill Street and City Square in Charlestown, to Haymarket Station or downtown Boston. Route 93 provides some trips throughout the day to the Charlestown Navy Yard.

Additional service between 6:30 AM and 8:30 AM to the Navy Yard has been requested by customers. There was room in the schedule to switch the 6:30 AM and 7:27 AM outbound trips to the variation which services the Navy Yard, and this change was made for the Summer 2008 schedule.

Recent APC data supports a 2004 ridecheck report of some standees in the morning on Sunday while headway is one hour, leading to very marginal failure of loading standard. Ridership should be monitored to see if it rises further.

Route 94 Medford Square - Davis Square Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	70%	Pass
Sat	Pass	Pass	Pass	55%	Pass
Sun	Pass	Pass	Pass	74%	Pass

Route 94 provides service from Medford Square to Davis Square in Somerville, via Winthrop Circle, Tufts University, and Powder House Square.

This route fails the Frequency Standard during the weekday morning peak. The 8:22 AM inbound and 8:53 AM outbound trips could both be shifted two

minutes earlier, which would make the route pass. This change will be implemented for Fall 2008.

Changes in run times were made in Spring 2008 to improve reliability on Saturdays in response to customer concerns. Service was also added to improve the frequency of this route during the weekday evening peak, for the purpose of improving coordination of departure times at Davis Square with the Route 96.

Route 95 West Medford - Sullivan Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	57%	Pass
Sat	Pass	Pass	Pass	60%	Pass
Sun	Pass	Pass	Pass	52%	Pass

Route 95 operates from West Medford to Sullivan Square in Charlestown via Medford Square.

Using new GPS-based run time data, a new schedule was created for Summer 2008 which should improve schedule adherence on this route.

Route 96 Medford Sq - Harvard Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	67%	Pass
Sat	Pass	Pass	Pass	62%	Pass
Sun	Pass	Pass	Pass	67%	Pass

Route 96 operates from Medford Square to Harvard Square, serving Tufts University, Powder House Square, Davis Square, and Porter Square.

A suggestion was received to improve service in the evening on the Route 96 by increasing the frequency. This use of resources is not recommended at this time, as there is no chronic crowding on the route. Also, changes were made to the Route 94 in Spring of 2008 to better coordinate evening departure times from Davis Square, which should help evening service to run more efficiently and reliably.

Route 97 Malden Station - Wellington Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	51%	Pass
Sat	Pass	Pass	Pass	48%	Pass
Sun	Pass	Pass	Pass	60%	Pass

Route 97 operates from Malden Center Station to Wellington Station in Medford, via Everett Square and the Gateway Center shopping area.

Reaction to service at the Gateway Center, instituted in December 2001, has been positive. Customers have made requests for more service to the Gateway Center. This would be accomplished with proposed changes to Route 99.

No changes to Route 97 are recommended at this time.

Route 99 Boston Reg. Med Center Stoneham - Wellington Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	68%	Pass
Sat	Pass	Pass	Pass	74%	Fail
Sun	Pass	Pass	Pass	86%	Fail

Route 99 operates from the site of the former Boston Regional Medical Center in Stoneham to Wellington Station in Medford, via Molineaux Circle, Malden Hospital, Malden Center Station, and Sweetser Circle.

This route fails the Frequency Standard during the late AM peak on weekdays. However, the most recent ridership data indicates that peak demand on this route occurs between 6:30 AM and 7:30 AM, so it is appropriate for the most frequent service to be at that time, with frequencies decreasing to every 40 minutes after 8:00 AM. As newer ridership data is gathered, this determination will always be reviewed.

Route 99 fails the Cost Standard on both Saturdays and Sundays. It is proposed that Saturday service be cut back during the morning, a time of lower usage. Between the beginning of service and 10:00 AM, Route 99 would run hourly instead of every half hour. More frequent service between Wellington and Malden along the Route 99 corridor will remain available on Route 106. This change will improve the route's compliance with the Cost Standard.

To attract more riders to Route 99, and respond to a frequent customer request, it is recommended that on Saturday this route should service the Gateway Center shopping area. To accommodate this addition to the schedule, the frequency will be modified to every 40 minutes. This change can be made at no additional cost. It is estimated that this change would attract at least 38 new passengers to Route 97 and Route 99 on Saturdays.

If this change is implemented and proves to be popular, the possibility of Sunday service into the Gateway Center would be examined.

Route 100 Elm Street - Wellington Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	57%	Pass
Sat	Pass	Pass	Pass	62%	Fail
Sun	Pass	Pass	Pass	68%	Pass

Route 100 operates from Elm Street in Medford via Roosevelt Circle to Wellington Station. No changes are recommended to Route 100 at this time. The failure of the Frequency Standard would require additional resources to correct, and ridership is limited on this route.

Route 100 fails the Cost Standard on Saturdays. It would be recommended to reduce service to hourly, which would easily accommodate all of the passengers using this route on Saturdays, but the current alignment of the schedules at Charlestown garage prevents this potential service change from saving any resources. No change is recommended.

Route 101 Malden Station - Sullivan Station Via Medford Square

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	60%	Pass
Sat	Pass	Fail	Pass	69%	Pass
Sun	Pass	Fail	Pass	48%	Pass

Route 101 operates from Malden Center Station to Sullivan Square Station in Charlestown, serving Medford Square and Winter Hill.

A slight weekday failure of the Load Standard for this route was reported in a 2005 ridecheck. Current APC data confirms that the bus is often filled close to

capacity, but does not violate the loading standards. Ridership will be closely monitored.

On Saturdays and Sundays, Route 101 fails the Frequency Standard, as buses operate every 65 minutes rather than every 60 minutes. However, tightening the headway would require adding a bus to the route, and ridership levels at those times do not warrant this additional expense. No change is recommended.

Route 104 Malden Station - Sullivan Station Via Ferry Street

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	58%	Pass
Sat	Pass	Pass	Fail	51%	Pass
Sun	Pass	Fail	Pass	58%	Pass

Route 104 operates from Malden Center Station to Sullivan Square in Charlestown, via Glendale and Everett Squares.

Recent ridership counts support previous observations of Load Standard violations in the evening on Saturdays due to some standees.

On Saturdays, it is recommended that an additional bus be added between 7:30 PM and 10:30 PM to be shared between Routes 89, 104, 109, and 95. This will allow for frequencies to improve from hourly to every 45-50 minutes.

This route fails the Frequency Standard by two minutes just after noon on Sundays. This slight failure is necessary to maintain schedule reliability at that time of day; no change is recommended.

Route 105 Malden Station - Sullivan Station Via Main Street

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	54%	Pass
Sat	Pass	Fail	Pass	56%	Pass
Sun	Pass	Pass	Pass	76%	Pass

Route 105 operates from Malden Center Station to Sullivan Square in Charlestown, via east Malden.

Route 105 fails the Frequency Standard weekdays with 35-minute headways during peak periods and 70-minute headways midday and on Saturday. Because the ridership on this route is not heavy and

reducing the headways would require additional resources, no change is recommended at this time.

Route 106 Franklin Sq or Lebanon Street Loop - Wellington Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	62%	Pass
Sat	Pass	Pass	Pass	74%	Pass
Sun	Pass	Pass	Pass	82%	Pass

Route 106 provides service from the Lebanon Loop to Wellington Station in Medford via Malden Center Station. Route 106 operates midday on weekdays beyond the Lebanon Loop into Melrose providing service to Park and Linwood Streets, Melrose/Wakefield Hospital, and Franklin Square. Route 106 also provides limited weekday AM peak period trips via Park and Linwood to Franklin Square.

No changes are recommended.

Route 108 Linden Square - Wellington Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	58%	Pass
Sat	Pass	Pass	Pass	75%	Pass
Sun	Pass	Pass	Pass	67%	Pass

Route 108 provides service from Linden Square in Malden via Malden Center Station to Wellington Station in Medford.

No changes are recommended.

Route 109 Linden Square - Sullivan Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	56%	Pass
Sat	Pass	Pass	Fail	51%	Pass
Sun	Pass	Pass	Pass	61%	Pass

Route 109 operates from Linden Square in Malden to Sullivan Station in Charlestown, via Glendale Square, Everett Square, and Sweetser Circle.

Heavy usage and occasional overcrowding has been reported on Saturday evening service on Route 109. It is recommended that an additional bus be added between 7:30 PM and 10:30 PM to be shared between Routes 89, 95, 104, and 109. This would allow for improved frequencies from hourly to every 45-50 minutes.

Route 110 Wonderland Station - Wellington Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	68%	Pass
Sat	Pass	Pass	Pass	64%	Pass
Sun	Pass	Pass	Pass	82%	Pass

Route 110 operates from Wonderland Station in Revere to Wellington Station in Medford, via Bell Circle, Revere Center, Woodlawn, Everett Square, and Sweetser Circle.

No changes have been requested or are recommended for Route 110 at this time.

Route 111 Woodlawn or Broadway & Park - Haymarket Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	75%	Pass
Sat	Pass	Pass	Fail	74%	Pass
Sun	Pass	Pass	Fail	63%	Pass

Route 111 is a Key bus route and operates from Woodlawn in Everett to Haymarket in Boston via Bellingham Square in Chelsea. Several short trips operate inbound only in the morning on weekdays from Washington Avenue at Revere Beach Parkway to Haymarket. During weekday evenings, Route 111 operates from Broadway and Park Avenue in Revere to Haymarket.

Significant service additions and frequency improvements were made to this heavily used route in Winter 2008. Subsequent counts show that crowding levels meet the Load Standard . No further changes are recommended.

Route 112 Wellington Station - Wood Island Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	53%	Pass
Sat	Pass	Pass	Pass	49%	Pass
Sun	Pass	Fail	Pass	51%	Pass

Route 112 operates from Wellington Station in Malden to Wood Island Station in East Boston, via Everett Square, Quigley Hospital, Mystic Mall, Admiral’s Hill, and Bellingham Square.

Schedule adherence complaints led to the discovery that some midpoints were poorly timed. Buses on Route 112 were running 10 minutes early at Bellingham Square, leading to service that was the equivalent of 25 minutes late. Run times were adjusted on weekdays for Summer 2008. Similar adjustments will be made for weekends on this route.

Route 114 Bellingham Square or Mystic Mall - Maverick Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Waive	Pass	48%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 114 is a short weekday-only route providing service between Maverick Station and Bellingham Square in Chelsea, which supplements the service of Route 116/117. During the midday, it continues on to serve Mystic Mall.

Independently, this route does not conform to the Frequency Standard, but it shares almost all segments with the Route 116/117 shared corridor, which has very frequent service. If proposals to add service to Route 116/117 are implemented, reliability should improve over the entire shared corridor, which will improve the schedule adherence of this route.

Route 116 Wonderland Station - Maverick Station Via Revere

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	64%	Pass
Sat	Pass	Pass	Fail	68%	Pass
Sun	Pass	Pass	Fail	69%	Pass

Route 117 Wonderland Station - Maverick Station via Beach

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	64%	Pass
Sat	Pass	Pass	Fail	65%	Pass
Sun	Pass	Pass	Fail	67%	Pass

Routes 116 and 117 provide service in Revere, Chelsea, and East Boston with a shared common segment on Broadway and Meridian Street. This shared segment is designated as a Key Route.

Routes 116 and 117 are a very high priority for the use of available resources. Both routes routinely experience high levels of crowding, and the community has expressed concern. Failures of the Load Standard occur during the PM peak and evening, and during the early afternoon on

weekends. It is recommended that eight hours of service be added on weekdays to improve service reliability and crowding.

On weekdays, it is recommended that some trips of Route 117 be turned Broadway and Central Avenue rather than at Wonderland. Each round trip on this shortened route would save 16-22 minutes, which would be used to increase recovery time and frequency along the Meridian Street and Broadway corridor.

It is recommended that four hours of service time be added on Saturdays, to increase recovery time between trips and extend the hours during which the routes operate at a combined frequency of every 15 minutes. This would also add approximately 32 miles, and attract a projected 210 additional riders.

Route 119 Northgate Shopping Center - Beachmont Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	59%	Pass
Sat	Pass	Pass	Pass	58%	Pass
Sun	Pass	Pass	Pass	55%	Pass

Route 119 serves residential neighborhoods in Revere, the Linden Square/Northgate retail area, and Beachmont Station.

The slight weekday failure of the Frequency Standard on Route 119 was necessary to address schedule adherence issues. Run time analysis shows that adherence has improved; no change to improve Frequency Standard compliance is recommended.

In addition, multiple requests have been received to consider having the Route 119 enter the parking lot of the Shops at Suffolk Downs. The additional time required to pull into the Shops at Suffolk Downs could be accommodated if the frequency of the bus were reduced to every 35-40 minutes during peaks and every 70 minutes off-peak. Public input will be sought to determine whether the community would be comfortable with this change. Cooperation would also be required from the managers of the shopping center, in order to determine if a safe path can be made for the bus and its passengers through the grounds.

Route 120 Orient Heights Station - Maverick Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	60%	Pass
Sat	Pass	Pass	Pass	74%	Pass
Sun	Pass	Pass	Pass	70%	Pass

Route 120 is a local route that serves Bennington Street, Jeffries Point, and the Waldemar Housing area in East Boston, with connections to Orient Heights and Maverick Station.

Customers who use Route 120 have reported that it is not staying on schedule reliably. Although some of the problem with schedule adherence may be attributed to the ongoing reconstruction of Maverick Station, customers have reported that similar problems existed before construction began. Run times will be examined, and particular attention will be paid to making sure that midpoints, such as the beginning of the Waldemar and Jeffries Point loops, are accurately scheduled.

Route 121 Wood Island Station - Maverick Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Pass	Pass	71%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 121 is a short route providing commuter service on Lexington Street in East Boston. During the PM peak, this route operates between Eagle Square and Maverick only.

This route performs generally well, but fails the Span of Service Standard because the last weekday outbound trip leaves its origin at Maverick Station before 6:30 PM. Recent observations show that ridership on this last trip is higher than ridership on the previous two peak trips; possibly indicating that service at this time is desirable.

It is recommended to bring Route 121 into compliance with the Span of Service standard by moving the 6:20 PM outbound trip to 6:15 PM and adding a new inbound 6:29 PM trip and a new 6:40 PM outbound. This will add a half hour of vehicle time and 2.6 miles, and is projected to attract 19 new riders.

Route 131 Melrose Highlands - Malden Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	68%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 131 provides weekday service from Melrose Highlands via Franklin Square and east side Melrose to Oak Grove Station or Malden Center Station.

There has been a request to alter this route to service the Square One Mall. This would be a lengthy extension requiring significant resources. As the Square One Mall is already serviced by several routes, including the 430 which also departs from Malden Station, this change is not recommended.

Route 132 Redstone Shopping Center - Malden Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	55%	Pass
Sat	Pass	Fail	Pass	59%	Fail
Sun	N/A	N/A	N/A	N/A	N/A

Route 132 operates weekdays and Saturday from the Redstone Shopping Center in Stoneham to Malden Center Station, via Wyoming Square and Oak Grove Station.

Investigation of the travel times on this route using new GPS-based data revealed that running time was not allocated correctly, leading to schedule adherence problems at Oak Grove. A new schedule has been created with more accurate run times, which should prevent the early outbound departures from Oak Grove while still giving sufficient time for the driver to complete the route.

This route currently fails the Frequency Standard, and it is recommended that frequency be improved from 5:30 PM onward in the evening, as requested by customers, where previously there was a large gap in service. This change is being implemented for Fall 2008.

Route 132 also fails the Cost Standard on Saturdays. It is recommended that the unpopular 7:00 AM inbound trip be discontinued, which would produce a savings of half an hour and cause 3 passengers to take later service. An effort should be

made to reach out to businesses at Redstone to assist with promotion of this route in hopes that more riders would be attracted.

Route 134 North Woburn - Wellington Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	58%	Pass
Sat	Pass	Pass	Pass	52%	Pass
Sun	Pass	Fail	Pass	55%	Pass

Route 134 operates weekdays and Saturday from North Woburn or West Medford to Wellington Station via Winthrop Circle, Medford Square, and Meadow Glen Mall. On Sunday, service operates from Woburn Square to Wellington.

The 75-minute headway of the final trip on Sunday is a result of the extension of Sunday service to Woburn that took place in 2005, and altering this portion of the schedule to comply with the Frequency Standard is not recommended.

The recent temporary relocation of the Middlesex County Courthouse to Woburn from East Cambridge resulted in a route modification in early 2008 to add service to the new courthouse location in the TradeCenter 128 complex. Ridership and running times will be monitored to see if further adjustments are needed.

There has been a request to extend service on Route 134 to the Anderson Regional Transportation Center; however, the configuration of roads and unavailability of rail crossings near Anderson make this extension prohibitively difficult.

To accommodate changes to the schedule of Route 132 for Fall 2008, the outbound frequency of Route 134 was altered from 20 minutes to 30 minutes during the hour between 5:30 PM and 6:30 PM. Ridership observations indicate that no crowding problems would result, but up to 12 passengers may be lost.

Route 136 Reading Depot - Malden Station Via Lakeside

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	53%	Pass
Sat	Pass	Pass	Pass	56%	Fail
Sun	N/A	N/A	N/A	N/A	N/A

Route 137 Reading Depot - Malden Station Via North Ave

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Fail	49%	Pass
Sat	Pass	Pass	Pass	50%	Fail
Sun	N/A	N/A	N/A	N/A	N/A

Routes 136 and 137 operate together from Reading Depot to Malden Center Station, sharing the same alignment from Wakefield Square to Malden Station via Greenwood Station, Franklin Square, and Oak Grove. Between Reading Station and Wakefield, Route 137 operates west of Lake Quannapowitt via Wakefield Station, while Route 136 operates east of the lake.

Because Routes 136 and 137 share much of the same alignment, they are generally analyzed together as one route for the purposes of determining conformance with the Service Delivery Policy. As in previous plans, the slight Frequency Standard failure in the early PM peak is deemed acceptable. The additional frequency failure created by the existence of the last round trip on the schedule cannot be fixed without the addition of another vehicle, which is not recommended at existing ridership levels. No changes are recommended for these failures of the Frequency Standard.

To address weekday schedule adherence issues, it is proposed that some additional rush hour trips of Route 136 and Route 137 be turned around at Oak Grove Station, rather than proceeding to Malden Station. Ridership on the section between the two Orange Line stations is very low.

A major change is proposed in order to create Sunday service on these routes, a service improvement that many customers have requested. Although new resources are not available to create Sunday service, some resources may be moved

from Saturday resulting in somewhat less frequent Saturday service. Currently, 136/137 buses run every 30 minutes on Saturday between 6:00 AM and 8:00 PM. This frequency would be changed to every 45 minutes. All buses would run Route 136 east of the lake while travelling outbound to Reading, and run Route 137 west of the lake while traveling inbound to Malden Station. Customers on either side of the lake could have service to/from Malden by "riding through" the end of the line. This practice is currently in use on Sundays and late evenings on the Route 40/50.

The new Sunday service would run every 90 minutes between 8:00 AM and 5:00 PM. It is projected that up to 409 trips would be made on this new Sunday service.

Route 170 Oak Park - Dudley Station (Limited Service)

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Fail	Pass	51%	Fail
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

The Route 170 provides reverse-peak weekday service between Downtown Boston, Waltham, Burlington and Bedford. There are two trips from Downtown to Bedford in the morning and one afternoon trip returning from Bedford to Downtown Boston in the afternoon.

Ridership has increased 60% since 2005, but still does not pass the Cost Standard at \$12.17 per passenger trip. Three passengers were found to ride the morning trips between Waltham Center and Burlington/Bedford and three passengers boarded inbound before Waltham, or less than 14% of all passengers. Travel time between Lincoln St. in Waltham and Bedford is approximately 15 minutes in the morning and 20 minutes in the afternoon. In addition, it takes 17 - 20 minutes for the bus to travel to/from Bedford back towards Lincoln St. in order to connect to other in-service trips. In total, this works out to a cost of over \$65 per passenger trip for just the portion of the trip between Lincoln St. and Bedford.

Due to the high cost and limited use of the service for this portion of the route, it is recommended that the route serve Wyman St. at Lincoln St. and then

follow the Route 70A to/from Waltham Center via Lexington St., Lake St., and Lincoln St. It is expected that eliminating service on Route 128 will improve reliability for the afternoon inbound service as well as the morning trips connected to the outbound service.

With the saved time, it is recommended that an additional afternoon inbound trip be added so that there are two morning trips and two afternoon trips. Since there were passenger requests for earlier and later inbound service, it is recommended that the two afternoon inbound trips leave Waltham Center at 3:55 PM and 4:55 PM, serving Smith St. at 4:10 PM and 5:00 PM respectively.

Approximately 6 passengers will be impacted by the elimination of service between Waltham and Bedford. Alternate service to the Burlington/Bedford area is provided by the Route 351 from Alewife, but there are currently no direct services connecting Waltham to other western suburbs. A combination of other service providers could be used (128 Business Council Waltham Shuttle, Lexpress Routes 4/2 and 5 and Lowell Regional Transit Rt. 14) although this would be cumbersome.

The number of passengers attracted by the additional inbound trip is unknown, but estimated to be positive.

Route 171 Logan Airport - Dudley Station Sunrise

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Fail	Pass	38%	Pass
Sat	Fail	Fail	Pass	57%	Pass
Sun	Fail	Fail	Pass	68%	Pass

Route 171 provides early morning service from Dudley Station to Logan Airport via Andrew Station. The service is designed to carry airport-bound traffic before regular subway and bus service begins running. The Route 171 is met in Dudley Square by service on the Route 28 and Route 15 service.

Since this route is a supplement to a number of other subway and bus routes that operate during the regular service day, no change is recommended.

Route 201 & 202 Fields Corner Station - Fields Corner Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	67%	Pass
Sat	Pass	Pass	Pass	72%	Fail
Sun	Pass	Pass	Pass	71%	Fail

These routes operate in a loop from Fields Corner, via Neponset Ave. and Adams St., with midday service on weekends extended to North Quincy Station. Route 201 operates in the clockwise direction, and Route 202 operates counter-clockwise.

These routes fail the Cost Standard for Saturdays and Sundays. On Saturdays, it is recommended that the span of service be shortened during low ridership times. From Fields Corner, the first Route 201 trip of the day would start at 6:40 AM rather than 6:00 AM, the first Route 202 trip would start at 9:05 AM rather than 8:20 AM, the last Route 202 trip of the day would start at 6:05 PM rather than 6:45 PM, and the last Route 201 trip would start at 9:00 PM rather than 9:30 PM. These changes would reduce bus service by 2.5 hours and affect 19 passengers who could use service up to 40 minutes earlier/later, or ride the loop in the opposite direction. No change is recommended on Sundays, when the schedule is more limited, and when interlined routes provide few options for saving hours.

There have been requests to eliminate the extension to North Quincy on the weekends. This would make the trip between Keystone and Puritan more convenient, as it is during weekdays, but would affect customers between the Fields Corner and North Quincy areas. Since the number of riders making each of these trips is similar, maintaining the status quo is recommended.

Route 210 Quincy Center Station - No. Quincy Station or Fields Corner Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Pass	Pass	54%	Pass
Sat	Pass	Pass	Pass	60%	Pass
Sun	N/A	N/A	N/A	Pass	

This route links Quincy Center and Fields Corner on weekdays, and Quincy Center with North Quincy Station on Saturdays, Route 210 fails the Span of Service Standard because the last weekday trip in the reverse-peak direction departs Quincy Center at 5:15 PM. Due to limited resources, extending the Span of Service is not proposed at this time.

Route 211 Quincy Center Station - Squantum

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	57%	Pass
Sat	Pass	Pass	Pass	71%	Fail
Sun	Pass	Fail	Pass	75%	Fail

Route 211 connects the Squantum neighborhood with Quincy Center.

This route fails the Cost Standard on weekends. On Saturdays, it is recommended that the Span of Service be shortened by 55 minutes. The first trip of the day would depart Quincy Center at 6:55 AM rather than 6:00 AM. Five customers would be affected. There is a Frequency Standard violation due to a 2-hour headway in each direction on Sunday afternoon. However, no frequency changes are recommended due to low ridership.

Route 212 Quincy Center Station - North Quincy Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	69%	Pass
Sat	Pass	Fail	Pass	66%	Fail
Sun	N/A	N/A	N/A	N/A	N/A

This route connects Quincy Center with North Quincy Station.

Route 212 fails the Cost Standard on Saturdays. It is recommended that the lightly used first trip be eliminated. The first trip would depart from Quincy Center at 8:00 AM rather than 6:50 AM; 3

passengers would be affected. The Frequency Standard violation on Saturday is due to some headways being greater than 60 minutes on 2-3 trips. Since the route already exceeds the Cost Standard, it is not recommended to correct the Frequency violation at this time.

Route 214 Quincy Center Station - Germantown

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	64%	Pass
Sat	Pass	Pass	Pass	69%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

Route 214 connects Germantown and Quincy Center, while Route 216 links Hough's Neck and Quincy Center.

It is recommended that Routes 214 and 216 be combined all day on Saturday, as is already the case for Saturday morning, Saturday evening, and all day Sunday. This would improve the frequency for some customers, although the frequency would decrease for another smaller group. The travel time would increase by 7-9 minutes for those traveling from Germantown or to Hough's Neck. This change would save 6.0 operating hours per Saturday for the two routes combined, and thus would remedy the Cost Standard failure for Route 216 on Saturdays. It is expected to result in a net gain of 6 customers on the two routes combined.

For 372 people who travel to and from the areas that are served only by either Route 214 or Route 216, the headways between noon and 6:00 PM on Saturday would improve from 20 minutes to 15 minutes. For 93 people who travel to and from the trunk section served by both routes, the frequency would decrease from every 10 minutes to every 15 minutes. The 7-9 minutes of increased travel time would affect 170 people.

Route 215 Quincy Center Station - Ashmont Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	58%	Pass
Sat	Pass	Pass	Pass	64%	Pass
Sun	Pass	Pass	Pass	56%	Pass

Route 215 links Quincy Center with Ashmont, by way of West Quincy and E. Milton Sq. No changes are recommended. The Frequency Standard violation is due to a single 35-minute headway during the PM peak period. However, the resources needed to address this violation are currently unavailable.

Route 216 Quincy Center Station - Houghs Neck

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	60%	Pass
Sat	Pass	Pass	Pass	56%	Fail
Sun	Pass	Pass	Pass	67%	Pass

This route links the Hough's Neck area with Quincy Center. See Route 214 above for a proposal concerning both Routes 214 and 216 on Saturdays.

Route 217 Wollaston Station - Ashmont Station via Wollaston Beach

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	50%	Fail
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

★ **Proposal ALTERED from Preliminary Plan**

This route operates weekdays only, connecting Ashmont and Quincy Center by way of Wollaston.

The route fails the Cost Standard. It is recommended that the last trip from Ashmont, which had very little ridership when last counted, be eliminated. This change would cause 4 passengers to take alternate service or an earlier trip, and would save 20 minutes of operating time. Recent ridership counts showed an increase in customers on the last trip from Quincy, so this trip will not be eliminated as originally proposed in the Preliminary Service Plan.

Route 220 Quincy Center Station - Hingham

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	58%	Pass
Sat	Pass	Pass	Pass	63%	Pass
Sun	Pass	Pass	Pass	58%	Pass

Route 220 connects Hingham with Quincy Center.

There has been a request to extend the route to West Hingham Station on the Greenbush Line. However, given the roadway network and low demand for feeder bus service at commuter rail stations, this change is not recommended.

Route 221 Quincy Center Station - Fort Point

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Fail	Pass	66%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 221 connects the Fort Point area with Quincy Center. No changes are recommended for this route. Route 221 only makes 4 weekday trips in each direction, and it therefore fails both the Span of Service Standard and the Frequency Standard. However, this level of service has historically been provided so that the Fort Point area of Quincy would have some limited service, and no changes are recommended.

Route 222 Quincy Center Station - East Weymouth

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	62%	Pass
Sat	Pass	Pass	Pass	73%	Fail
Sun	Pass	Pass	Pass	71%	Pass

★ **Proposal ALTERED from Preliminary Plan**

Route 222 links E. Weymouth with Quincy Center.

There have been many requests to extend route 222 south of Jackson Square, due to the recent decision by a private carrier to discontinue bus service in Weymouth. It is recommended that some trips on the route be extended from Jackson Square to Pleasant and Washington Streets, which would serve several residential complexes (see map). In

response to public feedback regarding the Preliminary Service Plan, the existing portion of the route along High Street between Jackson Square and Ward/French streets in Hingham would continue to be served by alternating trips. The extension on 1/2 of the trips would cause the frequency of service to decrease slightly during some periods - AM Peak headways would change from 12 to 13 minutes, PM Peak headways from 15 to 16 minutes, and midday headways from 30 to 32 minutes. Frequency would not be affected on evenings or weekends.

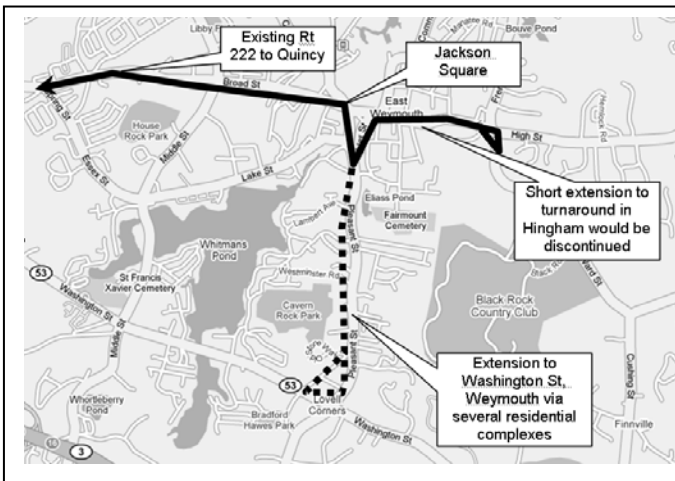
For weekdays, it is estimated that 5 customers would be lost due to the routing change on some trips, and 28 due to the decreased frequency. However, an estimated 40 new customers would be attracted because of the extension, for a net gain of 7 weekday passengers. It is also estimated that there would be 8 new passengers on Saturday, and 5 on Sunday. There is a cost of 1.0 hours on Sunday, in order to maintain the existing 60-minute headway.

Route 225 Quincy Center Station - Weymouth Landing

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	62%	Pass
Sat	Pass	Pass	Pass	61%	Pass
Sun	Pass	Pass	Pass	62%	Pass

Route 225 connects Quincy Center and Weymouth Landing. The Load Standard failure is because of some standees just after the end of the peak periods. However, the route carries even higher passenger volumes during the peak periods, and recent counts show ridership is increasing. Therefore, it is recommended that one vehicle be added for 2 hours during the PM Peak, from 4:45 PM to 6:45 PM. This would improve the headways from 12 minutes to 10 minutes, and attract an estimated 41 new customers.

There have been many requests to extend this route to South Weymouth, due to the recent decision by a private carrier to discontinue bus service in Weymouth. It is recommended that 10 weekday trips on Route 225 be extended to Columbian Square/South Shore Hospital, via Washington St., Middle St., and the Wal-Mart plaza (see map and proposed schedule). In addition to potential reverse commuters for the hospital and shopping plaza, the extended trips would serve a high school and several residential complexes. The cost would be 3.4 hours, but an estimated 80 new customers would be attracted.



Proposed Schedule and Map for Route 225 Trips to be Extended to South Weymouth:

Outbound		Inbound	
Dep Quincy Ctr	Arr So Shore Hosp	Dep So Shore Hosp	Arr Quincy Ctr
6:15a	6:45a	6:50a	7:25a
6:55	7:25	7:30	8:04
7:55	8:24	8:25	8:55
12:30p	1:05p	1:05p	1:35p
2:15	2:51	2:52	3:22
2:53	3:28	3:30	4:12
5:49	6:21	6:26	6:53
6:40	7:10	7:10	7:27
7:05	7:35	7:35	8:02
10:35	11:05	11:05	11:27

Route 230 Quincy Center Station - Montello Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	62%	Pass
Sat	Pass	Pass	Pass	58%	Fail
Sun	Pass	Fail	Pass	69%	Fail

★ **Proposal ALTERED from Preliminary Plan**

Route 230 connects Quincy Center with the Montello commuter rail station in Brockton, by way of Holbrook and Braintree. This route fails the Cost Standard on weekends. The Preliminary Service Plan recommended the elimination of the last two round trips on Saturdays and Sundays. However, recent counts show an increase in ridership on these trips, and therefore this recommendation has been withdrawn.

The route also fails the Frequency Standard because of some headways during the midday and on Sundays which are greater than 60 minutes. However, resources are not currently available to remedy this.

Route 236 Quincy Center Station - South Shore Plaza

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	58%	Pass
Sat	Pass	Fail	Fail	56%	Pass
Sun	Pass	Pass	Pass	62%	Pass

This route links Quincy Center with the South Shore Plaza. No changes are recommended for Route 236. The Frequency Standard violations are due to some headways which are greater than 30 minutes during the peak hours, and because of 70-minute headways on Saturday. However, correcting these frequencies is not possible due to limited resources. The Load Standard failure is caused by some standees on trips around 5:15 PM on Saturday, but again limited resources preclude efforts to remedy this problem.



Route 238 Quincy Center Station - Holbrook/Randolph Comm. Rail Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	53%	Pass
Sat	Pass	Pass	Fail	58%	Pass
Sun	Pass	Fail	Pass	55%	Pass

Route 238 connects Quincy Center with the South Shore Plaza and the Holbrook/Randolph commuter rail station.

It is recommended that a trip to Quincy Center be added departing from Holbrook/Randolph Station at 5:45 AM weekdays. Requests for the earlier service have been received, and the current first trip has 66 boardings. The cost of the added trip would be 1.6 hours per weekday, and this trip is expected to attract 25 new customers.

There are some headways on Sunday which are greater than 60 minutes. The violation of the Load Standard on Saturdays is due to some standees around 6:00 PM. Due to limited resources, it is not recommended that these failures be corrected at this time.

There have been requests for additional Sunday service to South Shore Plaza, in order to improve access for mall employees and/or restaurant patrons. Beginning in Fall 2008, almost all Sunday trips will enter South Shore Plaza in both directions. This has been implemented at no additional cost.

Route 240 Avon Line - Ashmont Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Fail	47%	Pass
Sat	Pass	Pass	Pass	64%	Pass
Sun	Pass	Fail	Pass	63%	Pass

Route 240 connects Crawford Sq. and Ashmont, with some trips also serving Avon Sq. or the Holbrook/Randolph commuter rail station. No changes are recommended for this route. The Frequency Standard failures are due to some headways being greater than 60 minutes on weeknights and Sundays. The violation of the Load Standard is because of some standees between 7:00 PM and 8:00 PM outbound. However,

addressing these failures would not be the most efficient use of the limited available resources.

Route 245 Quincy Center Station - Mattapan Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	63%	Fail
Sat	Pass	Fail	Pass	62%	Fail
Sun	Pass	Fail	Pass	60%	Fail

Route 245 operates Quincy Center - Mattapan Monday-Saturday. On Sundays, a shuttle service from Quincy Center Station via Whitwell and Adams Streets operates. No changes are recommended for Route 245. This route offers fairly limited service, and also has low ridership. Therefore, the route does not adhere to the Frequency Standard or the Cost Standard on any day of the week. However, Route 245 does serve parts of Milton and Quincy which would otherwise be without transit service. The Sunday cost per passenger appears very high, but this is for only one hour of service, since the short route is in effect on Sunday.

Route 325 Elm Street - Haymarket Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Pass	Pass	43%	Fail
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 325 is an express route and operates weekdays only from Elm Street at Fellsway in Medford via Roosevelt Circle and I-93 to Haymarket.

Schedule changes made in Spring 2008 should eliminate the failure of the Cost Standard while decreasing frequency only slightly. The new schedule also addresses the Span of Service Standard failure on weekdays by moving the last outbound departure to 6:30 PM. Run times have been modified for the Summer 2008 schedule to create more accurate arrival times on the schedule, allowing customers to better plan their travel.

Route 326 West Medford - Haymarket Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	48%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 326 provides weekday express service via I-93 between West Medford and Haymarket Station in Boston, via Medford Square.

Run times have been modified for the Summer 2008 schedule. This creates more accurate arrival times on the schedule, allowing customers to better plan their travel.

Route 350 North Burlington - Alewife Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	62%	Pass
Sat	Pass	Pass	Pass	61%	Pass
Sun	Pass	Fail	Pass	65%	Fail

Route 350 runs between Alewife and North Burlington, via Burlington Mall, Cambridge St in Woburn, Winchester, and Arlington, and Mass. Ave.

On Sundays, the morning headways vary from 75 to 80 minutes, and there are 70-minute headways between the last two trips. Given existing ridership levels, no changes are recommended.

Route 351 Oak Park - Alewife Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	64%	Fail
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 351 is a weekday only commuter route. There are 6 trips from Alewife to Oak Park in the AM peak and 6 trips from Oak Park to Alewife in the PM peak. This route operates express via Route 2 and Route 128, and locally serves Burlington Mall Road and several business parks off Middlesex Turnpike in Burlington and Bedford.

It is recommended that the MBTA partner with area businesses to market this service as an option for reverse-commute employees.

Route 352 Burlington - State Street

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	60%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 352 is an express route that operates on weekdays from North Burlington to State Street Station via I-95 and I-93.

No changes are recommended for Route 352 at this time.

Route 354 Woburn Line - State Street

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	45%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 354 is an express route that operates weekdays from Van deGraff Drive in Burlington to State Street Station in Boston, via Woburn Square. Some reverse-peak direction trips also stop in Medford Square, and outbound evening trips extend to Chestnut Avenue in Burlington.

Significant run time adjustments were made in Spring 2008 to address schedule adherence issues.

Route 355 Mishawum Station - State Street

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Fail	Pass	31%	Fail
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 355 provides limited weekday service via I-93 between Mishawum Station in Woburn and downtown Boston, with stops at West Cummings Park and Medford Square.

Route 355 operates only two outbound trips in the AM and two inbound trips in the PM, providing service only in the reverse peak direction (outbound in the morning and inbound in the afternoon). In the peak direction (inbound in the morning and outbound in the afternoon), three of the four Route 355 trips operate in service as Route 352 trips.

Due to the limited reverse commuting service provided by the Route 355, it fails the span, frequency and net cost/passenger standards. However, Route 355 trips would operate deadhead trips on Route 352 if the Route 355 were not operating, and therefore little or no cost savings would result from cutting these trips. It is recommended that Route 355 not be changed.

Route 411 Malden Station - Revere/Jack Satter House

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	44%	Pass
Sat	Pass	Pass	Pass	67%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

Route 411 provides service between Malden Center Station and the Jack Satter House in Revere, serving Granada Highlands, Linden Square, Northgate Shopping Center, Wonderland Station, and Revere Beach Station.

There is a request from the City of Revere to provide service along Revere Beach Boulevard for residents of several new condominium complexes. A possible proposal would be to extend Route 411 northward to Point of Pines, servicing Revere Beach Boulevard. However, at this time such an extension of Route 411 would require a decrease in frequency to every 65 minutes. The impact this would have along the rest of the route would need to be examined further, especially in Grenada Highlands which uses this as a commuter route rather than a community circulator.

Route 424 Eastern & Essex - Haymarket or Wonderland

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Pass	Pass	66%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

This weekday, peak-period commuter route provides service from Eastern Avenue in Lynn to Wonderland in the AM, and from Haymarket in the PM.

Because Route 424 is an integral part and former variation of the Route 450 schedule, the failure of the Span of Service standard (due to last outbound

trip departing before 6:30 PM) is acceptable. Schedule adherence issues on this route are partly due to early arrivals at Wonderland, which are considered acceptable for an express route of this type. Run times should still be checked to make sure that the schedule is reasonably accurate and efficient.

There has been a request for later morning service on this route. This service would probably attract ridership, since the last trip in the AM peak has the highest ridership of the AM peak trips. However, this change is not recommended right now due to the many other uses for additional resources that would be a higher priority.

Route 426 Central Sq Lynn - Haymarket or Wonderland Station Via

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	55%	Pass
Sat	Pass	Pass	Pass	51%	Pass
Sun	Pass	Pass	Pass	53%	Pass

Due to customer requests, an additional morning trip was modified in Spring 2008 to run to Haymarket instead of Wonderland. Crowding had been reported on the Haymarket-bound trips, and it is hoped that this switch will help. A large residential development at Rowe Quarry has increased ridership on Route 426, according to customer and operator reports. Since this development is continuing to add housing units, ridership on this route will be examined over the next few years, and run times will be optimized to make sure that any necessary adjustments to the service are made. Trip times may be altered if changes are made to the schedule of Route 439, to preserve coordination between the two routes.

There has been a request for service to Haymarket instead of Wonderland on Saturdays, which is not recommended due to expense.

Route 428 Oaklandvale - Haymarket Station via Granada Highlands

	Span	Freq	Load	On-Time	Cost
Wkdy	Waive	Pass	Pass	60%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 428 is a long-distance commuter route connecting Wakefield, Saugus, and parts of Revere with Haymarket. It fails the Span of Service Standard, but earlier and later service is provided by Route 426/426W. No changes are recommended to Route 428 at this time.

Route 429 Northgate Shopping Center - Central Sq Lynn

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	50%	Pass
Sat	Pass	Pass	Pass	48%	Pass
Sun	Pass	Pass	Pass	59%	Pass

Route 429 is a local route that links Revere with Central Square in Lynn via Saugus and the Square One Mall.

Route 429 fails the Frequency Standard on weekdays during the very end of the morning peak. Rising costs have pushed the net cost per passenger for Sunday service on Route 429 to just above the policy standard. Changes are not recommended at this time, due to lack of recent ridership data and the marginal nature of the failure. Schedule adherence is low on this route. Run times will be examined and modified to assure that the route can maintain a reliable schedule and remain attractive to riders.

Crowding has been reported on early morning trips of Route 429, but our data shows that the route does not fail the Load Standard right now. Ridership should be looked at frequently, especially if APC becomes available for this route, in order to make sure service remains sufficient.

Route 430 Saugus, Appleton Street - Malden Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	41%	Pass
Sat	Pass	Pass	Pass	43%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

Route 430 operates between Saugus Center and Malden Center Station, providing service to Clifondale Square, the Square One Mall, and Granada Highlands.

There has also been a request for the Route 430 to pull into the Granada Highlands housing in Malden, rather than passing near it on Broadway. Although the schedule of Route 430 could not support this additional travel time on every trip without additional resources, it may be possible to have Route 430 serve Granada Highlands at certain off-peak times without additional cost. This would supplement the service provided by Route 411, and provide increased span and some increased frequency of service at Granada Highlands. This change is recommended, with trips of Route 430 being diverted only during times when the current schedule can be maintained without reliability problems, crowding problems, or additional time and vehicles.

Route 431 Neptune Towers - Central Sq Lynn

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	28%	Pass
Sat	Pass	Pass	Pass	33%	Fail
Sun	Pass	Fail	Pass	48%	Fail

Route 431 is local service operating from Central Square to Neptune Towers in Lynn, operating via Summer Street outbound and Neptune Street inbound, which began service in June 2002. The projected ridership predicted at that time has not materialized. Ridership on weekdays is low but does pass the Cost Standard, but service on Saturday and Sunday is barely used.

Because the very short trips on Route 431 are scheduled between trips of Route 435, eliminating it would not produce significant cost savings. However, some cuts are proposed to weekend service. The last two trips towards Central Square in the evening will be eliminated on Saturday and

Sunday, producing a small savings of 10 minutes and 3 vehicle miles on each day. Ridership observations have never seen passengers using these trips, so it is projected that no passengers would be lost with this change. In the future, individual weekend trips of Route 431 may be eliminated if they are found to be interfering with schedule adherence on Route 435.

Route 434 Peabody - Haymarket Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Fail	Pass	45%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 434 is a weekday-only express service linking Peabody and Haymarket via Lynn, and consists of one peak direction trip during each peak period. Although this fails the Span and Frequency Standards, no additional service is recommended given existing ridership levels.

Route 435 Liberty Tree Mall - Central Sq Lynn

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	50%	Fail
Sat	Pass	Pass	Pass	40%	Pass
Sun	Pass	Fail	Pass	50%	Pass

Route 435 links Danvers with Lynn via Peabody providing service to the major retail, industrial and medical facilities in the area.

Run times will be examined and modified as needed to make schedules more reliable, in hopes of attracting additional riders.

Ridership on the Pine Hill variation, which runs five times during the day, has dropped to almost zero, but some riders appear to still be using it primarily for midday trips. We have had a request to change at least one of the Pine Hill trips to a standard run of Route 435 in order to provide more service to the usual section. It is proposed that the 7:15 AM trip towards Lynn and the 5:45 PM trip away from Lynn be converted to standard runs without service to Pine Hill.

Route 436 Danvers Sq - Central Sq Lynn

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Fail	Pass	61%	Fail
Sat	Pass	Pass	Pass	62%	Fail
Sun	Pass	Fail	Pass	53%	Fail

Route 436 links Danvers with Lynn via Peabody providing service to major retail, industrial, and medical facilities in the area.

Route 436 fails the Span of Service Standard on weekdays due to the first inbound arriving at Lynn Central Square after 7:00 AM. Correcting this issue is not recommended, as the route already fails the Cost Standard on weekdays.

To address the Cost Standard failure, it is recommended that the 9:10 AM outbound trip to Goodwin's Circle and the 9:40 AM inbound trip be eliminated. This change would affect 4 passengers, according to the latest ridership count. Although this would leave a gap in the late morning schedule, this would bring service levels in line with existing demand.

Route 439 Bass Point Nahant - Central Sq Lynn

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	51%	Fail
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 439 links the peninsula of Nahant with Lynn during weekdays. In addition to providing a link to Central Square, Lynn it also provides limited direct service to Vinnin Square, Swampscott.

New 2008 ridership data indicates that ridership has dropped even further on Route 439, which currently has the highest net cost per passenger of any full day weekday route in the system. It is proposed that the 439 be moved to a more limited commuter service model, while also preserving the midday connection to Vinnin Square.

Currently there are five morning trips, including one inbound connection to Vinnin Square. It is proposed to reduce this number to three trips, including one with the current connection to Vinnin Square. The evening rush (along with the late midday period) also has five trips, which would also be reduced to three.

The midday trips would continue to run, although their departure times may be changed based on customer needs and vehicle availability.

While the current ridership on Route 439 would still not be sufficient to make this route cost-effective with this reduced number of trips, analysis determined that further cost savings from cutting additional trips would be small at any point short of cutting the Route 439 entirely. At this time, cutting the route entirely is not recommended, and it is hoped that a renewed marketing effort in this time of rising gas prices might attract more passengers.

Route 441 Marblehead - Haymarket or Wonderland Station via Paradise Road

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	50%	Pass
Sat	Pass	Pass	Fail	55%	Pass
Sun	Pass	Pass	Pass	66%	Pass

Route 442 Marblehead - Haymarket or Wonderland Station via Humphrey Street

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	49%	Pass
Sat	Pass	Pass	Pass	63%	Pass
Sun	Pass	Fail	Pass	64%	Pass

Route 448 Marblehead - Downtown Crossing

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Pass	Pass	45%	Fail
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 449 Marblehead - Downtown Crossing

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Pass	Pass	57%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

★ **Proposal ALTERED from Preliminary Plan**

These routes link Marblehead with Boston via Lynn. Route 441 operates to Haymarket via Paradise Road, and Route 442 operates via Humphrey Street. Some peak period and all weekend service operates

to Wonderland, and several peak period trips serve Downtown Crossing as Routes 448 (via Paradise) and 449 (via Humphrey).

Customers, bus operators, and other MBTA personnel have reported that ridership patterns on Routes 441 and 442 have changed during the PM peak. More customers now prefer to board these buses at Wonderland rather than Haymarket. Observations at Wonderland conducted in October 2007 and May 2008 show that these buses pick up more than half of their outbound passengers at Wonderland.

The original recommendation that PM peak service on Routes 441 and 442 be converted to an arrangement similar to the AM peak, with several vehicles running only between Wonderland and Phillips Beach, has been modified due to public feedback. A large number of residents, employees, business owners, and elected officials in Marblehead were strongly opposed to such a reduction in the number of trips traveling to Marblehead during the PM peak. In addition, some riders who regularly board these buses at Haymarket were also very concerned about a significant decrease in frequency of service.

The revised proposal would eliminate only two round-trips between Haymarket and Marblehead, at the beginning and end of the peak period, to minimize impact at those locations. The current Haymarket departure times of 3:50 PM and 6:20 PM would be eliminated. Some existing trips would be converted from Route 442 to Route 441 to maintain an alternating balance between the two routes. The current Marblehead departure times of 5:05 PM and 7:23 PM would be eliminated. One of these departures is short trip that travels to the Lynn Garage. Trip times will be adjusted to the extent possible in order to minimize gaps in service at any location along these routes.

With the resources saved by this change, some service would operate between Wonderland and Central Square at a frequency of every 25 minutes, between 3:00 PM and 5:30 PM. This recommendation, even with the modifications from the Preliminary Plan, should still have positive impact on levels of crowding on Routes 441 and 442.

On weekends, Route 441 and Route 442 have sufficient running time in their schedule for average conditions, but very little recovery time to get back on schedule after unusual traffic or other incident. It is proposed that up to four round trips on each weekend day be turned at Phillips Beach in Swampscott, and not proceed to Marblehead. Each such short trip would then be followed by a short period of recovery time, which would allow for improved reliability. There would still be at least hourly service to Marblehead during the day. This is sufficient for the ridership along the section past Phillips Beach of both routes, which ridership observations show as being 11.2% of the total on Saturdays, and 9.9% on Sundays. This weekend proposal may not be implemented if routing changes near Wonderland are able to provide faster runtimes.

The operation of Routes 448 and 449 between Marblehead and Downtown Crossing will be modified. Buses on this route will stop in the busway in Central Square, Lynn. However, all operation between Central Square, Lynn, and the exit of the Ted Williams tunnel downtown will be strictly limited stops with no boardings or alightings in either direction, except for the stop on North Shore Road by Wonderland and another at Logan Airport. It is hoped that this will provide a speedier service for passengers from Lynn and points further north, and eliminate possible confusion about service south of Lynn.

Route 450 Salem Depot - Haymarket or Wonderland Station via Western Ave

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	47%	Pass
Sat	Pass	Waive	Pass	50%	Pass
Sun	Pass	Fail	Pass	56%	Pass

Route 456 Salem Depot - Central Sq Lynn

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	47%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 450 links Salem with Boston via Western Ave. in Lynn. Weekday service operates to Haymarket, Weekend Service operates to Wonderland as Route

450W. Route 456 links Salem with Central Square in Lynn during weekday middays only.

These routes have been experiencing severe problems with schedule adherence. New run times have been designed that should allow the buses to maintain a reliable schedule on both routes. In both cases, the new run times exceed the capacity of the current number of buses serving these routes. In light of the steady but moderate ridership on this route, adding more resources is not possible at this time.

It is proposed that the frequency of Route 450 and 456 in the midday be decreased, so that alternating trips operate every 40 minutes instead of every 30 minutes. Route 456 would operate later into the afternoon, with the last inbound trip arriving in Central Square just before 5:00 PM instead of the current 4:16 PM. For Route 456, this would involve 45 minutes of vehicle time from the Lynn garage, but a decrease of 13.7 miles. For Route 450, time resources should not be affected, and 29.9 miles would be saved. It is projected that the decreased frequency would cause the loss of up to 30 passengers on Route 456 and 66 on Route 450, but it is difficult to project how many would be attracted by a schedule that would be much more reliable.

Route 451 North Beverly - Salem Depot

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	45%	Pass
Sat	Pass	Pass	Pass	29%	Fail
Sun	N/A	N/A	N/A	N/A	N/A

Route 451 links North Beverly with Salem on weekdays. On Saturdays a short route operates between Ellis Square in Beverly and Salem Depot. This route is coordinated with Routes 465 and 468 at Salem Depot to allow for traveling through between Beverly and Danvers.

Route 451 fails the Cost Standard on Saturdays. Since ridership is especially light on Saturday mornings, it is proposed that the first round trip be eliminated. The first trip would depart from Salem Depot at 9:30 AM rather than 8:30 AM. It is expected that 2 customers would be affected by this change.

Departure times on Route 451 may need to be adjusted to allow for planned run time changes and schedule adjustments on Routes 465 and 468.

Route 455 Salem Depot - Haymarket or Wonderland Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	49%	Pass
Sat	Pass	Pass	Pass	55%	Pass
Sun	Pass	Pass	Pass	57%	Pass

Route 459 Salem Depot - Downtown Crossing

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	24%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 455 and Route 459 link Salem with Wonderland, Haymarket, or Downtown Crossing via Loring Avenue.

Three morning trips and four afternoon trips on Route 459 between Downtown Crossing and West Lynn were designed to provide reverse-peak connections between Terminal C at Logan Airport and Downtown Crossing. At the time, there was no Silver Line service to Logan Airport. Since Silver Line connections from downtown to the airport have become available, ridership on these trips has dropped almost entirely. It is proposed that these trips be eliminated due to low ridership.

Schedule adherence is low on these two routes, and running times will be examined and changed if necessary to ensure reliable service.

Route 465 Liberty Tree Mall - Salem Depot

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	56%	Fail
Sat	Pass	Pass	Pass	44%	Fail
Sun	N/A	N/A	N/A	N/A	N/A

Route 468 Danvers Square - Salem Depot (Limited Service)

	Span	Freq	Load	On-Time	Cost
Wkdy	Fail	Fail	Pass	42%	Fail
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 465 links Danvers with Salem via Peabody, and Route 468 provides limited Danvers-Salem service via Water/Margin/North Streets.

Both of these routes fail the Cost Standard on all days of operation, and ridership data collected early in 2008 indicates that ridership on both routes has declined in recent years. On Saturday morning, the 9:00 AM trip from Salem and the 9:50 AM trip from Danvers are proposed for elimination due to low ridership. This change is projected to affect 7 passengers, who could take service an hour earlier or later. Route 468 already provides very limited service and is interlined with other routes in the area. Because of this, significant cost savings could not be realized by eliminating Route 468, and this elimination is not recommended at this time.

There have also been requests to better coordinate arrival times at Salem Depot with connections to the commuter rail. This will be done, along with run time adjustments for a more accurate schedule. These changes can be made without additional costs.

Route 500 Riverside Station - Federal & Franklin Streets

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	58%	Fail
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

★ **Proposal ALTERED from Preliminary Plan**

This express bus operates on weekdays during commuter hours between Riverside Station and Downtown Boston.

Ridership on the Route 500 has decreased since the fare increase occurred in 2007. Although the Preliminary Service Plan included a proposal to eliminate Route 500 entirely, a reduction in frequency is instead included in the Final Plan, due to public feedback in support of keeping the route.

The number of morning inbound trips will be reduced from six to three. The afternoon outbound trips will operate at a 70-minute headway, departing at 3:00, 4:10, 5:20, and 6:30PM.

Route 501 Brighton Center - Federal & Franklin Streets

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	73%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 501 provides express weekday service between Brighton Center and Downtown Boston via Oak Square and Newton Corner.

Customers have requested rerouting afternoon service on the Route 501 to exit the Mass. Pike at the Allston Tolls. Based on an analysis of travel times and passenger travel patterns, it has been determined that the current routing has the least average travel time per passenger. While no permanent routing change is recommended, the new real-time automatic vehicle location system will allow better monitoring of the route and improve communication between the drivers, inspectors, and control center. This new tool will be used to give the control center discretion to detour the Route 501 via Cambridge Street during extreme traffic conditions on the Mass. Pike.

Route 502 Watertown Yard - Copley Square

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	78%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 502 is an express route that provides weekday peak service between Watertown Square and Copley Square. No changes are recommended for the Route 502 at this time.

Route 503 Brighton Center - Copley

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	53%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 503 is an express route that runs from Brighton Center to Copley Square via Oak Square and Newton Corner. No changes are recommended for the Route 503 at this time.

Route 504 Watertown Yard - Federal & Franklin Streets

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	69%	Pass
Sat	Pass	Pass	Pass	68%	Pass
Sun	N/A	N/A	N/A	N/A	N/A

Route 504 is an express route that provides weekday and Saturday service between Watertown Square and Downtown Boston. No changes are recommended for the Route 504 at this time.

Route 505 Waltham Center - Federal & Franklin Streets

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	59%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route 505 provides express commuter service between Central Square, Waltham and Downtown Boston. No changes are recommended for the Route 505 at this time.

Route 553 Roberts - Federal & Franklin Streets

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	50%	Pass
Sat	Pass	Fail	Unk	66%	Fail
Sun	N/A	N/A	N/A	N/A	N/A

Route 553 provides local service between Brandeis/Roberts, Central Sq., Waltham, and Newton Corner via West Newton on weekdays and Saturdays. On weekdays, the route continues express to Boston via the Turnpike. Route 553 is coordinated with Route 554, and the two routes share the corridor between Waltham Center and Downtown Boston.

The Route 553/554, fail the Frequency Standard due to 35-minute headways during the afternoon and early PM Peak period. Adding service is not recommended. The current level of service does not require any passengers to stand.

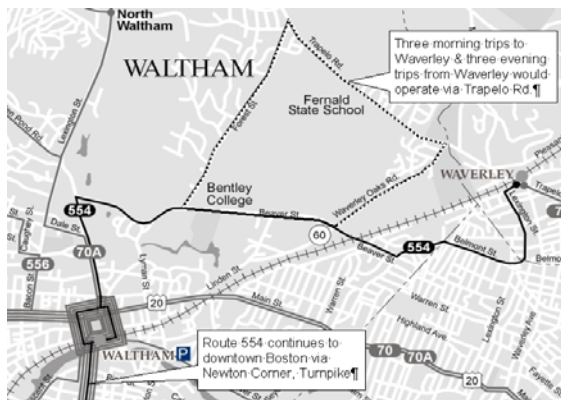
Route 554 Waverley Square - Federal & Franklin Streets

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	57%	Pass
Sat	Pass	Fail	Pass	52%	Fail
Sun	N/A	N/A	N/A	N/A	N/A

Route 554 provides weekday and Saturday service between Waverley Sq. and Newton Corner via West Newton and Central Sq., Waltham. On weekdays, the route continues express to downtown Boston via the Turnpike. Route 554 is coordinated with Route 553, and the two routes share the corridor between Waltham Center and downtown Boston.

Combined, the Routes 553/554 fail the Frequency Standard due to 35-minute headways during the afternoon and early PM Peak period. Adding service is not recommended due to low ridership.

A request has been made to provide service between Trapelo Rd. and Waverley Square. In order to test the demand for a new service, it is recommended that existing Route 554 service be modified, while minimizing impact to existing transit customers. A new Route 554 variation would be created that would travel via Forest St., Trapelo Rd., and Waverley Oaks Rd rather than Beaver St.



This variation would run on the first three outbound trips and the last three inbound trips of the day. From ridership checks, the only passengers that would be impacted are those who currently board at Beaver St. near Forest St.; these customers would have a short walk to a new stop on Forest St. A sample schedule is provided below.

Outbound trips via Trapelo Rd.		
Financial District	Waltham Center	Waverley Sq
5:56 AM	6:34 AM	6:55 AM
6:20 AM	6:58 AM	7:19 AM
6:55 AM	7:35 AM	7:56 AM
Inbound trips via Trapelo Rd.		
Waverley Sq	Waltham Center	Financial District
5:20 PM	5:39 PM	6:18 PM
6:15 PM	6:34 PM	7:13 PM
7:15 PM	7:34 PM	8:13 PM

This schedule allows for good connectivity to Route 73 and the Fitchburg Commuter Rail Line at Waverley Square; customers may also stay on the bus for continued service to/from the Financial District.

Route 555 Riverside Station - Federal & Franklin Streets Via Newton

	Span	Freq	Load	On-Time	Cost
Wkdy	Waive	Waive	Pass	47%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

The Route 555 provides evening service between Downtown Boston and Riverside Station. The route runs via Copley Square, Newton Corner, West Newton, and Washington St. The route was separated from the Route 500 in Winter 2007 due to changes in the fare structure.

This Span Standard is Waived for this route, since it is a late evening supplement to Routes 500, 553, and 554 which operate during the day. No changes are recommended for the Route 555 at this time.

Route 556 Waltham Highlands - Federal & Franklin Streets

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	56%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

The Route 556 provides weekday service between Waltham Highlands and Newton Corner via Central Square, Waltham. During peak periods, the Route 556 runs express between Newton Corner and Downtown Boston. No changes are recommended for the Route 556 at this time.

Route 558 Auburndale - Federal & Franklin Streets

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	51%	Fail
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

The Route 558 provides weekday service between Riverside and Newton Corner via Central Square, Waltham. During peak periods, the Route 558 runs express between Newton Corner and Downtown Boston. The route was extended to Riverside just before the most recent ridership data was collected in 2005. It is recommended that additional data be collected now that ridership has stabilized before making any changes to the route.

Route CT1 Central Square Cambridge. - South End Medical Area

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	55%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

CT1 is a crosstown bus that provides limited-stop weekday service between the BU Medical Center and Central Square, Cambridge via Massachusetts Ave. The CT1 fails the Loading Standard due to peak level loads just after 9:00 AM. This route appears to have a slightly later than standard peak period. Since the loads require passengers to stand, but do not exceed the peak period Crowding Standard, no change is recommended.

Route CT2 Sullivan Station - Kendall MIT Station - Ruggles Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	54%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

CT2 is a crosstown bus that provides limited-stop weekday service between the Sullivan Square and Ruggles via Union Square, Somerville, Kendall Square and the Longwood Medical Area. No changes are recommended for the Route CT2 at this time.

Route CT3 Longwood Medical Area - Andrew Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	53%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

The Route CT3 provides limited-stop weekday service between the Longwood Medical Area and Andrew via Ruggles and the BU Medical Center. No changes are recommended for the Route CT3 at this time.

Silver Line: Washington Street Dudley Station - Downtown

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	80%	Pass
Sat	Pass	Pass	Pass	85%	Pass
Sun	Pass	Pass	Pass	90%	Pass

The Silver Line Washington Street is a bus rapid transit line that provides service from Dudley Square in Roxbury to downtown, by way of the South End and Chinatown.

The service meets or exceeds the frequency, load, and span standards for weekdays, Saturdays and Sundays. No changes are recommended.

Silver Line: Waterfront

The Silver Line Waterfront is a bus rapid transit line that provides service from South Station to the South Boston Waterfront in an exclusive tunnel. From the end of the tunnel it has three branches that operate

on surface streets: the SL1 to Logan Airport, the SL2 to Boston Marine Industrial Park, and the SL3 to City Point. The Silver Line Waterfront entered limited service in December of 2004, and the three existing branches were all in service by June 2005.

Route SL1 Logan Airport - South Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	83%	Pass
Sat	Pass	Pass	Fail	73%	Pass
Sun	Pass	Pass	Pass	82%	Pass

This route is the Bus Rapid Transit line between South Station and Logan Airport. It also serves the Seaport area. No changes are proposed for Route SL1. The weekday failure for Load Standard has most likely been corrected. The problem was occurring outbound during the AM Peak, and trips have been added since the counts were taken. For Saturday, the SL1 slightly exceeded the Load Standard during the period from 5:00 PM to 5:30 PM inbound, but this appears to be event-related.

Route SL2 Boston Marine Industrial Park - South Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	86%	Pass
Sat	Pass	Pass	Pass	70%	Pass
Sun	Pass	Pass	Pass	77%	Pass

Route SL3 City Point - South Station

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Fail	70%	Pass
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

Route SL2 is Bus Rapid Transit service between South Station and the Boston Marine Industrial Park (BMIP). The Route SL3 is the Bus Rapid Transit line connecting City Point and South Station, by way of the Seaport district. The two routes share many stops in the corridor between the BMIP and South Station via the Seaport district.

In a major restructuring, it is recommended that the SL3 service be eliminated, and the resources used to increase SL2 service and simplify the schedule.

Eliminate SL3: There are only 30 weekday boardings for the stops which are unique to SL3, or an average of 0.4 passengers per trip. An experiment which extended the route to P Street failed because of noise concerns from residents. Furthermore, it is unclear that any route extension farther into South Boston would attract more customers, since the Route 7 has a lower fare, more frequent service, a shorter direct route, and better distribution within the Financial District. These resources would be better used elsewhere.

Simplify SL2: The SL2 would use a single routing at all times. This would eliminate confusion arising from three different routes at different times of day. This requires eliminating the layover time at BMIP; all layover activity would occur in the Transitway tunnel. Also, the bus stop on Dry Dock Ave at Design Center Place would be eliminated from the route; all boardings and alightings would occur on Black Falcon Ave. This stop was added so that there would be a common stop shared by the SL2 and SL3; however, this would no longer be needed. Both these changes improve the running time, simplify the route, and allow more scheduling flexibility.

Improve frequency: SL2 service would be improved to operate every 5 minutes during rush hours, and would alleviate some crowding observed toward the BMIP in the mornings. Midday service would operate every 10 minutes. Late evening and all weekend service would operate every 15 minutes, and therefore the SL2 would fully meet the Frequency Standard for Rapid Transit.

All these changes can be implemented at no additional cost, using the existing resources for SL2, SL3, and SL Waterfront. The Load Standard violation for weekdays has probably already been corrected - this was for outbound AM Peak and inbound PM Peak trips, but additional trips have been scheduled since the counts were taken.

Red Line: Ashmont or Braintree – Alewife

The Red Line provides heavy rail subway service through Boston and surrounding communities to the southeast and northwest. Service operates along two branches: the Ashmont branch, which terminates at Ashmont Station and serves three additional Dorchester neighborhood stations, and the Braintree branch which terminates at Braintree Station and serves five South Shore stations in

Braintree and Quincy. A common trunk portion of the line operates from JFK/UMass to Alewife Station and stops in Boston, Cambridge, and Somerville.

The Red Line complies with the frequency standard at almost all times on weekdays and Saturdays, although there are 16-19 minute headways at the end of the service day. On Sundays, the headways alternate between 15 and 16 minutes all day. Since these violations are minor, no change is recommended.

The Red Line partially met the *Service Delivery Policy* standard for route reliability. The reliability standard calls for 95% of trips to operate actual headways that are within 1.5 times the scheduled headways, and for 95% of trips to operate within 5 minutes of the scheduled run time. The Red Line overall met the headway standard 96% of the time, which reflects the improved line management, maintenance, and staffing levels than in previous years. The Red Line met the run time standard 85% of the time in late 2007 and early 2008. Some of the run-time problems are related to ongoing track restrictions due to temporary construction at the stations along the Dorchester Branch, and others are related to track speed restrictions on the Longfellow Bridge. Once construction or other repairs are completed, it is recommended that additional analysis be conducted to determine if scheduled run time changes are needed.

For the Vehicle Load standard, the Red Line complies at most times of day. The only exception is in the non-core areas during the Midday Base period, when the standard calls for no standees. Due to limited resources, no changes are recommended.

Orange Line: Forest Hills – Oak Grove

The Orange Line provides heavy rail subway service between Boston's southwest corridor and the surrounding communities due north from Downtown Boston.

The Orange Line complies with the frequency standard at almost all times, except the end of the day on Sunday. Since these 20-minute headways are only for a very small number of trips, no remedy is proposed here.

The Orange Line passed the headway reliability standard by running within 1.5 scheduled headways

97% of the time with a target of 95%. However, the run times met the run time standard only 93% of the time with a target of 95%. As a follow-up to the completion of the signal system upgrade on the north side in May 2008, an analysis of actual run times will be implemented in Fall 2008. This will allow for updated run times, and potentially improved frequency, beginning in 2009. This analysis may also improve run time standard compliance.

Passenger counts and data from the Automated Fare Collection system show that the Orange Line was within the MBTA's passenger load standard for all weekday time periods.

Blue Line: Wonderland – Bowdoin

The Blue Line provides heavy rail subway service between Wonderland Station in Revere and Bowdoin Station in Downtown Boston. With twelve stations, the Blue Line is the shortest heavy rail line in the MBTA system. However, the line provides a valuable connection across Boston Harbor from East Boston and Revere to Downtown Boston.

The Blue Line met the frequency standard at all times.

The Blue Line met the on-time performance standard for headways, but not for run time. The Blue Line ran within 1.5 scheduled headways 96% of the time and ran within 5 minutes of the scheduled run time 91% of the time. Run time improvements were implemented in January 2008, and it is anticipated that these changes will lead to better performance in the future.

Passenger counts and data from the Automated Fare Collection system show that the Blue Line did not meet the passenger loading standard for the core area during the evening and late evening periods. The change to six-car trains, which begins in fall 2008 should address this problem.

Green Line: Boston College, Cleveland Circle, Riverside, or Heath St – Lechmere or Government Center

The Green Line provides light rail service on four branches to Boston College, Cleveland Circle, Riverside, and Heath St. A trunk portion operates from Kenmore or Copley to Lechmere.

The Green Line met the frequency standard at all times on all branches.

Overall, the Green Line did not fully meet either of the two schedule adherence standards. The headway standard currently calls for 95% of trips in the core area to operate on an actual 3-minute headway; 80% of trips did so when measured during early 2008. However, all 4 branches did meet the headway standard, which requires 85% of trips to be within 1.5 scheduled headways. The run time standard calls for 95% of trips to operate within 5 minutes of the scheduled run time; 80% of observed trips did so. This performance is an improvement over past years, but more work needs to be done to eliminate speed restrictions and improve run times.

Green Line passenger counts were conducted at many of the most heavily-used surface stations during 2006-07. Other counts and data from the Automated Fare Collection system were used for the trunk portion. Only the trunk portion and the E branch fully comply with the vehicle load standard. For the B, C, and D branches, the passenger load violations were due to some standees during non-peak periods. Unfortunately, resources are not currently available to correct this problem.

Mattapan Trolley: Mattapan Station – Ashmont Station

The Mattapan Trolley provides light rail feeder service from Mattapan Station, a number of Milton neighborhoods, and the Lower Mills neighborhood of Boston. The trolley connects to the Red Line at Ashmont Station. Trolley service resumed in December 2007, after the vehicles and stations on the line were refurbished.

The Mattapan Trolley meets the span of service standard on weekdays, Saturdays, and Sundays. It also meets the frequency standard during most times of day. However, on Sunday mornings before 9:30 AM, service operates every 30 minutes; in comparison, the standard calls for off-peak service every 15 minutes or better. Based on running time observation conducted after the line was reconfigured at Ashmont Station, it is recommended that service be modified to operate every 20 minutes on Sunday mornings using a single vehicle. Although this will not pass the headway standard, the frequency will be substantially improved.

The Mattapan Trolley is the only light rail line that met both on-time performance standards. The Mattapan Trolley ran within 1.5 scheduled headways

92% of the time when observed in March 2005 and ran within 5 minutes of the scheduled run time 100% of the time.

Passenger loads were counted on weekdays in March 2005. Although a few trips had standees, the average load all day was 49% and for each time period all day was never higher than 88%. Since the loading standard calls for passenger volumes to be less than 225% of a seated load in peaks or less than 100% of a seated load in off-peaks, the Mattapan Trolley meets the vehicle load standard.

F1 Commuter Boat: Boston – Hingham

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Fail	Pass	98%	N/A
Sat	N/A	N/A	N/A	N/A	N/A
Sun	N/A	N/A	N/A	N/A	N/A

★ **Proposal ALTERED from Preliminary Plan**

The F1 provides direct weekday Commuter Boat service between Hingham Shipyard and Rowes Wharf in Boston.

The service passes the frequency standard during peak periods but fails during the off-peak periods because of a 3.5-hour gap in service during the midday, rather than 3 hours as the policy states. Due to low ridership and demand during this time, no further action is recommended.

Changes to this route have been withdrawn at this time.

**F2/F2H Commuter Boat: Boston – Quincy/
Hull/Logan Airport**

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	97%	N/A
Sat	N/A	Pass	Pass	97%	N/A
Sun	N/A	Pass	Pass	97%	N/A

★ **Proposal ALTERED from Preliminary Plan**

The F2/F2H provides Commuter Boat service between Fore River Shipyard in Quincy, Pemberton Point in Hull, Logan Airport and Long Wharf in Boston. This service is operated daily.

Changes to this route have been withdrawn at this time.

F4 Inner Harbor Ferry: Boston - Charlestown

	Span	Freq	Load	On-Time	Cost
Wkdy	Pass	Pass	Pass	100%	N/A
Sat	N/A	Pass	Pass	100%	N/A
Sun	N/A	Pass	Pass	100%	N/A

★ **Proposal ALTERED from Preliminary Plan**

The F4 Inner Harbor Ferry service operates daily between Long Wharf in Boston and the Charlestown Navy Yard.

Changes to this route have been withdrawn at this time.

Service Standard Compliance Summary: Heavy Rail

Service Standard:	Blue	Orange	Red -Ash.	Red -Braintree	Red -Trunk			
Span of Service: Weekdays or Saturdays 6:00 AM – midnight. Sundays 7:00 AM – midnight.								
Weekday:	•	•	•	•	•			
Saturday:	•	•	•	•	•			
Sunday:	•	•	•	•	•			
Frequency of Service: Every 10 minutes or less in peaks & every 15 minutes or less off-peak.								
Weekday:	•	•	•	×	•			
				19 min headway after 11:40 PM				
Saturday:	•	•	×	×	•			
			16 min headway after 11:40 PM	18 min headway after 11:40 PM				
Sunday:	•	×	×	×	•			
		Ev. 20 min after 11:40 PM	15/16 min headways	15/16 min headways				
Schedule Adherence: At least 95% of trips within 1.5 scheduled headways and within 5 minutes of scheduled run time								
Headway:	96 %	97 %	97 %	96 %	96%			
Run time:	91 %	93 %	88 %	83 %	-			
Vehicle Load: Average passengers/seats by time period in Early AM, AM Peak, Midday School, & PM Peak below 225% for Blue & Orange Lines and below 270-334% for Red Line. During Midday Base, Evening, and Late Evening, average passengers/seats below 140% in core for Blue & Orange Lines, below 140-174% in core for Red Line, and below 100% in non-core areas for all lines.								
	Core	Non-core	Core	Non-core	Non-core	Non-core	Core	Non-core
Early AM:	•	•	•	•	•	•	•	•
AM Peak:	•	•	•	•	•	•	•	•
Midday Base:	•	•	•	•	•	×	•	×
Midday School:	•	•	•	•	•	•	•	•
PM Peak:	•	•	•	•	•	•	•	•
Evening:	×	•	•	•	•	•	•	•
Late Evening:	×	•	•	•	•	•	•	•

Key: • = Complies × = Does Not Comply – = Not Applicable

Service Standard Compliance Summary: Light Rail

Service Standard: Green Trunk Green B Branch Green C Branch Green D Branch Green E Branch Mattapan Trolley

Span of Service: Weekdays or Saturdays 6:00 AM – midnight. Sundays 7:00 AM – midnight.

Weekday:	•	•	•	•	•	•
Saturday:	•	•	•	•	•	•
Sunday:	•	•	•	•	•	•

Frequency of Service: Every 10 minutes or less in peaks & every 15 minutes or less in off-peak.

Weekday:	•	•	•	•	•	•
Saturday:	•	•	•	•	•	•
Sunday:	•	•	•	•	•	×

30 min headway before 9:30 AM

Schedule Adherence: At least 85% of trips within 1.5 scheduled headways on branches, at least 95% of trips within 3-min. headways in trunk, and at least 95% of trips within 5 mins. of scheduled run time

Headway:	80 %	85 %	91 %	86 %	90 %	92 %
Run time:	–	63 %	79 %	91 %	89 %	100 %

Vehicle Load: Average number of passengers/seats by time period in Early AM, AM Peak, Midday School, & PM Peak below 225%. During Midday Base, Evening, and Late Evening, average number of passengers/seats below 140% in core areas and below 100% in non-core areas.

	Core	Core	Non-core	Core	Non-core	Core	Non-core	Core	Non-core	Non-core
Early AM:	•	•	•	•	•	•	•	•	•	•
AM Peak:	•	•	•	•	•	•	•	•	•	•
Midday Base:	•	•	×	•	•	•	×	•	•	•
Midday School:	•	•	•	•	•	•	•	•	•	•
PM Peak:	•	•	•	•	•	•	•	•	•	•
Evening:	•	•	×	•	×	•	×	•	•	•
Late Eve:	•	•	×	•	•	•	×	•	•	•

Key: • = Complies × = Does Not Comply – = Not Applicable

III. PROPOSALS FOR FUTURE CONSIDERATION

North Allston

With substantial new development slated for the North Allston area by Harvard University, future service plans will evaluate the bus network structure in the area. The Route 66 in particular will receive increased attention to determine ways to improve capacity and reliability.

IV. SERVICE DELIVERY POLICY CHANGE RECOMMENDATIONS

The MBTA's *Service Delivery Policy* was first established in its current form in 1996 through a joint effort of the MBTA, the Executive Office of Transportation and Construction and the Conservation Law Foundation. The intent of the *Service Delivery Policy* was to improve the MBTA's performance by adopting best-practice techniques for planning and evaluating services.

A number of changes to the *Service Delivery Policy* were approved by the MBTA Board of Directors in 2004 and 2006.

Service Delivery Policy – 2008 Summary of Proposed Changes

The Schedule Adherence Standards have been modified to:

- Take advantage of new monitoring technologies available to the MBTA
- Match the standards for frequent buses to those for rail
- More accurately represent the schedule of light rail vehicles within the subway
- Make the commuter boat frequency standards consistent with those for commuter rail

Bus On Time Performance – Route Test

The recent installation of a CAD/AVL system on MBTA buses has allowed for reporting of on-time performance at all scheduled points for all trips that a vehicle operates. At the same time, the number of monitored points has been increasing. Service Planning has been using this higher number of "timepoints" to create bus schedules that are more accurate for customers along an entire route.

To better capture this increased amount of data, and show a greater level of detail in the performance of an entire bus route, the Bus Route Test has been modified and is now based on the proportion of monitored timepoints at which the bus is on time for all scheduled trips over the effective period of a set of timetables. For instance, the Schedule Adherence Standard results in the 2008 Service

Plan are based on performance over the entire Fall 2007 period. The On Time test for a Bus Route is similarly modified, and a bus route is considered to be on time if 75% of all measured timepoints were on time. In the 2008 Service Plan, instead of reporting only Pass or Fail for each route, the actual percentage of on time timepoints is shown. This change is intended to provide more detailed information with which to compare the performance of different routes.

Bus On Time Test for Walk-Up Trips

A route is considered to provide walk-up service for any part of the day in which it operates more frequently than one bus every ten minutes. As a result, customers expect to arrive at a stop without looking at a schedule and have only a brief wait. These trips have therefore been measured based on the amount of time between buses rather than the scheduled arrival time.

Since frequent bus service of this nature has similar customer expectations as rail service, the resulting test for on time timepoints has been set as identical to the headway performance standard for heavy rail. The time between buses at the beginning of the route must be less than 1.5 times the scheduled headway at that point. Likewise, the time between buses at midpoints must also be less than 1.5 times the scheduled headway at that point to be considered on time.

Headway Performance of Light Rail – Subway

The previous Headway Performance standard for light rail operating in the subway is that 95% of all service operates with headways of less than 3 minutes over the entire service day. Analysis of the non-summer scheduled trip times on the Green Line have shown that if service were run exactly as scheduled, the percentage of passing trips would be only 68%. However, 95% of all scheduled trips are at a headway of 5 minutes or less, and the Headway Performance standard has been modified to reflect this fact.

Boat – Frequency of Service and Vehicle Load

To bring the Frequency of Service Standards for Boat in line with Commuter Rail, the AM and PM peak period has been revised from a 30-minute headway in the peak direction to 3 trips in the peak

direction. During the off-peak periods the frequency has changed from 120-minute headway to 180-minutes in each direction.

The vehicle load section has been updated to more accurately reflect the vessel capacity dictated by Coast Guard regulations rather than apply a load standard that is more suited to bus and rail. In addition boats regularly in service have been added to the Vehicle Load Addendum.

V. TITLE VI and ENVIRONMENTAL JUSTICE REVIEWS

To comply with Title VI of the Civil Rights Act of 1964, the MBTA analyzes the Service Plans to ensure that the proposed or recommended service changes do not discriminate against minority and low income communities.

For Title VI, the MBTA completes the "Level of Service" analysis for Vehicle Load, Frequency of Service, and Schedule Adherence (using the service standards in the *Service Delivery Policy*) by comparing the performance of minority and low income bus routes against the bus system as a whole. This comparison is made on the current system and on the system after all proposed changes take effect, to assure that improvements are being made in an equitable manner.

Also completed is the Title VI "Quality of Service" analysis that measures fares, transfers, travel miles, and travel time for sample trips between the ten most densely populated minority traffic analysis zones (TAZs) and the three TAZs with the highest densities of work-trip attractions. These are compared to the fares, transfers, travel miles, and travel time for sample trips between the 10 most densely populated non-minority residential TAZs and same three work-attraction TAZs to determine whether there are any minority/non-minority discrepancies. This analysis is available in the MBTA Title VI Report of September 2008. Although the analysis was performed with information from the Preliminary 2008 Service Plan, it was verified that none of the changes made for the Final 2008 Service Plan impacted the analysis.

In addition to the Quality of Service analysis, the Boston Region Metropolitan Planning Organization (MPO) performs an environmental justice analysis. The MPO has adopted the following definition of environmental justice:

"Environmental Justice requires the MPO to:

- examine the allocation of benefits and burdens, currently and in the planned future,
- ensure that minority and low-income communities are treated equitably in the

provision of transportation services and projects, and

- provide full participation for minority and low-income communities to advise the MPO during its planning and decision-making process.

The examination of Environmental Justice will include consideration of patterns of capital investment and allocation that have contributed to present conditions and inform current and future MPO decisions."

The Boston MPO uses the following measures of accessibility and mobility to assess environmental justice aspects of transit services:

Accessibility

- transit travel times to jobs, hospitals, and two- and four-year institutions of higher learning
- average number of jobs, hospitals, and two- and four-year institutions of higher learning within a 40 minute transit trip

Mobility

- average door-to-door travel time for transit trips produced in an environmental justice area
- average door-to-door travel time for transit trips attracted to an environmental justice area

For most measures, the available data tends to confirm that the MBTA is treating minority and low-income communities equitably in the provision of transportation services. A complete assessment of the environmental justice review completed to date can be found in *JOURNEY to 2030*, the Boston MPO's long-range transportation plan.

Weekday Bus Service - Current and Proposed

"X" = failed, "I" failed but improved

Route	Description	Current							Standards					Proposed							Standards					Change					Route	
		Peak Hours	Off-Peak Hours	Total Hours	Total Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Type of Change	Peak Hours	Off-Peak Hours	Total Hours	Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Peak Hours	Off-Peak Hours	Total Hours	Miles		Ridership
68	Harvard Square - Kendall MIT Station	3.5	8.5	12.0	109	\$ 1,321	520	\$ 1.78				72.5%	None	3.5	8.5	12.0	109	\$ 1,321	520	\$ 1.78							0	0	0	0	0	68
69	Harvard Square - Lechmere Station	12.6	30.9	43.5	290	\$ 4,443	2,985	\$ 0.73				63.3%	Minor	12.6	30.9	43.5	290	\$ 4,443	2,985	\$ 0.73				I			0	0	0	0	0	69
70	Cedarwood - Central Square Cambridge	27.2	77.8	105.0	1,192	\$ 12,134	4,654	\$ 1.85			X	64.6%	Minor	27.2	77.8	105.0	1,192	\$ 12,134	4,654	\$ 1.85				I			0	0	0	0	0	70
70A	No. Waltham - University Pk., Cambridge.	16.0	29.1	45.1	554	\$ 5,549	2,032	\$ 1.97	X	X		57.5%	None	16.0	29.1	45.1	554	\$ 5,549	2,032	\$ 1.97	X	X				0	0	0	0	0	70A	
71	Watertown Square - Harvard Station	29.4	66.8	96.2	896	\$ 10,486	5,378	\$ 1.19				73.9%	None	29.4	66.8	96.2	896	\$ 10,486	5,378	\$ 1.19						0	0	0	0	0	71	
72	Aberdeen & Mt. Auburn - Harvard Station	8.3	18.0	26.3	224	\$ 2,815	714	\$ 3.18				62.2%	None	8.3	18.0	26.3	224	\$ 2,815	714	\$ 3.18						0	0	0	0	0	72	
73	Waverley Square - Harvard Station	41.5	74.0	115.4	1,194	\$ 13,254	6,315	\$ 1.34			X	74.1%	None	41.5	74.0	115.4	1,194	\$ 13,254	6,315	\$ 1.34			X			0	0	0	0	0	73	
74	Belmont Center - Harvard Station via Concord Ave	7.9	19.3	27.2	337	\$ 3,272	981	\$ 2.58			X	63.2%	None	7.9	19.3	27.2	337	\$ 3,272	981	\$ 2.58			X			0	0	0	0	0	74	
75	Belmont Center - Harvard Station via Fresh Pond Pkwy	3.7	7.2	10.9	128	\$ 1,312	487	\$ 1.93	X	X		64.9%	None	3.7	7.2	10.9	128	\$ 1,312	487	\$ 1.93	X	X				0	0	0	0	0	75	
76	Hanscom Air Force Base - Alewife Station	10.8	21.8	32.6	657	\$ 4,794	626	\$ 6.90			X	63.4%	Minor	10.8	21.8	32.6	657	\$ 4,794	626	\$ 6.90			X	X		0	0	0	0	0	76	
77	Arlington Heights - Harvard Station	46.3	115.2	161.6	1,625	\$ 18,220	6,551	\$ 2.02				69.9%	None	46.3	115.2	161.6	1,625	\$ 18,220	6,551	\$ 2.02						0	0	0	0	0	77	
78	Arlmont Village - Harvard Station	15.5	37.0	52.5	716	\$ 6,542	1,149	\$ 4.93				56.9%	Minor	15.5	37.0	52.5	716	\$ 6,542	1,149	\$ 4.93				X		0	0	0	0	0	78	
79	Arlington Heights - Alewife Station	13.0	25.3	38.3	342	\$ 4,278	1,095	\$ 3.15				62.2%	None	13.0	25.3	38.3	342	\$ 4,278	1,095	\$ 3.15						0	0	0	0	0	79	
80	Arlington Center - Lechmere Station	13.5	34.9	48.4	536	\$ 5,590	1,872	\$ 2.23				67.5%	None	13.5	34.9	48.4	536	\$ 5,590	1,872	\$ 2.23						0	0	0	0	0	80	
83	Rindge Ave. - Central Square, Cambridge	12.4	31.3	43.7	336	\$ 4,591	2,154	\$ 1.37				57.5%	None	12.4	31.3	43.7	336	\$ 4,591	2,154	\$ 1.37						0	0	0	0	0	83	
84	Arlmont Loop - Alewife Station	4.8	1.3	6.1	96	\$ 946	211	\$ 3.72				61.4%	Minor	4.8	1.4	6.2	104	\$ 977	226	\$ 3.57						0	0.1	0.1	7.9	15	84	
85	Spring Hill - Kendall MIT Station	3.8	9.4	13.3	120	\$ 1,455	397	\$ 2.90			X	81.0%	None	3.8	9.4	13.3	120	\$ 1,455	397	\$ 2.90			X			0	0	0	0	0	85	
86	Sullivan Station - Cleveland Circle	27.0	58.6	85.6	751	\$ 9,419	5,139	\$ 1.07				47.4%	None	27.0	58.6	85.6	751	\$ 9,419	5,139	\$ 1.07						0	0	0	0	0	86	
87	Clarendon Hill - Lechmere Station via Somerville Avenue	17.3	40.5	57.8	531	\$ 6,394	3,373	\$ 1.14			X	63.8%	Minor	17.3	40.5	57.8	531	\$ 6,394	3,373	\$ 1.14			I			0	0	0	0	0	87	
88	Clarendon Hill - Lechmere Station via Highland Avenue	16.5	37.7	54.2	449	\$ 5,855	3,785	\$ 0.79				74.3%	Minor	18.2	37.7	55.9	465	\$ 6,101	3,785	\$ 0.85						1.7	0	1.7	15.9	0	88	
89	Clarendon Hill or Davis Square - Sullivan Station via Broadway	22.1	34.1	56.2	434	\$ 6,207	3,431	\$ 1.05				67.4%	Major	22.1	34.6	56.7	441	\$ 6,262	3,519	\$ 1.02						0	0.5	0.5	6.7	88	89	
90	Davis Square Station - Wellington Station	6.4	19.0	25.3	247	\$ 2,787	920	\$ 2.27			X	58.5%	None	6.4	19.0	25.3	247	\$ 2,787	920	\$ 2.27			X			0	0	0	0	0	90	
91	Sullivan Station - Central Square, Cambridge	8.0	21.8	29.8	205	\$ 3,031	1,482	\$ 1.29				69.7%	None	8.0	21.8	29.8	205	\$ 3,031	1,482	\$ 1.29						0	0	0	0	0	91	
92	Assembly Square Mall - Downtown Via Main Street	17.1	23.3	40.4	278	\$ 4,415	1,055	\$ 3.42				54.9%	None	17.1	23.3	40.4	278	\$ 4,415	1,055	\$ 3.42						0	0	0	0	0	92	
93	Sullivan Station - Downtown Via Bunker Hill	29.6	40.7	70.2	488	\$ 7,680	4,210	\$ 1.06				60.1%	None	29.6	40.7	70.2	488	\$ 7,680	4,210	\$ 1.06						0	0	0	0	0	93	
94	Medford Square - Davis Square Station	9.1	23.9	33.0	282	\$ 3,545	1,174	\$ 2.26			X	70.1%	Minor	9.1	23.9	33.0	282	\$ 3,545	1,174	\$ 2.26						0	0	0	0	0	94	
95	West Medford - Sullivan Station	11.6	28.9	40.5	486	\$ 4,813	1,253	\$ 3.08				56.8%	None	11.6	28.9	40.5	486	\$ 4,813	1,253	\$ 3.08						0	0	0	0	0	95	
96	Medford Sq - Harvard Station	14.6	28.7	43.3	359	\$ 4,742	1,500	\$ 2.40				66.9%	None	14.6	28.7	43.3	359	\$ 4,742	1,500	\$ 2.40						0	0	0	0	0	96	
97	Malden Station - Wellington Station	8.1	10.0	18.1	171	\$ 2,148	565	\$ 3.04				51.4%	None	8.1	10.0	18.1	171	\$ 2,148	565	\$ 3.04						0	0	0	0	0	97	
99	Boston Reg. Med Center Stoneham - Wellington Station	10.8	25.2	36.0	440	\$ 4,325	1,060	\$ 3.32			X	67.7%	None	10.8	25.2	36.0	440	\$ 4,325	1,060	\$ 3.32			X			0	0	0	0	0	99	
100	Elm Street - Wellington Station	6.2	16.2	22.4	260	\$ 2,624	622	\$ 3.46			X	57.1%	Minor	6.2	16.2	22.4	260	\$ 2,624	622	\$ 3.46			X			0	0	0	0	0	100	
101	Malden Station - Sullivan Station Via Medford Square	23.5	48.0	71.5	697	\$ 8,134	4,116	\$ 1.22				59.7%	None	23.5	48.0	71.5	697	\$ 8,134	4,116	\$ 1.22						0	0	0	0	0	101	
104	Malden Station - Sullivan Station Via Ferry Street	16.6	31.9	48.5	488	\$ 5,604	3,360	\$ 0.91				57.6%	None	16.6	31.9	48.5	488	\$ 5,604	3,360	\$ 0.91						0	0	0	0	0	104	
105	Malden Station - Sullivan Station Via Main Street	6.9	14.3	21.2	250	\$ 2,550	893	\$ 2.10			X	53.9%	None	6.9	14.3	21.2	250	\$ 2,550	893	\$ 2.10			X			0	0	0	0	0	105	
106	Franklin Sq or Lebanon Street Loop - Wellington Station	14.7	34.6	49.3	530	\$ 5,697	2,317	\$ 1.70				61.7%	None	14.7	34.6	49.3	530	\$ 5,697	2,317	\$ 1.70						0	0	0	0	0	106	
108	Linden Square - Wellington Station	14.4	37.2	51.6	502	\$ 5,746	2,600	\$ 1.45				57.9%	None	14.4	37.2	51.6	502	\$ 5,746	2,600	\$ 1.45						0	0	0	0	0	108	
109	Linden Square - Sullivan Station	16.3	36.5	52.8	564	\$ 6,114	2,988	\$ 1.29				56.2%	None	16.3	36.5	52.8	564	\$ 6,114	2,988	\$ 1.29						0	0	0	0	0	109	
110	Wonderland Station - Wellington Station	18.2	33.1	51.3	561	\$ 6,097	2,392	\$ 1.79				68.1%	None	18.2	33.1	51.3	561	\$ 6,097	2,392	\$ 1.79						0	0	0	0	0	110	
111	Woodlawn or Bway & Park - Haymarket Station	47.2	104.7	151.9	1,852	\$ 18,341	8,692	\$ 1.35				74.7%	None	47.2	104.7	151.9	1,852	\$ 18,341	8,692	\$ 1.35						0	0	0	0	0	111	
112	Wellington Station - Wood Island Station	10.5	30.8	41.3	472	\$ 4,768	1,213	\$ 3.17			X	52.6%	None	10.5	30.8	41.3	472	\$ 4,768	1,213	\$ 3.17			X			0	0	0	0	0	112	
114	Bellingham Square or Mystic Mall - Maverick Station	5.9	12.4	18.3	151	\$ 1,991	1,499	\$ 0.57				48.1%	None	5.9	12.4	18.3	151	\$ 1,991	1,499	\$ 0.57						0	0	0	0	0	114	
116	Wonderland Station - Maverick Station Via Revere	15.3	40.1	55.4	521	\$ 6,099	4,388	\$ 0.63				63.5%	Minor	16.8	42.6	59.4	521	\$ 6,439	4,388	\$ 0.71			I	I	I	1.5	2.5	4	0	0	116	
117	Wonderland Station - Maverick Station via Beach	14.3	40.2	54.5	484	\$ 5,879	4,058	\$ 0.69				63.6%	Minor	15.8	42.7	58.5	484	\$ 6,219	4,058	\$ 0.77			I	I	I	1.5	2.5	4	0	0	117	
119</																																

Weekday Bus Service - Current and Proposed

"X" = failed, "I" failed but improved

Route	Description	Current						Standards					Proposed						Standards					Change					Route			
		Peak Hours	Off-Peak Hours	Total Hours	Total Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Type of Change	Peak Hours	Off-Peak Hours	Total Hours	Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Peak Hours	Off-Peak Hours		Total Hours	Miles	Ridership
211	Quincy Center Station - Squantum	8.1	13.0	21.1	271	\$ 2,661	725	\$ 2.91			57.4%	None	8.1	13.0	21.1	271	\$ 2,661	725	\$ 2.91							0	0	0	0	0	211	
212	Quincy Center Station - North Quincy Station	3.5	3.6	7.1	70	\$ 865	273	\$ 2.41			68.7%	None	3.5	3.6	7.1	70	\$ 865	273	\$ 2.41							0	0	0	0	0	212	
214	Quincy Center Station - Germantown	10.1	11.9	22.1	244	\$ 2,743	961	\$ 2.09			63.7%	None	10.1	11.9	22.1	244	\$ 2,743	961	\$ 2.09							0	0	0	0	0	214	
215	Quincy Center Station - Ashmont Station	12.3	26.3	38.6	461	\$ 4,647	1,439	\$ 2.47	X		58.3%	None	12.3	26.3	38.6	461	\$ 4,647	1,439	\$ 2.47	X						0	0	0	0	0	215	
216	Quincy Center Station - Houghs Neck	9.9	22.2	32.1	435	\$ 4,012	965	\$ 3.40			59.6%	None	9.9	22.2	32.1	435	\$ 4,012	965	\$ 3.40							0	0	0	0	0	216	
217	Wollaston Station - Ashmont Station via Wollaston Beach	4.9	8.3	13.2	173	\$ 1,670	223	\$ 6.73			49.8%	X	Minor	4.9	7.9	12.8	170	\$ 1,633	219	\$ 6.70				I		0	-0.4	-0.4	-3	-4	217	
220	Quincy Center Station - Hingham	15.6	32.6	48.2	780	\$ 6,461	1,410	\$ 3.82			57.7%	None	15.6	32.6	48.2	780	\$ 6,461	1,410	\$ 3.82							0	0	0	0	0	220	
221	Quincy Center Station - Fort Point	1.3	1.6	3.0	40	\$ 390	102	\$ 3.07	X	X	65.9%	None	1.3	1.6	3.0	40	\$ 390	102	\$ 3.07	X	X					0	0	0	0	0	221	
222	Quincy Center Station - East Weymouth	13.6	30.1	43.7	644	\$ 5,627	1,326	\$ 3.48			62.2%	Major	13.6	30.1	43.7	662	\$ 5,685	1,333	\$ 3.50							0	0	0	18	7	222	
225	Quincy Center Station - Weymouth Landing	18.5	29.3	47.8	588	\$ 5,962	2,557	\$ 1.57		X	62.0%	Major	21.3	32.0	53.3	673	\$ 6,736	2,678	\$ 1.76			I	I			2.8	2.7	5.5	85	121	225	
230	Quincy Center Station - Montello Station	12.5	29.8	42.2	678	\$ 5,585	1,305	\$ 3.52	X		62.4%	None	12.5	29.8	42.2	678	\$ 5,585	1,305	\$ 3.52	X						0	0	0	0	0	230	
236	Quincy Center Station - South Shore Plaza	7.1	11.6	18.6	243	\$ 2,360	486	\$ 4.10	X		58.4%	None	7.1	11.6	18.6	243	\$ 2,360	486	\$ 4.10	X						0	0	0	0	0	236	
238	Quincy Center Station - Holbrook/Randolph Comm. Rail St	12.0	27.8	39.8	575	\$ 5,073	1,518	\$ 2.58			53.1%	Major	12.0	29.4	41.4	601	\$ 5,263	1,543	\$ 2.65	I						0	1.6	1.6	26	25	238	
240	Avon Line - Ashmont Station	23.3	45.4	68.7	1,043	\$ 9,040	2,408	\$ 2.99	X	X	47.1%	None	23.3	45.4	68.7	1,043	\$ 9,040	2,408	\$ 2.99	X	X					0	0	0	0	0	240	
245	Quincy Center Station - Mattapan Station	6.8	13.2	20.0	261	\$ 2,497	395	\$ 5.56	X		62.6%	X	None	6.8	13.2	20.0	261	\$ 2,497	395	\$ 5.56	X		X			0	0	0	0	0	245	
275	Downtown Boston - Long Island Health Campus	3.3	9.8	13.0	271	\$ 1,891	235	\$ 8.05			25.9%	X	None	3.3	9.8	13.0	271	\$ 1,891	235	\$ 8.05			X			0	0	0	0	0	275	
276	Boston City Hospital - Long Island Health Campus	3.6	8.1	11.7	94	\$ 1,252	598	\$ 2.09			31.2%	None	3.6	8.1	11.7	94	\$ 1,252	598	\$ 2.09							0	0	0	0	0	276	
277	L. Shattuck Hospital - Park & Tremont Streets	0.7	-	0.7	5	\$ 92	-	\$ -			12.5%	None	-	-	-	-	\$ -	-	\$ -							0	0	0	0	0	277	
325	Elm Street - Haymarket Station	12.8	4.8	17.5	281	\$ 2,681	320	\$ 6.23	X		42.9%	X	Minor	9.3	4.8	14.0	281	\$ 2,278	311	\$ 5.18				I		-3.5	0	-3.5	0	-9	325	
326	West Medford - Haymarket Station	13.6	3.8	17.4	308	\$ 2,798	434	\$ 4.30			47.8%	None	13.6	3.8	17.4	308	\$ 2,798	434	\$ 4.30							0	0	0	0	0	326	
350	North Burlington - Alewife Station	18.0	34.7	52.7	827	\$ 7,029	1,344	\$ 4.47	X		61.6%	None	18.0	34.7	52.7	827	\$ 7,029	1,344	\$ 4.47	X						0	0	0	0	0	350	
351	Oak Park - Alewife Station	5.9	3.5	9.4	284	\$ 1,814	145	\$ 10.36			63.7%	X	None	5.9	3.5	9.4	284	\$ 1,814	145	\$ 10.36			X			0	0	0	0	0	351	
352	Burlington - State Street	6.8	6.1	12.8	322	\$ 2,210	377	\$ 2.78			60.1%	None	6.8	6.1	12.8	322	\$ 2,210	377	\$ 2.78							0	0	0	0	0	352	
354	Woburn Line - State Street	14.9	20.8	35.8	776	\$ 5,583	777	\$ 4.11			45.4%	None	14.9	20.8	35.8	776	\$ 5,583	777	\$ 4.11							0	0	0	0	0	354	
355	Mishawum Station - State Street	1.5	1.9	3.4	55	\$ 471	17	\$ 24.60	X	X	30.5%	X	None	1.5	1.9	3.4	55	\$ 471	17	\$ 24.60	X	X		X		0	0	0	0	0	355	
411	Malden Station - Revere/Jack Satter House	6.0	17.7	23.7	339	\$ 2,948	823	\$ 2.82		X	44.4%	None	6.0	17.7	23.7	339	\$ 2,948	823	\$ 2.82	X						0	0	0	0	0	411	
424	Eastern & Essex - Haymarket or Wonderland	5.0	1.1	6.1	89	\$ 929	187	\$ 2.82	X		65.8%	None	5.0	1.1	6.1	89	\$ 929	187	\$ 2.82	X						0	0	0	0	0	424	
426	Central Sq Lynn - Haymarket or Wonderland Station Via	19.4	43.7	63.0	852	\$ 7,863	1,584	\$ 2.81			54.6%	None	19.4	43.7	63.0	852	\$ 7,863	1,584	\$ 2.81							0	0	0	0	0	426	
428	Oaklandvale - Haymarket Station via Granada Highlands	4.2	1.9	6.0	101	\$ 927	193	\$ 2.65			59.7%	None	4.2	1.9	6.0	101	\$ 927	193	\$ 2.65							0	0	0	0	0	428	
429	Northgate Shopping Center - Central Sq Lynn	14.7	29.9	44.6	652	\$ 5,771	1,245	\$ 3.88	X		50.1%	None	14.7	29.9	44.6	652	\$ 5,771	1,245	\$ 3.88	X						0	0	0	0	0	429	
430	Saugus, Appleton Street - Malden Station	7.9	19.7	27.6	347	\$ 3,334	854	\$ 3.14	X		41.3%	None	7.9	19.7	27.6	347	\$ 3,334	854	\$ 3.14	X						0	0	0	0	0	430	
431	Neptune Towers - Central Sq Lynn	0.7	2.3	3.0	32	\$ 337	64	\$ 4.50	X		28.3%	None	0.7	2.3	3.0	32	\$ 337	64	\$ 4.50	X						0	0	0	0	0	431	
434	Peabody - Haymarket Station	1.0	1.1	2.1	36	\$ 300	58	\$ 3.02	X	X	45.3%	None	1.0	1.1	2.1	36	\$ 300	58	\$ 3.02	X	X					0	0	0	0	0	434	
435	Liberty Tree Mall - Central Sq Lynn	7.3	21.9	29.2	391	\$ 3,544	515	\$ 6.12	X		50.2%	X	None	7.3	21.9	29.2	391	\$ 3,544	515	\$ 6.12	X		X			0	0	0	0	0	435	
436	Danvers Sq - Central Sq Lynn	11.3	21.4	32.7	427	\$ 4,091	686	\$ 5.20	X	X	60.8%	X	Minor	10.3	21.4	31.7	420	\$ 3,954	690	\$ 4.97	X	X		I		-1	0	-1	-7	4	436	
439	Bass Point Nahant - Central Sq Lynn	3.4	4.8	8.2	123	\$ 1,105	53	\$ 20.08			51.1%	X	Major	0.9	4.8	5.7	87	\$ 702	43	\$ 15.57					I		-2.5	0	-2.5	-36	-10	439
441	Marblehead - Haymarket or Wonderland Station via Paradise Road	16.9	24.4	41.3	581	\$ 5,424	1,211	\$ 2.33			50.0%	Major	17.6	24.4	42.0	580	\$ 5,501	1,236	\$ 2.30			I	I			0.7	0	0.7	-1.2	25	441	
442	Marblehead - Haymarket or Wonderland Station via Humphry Street	13.4	43.5	56.9	837	\$ 7,118	1,513	\$ 2.55		X	49.4%	Major	14.1	43.5	57.6	836	\$ 7,195	1,538	\$ 2.53			I	I			0.7	0	0.7	-1.2	25	442	
448	Marblehead - Downtown Crossing	4.0	2.5	6.4	99	\$ 935	130	\$ 5.04	X		45.4%	X	None	4.0	2.5	6.4	99	\$ 935	130	\$ 5.04	X		X			0	0	0	0	0	448	
449	Marblehead - Downtown Crossing	5.3	2.5	7.9	117	\$ 1,153	177	\$ 4.36	X		57.4%	None	5.3	2.5	7.9	117	\$ 1,153	177	\$ 4.36	X						0	0	0	0	0	449	
450	Salem Depot - Haymarket or Wonderland Station via West	15.7	38.2	53.9	846	\$ 7,051	1,342	\$ 3.10		X	46.8%	Minor	15.7	38.2	53.9	816	\$ 6,956	1,276	\$ 3.30			X	X	I		0	0	0	-29.9	-66	450	
451	North Beverly - Salem Depot	4.5	13.3	17.8	192	\$ 2,022	370	\$ 4.70	X		45.1%	None	4.5	13.3	17.8	192	\$ 2,022			X						0	0	0	0		451	
455	Salem Depot - Haymarket or Wonderland Station	15.5	38.3	53.9	665	\$ 6,470	1,449	\$ 2.31			48.7%	None	15.5	38.3	53.9	665	\$ 6,470	1,449	\$ 2.31							0	0	0	0	0	455	
456	Salem Depot - Central Sq Lynn	0.8	7.8	8.5	114	\$ 967	237	\$ 3.32	X		47.1%	Major	1.5	7.8	9.2	100	\$ 1,003	20														

Weekday Bus Service - Current and Proposed

"X" = failed, "I" = failed but improved

Route	Description	Current							Standards					Proposed							Standards					Change					Route
		Peak Hours	Off-Peak Hours	Total Hours	Total Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Type of Change	Peak Hours	Off-Peak Hours	Total Hours	Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Peak Hours	Off-Peak Hours	Total Hours	Miles	
554	Waverley Square - Federal & Franklin Streets	7.7	20.8	28.5	472	\$ 3,782	659	\$ 3.59	X		57.1%		Major	8.2	20.8	29.0	485	\$ 3,882	686	\$ 3.51	X					0.5	0	0.5	13.2	27	554
555	Riverside Station - Federal & Franklin Streets Via Newton	-	5.8	5.8	104	\$ 718	120	\$ 3.83	X		46.7%		None	-	5.8	5.8	104	\$ 718	120	\$ 3.83	X					0	0	0	0	0	555
556	Waltham Highlands - Federal & Franklin Streets	8.6	11.1	19.6	281	\$ 2,617	462	\$ 3.51			56.2%		None	8.6	11.1	19.6	281	\$ 2,617	462	\$ 3.51						0	0	0	0	0	556
558	Auburndale - Federal & Franklin Streets	8.4	8.5	16.9	283	\$ 2,435	332	\$ 5.18			50.7%	X	None	8.4	8.5	16.9	283	\$ 2,435	332	\$ 5.18			X			0	0	0	0	0	558
CT1	Central Square Cambridge. - South End Medical Area	11.0	22.5	33.5	224	\$ 3,489	2,268	\$ 0.78		X	55.5%		None	11.0	22.5	33.5	224	\$ 3,489	2,268	\$ 0.78		X				0	0	0	0	0	CT1
CT2	Sullivan Station - Kendall MIT Station - Ruggles Station	21.6	33.3	54.8	441	\$ 6,114	1,636	\$ 2.98			54.0%		None	21.6	33.3	54.8	441	\$ 6,114	1,636	\$ 2.98						0	0	0	0	0	CT2
CT3	Longwood Medical Area - Andrew Station	11.7	22.4	34.1	272	\$ 3,715	1,016	\$ 2.90			53.4%		None	11.7	22.4	34.1	272	\$ 3,715	1,016	\$ 2.90						0	0	0	0	0	CT3
SL1	Logan Airport - South Station	21.3	69.8	91.1	707	\$ 9,375	5,023	\$ 0.48		X	82.9%		None	21.3	69.8	91.1	707	\$ 9,375	5,023	\$ 0.48		X				0	0	0	0	0	SL1
SL2	Boston Marine Industrial Park - South Station	11.6	27.7	39.4	380	\$ 4,404	2,863	\$ 0.15		X	86.0%		Major	23.4	46.7	70.2	711	\$ 8,088	5,026	\$ 0.22		I	I			11.8	19	30.8	331	2163	SL2
SL3	City Point - South Station	7.9	14.0	21.9	260	\$ 2,679	1,923	\$ -		X	69.8%		Major	-	-	-	-	\$ -	-	\$ -						-7.9	-14	-21.9	-260.3	-1923	SL3
SLWater	Silver Line Way - South Station	19.4	13.6	33.0	212	\$ 3,820	1,197	\$ 1.80			73.4%		Major	15.5	8.6	24.1	165	\$ 2,887	957	\$ 1.63						-3.9	-5	-8.9	-47	-240	SLWater
SLWash	Dudley Station - Downtown	39.7	82.8	122.4	770	\$ 12,553	14,709	\$ 0.09			79.5%		None	39.7	82.8	122.4	770	\$ 12,553	14,709	\$ 0.09						0	0	0	0	0	SLWash

Saturday Bus Service - Current and Proposed

"X"=failed, "I" failed but improved

Route	Description	Current					Standards					Proposed					Standards					Change			Route	
		Total Hours	Total Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Type of Change	Total Hours	Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Total Hours	Miles		Ridership
1	Harvard Square - Dudley Station via Mass. Ave.	135.3	999	\$ 12,235	9,495	\$ 0.53			X	72.3%	Minor	139.3	1,029	\$ 12,597	9,642	\$ 0.55							4	29.4	147	1
5	City Point - McCormack Housing	5.7	41	\$ 513	71	\$ 6.46		X		58.6%	X	None	5.6	41	\$ 506	71	\$ 6.37				I		-0.1	0	0	5
7	City Point - Otis & Summer Streets	17.3	155	\$ 1,650	338	\$ 4.12				69.3%	None	17.3	155	\$ 1,650	338	\$ 4.12							0	0	0	7
8	Harbor Point /U Mass - Kenmore Station	44.8	470	\$ 4,492	1,064	\$ 3.46				52.3%	Major	42.8	448	\$ 4,288	1,060	\$ 3.29							-2	-22	-4	8
9	City Point - Copley Square via Broadway Station	52.3	468	\$ 4,988	1,817	\$ 1.99				67.6%	None	52.3	468	\$ 4,988	1,817	\$ 1.99							0	0	0	9
10	City Point - Copley Square Via BU Med Center	49.6	404	\$ 4,604	1,436	\$ 2.45				68.1%	None	49.6	404	\$ 4,604	1,436	\$ 2.45							0	0	0	10
11	City Point - Downtown	50.1	441	\$ 4,759	952	\$ 4.24				72.6%	None	50.1	441	\$ 4,759	952	\$ 4.24							0	0	0	11
14	Roslindale Square - Heath Street Loop	32.3	402	\$ 3,442	901	\$ 3.06				52.9%	None	32.3	402	\$ 3,442	901	\$ 3.06							0	0	0	14
15	Kane Square - Ruggles Station	60.2	492	\$ 5,594	3,756	\$ 0.73		X		63.7%	Minor	61.2	499	\$ 5,682	3,781	\$ 0.74			I				1	6.8	25	15
16	Forest Hills Station - U Mass.	32.9	346	\$ 3,301	2,356	\$ 0.64			X	60.4%	Minor	35.9	376	\$ 3,597	2,486	\$ 0.69							3	29.7	130	16
17	Fields Corner Station - Andrew Station	29.1	265	\$ 2,793	2,132	\$ 0.55				66.0%	None	29.1	265	\$ 2,793	2,132	\$ 0.55							0	0	0	17
18	Ashmont Station - Andrew Station	9.8	77	\$ 897	230	\$ 3.14				66.2%	None	9.8	77	\$ 897	230	\$ 3.14							0	0	0	18
21	Ashmont Station - Forest Hills Station	15.7	157	\$ 1,546	987	\$ 0.81				71.4%	Major	17.7	179	\$ 1,750	1,033	\$ 0.93			I				2	22	46	21
22	Ashmont Station - Ruggles Station Via Talbot Ave	90.6	939	\$ 9,055	4,960	\$ 1.07				62.1%	Minor	90.6	939	\$ 9,055	4,960	\$ 1.07			I				0	0	0	22
23	Ashmont Station - Ruggles Station via Washington Street	104.8	969	\$ 10,093	5,591	\$ 1.05				61.5%	None	104.8	969	\$ 10,093	5,591	\$ 1.05							0	0	0	23
24	Wakefield Ave. - Mattapan Station or Ashmont	33.1	334	\$ 3,277	955	\$ 2.67				68.5%	None	33.1	334	\$ 3,277	955	\$ 2.67							0	0	0	24
26	Ashmont Station - Norfolk & Wash. Belt	20.2	206	\$ 2,007	774	\$ 1.83				60.7%	Major	18.2	175	\$ 1,775	746	\$ 1.62			X				-2	-31	-28	26
28	Mattapan Station - Ruggles Station	138.5	1,267	\$ 13,298	8,101	\$ 0.88			X	65.1%	Major	140.0	1,285	\$ 13,456	8,175	\$ 0.89							1.5	18	74	28
29	Mattapan Station - Jackson Sq Station	14.7	180	\$ 1,556	432	\$ 2.84				72.7%	None	14.7	180	\$ 1,556	432	\$ 2.84							0	0	0	29
30	Mattapan Station - Roslindale Square	19.5	194	\$ 1,922	815	\$ 1.60				70.8%	None	19.5	194	\$ 1,922	815	\$ 1.60							0	0	0	30
31	Mattapan Station - Forest Hills Station	43.1	443	\$ 4,294	3,047	\$ 0.65				64.9%	Major	47.3	487	\$ 4,715	3,156	\$ 0.73			I				4.2	44	109	31
32	Wolcott Square or Cleary Square - Forest Hills Station	64.0	958	\$ 7,335	4,157	\$ 1.00				73.9%	None	64.0	958	\$ 7,335	4,157	\$ 1.00							0	0	0	32
33	River & Milton Streets - Mattapan Station	12.8	144	\$ 1,315	303	\$ 3.58				52.6%	None	12.8	144	\$ 1,315	303	\$ 3.58							0	0	0	33
34	Dedham Line - Forest Hills Station	28.7	332	\$ 2,978	1,470	\$ 1.27				60.0%	None	28.7	332	\$ 2,978	1,470	\$ 1.27							0	0	0	34
34E	Walpole - Forest Hills Station	60.3	838	\$ 6,706	2,157	\$ 2.35			X	42.5%	None	60.3	838	\$ 6,706	2,157	\$ 2.35			X				0	0	0	34E
35	Dedham Mall - Forest Hills Station	28.1	323	\$ 2,904	1,084	\$ 1.92				58.1%	None	28.1	323	\$ 2,904	1,084	\$ 1.92							0	0	0	35
36	VA Hosp - Forest Hills Station Via Chas. River Loop	34.0	354	\$ 3,400	1,282	\$ 1.89				71.3%	None	34.0	354	\$ 3,400	1,282	\$ 1.89							0	0	0	36
37	Baker & Vermont Streets - Forest Hills Station	24.5	223	\$ 2,347	617	\$ 3.04				74.9%	None	24.5	223	\$ 2,347	617	\$ 3.04							0	0	0	37
37/38	Baker & Vermont - F Hills VIA J P Monument	2.5	29	\$ 263	49	\$ 4.61				81.4%	None	2.5	29	\$ 263	49	\$ 4.61							0	0	0	37/38
38	Wren Street - Forest Hills Station	12.0	141	\$ 1,250	238	\$ 4.49				81.4%	None	12.0	141	\$ 1,250	238	\$ 4.49							0	0	0	38
39	Forest Hills Station - Back Bay Station	125.9	1,099	\$ 11,919	8,276	\$ 0.68				72.1%	None	125.9	1,099	\$ 11,919	8,276	\$ 0.68							0	0	0	39
40	Georgetowne - Forest Hills Station	14.8	165	\$ 1,514	503	\$ 2.25				68.9%	None	14.8	165	\$ 1,514	503	\$ 2.25							0	0	0	40
41	Centre & Eliot Streets - JFK U Mass Station	24.6	192	\$ 2,258	826	\$ 1.97				61.9%	None	24.6	192	\$ 2,258	826	\$ 1.97							0	0	0	41
42	Forest Hills Station - Ruggles Station	31.5	270	\$ 2,966	1,309	\$ 1.51				63.5%	None	31.5	270	\$ 2,966	1,309	\$ 1.51							0	0	0	42
43	Ruggles Station - Park & Tremont Streets	49.7	336	\$ 4,398	805	\$ 4.70				53.6%	None	49.7	336	\$ 4,398	805	\$ 4.70							0	0	0	43
44	Jackson Sq Station - Ruggles Station	45.2	449	\$ 4,452	2,247	\$ 1.22				59.6%	None	45.2	449	\$ 4,452	2,247	\$ 1.22							0	0	0	44
45	Franklin Park - Ruggles Station	45.9	425	\$ 4,428	2,312	\$ 1.16				55.5%	None	45.9	425	\$ 4,428	2,312	\$ 1.16							0	0	0	45
47	Central Square Cambridge. - Broadway Station	55.1	545	\$ 5,423	1,271	\$ 3.51				62.3%	None	55.1	545	\$ 5,423	1,271	\$ 3.51							0	0	0	47
48	Centre & Eliot Streets - Jamaica Plain Loop	8.0	66	\$ 742	50	\$ 14.08				58.0%	X	Major	-	-	\$ -	-	\$ -						-8	-66	-50	48
50	Cleary Sq - Forest Hills Station Via Metropolitan	9.2	95	\$ 917	378	\$ 1.66				63.9%	None	9.2	95	\$ 917	378	\$ 1.66							0	0	0	50
51	Cleveland Circle - Forest Hills Station	18.1	250	\$ 2,007	615	\$ 2.50				80.6%	None	18.1	250	\$ 2,007	615	\$ 2.50							0	0	0	51
52	Dedham Mall - Watertown Yard	11.4	170	\$ 1,306	107	\$ 11.45		X		46.3%	X	None	11.4	170	\$ 1,306	107	\$ 11.45			X	X		0	0	0	52
55	Queensberry Street - Park & Tremont Streets	17.1	131	\$ 1,563	303	\$ 4.40				68.8%	None	17.1	131	\$ 1,563	303	\$ 4.40							0	0	0	55
57	Watertown Yard - Kenmore Station	119.3	1,217	\$ 11,854	4,627	\$ 1.80				75.0%	None	119.3	1,217	\$ 11,854	4,627	\$ 1.80							0	0	0	57
59	Needham Junction - Watertown Square	13.2	167	\$ 1,413	299	\$ 3.97		X		73.4%	None	13.2	167	\$ 1,413	299	\$ 3.97			X				0	0	0	59
60	Chestnut Hill - Kenmore Station	34.2	404	\$ 3,574	593	\$ 5.27				64.5%	X	None	34.2	404	\$ 3,574	593	\$ 5.27				X		0	0	0	60
62/76	Bedford V.A. Hospital - Alewife Station Via Hanscom A	27.8	575	\$ 3,691	459	\$ 7.28		X		64.5%	X	Minor	25.8	535	\$ 3,430	444	\$ 6.97			X	I		-2	-40	-15	62/76
64	Oak Square - University Pk. Cambridge	19.8	240	\$ 2,086	554	\$ 3.01				67.7%	None	19.8	240	\$ 2,086	554	\$ 3.01							0	0	0	64
65	Brighton Center - Kenmore Station	11.8	101	\$ 1,113	280	\$ 3.21				61.0%	None	11.8	101	\$ 1,113	280	\$ 3.21							0	0	0	65
66	Harvard Square - Dudley Station via Brookline	111.3	870	\$ 10,214	6,056	\$ 0.93		X	X	54.1%	None	111.3	870	\$ 10,214	6,056	\$ 0.93			X	X			0	0	0	66

Saturday Bus Service - Current and Proposed

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Route	Description	Current					Standards					Proposed					Standards					Change			Route	
		Total Hours	Total Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Type of Change	Total Hours	Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Total Hours	Miles		Ridership
69	Harvard Square - Lechmere Station	30.4	251	\$ 2,834	1,818	\$ 0.80				64.3%	Minor	30.4	251	\$ 2,834	1,818	\$ 0.80							0	0	0	69
70	Cedarwood - Central Square Cambridge	91.3	1,125	\$ 9,689	4,030	\$ 1.64			X	64.9%	None	91.3	1,125	\$ 9,689	4,030	\$ 1.64			X				0	0	0	70
70A	No. Waltham - University Pk., Cambridge.	34.2	472	\$ 3,787	1,347	\$ 2.05		X		60.6%	None	34.2	472	\$ 3,787	1,347	\$ 2.05		X					0	0	0	70A
71	Watertown Square - Harvard Station	63.7	683	\$ 6,235	2,501	\$ 1.73				68.1%	None	63.7	683	\$ 6,235	2,501	\$ 1.73							0	0	0	71
72	Aberdeen & Mt. Auburn - Harvard Station	14.1	137	\$ 1,334	244	\$ 4.71				58.3%	None	14.1	137	\$ 1,334	244	\$ 4.71							0	0	0	72
72/75	Belmont Center - Harvard Station via Huron Ave	6.4	91	\$ 721	144	\$ 4.25				79.4%	None	6.4	91	\$ 721	144	\$ 4.25							0	0	0	72/75
73	Waverley Square - Harvard Station	63.4	732	\$ 6,363	2,791	\$ 1.52				64.7%	None	63.4	732	\$ 6,363	2,791	\$ 1.52							0	0	0	73
74	Belmont Center - Harvard Station via Concord Ave	12.2	132	\$ 1,234	203	\$ 5.32		X		71.1%	X	12.2	132	\$ 1,234	203	\$ 5.32		X			X		0	0	0	74
75	Belmont Center - Harvard Station via Fresh Pond Pkwy	8.9	118	\$ 974	245	\$ 3.22				76.2%	None	8.9	118	\$ 974	245	\$ 3.22							0	0	0	75
77	Arlington Heights - Harvard Station	127.6	1,318	\$ 12,735	4,285	\$ 2.21				67.1%	None	127.6	1,318	\$ 12,735	4,285	\$ 2.21							0	0	0	77
78	Arlmont Village - Harvard Station	20.6	312	\$ 2,374	328	\$ 6.48		X		57.9%	X	20.6	312	\$ 2,374	328	\$ 6.48		X			X		0	0	0	78
80	Arlington Center - Lechmere Station	31.5	410	\$ 3,413	1,257	\$ 1.96				71.1%	None	31.5	410	\$ 3,413	1,257	\$ 1.96							0	0	0	80
83	Rindge Ave. - Central Square, Cambridge	28.6	260	\$ 2,741	1,328	\$ 1.30				61.0%	None	28.6	260	\$ 2,741	1,328	\$ 1.30							0	0	0	83
86	Sullivan Station - Cleveland Circle	44.4	429	\$ 4,336	1,880	\$ 1.55				51.1%	None	44.4	429	\$ 4,336	1,880	\$ 1.55							0	0	0	86
87	Clarendon Hill - Lechmere Station via Somerville Avenue	44.1	444	\$ 4,360	2,052	\$ 1.36				60.7%	None	44.1	444	\$ 4,360	2,052	\$ 1.36							0	0	0	87
88	Clarendon Hill - Lechmere Station via Highland Avenue	44.0	420	\$ 4,279	2,257	\$ 1.14				73.7%	None	44.0	420	\$ 4,279	2,257	\$ 1.14							0	0	0	88
89	Clarendon Hill or Davis Square - Sullivan Station via Broadway	26.5	234	\$ 2,518	1,504	\$ 0.91				66.8%	Major	27.2	232	\$ 2,559	1,571	\$ 0.87							0.7	-1.9	67	89
90	Davis Square Station - Wellington Station	15.1	165	\$ 1,534	502	\$ 2.30				55.1%	None	15.1	165	\$ 1,534	502	\$ 2.30							0	0	0	90
91	Sullivan Station - Central Square, Cambridge	29.8	237	\$ 2,746	1,234	\$ 1.47				63.7%	None	29.8	237	\$ 2,746	1,234	\$ 1.47							0	0	0	91
92	Assembly Square Mall - Downtown Via Main Street	25.0	177	\$ 2,234	493	\$ 3.77				57.6%	None	25.0	177	\$ 2,234	493	\$ 3.77							0	0	0	92
93	Sullivan Station - Downtown Via Bunker Hill	37.2	285	\$ 3,396	1,969	\$ 0.96				56.7%	None	37.2	285	\$ 3,396	1,969	\$ 0.96							0	0	0	93
94	Medford Square - Davis Square Station	16.5	210	\$ 1,770	525	\$ 2.61				54.8%	None	16.5	210	\$ 1,770	525	\$ 2.61							0	0	0	94
95	West Medford - Sullivan Station	27.7	360	\$ 2,997	614	\$ 4.12				60.5%	Minor	25.5	337	\$ 2,777	594	\$ 3.92							-2.2	-22.8	-20	95
96	Medford Sq - Harvard Station	33.6	312	\$ 3,244	917	\$ 2.78				61.7%	None	33.6	312	\$ 3,244	917	\$ 2.78							0	0	0	96
97	Malden Station - Wellington Station	9.8	90	\$ 945	307	\$ 2.32				48.3%	None	9.8	90	\$ 945	307	\$ 2.32							0	0	0	97
99	Boston Reg. Med Center Stoneham - Wellington Station	31.3	435	\$ 3,475	543	\$ 5.64				73.9%	X	27.3	390	\$ 3,064	533	\$ 4.99					I		-4	-45	-10	99
100	Elm Street - Wellington Station	20.9	236	\$ 2,147	330	\$ 5.75				61.7%	X	20.9	236	\$ 2,147	330	\$ 5.75					X		0	0	0	100
101	Malden Station - Sullivan Station Via Medford Square	37.3	412	\$ 3,806	1,921	\$ 1.22		X		69.2%	None	37.3	412	\$ 3,806	1,921	\$ 1.22		X					0	0	0	101
104	Malden Station - Sullivan Station Via Ferry Street	31.3	346	\$ 3,191	1,994	\$ 0.84			X	50.6%	Minor	32.0	356	\$ 3,270	2,023	\$ 0.86					I		0.7	10.1	29	104
105	Malden Station - Sullivan Station Via Main Street	13.4	171	\$ 1,438	372	\$ 3.11		X		55.6%	None	13.4	171	\$ 1,438	372	\$ 3.11		X					0	0	0	105
106	Franklin Sq or Lebanon Street Loop - Wellington Station	34.9	371	\$ 3,518	1,111	\$ 2.41				74.0%	None	34.9	371	\$ 3,518	1,111	\$ 2.41							0	0	0	106
108	Linden Square - Wellington Station	37.4	400	\$ 3,778	1,344	\$ 2.05				75.2%	None	37.4	400	\$ 3,778	1,344	\$ 2.05							0	0	0	108
109	Linden Square - Sullivan Station	27.6	316	\$ 2,853	1,557	\$ 1.07			X	51.1%	Minor	28.3	326	\$ 2,933	1,592	\$ 1.08					I		0.7	10.3	35	109
110	Wonderland Station - Wellington Station	29.4	354	\$ 3,092	1,073	\$ 2.12				63.8%	None	29.4	354	\$ 3,092	1,073	\$ 2.12							0	0	0	110
111	Woodlawn or Bway & Park - Haymarket Station	84.2	1,046	\$ 8,966	6,027	\$ 0.73				73.6%	None	84.2	1,046	\$ 8,966	6,027	\$ 0.73							0	0	0	111
112	Wellington Station - Wood Island Station	32.8	385	\$ 3,423	672	\$ 4.33				48.9%	None	32.8	385	\$ 3,423	672	\$ 4.33							0	0	0	112
116	Wonderland Station - Maverick Station Via Revere	37.6	379	\$ 3,720	2,896	\$ 0.52			X	68.4%	Minor	39.3	395	\$ 3,884	3,001	\$ 0.53			I	I	I		1.7	16	105	116
117	Wonderland Station - Maverick Station via Beach	36.0	347	\$ 3,512	2,795	\$ 0.50			X	64.7%	Minor	37.6	363	\$ 3,671	2,900	\$ 0.51			I	I	I		1.6	16	105	117
119	Northgate Shopping Center - Beachmont Station	12.9	166	\$ 1,391	306	\$ 3.78				58.2%	None	12.9	166	\$ 1,391	306	\$ 3.78							0	0	0	119
120	Orient Heights Station - Maverick Station	31.0	323	\$ 3,098	1,188	\$ 1.85				74.3%	None	31.0	323	\$ 3,098	1,188	\$ 1.85							0	0	0	120
132	Redstone Shopping Center - Malden Station	12.4	151	\$ 1,311	140	\$ 8.60		X		58.8%	X	11.9	144	\$ 1,257	137	\$ 8.41		X			I		-0.5	-6.5	-3	132
134	North Woburn - Wellington Station	39.1	465	\$ 4,098	1,086	\$ 3.01				51.9%	None	39.1	465	\$ 4,098	1,086	\$ 3.01							0	0	0	134
136	Reading Depot - Malden Station Via Lakeside	20.6	339	\$ 2,461	359	\$ 6.09				55.6%	X	15.6	251	\$ 1,845	321	\$ 4.99					I		-5	-88.4	-38	136
137	Reading Depot - Malden Station Via North Ave	18.0	263	\$ 2,042	313	\$ 5.76				49.9%	X	13.0	175	\$ 1,426	260	\$ 4.72							-5	-88.4	-53	137
171	Logan Airport - Dudley Station Sunrise	1.3	21	\$ 152	28	\$ 4.66		X	X	57.3%	None	1.3	21	\$ 152	28	\$ 4.66		X	X				0	0	0	171
201&202	Fields Corner Station - Fields Corner Station	27.0	299	\$ 2,754	319	\$ 7.87				71.5%	X	24.5	269	\$ 2,492	300	\$ 7.55					I		-2.5	-30	-19	201&202
210	Quincy Center Station - No. Quincy Station or Fields Corner Station	7.6	71	\$ 737	179	\$ 3.36				59.6%	None	7.6	71	\$ 737	179	\$ 3.36							0	0	0	210
211	Quincy Center Station - Squantum	13.0	166	\$ 1,396	142	\$ 9.07				70.9%	X	12.1	156	\$ 1,304	137	\$ 8.76					I		-0.9	-10	-5	211
212	Quincy Center Station - North Quincy Station	6.3	71	\$ 648	93	\$ 6.21		X		66.5%	X	5.8	65	\$ 597	90	\$ 5.87		X			I		-0.5	-5.5	-3	212
214	Quincy Center Station - Germantown	14.2	152	\$ 1,432	439	\$ 2.50				69.4%	Major	11.2	145	\$ 1,209	442	\$ 1.98			I				-3	-7	3	214

Saturday Bus Service - Current and Proposed

"X"=failed, "I" failed but improved

Route	Description	Current					Standards					Proposed					Standards					Change			Route	
		Total Hours	Total Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Type of Change	Total Hours	Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Total Hours	Miles		Ridership
215	Quincy Center Station - Ashmont Station	29.2	348	\$ 3,063	760	\$ 3.27				63.7%	None	29.2	348	\$ 3,063	760	\$ 3.27							0	0	0	215
216	Quincy Center Station - Houghs Neck	28.1	377	\$ 3,082	526	\$ 5.10				55.7%	X	Major	25.1	370	\$ 2,859	529	\$ 4.64		I				-3	-7	3	216
220	Quincy Center Station - Hingham	30.2	491	\$ 3,580	670	\$ 4.58				63.0%	None	30.2	491	\$ 3,580	670	\$ 4.58							0	0	0	220
222	Quincy Center Station - East Weymouth	23.2	339	\$ 2,629	446	\$ 5.13				73.3%	X	Major	23.2	349	\$ 2,660	454	\$ 5.10				I		0	10	8	222
225	Quincy Center Station - Weymouth Landing	22.7	296	\$ 2,463	795	\$ 2.34				61.4%	None	22.7	296	\$ 2,463	795	\$ 2.34							0	0	0	225
230	Quincy Center Station - Montello Station	27.1	437	\$ 3,204	441	\$ 6.51				58.0%	X	None	27.1	437	\$ 3,204	441	\$ 6.51				X		0	0	0	230
236	Quincy Center Station - South Shore Plaza	15.8	211	\$ 1,729	431	\$ 3.25		X	X	56.3%	None	15.8	211	\$ 1,729	431	\$ 3.25		X	X				0	0	0	236
238	Quincy Center Station - Holbrook/Randolph Comm. Rail St	24.2	409	\$ 2,922	887	\$ 2.53			X	57.8%	None	24.2	409	\$ 2,922	887	\$ 2.53			X				0	0	0	238
240	Avon Line - Ashmont Station	39.8	710	\$ 4,923	1,021	\$ 4.06				64.2%	None	39.8	710	\$ 4,923	1,021	\$ 4.06							0	0	0	240
245	Quincy Center Station - Mattapan Station	12.8	181	\$ 1,434	113	\$ 11.93		X		61.7%	X	None	12.8	181	\$ 1,434	113	\$ 11.93		X		X		0	0	0	245
275	Downtown Boston - Long Island Health Campus	11.4	228	\$ 1,487	-	\$ -				45.3%	None	-	-	\$ -	-	\$ -						0	0	0	275	
276	Boston City Hospital - Long Island Health Campus	10.2	72	\$ 913	-	\$ -				25.6%	None	-	-	\$ -	-	\$ -						0	0	0	276	
277	L. Shattuck Hospital - Park & Tremont Streets	0.6	5	\$ 56	-	\$ -				0.0%	None	-	-	\$ -	-	\$ -						0	0	0	277	
350	North Burlington - Alewife Station	31.7	530	\$ 3,807	731	\$ 4.45				60.7%	None	31.7	530	\$ 3,807	731	\$ 4.45						0	0	0	350	
411	Malden Station - Revere/Jack Satter House	15.7	229	\$ 1,779	384	\$ 3.87				66.5%	None	15.7	229	\$ 1,779	384	\$ 3.87						0	0	0	411	
426	Central Sq Lynn - Haymarket or Wonderland Station Via	26.5	338	\$ 2,848	504	\$ 3.50				51.2%	None	26.5	338	\$ 2,848	504	\$ 3.50						0	0	0	426	
429	Northgate Shopping Center - Central Sq Lynn	31.6	454	\$ 3,557	688	\$ 4.41				48.1%	None	31.6	454	\$ 3,557	688	\$ 4.41						0	0	0	429	
430	Saugus, Appleton Street - Malden Station	14.5	183	\$ 1,556	519	\$ 2.24				42.5%	None	14.5	183	\$ 1,556	519	\$ 2.24						0	0	0	430	
431	Neptune Towers - Central Sq Lynn	2.6	32	\$ 276	3	\$ 91.11				33.0%	X	Minor	2.4	29	\$ 253	3	\$ 83.46				I	-0.2	-3	0	431	
435	Liberty Tree Mall - Central Sq Lynn	26.3	332	\$ 2,817	513	\$ 4.73				40.1%	None	26.3	332	\$ 2,817	513	\$ 4.73						0	0	0	435	
436	Danvers Sq - Central Sq Lynn	19.7	256	\$ 2,131	287	\$ 6.66				62.5%	X	None	19.7	256	\$ 2,131	287	\$ 6.66				X		0	0	0	436
441	Marblehead - Haymarket or Wonderland Station via Paradise Road	18.8	327	\$ 2,295	525	\$ 2.22			X	55.1%	Minor	18.8	313	\$ 2,251	522	\$ 2.16			X	I		0	-14	-3	441	
442	Marblehead - Haymarket or Wonderland Station via Humphry Street	28.6	452	\$ 3,352	603	\$ 3.41				62.9%	Minor	28.6	438	\$ 3,307	601	\$ 3.35				I		0	-14	-2	442	
450	Salem Depot - Haymarket or Wonderland Station via Wes	28.5	442	\$ 3,314	583	\$ 3.53				49.6%	None	28.5	442	\$ 3,314	583	\$ 3.53						0	0	0	450	
451	North Beverly - Salem Depot	5.0	63	\$ 534	69	\$ 6.97				28.7%	X	Major	4.5	56	\$ 479	67	\$ 6.39				I	-0.5	-6.6	-2	451	
455	Salem Depot - Haymarket or Wonderland Station	63.5	846	\$ 6,941	1,704	\$ 1.92				55.5%	None	63.5	846	\$ 6,941	1,704	\$ 1.92						0	0	0	455	
465	Liberty Tree Mall - Salem Depot	16.5	177	\$ 1,668	214	\$ 7.04				44.5%	X	Minor	15.0	160	\$ 1,514	207	\$ 6.55				I	-1.5	-17	-7	465	
504	Watertown Yard - Federal & Franklin Streets	23.7	346	\$ 2,687	536	\$ 2.86				67.7%	None	23.7	346	\$ 2,687	536	\$ 2.86						0	0	0	504	
553	Roberts - Federal & Franklin Streets	18.6	198	\$ 1,873	244	\$ 5.53		X		65.8%	X	None	18.6	198	\$ 1,873	244	\$ 5.53		X		X	0	0	0	553	
554	Waverley Square - Federal & Franklin Streets	19.2	234	\$ 2,030	195	\$ 8.26		X		52.4%	X	None	19.2	234	\$ 2,030	195	\$ 8.26		X		X	0	0	0	554	
SL1	Logan Airport - South Station	75.9	628	\$ 7,082	4,079	\$ 0.35			X	72.9%	None	75.9	628	\$ 7,082	4,079	\$ 0.35			X			0	0	0	SL1	
SL2	Boston Marine Industrial Park - South Station	19.1	195	\$ 1,899	566	\$ 1.97				70.5%	Major	38.3	390	\$ 3,805	1,118	\$ 2.01				I		19.2	195	552	SL2	
SLWater	Silver Line Way - South Station	19.2	85	\$ 1,556	552	\$ 1.43				51.5%	Major	-	-	\$ -	-	\$ -						-19.2	-137.1	-552	SLWater	
SLWash	Dudley Station - Downtown	103.8	710	\$ 9,205	8,877	\$ 0.28				85.3%	None	103.8	710	\$ 9,205	8,877	\$ 0.28						0	0	0	SLWash	

Sunday Bus Service - Current and Proposed

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Route	Description	Current					Standards					Proposed					Standards					Change			Route		
		Total Hours	Total Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Type of Change	Total Hours	Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Total Hours	Miles		Ridership	
1	Harvard Square - Dudley Station via Mass. Ave.	73.6	608	\$ 6,858	4,914	\$ 0.64		X	X	65.0%		Minor	77.6	637	\$ 7,220	4,990	\$ 0.69							4	29.4	76	1
8	Harbor Point /U Mass - Kenmore Station	41.4	435	\$ 4,157	643	\$ 5.70				62.5%	X	Major	40.2	421	\$ 4,029	639	\$ 5.55					I		-1.2	-14.9	-4	8
9	City Point - Copley Square via Broadway Station	35.1	352	\$ 3,467	1,087	\$ 2.43				69.1%		None	35.1	352	\$ 3,467	1,087	\$ 2.43							0	0	0	9
10	City Point - Copley Square Via BU Med Center	27.1	263	\$ 2,650	739	\$ 2.83				64.3%		None	27.1	263	\$ 2,650	739	\$ 2.83							0	0	0	10
11	City Point - Downtown	31.9	317	\$ 3,146	718	\$ 3.62				73.1%		None	31.9	317	\$ 3,146	718	\$ 3.62							0	0	0	11
15	Kane Square - Ruggles Station	54.8	484	\$ 5,207	2,135	\$ 1.68				72.7%		None	54.8	484	\$ 5,207	2,135	\$ 1.68							0	0	0	15
16	Forest Hills Station - U Mass.	26.1	287	\$ 2,660	1,376	\$ 1.17				62.5%		None	26.1	287	\$ 2,660	1,376	\$ 1.17							0	0	0	16
17	Fields Corner Station - Andrew Station	10.5	95	\$ 1,002	531	\$ 1.13				78.0%		None	10.5	95	\$ 1,002	531	\$ 1.13							0	0	0	17
18	Ashmont Station - Andrew Station	7.6	61	\$ 706	134	\$ 4.51				82.0%		None	7.6	61	\$ 706	134	\$ 4.51							0	0	0	18
21	Ashmont Station - Forest Hills Station	10.4	97	\$ 1,002	224	\$ 3.71				74.6%		None	10.4	97	\$ 1,002	224	\$ 3.71							0	0	0	21
22	Ashmont Station - Ruggles Station Via Talbot Ave	60.8	708	\$ 6,320	2,554	\$ 1.71				71.5%		Minor	60.8	708	\$ 6,320	2,554	\$ 1.71			I				0	0	0	22
23	Ashmont Station - Ruggles Station via Washington Street	64.1	662	\$ 6,399	2,986	\$ 1.38				61.8%		None	64.1	662	\$ 6,399	2,986	\$ 1.38							0	0	0	23
24	Wakefield Ave. - Mattapan Station or Ashmont	12.6	162	\$ 1,360	356	\$ 3.06				78.6%		Major	14.6	186	\$ 1,570	396	\$ 3.21							2	24	40	24
26	Ashmont Station - Norfolk & Wash. Belt	6.5	61	\$ 630	200	\$ 2.39				60.7%		None	6.5	61	\$ 630	200	\$ 2.39							0	0	0	26
28	Mattapan Station - Ruggles Station	99.8	999	\$ 9,856	5,056	\$ 1.19		X		55.3%		Major	101.8	1,011	\$ 10,029	5,115	\$ 1.20			I				2	12.3	59	28
30	Mattapan Station - Roslindale Square	9.4	107	\$ 967	171	\$ 4.90				74.8%		None	9.4	107	\$ 967	171	\$ 4.90							0	0	0	30
31	Mattapan Station - Forest Hills Station	32.2	394	\$ 3,405	1,739	\$ 1.20				65.4%		Major	37.2	444	\$ 3,899	1,837	\$ 1.36			I				5	50	98	31
32	Wolcott Square or Cleary Square - Forest Hills Station	48.4	890	\$ 6,075	2,650	\$ 1.53				63.6%		None	48.4	890	\$ 6,075	2,650	\$ 1.53							0	0	0	32
34	Dedham Line - Forest Hills Station	11.3	151	\$ 1,234	1,059	\$ 0.41				61.8%		Major	12.3	159	\$ 1,328	1,099	\$ 0.45			I				1	8.4	40	34
34E	Walpole - Forest Hills Station	30.6	464	\$ 3,525	1,241	\$ 2.08			X	51.8%		Major	36.1	554	\$ 4,180	1,360	\$ 2.31			I	I			5.5	90	119	34E
35	Dedham Mall - Forest Hills Station	8.9	115	\$ 958	414	\$ 1.55		X		60.0%		None	8.9	115	\$ 958	414	\$ 1.55			X				0	0	0	35
36	VA Hosp - Forest Hills Station Via Chas. River Loop	26.9	325	\$ 2,836	1,410	\$ 1.25				63.4%		None	26.9	325	\$ 2,836	1,410	\$ 1.25							0	0	0	36
37/38	Baker & Vermont - F Hills VIA J P Monument	8.7	98	\$ 890	171	\$ 4.45				65.1%		None	8.7	98	\$ 890	171	\$ 4.45							0	0	0	37/38
39	Forest Hills Station - Back Bay Station	96.5	936	\$ 9,439	4,713	\$ 1.24				60.8%		None	96.5	936	\$ 9,439	4,713	\$ 1.24							0	0	0	39
40	Georgetowne - Forest Hills Station	7.6	80	\$ 760	236	\$ 2.46				66.8%		None	7.6	80	\$ 760	236	\$ 2.46							0	0	0	40
41	Centre & Eliot Streets - JFK U Mass Station	16.8	152	\$ 1,604	494	\$ 2.49				55.6%		None	16.8	152	\$ 1,604	494	\$ 2.49							0	0	0	41
42	Forest Hills Station - Ruggles Station	18.4	180	\$ 1,801	590	\$ 2.29				81.3%		None	18.4	180	\$ 1,801	590	\$ 2.29							0	0	0	42
43	Ruggles Station - Park & Tremont Streets	30.7	242	\$ 2,828	699	\$ 3.29				60.3%		None	30.7	242	\$ 2,828	699	\$ 3.29							0	0	0	43
44	Jackson Sq Station - Ruggles Station	18.6	200	\$ 1,879	666	\$ 2.06				61.7%		None	18.6	200	\$ 1,879	666	\$ 2.06							0	0	0	44
45	Franklin Park - Ruggles Station	17.5	175	\$ 1,728	575	\$ 2.25				64.4%		None	17.5	175	\$ 1,728	575	\$ 2.25							0	0	0	45
47	Central Square Cambridge. - Broadway Station	31.4	322	\$ 3,125	630	\$ 4.20				66.8%		None	31.4	322	\$ 3,125	630	\$ 4.20							0	0	0	47
55	Queensberry Street - Park & Tremont Streets	14.7	116	\$ 1,351	229	\$ 5.14				60.2%		None	14.7	116	\$ 1,351	229	\$ 5.14							0	0	0	55
57	Watertown Yard - Kenmore Station	72.8	832	\$ 7,522	3,324	\$ 1.50		X		58.1%		None	72.8	832	\$ 7,522	3,324	\$ 1.50			I				0	0	0	57
59	Needham Junction - Watertown Square	11.5	149	\$ 1,246	201	\$ 5.44		X		70.8%		None	11.5	149	\$ 1,246	201	\$ 5.44			X				0	0	0	59
60	Chestnut Hill - Kenmore Station	15.8	197	\$ 1,685	262	\$ 5.67		X		56.8%	X	Minor	15.8	204	\$ 1,707	277	\$ 5.40			X				0	7	15	60
64	Oak Square - University Pk. Cambridge	9.9	117	\$ 1,034	241	\$ 3.53				68.9%		None	9.9	117	\$ 1,034	241	\$ 3.53							0	0	0	64
66	Harvard Square - Dudley Station via Brookline	82.4	673	\$ 7,653	4,745	\$ 0.85		X	X	60.8%		Minor	88.4	673	\$ 8,054	4,745	\$ 0.94			I	I			6	0	0	66
69	Harvard Square - Lechmere Station	19.0	167	\$ 1,799	920	\$ 1.20				64.8%		Minor	19.0	167	\$ 1,799	920	\$ 1.20				I			0	0	0	69
70	Cedarwood - Central Square Cambridge	67.2	983	\$ 7,629	2,847	\$ 1.92		X		56.2%		Minor	67.2	983	\$ 7,629	2,847	\$ 1.92			I				0	0	0	70
71	Watertown Square - Harvard Station	44.4	421	\$ 4,311	1,138	\$ 3.03				54.8%		None	44.4	421	\$ 4,311	1,138	\$ 3.03							0	0	0	71
72/75	Belmont Center - Harvard Station via Huron Ave	15.8	219	\$ 1,755	349	\$ 4.27				76.1%		None	15.8	219	\$ 1,755	349	\$ 4.27							0	0	0	72/75
73	Waverley Square - Harvard Station	44.0	486	\$ 4,493	1,072	\$ 3.43			X	51.3%		None	44.0	486	\$ 4,493	1,072	\$ 3.43			X				0	0	0	73
77	Arlington Heights - Harvard Station	72.9	845	\$ 7,567	2,730	\$ 2.01				59.7%		None	72.9	845	\$ 7,567	2,730	\$ 2.01							0	0	0	77
78	Arlmont Village - Harvard Station	18.7	320	\$ 2,270	229	\$ 9.15				55.0%	X	None	18.7	320	\$ 2,270	229	\$ 9.15				X			0	0	0	78
80	Arlington Center - Lechmere Station	17.4	242	\$ 1,934	563	\$ 2.68				68.8%		None	17.4	242	\$ 1,934	563	\$ 2.68							0	0	0	80
83	Rindge Ave. - Central Square, Cambridge	15.4	146	\$ 1,495	474	\$ 2.39				66.3%		None	15.4	146	\$ 1,495	474	\$ 2.39							0	0	0	83

Sunday Bus Service - Current and Proposed

"X"=failed, "I"=failed but improved

Route	Description	Current					Standards					Proposed					Standards					Change			Route	
		Total Hours	Total Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Type of Change	Total Hours	Miles	Total Expenses/Day	Ridership	Net Cost/Passenger	Span	Frequency	Loading	Sched. Adherence	Cost	Total Hours	Miles		Ridership
350	North Burlington - Alewife Station	19.4	335	\$ 2,364	361	\$ 5.79		X		64.6%	X	None	19.4	335	\$ 2,364	361	\$ 5.79		X			X	0	0	0	350
426	Central Sq Lynn - Haymarket or Wonderland Station Via	25.8	329	\$ 2,769	386	\$ 5.02				52.5%		None	25.8	329	\$ 2,769	386	\$ 5.02						0	0	0	426
429	Northgate Shopping Center - Central Sq Lynn	17.4	252	\$ 1,965	320	\$ 5.38				58.8%		None	17.4	252	\$ 1,965	320	\$ 5.38						0	0	0	429
431	Neptune Towers - Central Sq Lynn	2.6	35	\$ 287	8	\$ 35.10		X		48.1%	X	Minor	2.4	32	\$ 264	8	\$ 32.23		X			I	-0.2	-3	0	431
435	Liberty Tree Mall - Central Sq Lynn	6.9	88	\$ 741	158	\$ 3.93		X		50.1%		None	6.9	88	\$ 741	158	\$ 3.93		X				0	0	0	435
436	Danvers Sq - Central Sq Lynn	9.5	141	\$ 1,084	169	\$ 5.66		X		52.7%	X	None	9.5	141	\$ 1,084	169	\$ 5.66		X			X	0	0	0	436
441	Marblehead - Haymarket or Wonderland Station via Paradise Road	14.4	251	\$ 1,762	392	\$ 2.34				66.2%		Minor	14.4	237	\$ 1,717	391	\$ 2.24					I	0	-14	-1	441
442	Marblehead - Haymarket or Wonderland Station via Humphry Street	25.0	397	\$ 2,934	635	\$ 2.47		X		64.3%		Minor	25.0	383	\$ 2,889	633	\$ 2.41		X			I	0	-14	-2	442
450	Salem Depot - Haymarket or Wonderland Station via Wes	23.7	363	\$ 2,738	481	\$ 3.54		X		56.1%		None	23.7	363	\$ 2,738	481	\$ 3.54		X				0	0	0	450
455	Salem Depot - Haymarket or Wonderland Station	35.3	465	\$ 3,839	788	\$ 2.72				57.0%		None	35.3	465	\$ 3,839	788	\$ 2.72						0	0	0	455
SL1	Logan Airport - South Station	99.4	820	\$ 9,263	3,578	\$ 1.20				81.7%		None	99.4	820	\$ 9,263	3,578	\$ 1.20						0	0	0	SL1
SL2	Boston Marine Industrial Park - South Station	18.4	190	\$ 1,838	315	\$ 4.44				77.1%		Major	36.9	375	\$ 3,665	822	\$ 3.07		I				18.5	185	507	SL2
SLWater	Silver Line Way - South Station	18.5	81	\$ 1,492	507	\$ 1.55			X	49.1%		Major	-	-	\$ -	-	\$ -						-18.5	-132.9	-507	SLWater
SLWash	Dudley Station - Downtown	79.7	576	\$ 7,166	5,525	\$ 0.54				89.8%		None	79.7	576	\$ 7,166	5,525	\$ 0.54						0	0	0	SLWash

Comparative Evaluation: Weekday Proposals

Route	Change in							Net Cost/Pax	
	Type	Hours	Miles	Riders	Cost Per Day	Cost Per New Rider	Savings Per Lost Rider	Current	Projected
4	Major	2	47.4	53	\$ 340.90	\$ 6.43		\$ 4.36	\$ 4.68
5	Minor	-0.1	-0	0	\$ (6.69)			\$ 4.09	\$ 4.04
6	Major	-7.2	-46.3	-83	\$ (764.98)		\$ 9.22	\$ 9.22	\$ -
7	Minor	4	12.6	25	\$ 481.67	\$ 19.27		\$ 2.11	\$ 2.27
9	Minor	4	14	19	\$ 490.69	\$ 25.83		\$ 1.58	\$ 1.68
10	Minor	0.2	0.6	10	\$ 17.34	\$ 1.73		\$ 1.67	\$ 1.67
19	Minor	1.3	6.2	0	\$ 169.42			\$ 1.09	\$ 1.14
21	Major	2	22	30	\$ 181.07	\$ 6.04		\$ 0.86	\$ 0.91
26	Major	-2	-30	-11	\$ (220.98)		\$ 20.09	\$ 1.38	\$ 1.24
28	Major	-0	-0	79	\$ (60.04)	\$ (0.76)		\$ 1.05	\$ 1.04
29	Minor	-0	2	16	\$ (5.79)	\$ (0.36)		\$ 1.78	\$ 1.77
31	Major	2	20	49	\$ 160.27	\$ 3.27		\$ 1.11	\$ 1.13
34E	Major	2	30	31	\$ 254.01	\$ 8.19		\$ 3.01	\$ 3.07
40	Minor	0.8	10	26	\$ 65.61	\$ 2.52		\$ 1.80	\$ 1.81
48	Major	-8.633	-63.9	-85	\$ (784.92)		\$ 9.23	\$ 9.23	\$ -
84	Minor	0.1	7.9	15	\$ 20.44	\$ 1.36		\$ 3.72	\$ 3.57
88	Minor	1.7	15.9	0	\$ 246.36			\$ 0.79	\$ 0.85
89	Major	0.5	6.7	88	\$ (12.09)	\$ (0.14)		\$ 1.05	\$ 1.02
116	Minor	4	-0	0	\$ 340.00			\$ 0.63	\$ 0.71
117	Minor	4	-0	0	\$ 340.00			\$ 0.69	\$ 0.77
121	Minor	0.5	2.6	19	\$ 27.30	\$ 1.44		\$ 1.09	\$ 1.10
132	Minor	1.2	12.5	21	\$ 162.00	\$ 7.71		\$ 3.16	\$ 3.34
134	Minor	-0.7	-4.5	-12	\$ (85.80)		\$ 7.15	\$ 2.87	\$ 2.84
170	Major	-1	-33.8	-4	\$ (214.15)		\$ 53.54	\$20.65	\$ 14.94
217	Minor	-0.4	-3	-4	\$ (33.28)		\$ 8.32	\$ 6.73	\$ 6.70
222	Major	-0	18	7	\$ 51.99	\$ 7.43		\$ 3.48	\$ 3.50
225	Major	5.5	85	121	\$ 681.72	\$ 5.63		\$ 1.57	\$ 1.76
238	Major	1.6	26	25	\$ 170.84	\$ 6.83		\$ 2.58	\$ 2.65
325	Minor	-3.5	-0	-9	\$ (383.64)		\$ 42.63	\$ 6.23	\$ 5.18
436	Minor	-1	-7	4	\$ (140.46)	\$ (35.12)		\$ 5.20	\$ 4.97
439	Major	-2.5	-36	-10	\$ (394.86)		\$ 39.49	\$20.08	\$ 15.57
441	Major	0.7	-1.2	25	\$ 23.03	\$ 0.92		\$ 2.33	\$ 2.30
442	Major	0.7	-1.2	25	\$ 23.03	\$ 0.92		\$ 2.55	\$ 2.53
450	Minor	-0	-29.9	-66	\$ 46.71		\$ (0.71)	\$ 3.10	\$ 3.30
456	Major	0.7	-14	-29	\$ 58.07		\$ (2.00)	\$ 3.32	\$ 4.06
500	Major	-6	-131	-80	\$ (760.23)		\$ 9.50	\$ 6.88	\$ 5.17
554	Major	0.5	13.2	27	\$ 41.54	\$ 1.54		\$ 3.59	\$ 3.51
SL2	Major	30.8	331	2163	\$ 677.28	\$ 0.31	\$ 0.31	\$ 0.15	\$ 0.22
SL3	Major	-21.9	-260.3	-1923	\$(2,678.98)		\$ 1.39	\$ 1.39	\$ -
SLWater	Major	-8.9	-47	-240	\$ (599.66)		\$ 2.50	\$ 1.80	\$ 1.63

Comparative Evaluation: Saturday Proposals

Route	Change in					Cost Per Day	Cost Per New Rider	Savings Per Lost Rider	Net Cost/Pax	
	Type	Hours	Miles	Riders	Cost Per Day				Current	Projected
1	Minor	4	29.4	147	\$ 249.55	\$ 1.70		\$ 0.53	\$ 0.55	
5	None	-0.1	-0	0	\$ (6.69)			\$ 6.46	\$ 6.37	
8	Major	-2	-22	-4	\$ (200.83)		\$ 50.21	\$ 3.46	\$ 3.29	
15	Minor	1	6.8	25	\$ 69.57	\$ 2.78		\$ 0.73	\$ 0.74	
16	Minor	3	29.7	130	\$ 196.51	\$ 1.51		\$ 0.64	\$ 0.69	
21	Major	2	22	46	\$ 168.91	\$ 3.67		\$ 0.81	\$ 0.93	
26	Major	-2	-31	-28	\$ (211.25)		\$ 7.54	\$ 1.83	\$ 1.62	
28	Major	1.5	18	74	\$ 101.44	\$ 1.37		\$ 0.88	\$ 0.89	
31	Major	4.2	44	109	\$ 338.29	\$ 3.10		\$ 0.65	\$ 0.73	
48	Major	-7.95	-65.96	-50	\$ (703.98)		\$ 14.08	\$ 14.08	\$ -	
62/76	Minor	-2.0	-40.0	-15	\$ (249.78)		\$ 16.65	\$ 7.28	\$ 6.97	
89	Major	0.7	-1.9	67	\$ (10.13)	\$ (0.15)		\$ 0.91	\$ 0.87	
95	Minor	-2.2	-22.8	-20	\$ (204.60)		\$ 10.23	\$ 4.12	\$ 3.92	
99	Major	-4	-45	-10	\$ (403.33)		\$ 40.33	\$ 5.64	\$ 4.99	
104	Minor	0.7	10.1	29	\$ 56.96	\$ 1.96		\$ 0.84	\$ 0.86	
109	Minor	0.7	10.3	35	\$ 53.03	\$ 1.52		\$ 1.07	\$ 1.08	
116	Minor	1.7	16	105	\$ 84.90	\$ 0.81		\$ 0.52	\$ 0.53	
117	Minor	1.6	16	105	\$ 78.21	\$ 0.74		\$ 0.50	\$ 0.51	
132	Minor	-0.5	-6.5	-3	\$ (51.87)		\$ 17.29	\$ 8.60	\$ 8.41	
136	Major	-5	-88.4	-38	\$ (587.14)		\$ 15.45	\$ 6.09	\$ 4.99	
137	Major	-5	-88.4	-53	\$ (575.74)		\$ 10.86	\$ 5.76	\$ 4.72	
201&202	Major	-2.5	-30	-19	\$ (248.36)		\$ 13.07	\$ 7.87	\$ 7.55	
211	Minor	-0.9	-10	-5	\$ (88.26)		\$ 17.65	\$ 9.07	\$ 8.76	
212	Major	-0.5	-5.5	-3	\$ (48.69)		\$ 16.23	\$ 6.21	\$ 5.87	
214	Major	-3	-7	3	\$ (225.32)	\$ (75.11)		\$ 2.50	\$ 1.98	
216	Major	-3	-7	3	\$ (225.32)	\$ (75.11)		\$ 5.10	\$ 4.64	
222	Major	-0	10	8	\$ 25.76	\$ 3.22		\$ 5.13	\$ 5.10	
431	Minor	-0.2	-3	0	\$ (22.93)			\$ 91.11	\$ 83.46	
441	Minor	-0	-14	-3	\$ (38.12)		\$ 12.71	\$ 2.22	\$ 2.16	
442	Minor	-0	-14	-2	\$ (40.27)		\$ 20.14	\$ 3.41	\$ 3.35	
451	Major	-0.5	-6.6	-2	\$ (52.95)		\$ 26.48	\$ 6.97	\$ 6.39	
465	Minor	-1.5	-17	-7	\$ (149.18)		\$ 21.31	\$ 7.04	\$ 6.55	
SL2	Major	19.2	195	552	\$ 1,138.34	\$ 2.06		\$ 1.97	\$ 2.01	
SLWater	Major	-19.2	-85.18	-552	\$ (788.71)		\$ 1.43	\$ 1.43	\$ -	

Comparative Evaluation: Sunday Proposals

Route	Change in					Cost Per Day	Cost Per New Rider	Savings Per Lost Rider	Net Cost/Pax	
	Type	Hours	Miles	Riders	Current				Projected	
1	Minor	4	29.4	76	\$ 303.51	\$ 3.99		\$ 0.64	\$ 0.69	
8	Major	-1.2	-14.9	-4	\$ (124.70)		\$ 31.17	\$ 5.70	\$ 5.55	
24	Major	2	24	40	\$ 179.84	\$ 4.50		\$ 3.06	\$ 3.21	
28	Major	2	12.3	59	\$ 128.15	\$ 2.17		\$ 1.19	\$ 1.20	
31	Major	5	50	98	\$ 419.29	\$ 4.28		\$ 1.20	\$ 1.36	
34	Major	1	8.4	40	\$ 63.26	\$ 1.58		\$ 0.41	\$ 0.45	
34E	Major	5.5	90	119	\$ 564.13	\$ 4.74		\$ 2.08	\$ 2.31	
60	Minor	-0	7	15	\$ 10.89	\$ 0.73		\$ 5.67	\$ 5.40	
66	Minor	6	-0	0	\$ 401.50			\$ 0.85	\$ 0.94	
136	Major	5	80	202	\$ 435.76	\$ 2.16		\$ -	\$ 2.16	
137	Major	5	69.2	207	\$ 397.57	\$ 1.92		\$ -	\$ 1.92	
222	Major	1	7	5	\$ 85.40	\$ 17.08		\$ 3.67	\$ 3.84	
431	Minor	-0.2	-3	0	\$ (22.93)			\$ 35.10	\$ 32.23	
441	Minor	-0	-14	-1	\$ (42.42)		\$ 42.42	\$ 2.34	\$ 2.24	
442	Minor	-0	-14	-2	\$ (40.27)		\$ 20.14	\$ 2.47	\$ 2.41	
SL2	Major	18.5	185	507	\$1,122.21	\$ 2.21		\$ 4.44	\$ 3.07	
SLWater	Major	-18.5	-80.9	-507	\$ (787.52)		\$ 1.55	\$ 1.55	\$ -	