MBTA Water Transportation Service 2000 Passenger Survey

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1. Introduction

Background of Survey

This report presents the final results of a survey of passengers on all Water Transportation services currently funded by the Massachusetts Bay Transportation Authority (MBTA). This survey was conducted by the Central Transportation Planning Staff (CTPS) in April 2000. These services surveyed consist of two commuter boat routes to Boston from the South Shore towns of Hingham and Hull and three short ferry routes connecting points within Boston Inner Harbor. The latter run from the Charlestown Navy yard to Long Wharf, from the Navy Yard to Lovejoy Wharf (near North Station), and from Lovejoy Wharf to the U.S. Courthouse and the World Trade Center in South Boston.

The Hull route has been operating since 1963, but has been funded by the MBTA only since 1997. The Hingham route was established in 1975, and has been partly funded by the state or the MBTA since 1977. The Inner Harbor routes are newer, and are provided as part of the traffic mitigation effort for the Central Artery reconstruction project. The Navy Yard - Long Wharf route was established in 1988. Service from Lovejoy Wharf to the Navy Yard and to the World Trade Center began in 1997. The Courthouse stop was added in 1998.

Survey Format and Distribution Method

The survey forms for the South Shore and Inner Harbor routes (copies of which appear at the end of this report) each contained 26 questions covering objective travel characteristics such as origin, destination, and trip purpose, and subjective views of service quality. Space was also provided for written comments and suggestions. The two forms differed only in check-off choices for certain questions relevant to only one or the other route category. The coverage of the questions was similar to that of recent surveys conducted on other MBTA services, such as the 1998 Old Colony Commuter Rail survey, but with addition of some questions pertaining to unique characteristics of water transportation service.

Survey distribution on all routes took place on Tuesday, April 25, 2000. All survey distribution was done by personnel of the contract operators of the boat services. Completed forms could be returned on board the boats or mailed in postage-free. The instructions provided by CTPS called for surveys to be offered to all passengers on all trips heading toward Boston on the Hingham and Hull routes. On the Inner Harbor routes, surveys were to be offered to all passengers on all trips in both directions, with the expectation that round-trip passengers would fill out only one survey each.

The boat operators were also asked to report total passenger boardings by trip on the survey day.

The returned results indicate that the distribution instructions were not followed completely. On the Hull route, which has only two inbound trips, both in the A.M. peak, the number of completed surveys from each trip was slightly greater than the total reported ridership (a total of 81 surveys versus 80 reported riders). Although this suggests that some passengers submitted more than one form, there were no pairs of surveys with answers sufficiently similar to indicate that they were filled out by the same passenger.

On the Hingham route, which has service all day, no surveys were returned from trips departing Hingham after 9:15 A.M., indicating that none were distributed, and wide variation in response rates among earlier trips suggests that not all crews were equally diligent in survey distribution. The overall response rate from trips up to 9:15 A.M. was 47% (846 returns versus 1,799 reported riders), or about the same as the typical response rate for MBTA commuter rail surveys.

On the Navy Yard - Long Wharf route, surveys were distributed on trips in both directions, but nearly all responses came from trips departing the Navy Yard between 6:45 and 11:15 A.M. or departing Long Wharf between 6:30 and 10:00 A.M. (It would be expected that most riders in either direction after mid-afternoon would be making return halves of round trips, but some one-way riders after late morning were apparently not surveyed.) On trips departing the Navy Yard up to 11:15 A.M., the overall response rate was 58% (171 returns versus 295 reported riders). On trips departing Long Wharf up to 10:00 A.M., the overall response rate was 72% (52 returns versus 72 reported riders).

On the Lovejoy - Courthouse/World Trade Center route, almost all ridership departing Lovejoy Wharf is on A.M. trips and almost all ridership departing the Courthouse and World Trade Center wharves in on P.M. trips. For the A.M. trips departing Lovejoy, survey responses were received only for trips departing between 6:20 and 9:15 A.M. For these, the overall response rate was 44% (21 returns versus 48 reported riders). Responses were received from most of the P.M. trips departing the Courthouse or World Trade Center with riders. For these, the overall response rate was 77% (33 returns versus 43 reported riders). Although some of the riders on A.M. trips from Lovejoy presumably returned on P.M. trips from the other end of the route, comparisons of the origin and destination information in the A.M. and P.M. surveys do not show any multiple returns from individual riders.

The Navy Yard - Lovejoy route has the lowest ridership of all the Inner Harbor routes. Ridership in each direction is about equally divided between A.M. and P.M. trips, but most of the survey responses came from trips departing either end before 9:00 A.M. For trips leaving the Navy Yard before 9:00 A.M., the overall response rate was 33% (6 returns versus 18 reported riders). For trips leaving Lovejoy before 9:00 A.M. the overall response rate was 100% (13 returns versus 13 reported riders).

The results of the Water Transportation surveys were entered in a computerized database from which responses to selected combinations of questions can be extracted at a wide range of levels of aggregation. The tables contained in this report are intended to provide an overview of the data available from the survey findings. More specialized tables can be generated as needed.

Survey Expansion Method

The control totals for the survey were based on the boarding counts reported by the boat operators on the same day that the surveys were distributed. The work program for the study called for the survey results to be expanded to ridership totals on a trip-by-trip basis. Because of large variations in response rates among trips, it was concluded that use of individual trip expansion factors would attach too much importance to the results of individual surveys from trips with low response rates. Therefore, in many cases composite expansion factors for several trips were used.

On both trips on the Hull route, all surveys were weighted at 1.0, because total responses equaled total reported ridership. On the Hingham route, response rates were significantly lower than average on the first and third departures. Therefore, a composite expansion factor was used for the first and second trips and another for the third and fourth trips. Otherwise, individual factors were used for all trips from which responses were received.

On the Charlestown - Long Wharf route, which is served by two boats, one boat had a higher overall response rate than the other. To compensate for this, composite expansion factors were used for consecutive pairs of A.M. trips leaving the Navy Yard. For A.M. trips leaving Long Wharf, which had lower average ridership, composite expansion factors for groups of two to five consecutive trips were used.

On the Lovejoy - Courthouse/World Trade Center route, a single composite expansion factor was used for all A.M. trips leaving Lovejoy. Composite factors for groups of three consecutive trips were used for P.M. departures from the Courthouse and World Trade Center. The counts provided by the boat operator separated boardings and alightings between the Courthouse and World Trade Center wharves, but because of low totals by trip, separate expansion factors were not used for the two locations. On the Lovejoy - Navy Yard route, a single expansion factor was used for all trips from the Navy Yard. All trips from Lovejoy were weighted at 1.0.

In this report, the raw survey results have been factored up to the control totals using the methods stated above. Expansion factors for individual surveys ranged from 1.0 to 3.2, but for 90% of the responses expansion factors did not exceed 2.4. In examining the results, it should be kept in mind that an unusual trip apparently made by two or three riders may actually represent expansion of a single survey response.

Arrangement of Information in Following Chapters

Chapters 2 through 12 present the findings of 11 standard reports produced by the database program prepared by CTPS for summarizing the survey results. Each chapter begins with a description of the information contained in the reports in that chapter. This is followed by a discussion of the main findings of these reports. At the end of the chapter are eight reports, one for each of the South Shore commuter boat routes and one for each direction for each of the three Inner Harbor routes. The sequence of the reports in these chapters is as follows:

- Hingham - Rowes Wharf, responses from A.M. trips from Hingham
- Hull - Quincy - Long Wharf, responses from A.M. Peak trips from Hull
- Charlestown Navy Yard - Long Wharf, responses from A.M. trips from Navy Yard
- Charlestown Navy Yard - Long Wharf, responses from A.M. trips from Long Wharf
- Charlestown Navy Yard - Lovejoy Wharf, responses from A.M. peak trips from Lovejoy Wharf
- Charlestown Navy Yard - Lovejoy Wharf, responses from A.M. peak trips from Navy Yard
- Lovejoy Wharf - Courthouse/World Trade Center, responses from A.M. peak trips from Lovejoy Wharf
- Lovejoy Wharf - Courthouse/World Trade Center, responses from P.M. peak trips from Courthouse and World Trade Center

It should be noted that most passengers in the first seven groups above were making portions of trips from home to work or other destination, whereas most passengers in the eighth were returning home after a day at work.

Chapter 13 summarizes written comments and suggestions from the box at the end of the survey form. For purposes of discussion, these have been divided into 10 major categories, as described on page 13-2.

2. Origin Locations and Activities

Information Contained

Each Origin Locations and Activities report consists of one table, showing the origin cities and towns of passengers in a selected group. This information is based on survey question 3b. Most city and town definitions in the database correspond with municipal boundaries, but Boston, Cambridge, Somerville, and Brookline are subdivided into neighborhoods. Locations outside Massachusetts are combined at state level only.

In the Origin Locations and Activities report, origins are arranged in descending order of volume with a maximum of 25 origins. If there are more than 25 origins in the group, those producing fewer boardings than the one in 25th place are combined as Other.

In addition to showing the number of riders and the percentage of the group total accounted for by each origin, the table includes a breakdown of passengers from each origin by activity prior to starting the trip, based on survey question 3a. The choices given on the survey were: At home; At school; At work; At a store; At the doctor or other personal business; At a work-related errand or meeting; At a restaurant, or social or recreational activity; and Other. The table includes the responses for all of these, although some of the table headings have been abbreviated.

Origin Locations

Survey question 3b provided space for respondents to write in the starting points of their trips, including street address or nearest intersection or landmark and city or town. Almost all of the respondents on all of the services surveyed completed at least the city or town portion of this question or included sufficient information in their responses to other questions to enable determination of their origin cities and towns. The majority also included some address information, but most specified streets only. In such cases, the level of precision with which it would be possible to map origins would vary with street lengths. Because of the large number of different origins, no attempt was made to create reports at a level of detail finer than city or town. Address responses were, however, included in the database in as much detail as was furnished, and they can be retrieved as needed.

Hingham Route

This route runs from the former Hingham Shipyard on Weymouth Back River to Rowes Wharf in Boston, with no intermediate stops. On the survey day, a total of 1,801 riders were reported using trips leaving Hingham between 6:00 and 9:15 A.M. The survey results show that these riders had origins in 16 South Shore cities and towns, but the top

seven accounted for 97% of the riders, and the top five accounted for 88%. As might be expected, Hingham accounted for the largest individual share of riders at 34.5%.

Hingham and the other towns in the top seven (Scituate, Cohasset, Weymouth, Hull, Marshfield, and Norwell) were also the top seven and also accounted for most of the riders in surveys conducted in the early years of operation of the route in 1977 and 1979. Ridership from the more distant origins grew at faster rates than that from Hingham and Weymouth, reducing the share accounted for by those two from 63% in 1977 to 43% in 2000. This was partly attributable to the almost complete elimination of private-carrier bus service to Boston from the other five towns, which was in itself a response to early diversions of riders to the boat. Hingham, Cohasset, Scituate, and Weymouth would all be served directly by the Greenbush Old Colony Line. Hull, Marshfield and Norwell would all adjoin towns with stations. (Weymouth already has a station on the Plymouth/Kingston Line.)

Overall, 98% of the inbound A.M. riders on the Hingham Line reported that their trips began at home. The only towns with under 98% of origins at home were Hingham (96.8%) and Weymouth (93.5%). Almost all of the Weymouth trips that did not originate at home were made by passengers from towns other than Weymouth who stopped off to work out at a local fitness center on the way to the boat. The greatest number of non-home-based trips from Hingham were made by Hingham residents who stopped off to leave children at daycare centers on the way to the boat. It is unclear to what, if any, extent the locations of the fitness and daycare centers influenced the decision to use the boat.

The trips on which surveys were distributed accounted for 95% of the reported inbound Hingham Route riders (1,801 of 1,888) on the survey day. Ridership on the 11 trips not surveyed averaged 7.9 per trip, with a range of 0 to 37. No attempt was made to expand the survey returns to include this ridership, since off-peak riders would be expected to have different characteristics than peak riders. Nevertheless, the number of off-peak riders was so small that information from them would not have affected overall daily results significantly. Inbound and outbound ridership was almost evenly matched, with a total of 1,869 outbound riders on the survey day. Only 5% of the outbound riders used trips departing Boston before 3:30 P.M., implying that most of the traffic was return halves of trips originating on the South Shore.

Hull Route

This route connects Pemberton Point, at the outer end of the Hull peninsula, with Long Wharf in Boston. Since 1997 it has been operated as a side diversion of a route from the Fore River in Quincy to Boston via Logan Airport. The primary purpose of that route is to serve airport traffic. It is unsubsidized except for the Hull portion of the service. All A.M. and P.M. trips serving Hull operate on a one-way loop, starting at the airport. All but the first morning trip then stop at Long Wharf before proceeding to Hull. From there, they continue to Quincy, then back to the airport and finally to Long Wharf. As a result, passengers riding from Hull to Long Wharf in the morning have a 60-minute trip

with two intermediate stops, but those going from Long Wharf to Hull in the evening have a 20-minute non-stop trip.

The Hull route has a much smaller service area than the Hingham route. Of 81 passengers on the Hull route, 80 had trip origins in Hull, and one in Scituate. The Scituate passenger was an employee of Logan Airport, which is served directly by the Hull route but not by the Hingham route. All of the riders on the Hull route began their trips at home.

The smaller attraction area of the Hull route compared with the Hingham route is attributable both to the relatively infrequent service on the Hull route (two round trips per day) and to the remote location of the terminal. Pemberton Point is about eight miles from Route 3A, the nearest major route used by commuters driving to Boston from South Shore points. In contrast, the Hingham terminal parking lot is only about one half mile off Route 3A. The Hull boats do not even attract a majority of the commuter boat riders living in Hull. The survey results show that the Hingham boats served 166 riders with origins in Hull, or more than double the 80 trips from Hull made via the Hull boats. Outbound ridership on the Hull Route was slightly higher than inbound, at 91 boardings.

Charlestown - Long Wharf Route

This route runs from the old Charlestown Navy Yard, now mostly converted to civilian uses, to Long Wharf on the downtown Boston waterfront. Unlike the South Shore routes, it has a two-way traffic base. In the A.M. peak, boats departing from the Navy Yard carry Charlestown residents to work locations in downtown Boston and boats leaving Long Wharf provide a connecting link to Charlestown work locations for commuters arriving in downtown Boston by other modes. Ridership in the P.M. peak presumably mirrors this. In addition, in good weather this route provides a convenient means for tourists to visit the *U.S.S. Constitution* which is moored at the Navy Yard. The route is also used by some downtown Boston and Charlestown workers for inexpensive lunchtime cruises.

On the survey day, a total of 295 riders were reported using boats leaving the Navy Yard between 6:45 and 11:15 A.M.. The expanded survey results show that 97% of these riders had trip origins within Charlestown. Of these, 90% began their trips at home. Another 6% were tourists staying at a hotel near the Navy Yard wharf.

Six scattered locations north of Boston accounted for one or two riders each, but none of these had more than one respondent. All of the longer-distance riders were either dropped off or drove or rode in cars that were parked near the Navy Yard terminal. Some of them indicated that their reason for using the boat was to avoid the cost of parking in downtown Boston. Others may have traveled with commuters who had final destinations in or near Charlestown. All of them indicated that they used the boat three to five days a week.

MBTA Ferry Services

2000 Passenger Survey

Origin Locations and Activities

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - A.M. Long Wharf Boardings

LOCATIONS			ACTIVITIES							
City/Town/Neighborhood	Total Riders	Pct. of Riders	Home	School	Work	Pers. Bus.	Work Rel.	Shop-ping	Social/ Rec.	Other/ Unknown
Boston: Financial-Retail	11	15.9%	35.8%		21.0%				43.2%	
Hull	4	5.2%	100.0%							
Quincy	4	5.0%	100.0%							
Winthrop	4	5.0%	100.0%							
Boston: East Boston	4	5.7%	100.0%							
Boston: Back Bay	4	5.2%			33.3%				66.7%	
Boston: Waterfront	4	5.1%	32.0%						68.0%	
Revere	3	3.7%	100.0%							
Westwood	3	3.6%	100.0%							
Newton	2	3.3%	100.0%							
Scituate	2	3.3%	100.0%							
Taunton	2	3.3%	100.0%							
Boston: South Boston	2	3.4%	100.0%							
Framingham	1	2.0%	100.0%							
Hingham	1	1.6%	100.0%							
Attleboro	1	1.7%	100.0%							
Mansfield	1	1.7%	100.0%							
Marshfield	1	1.6%	100.0%							
Milton	1	2.0%	100.0%							
Nahant	1	2.0%	100.0%							
Norwell	1	1.7%	100.0%							
Seekonk	1	1.6%	100.0%							
Sharon	1	1.6%	100.0%							
Boston: Hyde Park	1	2.0%	100.0%							
Bourne	1	2.0%	100.0%							
Other	8	10.7%	84.0%		16.0%					
TOTAL	72	100.0%	79.5%		6.8%				13.8%	
Unknown	0									

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MBTA Ferry Services

2000 Passenger Survey

Origin Locations and Activities

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - Navy Yard A.M. Peak Boardings

LOCATIONS			ACTIVITIES							
City/Town/Neighborhood	Total Riders	Pct. of Riders	Home	School	Work	Pers. Bus.	Work Rel.	Shop-ping	Social/ Rec.	Other/ Unknown
Boston: Charlestown	18	100.0%	100.0%							
TOTAL	18	100.0%	100.0%							

Unknown 0

MBTA Ferry Services

2000 Passenger Survey

Origin Locations and Activities

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Lovejoy Boardings

LOCATIONS			ACTIVITIES							
City/Town/Neighborhood	Total Riders	Pct. of Riders	Home	School	Work	Pers. Bus.	Work Rel.	Shop-ping	Social/ Rec.	Other/ Unknown
Marblehead	1	7.7%	100.0%							
Sharon	1	7.7%	100.0%							
Somerville	1	7.7%	100.0%							
Sudbury	1	7.7%	100.0%							
Swampscott	1	7.7%	100.0%							
Beverly	1	7.7%	100.0%							
Boston: Allston/Brighton	1	7.7%	100.0%							
Boston: Unspecified downtown	1	7.7%								100.0%
Boston: Roxbury	1	7.7%	100.0%							
Boston: BU-Fenway-Longwood	1	7.7%	100.0%							
Boston: Prudential	1	7.7%	100.0%							
Boston: South End	1	7.7%	100.0%							
Brookline: Longwood	1	7.7%	100.0%							
TOTAL	13	100.0%	92.3%							7.7%

Unknown 0

MBTA Ferry Services

2000 Passenger Survey

Origin Locations and Activities

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - A.M. peak Lovejoy Boardings

LOCATIONS			ACTIVITIES							
City/Town/Neighborhood	Total Riders	Pct. of Riders	Home	School	Work	Pers. Bus.	Work Rel.	Shop-ping	Social/ Rec.	Other/ Unknown
Beverly	9	19.0%	100.0%							
Salem	7	14.3%	100.0%							
Peabody	5	9.5%	100.0%							
Woburn	5	9.5%	100.0%							
Boston: Charlestown	5	9.5%	100.0%							
Gloucester	2	4.8%	100.0%							
Lowell	2	4.8%	100.0%							
Malden	2	4.8%	100.0%							
Newburyport	2	4.8%	100.0%							
Saugus	2	4.8%	100.0%							
Swampscott	2	4.8%	100.0%							
Topsfield	2	4.8%	100.0%							
Boston: North End	2	4.8%	100.0%							
TOTAL	48	100.0%	100.0%							
Unknown	0									

MBTA Ferry Services
2000 Passenger Survey

Origin Locations and Activities

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - Courthouse/WTC P.M. Peak Ons

LOCATIONS			ACTIVITIES						
City/Town/Neighborhood	Total Riders	Pct. of Riders	Home	School	Work	Pers. Bus.	Work Rel.	Shop-ping	Social/ Rec.	Other/ Unknown
Boston: South Boston	40	100.0%			89.0%		6.8%		4.2%	
TOTAL	40	100.0%			89.0%		6.8%		4.2%	
Unknown	0									

3. Access to the Ferry

Information Contained

Each Access to the Ferry report consists of up to four tables on one page. The first table, Access Mode to the Ferry, shows for the selected group of passengers the number and percent accessing their boarding locations by each of the modes listed in survey question 4a. The choices differed slightly between the forms used for the South Shore and Inner Harbor routes. For the South Shore routes, choices were: Walked directly; Was dropped off from a private car; Drove and parked at or near terminal; Rode as passenger in car parked at or near terminal; Transferred from a bus/shuttle; and Other. For the Inner Harbor routes, the check-off choices were: Walked directly; Was dropped off from a private car; Drove or rode as passenger in car parked at or near terminal; Transferred from a bus/shuttle; Transferred from commuter rail; Transferred from the subway; and Other.

The tables for each form include the responses for all of the check-off choices, although the table headings have been abbreviated slightly. (Rode as passenger in car parked at or near terminal appears as Passenger in PNR.) In the South Shore route reports, separate lines are included for passengers who listed taxi or bicycle as access mode under Other.

The second part of the first table shows access times of passengers reporting each mode of access, from question 4b. The responses are combined into various ranges of minutes, with the percent of riders with access times in each range shown, as well as the mean value of all responses.

The second table in the South Shore route reports, Bus/Shuttle Transfers, separates passengers that transferred from buses or shuttles by MBTA bus route, private-carrier or Regional Transit Authority, or other provider. Question 4a provided space for bus/shuttle users to specify which ones they used. At most boarding locations, the number of possible bus/shuttle connections was so limited that they could be identified from other information on the survey forms even when not specified by the respondents. Unidentifiable routes are not included in the percentage breakdowns, however. Because of the relatively low level of bus/shuttle access reported, the analysis of the results of the second table is included below in the discussion of the access mode responses in the first table rather than in a separate section.

The Inner Harbor route reports include, in addition to a table with breakdowns of bus and shuttle transfer passengers by route, two tables with breakdowns of commuter rail and rapid transit transfer passengers by route.

Because of the differences in the content of the surveys and reports for the South Shore and Inner harbor routes, they are grouped separately in the discussion below.

Mode of Access - South Shore Routes

Surveys on both South Shore routes were distributed only to passengers boarding at the outer (Hingham and Hull) terminals, because ridership patterns indicate that travel on these routes consists mainly of trips toward Boston in A.M. hours and return halves of these trips in P.M. hours. Therefore, all of the access data below pertains to the outer terminals. Information on connections at the Boston end is contained in the egress mode reports in chapter 5.

Park-and-Ride

On both South Shore routes, the most common mode of access to boarding terminals by large margins was park-and-ride. Including both drivers and passengers, this accounted for 94.2% of boardings on the Hingham route and for 76.6% on the Hull route. Park-and-ride passengers accounted for only 2.0% on the former line and 2.5% on the latter, implying respective average auto occupancy rates of 1.02 and 1.03. These figures may be slightly low if some passengers in park-and-ride cars incorrectly checked "Drove and parked" as the mode of access. The results were very similar to those for passengers in the Old Colony commuter rail survey, which showed average occupancy of 1.03 in cars arriving to park at stations on those lines. Overall use of park-and-ride access on the Old Colony lines was about the same as that on the Hull boat route, at 75.4%. The high park-and-ride rate at Hingham is largely a result of the terminal location being in an industrial area, having few homes within convenient walking distance.

Drop-Off

On both South Shore routes, drop-offs were the second most common access mode, at 4.6% for the Hingham route and 9.9% for the Hull route. For comparison, the overall drop-off rate for the Old Colony lines was 12.7%.

Walk

Walk-ins were the third-largest access mode group on both South Shore boat routes, accounting for 7.4% of riders on the Hull route, but for only 0.6% on the Hingham route. (In absolute terms, the Hull route had six walk-ins and the Hingham route had 11.) For comparison, the overall walk-in rate on the Old Colony lines was 9.8%.

Other Access Modes

All other access modes combined accounted for only 0.5% of passengers on the Hingham route, but for 6.2% of those on the Hull route. On the Hingham route, these included seven passengers who arrived by bicycle and two who transferred from

MBTA bus Route 220, which runs between Hingham Center and the Quincy Center Red Line station. The nearest stop to the Hingham wharf is about one half mile away on state Route 3A. (Some late night trips from Quincy Center make a side diversion to the boat terminal for the benefit of passengers who miss the final boat trip of the day.

Passengers using other access modes to the Hull route consisted entirely of five who transferred from the local bus route from Hingham Depot to Point Pemberton. This route is currently operated by A&B Coach Lines under an MBTA contract. At the time of the survey, it was operated by JBL Bus Lines, which is shown as the company in the survey results. (It is also known as MBTA Route 714.) The bus route is intended primarily to take Hull residents to Hingham and to a connection there with MBTA Route 220. The first bus of the day is due at Point Pemberton 10 minutes before the departure of the first boat, but the second bus is due to arrive at the same time that the second boat is supposed to depart. Of the five riders who transferred from buses, two rode the first boat and three rode the second.

Access Times - South Shore Routes

For all access modes combined, the average reported access time was 13.9 minutes for the Hingham route, but only 7.0 minutes for the Hull route. This difference is consistent with the much larger distribution of origins of riders on the Hingham route, as discussed in chapter 2. For comparison, the average access time reported by Old Colony train riders was 10.5 minutes. Old Colony riders have a much greater choice of boarding locations than boat passengers, so on average they have shorter access trips than Hingham boat riders. Nevertheless, the relatively small absolute difference between Old Colony and Hingham boat access times indicates that the special amenities offered by commuter boat service result in an attraction area only slightly larger than that of a typical commuter rail station.

Because of the high proportion of Hingham route riders using park-and-ride access, overall average access time was heavily weighted toward the result for that mode (14.1 minutes). Only 14.8% of park-and-ride drivers had access times longer than 20 minutes, and only 2% had times longer than 30 minutes. Park-and-ride passengers and drop-off passengers reported the lowest average access times, both at 11.3 minutes.

The highest average access time reported was for bus/shuttle, at 30.0 minutes, but this was expanded from only a single survey. Based on the location address, the access time would have consisted of about 10 minutes to walk from home to the boarding stop, 10 minutes to wait for the Route 220 bus and ride it to the stop outside the shipyard, and 10 minutes to walk from there to the wharf.

Walk-in riders had the second-highest reported average access time, at 18.1 minutes. This implies an average walking distance of slightly under one mile. The expanded survey results show 11 walk-in riders, but this was based on only five survey responses. The average was pulled up by one rider who walked for about two miles, and reported a time of 40 minutes. The others showed times ranging from 10 to 20 minutes.

The smaller service area of the Hull route resulted in a smaller range of access times as well as a lower average. Park-and-ride drivers had the lowest average time, at 6.1 minutes. All had times of 10 minutes or less, except for one passenger from outside Hull, who drove for 25 minutes. Walk-in riders had the longest average access time, at 11.8 minutes. There were only six walk-ins, including five with times of 5 to 15 minutes and one at 26 minutes.

Mode of Access - Inner Harbor Routes

Surveys were distributed on trips in both directions on the Inner Harbor routes. Unlike the South Shore routes, the Inner Harbor routes do not have clearly defined inner and outer ends, and they have some traffic originating in each direction. Access modes differ widely among the three Inner Harbor routes, as a result of differences in the transportation functions that they serve. In the discussion below, access modes are arranged in descending order of their frequency for all of the Inner Harbor routes combined.

Walk

The most common access mode overall for the Inner Harbor routes was walking, used in 75% of all trips. All passengers boarding the Lovejoy Wharf - Courthouse/World Trade Center route at either of the South Boston terminals reported that they got there by walking. Most of the responses came from passengers making trips that started at their work locations, so access alternatives involving private autos would not be expected. Indirect commuter rail and rapid transit connections are available by walking from South Station, and several MBTA local bus routes run past one or both of the terminals. but none of the passengers reported using any of these for access.

Walk-ins were also the only access mode reported by passengers boarding the Navy Yard - Lovejoy Wharf route at the Navy Yard. Most of these passengers began their trips at homes within a short distance of the Navy Yard wharf, and no access mode other than walking would have been convenient. Passengers going to the Lovejoy Wharf area from origins other than the Navy Yard can do so more conveniently by using MBTA bus or rapid transit service than by using the boat.

On the Navy Yard - Long Wharf route, 96.2% of the respondents boarding A.M. trips at the Navy Yard walked to the wharf. Most of the responses came from passengers making their initial trips of the day. Most were starting from homes nearby, but there were also some tourists staying at a hotel near the wharf. Unlike the Lovejoy wharf route, the Long Wharf route did attract a few park-and-ride and drop-off passengers.

Walking was much less common as an access mode among passengers riding the three routes in the opposite directions from those discussed above. None of the survey respondents boarding the Navy Yard - Lovejoy Wharf route at Lovejoy Wharf got there by walking. All of the responses were from passengers on morning peak trips, starting from origins beyond walking distance. Information on access modes for afternoon

trips can be inferred from egress modes of morning trips toward Lovejoy, discussed in chapter 5.

Among respondents boarding A.M. peak trips on the Lovejoy Wharf - Courthouse/ World Trade Center route at Lovejoy Wharf, only 10.4% got there by walking. In the P.M. peak, however, 75% of the survey respondents got to Lovejoy wharf by walking. Most of the P.M. riders were heading home from work, but all of the A.M. riders were going to work.

On the Navy Yard - Long Wharf route, 20.8% of the respondents boarding A.M. trips at Long Wharf got there by walking. Almost all of the responses from Long Wharf boardings, regardless of access mode, came from passengers making their initial trips of the. Information on access modes for afternoon trips can be inferred from egress modes of morning trips toward Long Wharf, discussed in chapter 5.

Commuter Rail

The second most common access mode overall for the Inner Harbor routes was commuter rail, used in 12.3% of all trips. This figure is mostly a reflection of the use of the Lovejoy Wharf routes as distributors for North Side commuter rail lines. Among respondents boarding A.M. peak trips on the Lovejoy Wharf - Courthouse/World Trade Center route at Lovejoy Wharf, 85.4 % transferred from commuter rail. There were responses from each of the North Side routes except the Fitchburg Line. Passengers on that line have the option of transferring directly to the Red Line at Porter Square and riding to South Station to reach destinations in South Boston. Of the three lines that were represented, the Rockport/Newburyport Line was the most important, accounting for 73% of the commuter rail transfers (30 of 41). This was at least partly because that line has the heaviest total A.M. peak ridership of all the North Side lines.

Among respondents boarding the Navy Yard - Lovejoy Wharf route at Lovejoy Wharf in the A.M. peak, 38.5 % transferred from commuter rail. In absolute terms, there were only five transfers. The Rockport/Newburyport Line accounted for three (60%) and the Fitchburg and Attleboro/Stoughton lines for one each. The latter passenger used the Orange Line as a connection from Back Bay station to North Station to reach Lovejoy Wharf.

Among respondents boarding A.M. trips on the Navy Yard - Long Wharf route at Long Wharf, 20.8% transferred from commuter rail. All of these transfers were from South Side commuter rail lines. This is as would be expected, since passengers going to the Navy Yard from North Side lines have much more direct access to Lovejoy Wharf than to Long Wharf. Most of the transfer passengers did not indicate how they got to Long Wharf from South Station. The fastest way would have been to walk along Atlantic Avenue for about one half mile. The 15 commuter rail transfers came from five of the seven South Side lines, but the only lines with more than one transfer were the Attleboro/ Stoughton Line (9) and the Franklin Line (3). These are the two most

heavily patronized South Side lines. There were no transfers from the Fairmount and Needham lines, which have the lowest total South Side ridership.

No transfers from commuter rail were reported by passengers boarding the Lovejoy Wharf - Court House/World Trade Center route at either of the South Boston wharves. The Court House wharf is within walking distance of South Station, and a few passengers alighting there in the P.M. peak did report that they walked to South Station to transfer to trains. As would be expected, there were no transfers from commuter rail at the Navy yard to boats on either route. The nearest commuter rail station to the Navy Yard is North Station, about 0.7 miles away by foot. This is about the same as the shortest walking path from North Station to Long Wharf. Lovejoy Wharf is between North Station and the Navy Yard.

Rapid Transit

The third most common access mode overall for the Inner Harbor routes was rapid transit, used in 7.7% of all trips. This average was produced entirely by transfers to the Navy Yard - Lovejoy Wharf route at Lovejoy Wharf (61.5%) and to the Navy Yard - Long Wharf route at Long Wharf (41.7%). All of these transfers were to A.M. boats, by passengers on their first trips of the day.

Most of the transfers at Long Wharf were from the Blue Line (26 of 30). Aquarium station on that line is located directly at the wharf. Blue Line transfers included not only passengers who boarded at stations in East Boston or Revere but also some passengers who transferred to the Blue Line from other rapid transit lines. There were also three transfers to boats from the Red Line, by passengers who walked to Long Wharf from South Station, and one transfer by a passenger who walked from the Orange Line at State station.

Transfers at Lovejoy Wharf came from both the Green Line (5) and the Orange Line (3). The nearest stop to the wharf on both of these lines is North Station.

Park-and-Ride and Drop Off

Park-and-Ride drivers and passengers accounted for 1.5% of access trips on Inner Harbor boats, and all of these were on the Navy Yard - Long Wharf route. Among those boarding at the Navy Yard 2.7% (8 riders) drove or rode in cars parked there. They came from scattered origins north of Boston, and most were trying to avoid either the high cost of downtown Boston parking or getting into downtown traffic. There were no reported park-and-ride access trips to Long Wharf.

The only reported drop-off-access was to the Navy Yard - Long Wharf route at the Navy Yard. This accounted for 1.0% of the boardings there, or three riders. Based on the distances of their origins from the Navy Yard, they were most likely dropped off by drivers who were going to the Navy yard or passing close by anyway.

Bus/Shuttle

Although there are MBTA bus stops within walking distance of each of the Inner Harbor boat terminals. The only reported bus transfer took place at Long Wharf. A single survey response was expanded to two riders, or 2.8% on that route, but this was only 0.4% of overall Inner Harbor access trips. The one reported transfer was from one of the Mass. Turnpike express bus routes, on which the nearest stop would have been about one half mile from Long Wharf.

Other Access Modes

The only access mode reported under Other for the Inner Harbor routes was boat-to-boat transfers. These accounted for 2.5% of overall Inner Harbor access trips, or 13 riders. The Navy Yard - Long Wharf route had two transfers from the Hull route and eight from the Hingham route going toward the Navy Yard. The Hull route serves Long Wharf directly, but on the opposite side of the Marriott Hotel from the Navy Yard boats. The Hingham route terminates at Rowes Wharf, about one quarter mile from Long Wharf.

The Lovejoy Wharf - Courthouse/World Trade Center route had two transfers from the Navy Yard - Lovejoy route in the A.M. peak. Both of these were by Charlestown residents going from home to work in South Boston. In the afternoon there was one transfer by a student going from school in Charlestown to a part-time job in South Boston. The two routes use adjacent berths at Lovejoy Wharf.

Access Times - Inner Harbor Routes

For all access modes combined, the average reported access times ranged from 4.3 minutes for passengers boarding A.M. peak trips on the Navy Yard - Lovejoy Wharf route at the Navy Yard to 33.5 minutes for A.M. peak passengers boarding the Lovejoy Wharf - Courthouse/World Trade Center route at Lovejoy Wharf. The shortest access times on all routes were reported by passengers who were using the boats at the beginning of a trip and walked to the boarding point. The longest times were for passengers who were using the boats as distributors at or near the end of a trip.

Reported access times for passengers going from the Navy Yard to Lovejoy ranged from two to ten minutes, with only one rider having a time longer than five minutes. At the South Boston wharves, access times ranged from one to ten minutes, with only three of the 40 riders having times longer than 7.5 minutes.

The average access time for riders boarding the Navy Yard - Long Wharf route at the Navy Yard was 5.7 minutes. For the 96% who walked in, the average was only 4.8 minutes, or slightly greater than the time for passengers going to Lovejoy from the Navy Yard. Access times for walk-ins ranged from one to 20 minutes, with only seven out of 282 longer than 10 minutes.

The average access time shown for the three drop-off passengers at the Navy Yard was 45 minutes, but this was based on only a single survey response. Among the eight park-and-ride passengers, average access time was 35.6 minutes, with one at under 10 minutes, two unreported, and five ranging from 37 to 45 minutes.

Most of the passengers boarding Inner Harbor boats at Lovejoy Wharf and many of those boarding at Long Wharf were using the Inner Harbor boats to complete trips begun via rapid transit, commuter rail, or other boat routes. As access times, many of these transfer passengers included only their times to Lovejoy or Long Wharf from their alighting point on the connecting modes. To obtain a more accurate and consistent measure of access times for the summary tables, scheduled rapid transit, commuter rail, or commuter boat line-haul times for the segments apparently used by these riders were added to their reported walking times to the wharves. These adjusted times are still somewhat low, in that they do not include times from actual starting points to rapid transit, commuter rail, or commuter boat boarding locations.

With the adjustments above, the overall average access time to Lovejoy Wharf for passengers on the Navy Yard route was 28.7 minutes. For transfers to this route from rapid transit lines only, the adjusted average access time was 20.1 minutes, with a range from five to 31 minutes. For transfers from commuter rail, the adjusted average access time was 40.6 minutes, with a range from 30 to 55 minutes. The reported walking times from North Station to the wharf included in these averages were usually around five minutes.

On the Navy Yard - Long Wharf route, the overall average access time for Long Wharf boardings was 29.2 minutes. For walk-ins, the average was 4.8 minutes. with a range of two to 12. The adjusted average access time for rapid transit transfers was 21.7 minutes, with a range from seven to 60 minutes. For commuter rail transfers the adjusted average was 53.9 minutes, with a range from 40 to 67 minutes. The higher average compared with transfer times from commuter rail lines at North Station to Lovejoy Wharf partly reflect the longer distance from South Station to Long Wharf. For passengers arriving at Long Wharf via the Hingham or Hull commuter boats, the adjusted average access time was 51.0 minutes, with a range from 40 to 65. For Hingham boat passengers, this included walking time of about five minutes between Rowes Wharf and Long Wharf.

For A.M. peak passengers boarding the Lovejoy Wharf - Courthouse/World Trade Center route at Lovejoy Wharf, the overall average access time was 33.5 minutes. For walk-ins, the average was 9.0 minutes. with a range of six to 12. For transfers from the Navy Yard - Lovejoy boat, the average was 7.0 minutes. The scheduled running time on that route is five minutes, so respondents may not have included initial access time to the Navy Yard wharf. Adjusted access times for commuter rail transfers averaged 37.6 minutes, with a range from 17 minutes for boardings at Malden Center to 64 minutes for boardings at Gloucester.

MBTA Ferry Services

2000 Passenger Survey

Access to the Ferry

Route: **Hingham–Rowes Wharf**

Expanded Results - A.M. Hingham Boardings

Access Mode to the Ferry:

	Number of Riders	Percent of Riders
Walk	8	0.4%
Drop off	83	4.6%
Park-and-ride	1,652	92.4%
Passenger in PNR	36	2.0%
Bus/Shuttle	2	0.1%
Bicycle	7	0.4%
Taxicab	0	0.0%
Other	0	0.0%
TOTAL	1,789	100.0%
No Answer	9	

Access Time (minutes):

Mean	0-5	6-10	11-15	16-20	21-30	Over 30
20.3	0.0%	20.6%	28.1%	28.1%	0.0%	23.2%
11.3	29.7%	27.1%	21.9%	11.5%	7.6%	2.2%
14.1	18.8%	25.6%	23.5%	17.3%	12.7%	2.1%
11.3	28.9%	36.0%	9.1%	21.0%	4.9%	0.0%
30.0	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
14.3	31.8%	0.0%	43.3%	0.0%	24.9%	0.0%
13.9	19.5%	25.8%	23.2%	17.0%	12.4%	2.1%

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers
220	2	100.0%

MBTA Ferry Services
2000 Passenger Survey

Access to the Ferry

Route: **Hull—Quincy–Long Wharf**
Expanded Results

Access Mode to the Ferry:

	Number of Riders	Percent of Riders
Walk	6	7.4%
Drop off	8	9.9%
Park-and-ride	60	74.1%
Passenger in PNR	2	2.5%
Bus/Shuttle	5	6.2%
Bicycle	0	0.0%
Taxicab	0	0.0%
Other	0	0.0%
TOTAL	81	100.0%
No Answer	0	

Access Time (minutes):

Mean	0-5	6-10	11-15	16-20	21-30	Over 30
11.8	33.3%	33.3%	16.7%	0.0%	16.7%	0.0%
7.9	25.0%	62.5%	12.5%	0.0%	0.0%	0.0%
6.1	59.3%	39.0%	0.0%	0.0%	1.7%	0.0%
7.0	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%
11.0	0.0%	80.0%	0.0%	20.0%	0.0%	0.0%
7.0	50.0%	43.8%	2.5%	1.3%	2.5%	0.0%

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers
JBL	5	100.0%

MBTA Ferry Services

2000 Passenger Survey

Access to the Ferry

Line: **Charlestown Navy Yard–Long Wharf**

Expanded Results - Navy Yard A.M. Boardings

Access Mode to the Ferry:

	Number of Riders	Percent of Riders
Walk	282	96.2%
Drop off	3	1.0%
Park-and-ride	8	2.7%
Bus/Shuttle	0	0.0%
Commuter rail	0	0.0%
Rapid transit	0	0.0%
Other	0	0.0%
TOTAL	293	100.0%
No Answer	1	

Access Time (minutes):

Mean	0-5	6-10	11-15	16-20	21-30	Over 30
4.8	76.4%	20.8%	2.3%	0.4%	0.0%	0.0%
45.0	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
35.6	0.0%	19.9%	0.0%	0.0%	0.0%	80.1%
5.7	74.4%	20.7%	2.3%	0.4%	0.0%	2.2%

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers

Commuter Rail Transfers:

Line	Number of Riders	Pct. of Transfers

Rapid Transit Transfers:

Line	Number of Riders	Pct. of Transfers

MBTA Ferry Services

2000 Passenger Survey

Access to the Ferry

Line: **Charlestown Navy Yard–Long Wharf**

Expanded Results - A.M. Long Wharf Boardings

Access Mode to the Ferry:

Access Time (minutes):

	Number of Riders	Percent of Riders	Mean	0-5	6-10	11-15	16-20	21-30	Over 30
Walk	15	20.8%	4.8	91.8%	8.2%	0.0%	0.0%	0.0%	0.0%
Drop off	0	0.0%							
Park-and-ride	0	0.0%							
Bus/Shuttle	2	2.8%	27.0	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Commuter rail	15	20.8%	53.9	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Rapid transit	30	41.7%	21.7	0.0%	35.7%	28.2%	8.8%	0.0%	27.3%
Other	10	13.9%	51.0	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
TOTAL	72	100.0%	29.2	19.6%	16.0%	11.2%	3.5%	3.4%	46.3%
No Answer	0								

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers
501	2	100.0%

Commuter Rail Transfers:

Line	Number of Riders	Pct. of Transfers
Attleboro/Stoughton	9	60.0%
Franklin	3	20.0%
Worcester/Framinghm	1	6.7%
Middleborough	1	6.7%
Other	1	6.7%

Rapid Transit Transfers:

Line	Number of Riders	Pct. of Transfers
Blue Line	26	86.7%
Red Line	3	10.0%
Orange Line	1	3.3%

MBTA Ferry Services

2000 Passenger Survey

Access to the Ferry

Line: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Navy Yard Boardings

Access Mode to the Ferry:

	Number of Riders	Percent of Riders
Walk	18	100.0%
Drop off	0	0.0%
Park-and-ride	0	0.0%
Bus/Shuttle	0	0.0%
Commuter rail	0	0.0%
Rapid transit	0	0.0%
Other	0	0.0%
TOTAL	18	100.0%
No Answer	0	

Access Time (minutes):

Mean	0-5	6-10	11-15	16-20	21-30	Over 30
4.3	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.3	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers

Commuter Rail Transfers:

Line	Number of Riders	Pct. of Transfers

Rapid Transit Transfers:

Line	Number of Riders	Pct. of Transfers

MBTA Ferry Services
2000 Passenger Survey

Access to the Ferry

Line: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Lovejoy Boardings

Access Mode to the Ferry:

Access Time (minutes):

	Number of Riders	Percent of Riders	Mean	0-5	6-10	11-15	16-20	21-30	Over 30
Walk	0	0.0%							
Drop off	0	0.0%							
Park-and-ride	0	0.0%							
Bus/Shuttle	0	0.0%							
Commuter rail	5	38.5%	40.6	0.0%	0.0%	0.0%	0.0%	20.0%	80.0%
Rapid transit	8	61.5%	20.1	14.3%	0.0%	14.3%	28.6%	28.6%	14.3%
Other	0	0.0%							
TOTAL	13	100.0%	28.7	8.3%	0.0%	8.3%	16.7%	25.0%	41.7%
No Answer	0								

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers

Commuter Rail Transfers:

Line	Number of Riders	Pct. of Transfers
Rockport/Newburyport	3	60.0%
Attleboro/Stoughton	1	20.0%
Fitchburg	1	20.0%

Rapid Transit Transfers:

Line	Number of Riders	Pct. of Transfers
Green Line	5	62.5%
Orange Line	3	37.5%

MBTA Ferry Services

2000 Passenger Survey

Access to the Ferry

Line: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - A.M. Peak Lovejoy Boardings

Access Mode to the Ferry:

Access Time (minutes):

	Number of Riders	Percent of Riders	Mean	0-5	6-10	11-15	16-20	21-30	Over 30
Walk	5	10.4%	9.0	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%
Drop off	0	0.0%							
Park-and-ride	0	0.0%							
Bus/Shuttle	0	0.0%							
Commuter rail	41	85.4%	37.6	0.0%	0.0%	0.0%	11.1%	16.7%	72.2%
Rapid transit	0	0.0%							
Other	2	4.2%	7.0	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
TOTAL	48	100.0%	33.5	0.0%	9.5%	4.8%	9.5%	14.3%	61.9%
No Answer	0								

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers

Commuter Rail Transfers:

Line	Number of Riders	Pct. of Transfers
Rockport/Newburyport	30	73.2%
Lowell	7	17.1%
Haverhill/Reading	5	12.2%

Rapid Transit Transfers:

Line	Number of Riders	Pct. of Transfers

MBTA Ferry Services
2000 Passenger Survey

Access to the Ferry

Line: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - P.M. Peak Courthouse/WTC Ons

Access Mode to the Ferry:

	Number of Riders	Percent of Riders
Walk	40	100.0%
Drop off	0	0.0%
Park-and-ride	0	0.0%
Bus/Shuttle	0	0.0%
Commuter rail	0	0.0%
Rapid transit	0	0.0%
Other	0	0.0%
TOTAL	40	100.0%
No Answer	0	

Access Time (minutes):

Mean	0-5	6-10	11-15	16-20	21-30	Over 30
4.4	78.1%	21.9%	0.0%	0.0%	0.0%	0.0%
4.4	78.1%	21.9%	0.0%	0.0%	0.0%	0.0%

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers

Commuter Rail Transfers:

Line	Number of Riders	Pct. of Transfers

Rapid Transit Transfers:

Line	Number of Riders	Pct. of Transfers

4. Destination Locations and Activities

Information Contained

Each Destination Locations and Activities report consists of one table, showing the destination cities and towns of passengers in a selected group. This information is based on survey question 8b. Most city and town definitions in the database correspond with municipal boundaries, but Boston, Cambridge, Somerville, and Brookline are subdivided into neighborhoods, as shown in figure 4-1. Locations outside Massachusetts are combined at state level only.

In the Destination Locations and Activities report, destinations are arranged in descending order of volume, with a maximum of 25 different destinations. If there are more than 25 destinations in the group, those producing fewer alightings than the one in 25th place are combined as Other.

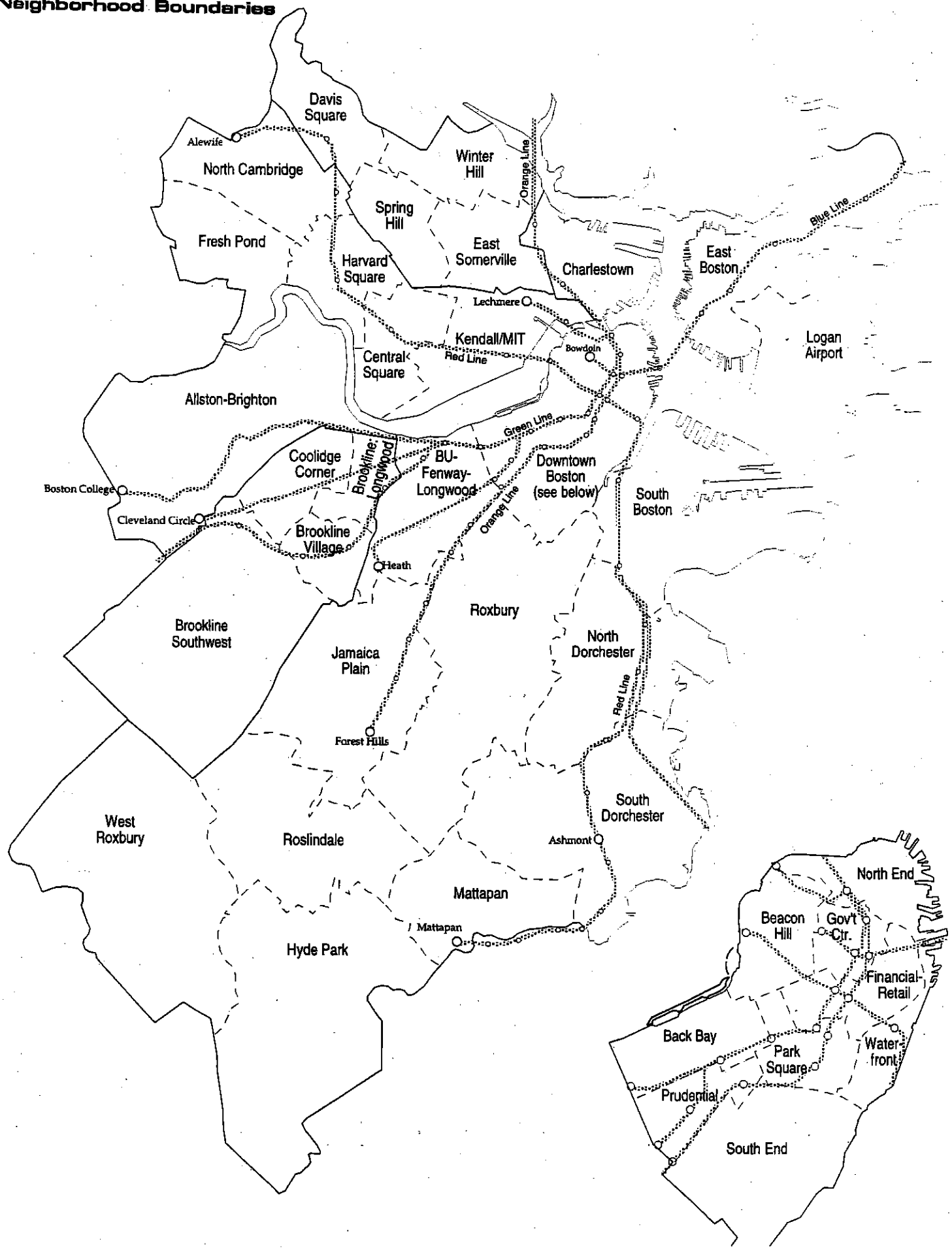
In addition to showing the number of riders and the percentage of the group total accounted for by each destination, the table includes a breakdown of passengers going to each destination by activity at the end of the trip, based on survey question 8a. The choices given on the survey were the same as those given for activity prior to the start of the trip. These were: At home; At school; At work; At a store; At the doctor or other personal business; At a work related errand or meeting; At a restaurant, or social or recreational activity; and Other. The table includes the responses for all of these, although some of the table headings have been abbreviated.

Summary of Findings - South Shore Routes

On both South Shore routes, the survey showed that the vast majority of final destinations of inbound trips were in Boston. On the Hingham route, 96.6% of the riders were destined for Boston. On the Hull route, the proportion was 96.3%. Destinations in Boston and Cambridge combined accounted for 99.3% of the destinations on the Hingham route and for 98.8% on the Hull route. For comparison, in the 1998 Old Colony commuter rail survey 82.6% of the riders on the Middleborough/ Lakeville Line and 89.2.% of those on the Plymouth/Kingston Line were destined for Boston. For Boston and Cambridge combined, the respective figures for the rail lines were 89.2% and 93.4%.

The heavier concentrations of Boston destinations on the boat routes compared with the Old Colony lines is partly a reflection of the limited number of stops served by the boats. On the Old Colony lines it is possible to make trips between pairs of stations outside Boston. The Hingham boat makes only one stop on the South Shore, in Hingham, and only one stop in Boston, at Rowes Wharf. The Hull boat makes South

Figure 4-1
Neighborhood Boundaries



Shore stops at both Hull and Quincy, but schedules and fares are not conducive to travel between those two points. In Boston, the Hull boats offer a choice of Logan Airport or Long Wharf for boarding or alighting, but the airport service is aimed at airline passengers rather than commuters and the fares to that point are much higher than typical commuter fares for similar distances. (Only the Hull - Long Wharf fares are subsidized by the MBTA.)

All of the survey returns from South Shore boats came from morning trips, when most passengers were starting from home on their first trips of the day. The Old Colony surveys covered the entire service day, so some of the passengers were going home to destinations beyond Boston or Cambridge.

Although Old Colony trains also make only one downtown Boston stop, it is at South Station. Passengers with destinations beyond walking distance from there can transfer directly to the Red Line, to other commuter rail lines, or to several MBTA bus routes. The nearest rapid transit station to the Boston boat terminals is Aquarium on the Blue Line. (At this writing it is temporarily closed for reconstruction, but it was open at the time the surveys were conducted.) This station is directly at Long Wharf, but about one quarter mile from Rowes Wharf. South Station is about one half mile from Rowes Wharf and three quarters of a mile from Long Wharf. The only MBTA bus route serving Rowes Wharf is Route 6 (Boston Marine Industrial Park to Haymarket) and only buses going toward Haymarket have a stop close to the Wharf.

Further Details on Destinations - South Shore Routes

The expanded survey results for the Hingham route show a total of 1,799 riders, of which 1,737 (96.6%) had destinations in Boston. Destinations in Boston Proper alone accounted for 1,624 trips. This was 88.9% of the overall total and 92.1% of the Boston total. The Hull route, which has much less frequent service and a smaller service area, had a total of 81 riders, of which 78 (96.3%) had destinations in Boston. Destinations in Boston Proper alone accounted for 66 trips. This was 81.5% of the overall total and 84.6% of the Boston total. For comparison, in the Old Colony survey, the ratio of Boston Proper to Boston Total trips was 84.4% for the Middleborough/Lakeville Line and 83.8.% for the Plymouth/Kingston Line. (Boston Proper is defined here as the area bordered approximately by Massachusetts Avenue, the Charles River, Boston Harbor, Fort Point Channel, and the Southeast Expressway.)

Because of a predominance of home-to-work trips on South Shore boat routes, the ratios of Boston Proper to total Boston trips were about the same for journey-to-work travel alone as for travel for all purposes. (The ratio for work trips was 92.4% on Hingham boats and 84.4% on Hull boats.) U.S. Census Journey-to-Work tabulations from 1990 (the most recent available) show that of work trips to Boston by all modes from the top seven origins served by the Hingham boat route, only 57% ended in Boston Proper. From the town of Hull, which originated most of the passenger trips on the Hull route, Boston Proper work trips accounted for 49.9% of total Boston work trips. These figures

show that like commuter rail lines, the South Shore boats are much more likely to attract riders destined for Boston Proper than riders destined for other areas of Boston.

By far, the largest groups of passengers on both South Shore boat routes had destinations in the Financial-Retail district. Such destinations were reported by 1,101 riders (61.2%) on the Hingham route and by 33 riders (40.7%) on the Hull Route. This was also the most common destination for passengers in the Old Colony survey and on all of the commuter rail lines surveyed in 1993, but accounted for smaller shares of the rail totals. On the two Old Colony lines the Financial-Retail district shares were 30.6% and 34.0%. On the older South Side Lines this district accounted for 29% to 32% of riders on the lines running via Back Bay, but for 39% of destinations on the Fairmount Line.

South Station, Rowes Wharf, and Long Wharf are all in the Waterfront district, but the Financial-Retail district borders on it and has more employment and other attractions. The Waterfront district itself had the second-largest shares of destinations on the Hingham route (11.7%) but was only third on the Hull route (7.4%). It was also second on both old Colony lines, at 12.6% and 15.3%. Almost all of the boat passengers with destinations in either of these districts walked to them from the wharves. (One passenger was picked up in a private car ands driven the rest of the way.)

Government Center had the second-largest share of final destinations on the Hull route (16.0%) but was third on the Hingham route (7.9%). It was third on both the Old Colony lines, at 9.7% and 10.1%. The walking paths to most of the destinations in Government Center are shorter from Long Wharf than from Rowes Wharf. In addition, the Blue Line provides direct connections from Aquarium Station at Rowes Wharf to the State, Government Center, and Bowdoin stations, all of which are in the Government Center district. Despite the availability of the Blue Line, it was used by only three riders going to the Government Center area from the Hull boats and none from the Hingham boats. The rest all walked from the wharves.

No other individual districts within Boston Proper included destinations of more than 2.0% (36) of the riders on the Hingham route, or more than 4.9% (4) of the riders on the Hull route. South Boston, which adjoins the Waterfront district but is not part of Boston Proper, attracted 6.2% (111) of the Hingham boat riders, but only 2.5% (2) of the Hull route riders. The shortest access path to South Boston from the wharves is via the old Northern Avenue bridge. All of the passengers going to South Boston from either wharf walked, except for three going to destinations near City Point, who used MBTA bus Route 7.

Other destinations in Boston outside Boston Proper attracted only 1.4% of all riders on the Hingham route, but for 12.3% on the Hull route. Almost all of these destinations on both routes were in Charlestown or the BU-Fenway-Longwood district, both of which adjoin Boston Proper. There were also a few riders going to Logan Airport or to Allston/Brighton from the Hingham route and to Logan Airport, other parts of East Boston, or North Dorchester from the Hull route. The greater dispersal of destinations

of Hull passengers is attributable to the more direct rapid transit connections from that route. (Only one of the Hull passengers going to Charlestown used the Navy Yard boat from Long Wharf, as the destinations of the others were not near the Navy Yard.) Destinations in Cambridge accounted for 2.8% of all trips on the Hingham route and for 2.5% on the Hull route. This contrasts with the Cambridge shares of 6.1% and 5.3% on the two Old Colony lines. All of the boat passengers going to Cambridge used the Red Line to get there except for two who rode bicycles. The Red Line connects directly with the Old Colony lines at South Station, but boat passengers must either walk long distances to reach it or use one or more intermediate transit services. Most of the Cambridge destinations from the Hingham route were in the Kendall Square/MIT area, but on the Hull route all of the Cambridge destinations were around Harvard Square.

Ridership to destinations outside of Boston or Cambridge on either boat route was negligible, at only 0.7% on the Hingham route and 1.2% on the Hull route. Most of them used rapid transit lines to continue their trips. The expanded survey results show four passengers passenger going to Medford, three each to Somerville and Revere and two to Waltham from the Hingham route, but there were only one or two actual survey responses for each. The Hull route had one passenger going to Wellesley.

Destination Activities - South Shore Routes

Both South Shore boat routes were used primarily for travel to work. This was the destination activity of 98.5% of riders surveyed on the Hingham route and of 98.8% of those on the Hull route. Inbound service on the Hull route is provided only during A.M. peak hours. The Hingham route has all-day service, but surveys were only distributed on trips arriving in Boston before 10:00 A.M. Passenger counts from the survey day show that 95.3% of the total daily ridership was on these trips, so even if there were no work trips after 10:00 A.M. the overall proportion of work trips would have been 93.8%. For comparison, work trips accounted for 82.6% and 85.4% of total ridership on the two Old Colony lines.

The lower proportions of non-work trips on the boat routes were at least partly a result of the higher fares compared with those of commuter rail. The distance by land from South Station to the Hingham boat terminal is about the same as the distance to the Old Colony South Weymouth station. The latter is in commuter rail fare Zone 3. At the time of the survey, the single-ride fare on the Hingham boat was the same as the Zone 8 commuter rail one-way fare. The cost per trip using a 10-ride boat ticket was slightly greater than the cost per trip of a 12-ride train ticket from Zone 8. This is the zone that includes the outer endpoints of the Old Colony lines. The cost of a monthly commuter boat pass was the same as that of a Zone 9 commuter rail pass (needed only at Worcester or Providence on South Side commuter rail lines.)

Of the 1.5% of Hingham boat riders who were not making work trips, most (1.0%) reported that they were traveling for work-related errands or meetings. Nearly half of these (8 of 18) also reported work zip codes in downtown Boston and probably continued to their work locations after their errands. Most of them also indicated that

they used the boat at least two days a week, so on other days they may have gone directly to work. The other riders who were going to work-related errands or meetings showed work locations on the South Shore, and most of them used the boat no more than one day a week.

The next most common trip purpose was Other (unspecified), at 0.4%, based on three surveys. School trips accounted for 0.1% (based on one survey from a graduate school student).

The Hull route had only one passenger not going to work. That passenger was making a work-related trip, but did not provide a work location zip code.

Summary of Findings - Inner Harbor Routes

Destination locations and activities varied widely among the Inner Harbor routes. Except on the Lovejoy Wharf - Courthouse/World Trade Center route, most of the survey returns came from morning trips when work travel was predominant, as would be expected. All of the passengers surveyed on boats going toward the Navy Yard from Lovejoy Wharf or Long Wharf had final destination in Charlestown. All those on morning trips going toward the Courthouse or World Trade Center Wharves were destined for South Boston or the Waterfront district. Most passengers going toward Long Wharf had final destinations in Boston Proper. Passengers going from the Navy Yard to Lovejoy Wharf had scattered destinations in Boston. Passengers going from the Courthouse or World Trade Center to Lovejoy Wharf almost all had destinations outside downtown Boston, which they reached by transferring to commuter rail at North Station.

Further Details on Destinations - Charlestown Navy Yard- Long Wharf Route

The Charlestown Navy Yard- Long Wharf route is by far the most heavily patronized of the Inner Harbor boat routes. Almost all of the surveys from boats going away from Long Wharf were from departures between 7:00 and 10:00 A.M., with 74% of these being from trips up to 9:00 A.M. All of the passengers, regardless of boarding time, reported final destinations in Charlestown. Based on the reported origins of passengers on A.M. trips going away from the Navy Yard, it would be expected that if P.M. trips from Long wharf had been surveyed, most of the riders would also have been destined for Charlestown. There would also have been a small number of park-and-ride passengers returning to cars parked in Charlestown to continue to more distant points.

Almost all of the surveys from boats going away from the Navy Yard were from departures between 6:45 and 11:15 A.M., with 74% of these being from trips up to 9:15 A.M. For all A.M. trips combined, 95.9% of destinations were in Boston, with Boston Proper alone accounting for 87.8%. For trips departing up to 9:15 A.M., the comparable figures were 99.1% and 92.1%. The heaviest individual concentration of destinations was in the Financial-Retail district, at 56.3% of total A.M. trips and 65.0% of A.M. peak trips. This was similar to the result on the Hingham route, where 61.2% of riders were

destined for this district. In second place on the Charlestown route was the Waterfront district, with 14.6% of all A.M. and 15.0% of all A.M. peak destinations. The comparable Hingham route figure was 11.7%. Government Center was the third largest destination of Charlestown route passengers, with 5.5% in all of the A.M. and 6.1% in the A.M. peak. These were slightly below the 7.9% on the Hingham route.

No other area attracted over 5.0% of total A.M. trips from Charlestown, but South Boston did get 5.6% of A.M. peak riders alone. The only other sections of Boston outside Boston Proper with any reported destinations were BU-Fenway-Longwood with 3.3% of the all-morning total but only 0.6% of the A.M. peak total, and Logan Airport, with 0.6% all morning and 0.8 % in the A.M. peak.

Only four cities or towns outside Boston had any reported destinations. Cambridge accounted for 1.9% all morning, but none of these were in the peak. The town of Essex had 1.0% of all morning riders, but this was based on one survey, expanded to three trips. The passenger was returning home via an indirect route after a job interview. This survey was left in the database only as a proxy for non-repetitive trips. Chelsea and Quincy attracted one trip each, both in the A.M. peak.

Based on the reported origins of passengers on A.M. trips going away from Long Wharf, it would be expected that if P.M. trips from the Navy Yard had been surveyed, destinations would have been more widely dispersed, with many of the passengers continuing home on rapid transit, commuter rail, or South Shore boat routes.

Further Details on Destinations - Navy Yard -Lovejoy Wharf Route

All of the survey responses from boats going away from Lovejoy wharf came from A.M. peak trips. All of these showed final destinations in Charlestown. Most of the responses from boats going toward Lovejoy also came from A.M. peak trips. Destinations for these were evenly divided among the North End, reached by walking, the Prudential area, and the BU-Fenway-Longwood area. Trips to the latter were all made by transferring to the Green Line.

Further Details on Destinations - Lovejoy Wharf - Courthouse/World Trade Center

Passenger counts on this route show that almost all of the ridership is on A.M. trips away from Lovejoy Wharf and on P.M. trips toward Lovejoy Wharf. Expanded A.M. peak surveys showed 48 riders on boats going away from Lovejoy, with 85.7% (41) having destinations in South Boston, and the rest going to the Waterfront district. In the P.M. there were only four riders, and only one of them had a final destination in South Boston. The other three walked to South Station, where one took the Red Line to Braintree, one took a commuter train to go to Shrewsbury, and one took an express bus to New Hampshire. All three were going home from work locations near North Station.

Expanded P.M. peak surveys showed 40 riders on boats going toward Lovejoy. These riders had many scattered destinations, with the greatest number to any one being five,

to Salem. Most of these riders transferred to commuter rail lines at North Station. Prior to the P.M. peak there were a few passengers going on errands to destinations near North Station.

Destination Activities - Charlestown Navy Yard- Long Wharf Route

On boats going away from Long Wharf between 7:00 and 10:00 A.M., which accounted for most of the surveys, 76.1% of the passengers were going to work. For trips up to 9:00 A.M. the proportion was 95.6%. Among the A.M. peak riders from Charlestown not going to work, destinations were equally divided between Work-Related and Social-Recreational Trips, at 2.2% each.

For the morning returns as a whole, Social/Recreational trips increased to 15.4%. All of these were made by tourists going from hotels in downtown Boston to the *U.S.S. Constitution* or to restaurants in the Navy Yard. Work-related trips increased to 5.1%. Of the rest, trips home and trips to School accounted for 1.7% each. Based on the origin activities of A.M. passengers going toward Long Wharf, the majority of P.M. passengers going away from Long Wharf would have been going home, but there would also have been significant numbers of tourists going to the Navy Yard.

On boats going away from the Navy Yard between 6:45 and 11:15 A.M., 73.1% of the passengers were going to work. For trips up to 9:15 A.M. the proportion was 94.0%. The latter figure was slightly lower than the 95.6% of A.M. peak riders going to work in the opposite direction. It was also lower than the 98.5% of work trips on the Hingham route, which also terminates on the downtown Waterfront. Among the A.M. peak riders from Charlestown not going to work, destinations were divided among School (2.1%), Work Related (1.3%), Shopping (0.9%), and trips for unspecified other reasons (1.7%).

For morning returns as a whole, Social/Recreational trips increased to 15.3%, as the combined result of tourists going from a hotel near the Navy Yard to downtown Boston, and home-based recreational trips starting in Charlestown. Other destination activities were Shopping (3.6%), Work Related (2.0%), Personal Business (1.9%), School (1.5%), and Home (1.0%). The remaining 1.6% indicated unspecified Other destinations.

Based on the reported origin activities of passengers on A.M. trips going away from Long Wharf, it would be expected that if P.M. trips from the Navy Yard had been surveyed, the majority of passengers would have been going home. There would also have been some tourists continuing trips after visits to the Navy Yard.

Destination Activities - Lovejoy Wharf - Courthouse/World Trade Center

On A.M. peak trips from Lovejoy Wharf 95% of the survey respondents were going to work. The other 5% consisted of work-related trips to the Courthouse. On P.M. trips, only one of the four riders surveyed was going to work. (This was a student going to a part-time after-school job at the World Trade Center.) The other three were going home

to destinations reached by connecting services, including two that involved walking to South Station from the Courthouse Wharf.

All of the riders on P.M. peak trips from the Courthouse and World Trade Center were heading home, mostly by transferring to commuter rail lines at North Station. Earlier in the day there were three riders going on work-related errands and one going home from jury duty at the courthouse.

Destination Activities - Navy Yard -Lovejoy Wharf Route

All of the survey responses from boats going away from Lovejoy Wharf came from A.M. peak trips. All of the passengers were going to work. Based on the origin activities of A.M. peak passengers on boats going toward Lovejoy, all or most passengers on P.M. trips going away from Lovejoy would have been going home. Midday trips would be likely to have included some tourists going to the Navy Yard after arriving at North Station by commuter rail, but midday passengers counts showed only one to four riders on each midday trip.

All of the passengers on A.M. peak trips going away from the Navy Yard were going to work. Only two surveys were returned from trips later in the day, including one from a passenger going home from personal business and one from a passenger going from home to a restaurant in the Prudential Center. Based on the origin activities of A.M. peak passengers on boats going toward the Navy Yard, all or most passengers on P.M. trips going away from there would have been going home. Midday trips would be likely to have included some tourists returning from the Navy Yard to transfer to commuter rail at North Station, but midday passengers counts showed one rider or none on each midday trip except for one trip that had six.

MBTA Ferry Services

2000 Passenger Survey

Destination Locations and Activities

Route: **Hingham–Rowes Wharf**

Expanded Results - A.M. Hingham Boardings

LOCATIONS			ACTIVITIES						
City/Town/Neighborhood	Total Riders	Pct. of Riders	Home	School	Work	Pers. Bus.	Work Rel.	Shop-ping	Social/ Rec.	Other/ Unknown
Boston: Financial-Retail	1,101	61.2%			99.2%		0.8%			
Boston: Waterfront	210	11.7%			98.9%		1.1%			
Boston: Government Center	142	7.9%			97.0%		1.4%			1.6%
Boston: South Boston	111	6.2%			96.2%		3.8%			
Cambridge: Kendall/MIT	37	2.0%			100.0%					
Boston: North End	36	2.0%			100.0%					
Boston: Park Square	30	1.7%		7.8%	86.0%					6.1%
Boston: Prudential	24	1.3%			100.0%					
Boston: Back Bay	22	1.2%			100.0%					
Boston: Unspecified downtown	18	1.0%			100.0%					
Boston: Beacon Hill	18	1.0%			100.0%					
Cambridge: Harvard Square	13	0.7%			100.0%					
Boston: BU-Fenway-Longwood	11	0.6%			100.0%					
Boston: Charlestown	10	0.6%			100.0%					
Medford	4	0.2%			100.0%					
Revere	3	0.2%			100.0%					
Somerville	3	0.2%			100.0%					
Boston: Logan Airport	3	0.2%								100.0%
Waltham	2	0.1%			100.0%					
Boston: Allston/Brighton	2	0.1%			100.0%					
TOTAL	1,799	100.0%		0.1%	98.5%		1.0%			0.4%
Unknown	0									

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3/16/01

MBTA Ferry Services
2000 Passenger Survey

Destination Locations and Activities

Route: **Hull—Quincy–Long Wharf**

Expanded Results

LOCATIONS			ACTIVITIES							
City/Town/Neighborhood	Total Riders	Pct. of Riders	Home	School	Work	Pers. Bus.	Work Rel.	Shop-ping	Social/ Rec.	Other/ Unknown
Boston: Financial-Retail	33	40.7%			100.0%					
Boston: Government Center	13	16.0%			100.0%					
Boston: Waterfront	5	6.2%			80.0%		20.0%			
Boston: Charlestown	4	4.9%			100.0%					
Boston: North End	4	4.9%			100.0%					
Boston: Park Square	4	4.9%			100.0%					
Boston: Back Bay	3	3.7%			100.0%					
Boston: BU-Fenway-Longwood	3	3.7%			100.0%					
Boston: South Boston	2	2.5%			100.0%					
Boston: Prudential	2	2.5%			100.0%					
Cambridge: Harvard Square	2	2.5%			100.0%					
Wellesley	1	1.2%			100.0%					
Boston: East Boston	1	1.2%			100.0%					
Boston: Unspecified downtown	1	1.2%			100.0%					
Boston: North Dorchester	1	1.2%			100.0%					
Boston: Logan Airport	1	1.2%			100.0%					
Boston: Beacon Hill	1	1.2%			100.0%					
TOTAL	81	100.0%			98.8%		1.2%			
Unknown	0									

CTPS
2/15/01

MBTA Ferry Services

2000 Passenger Survey

Destination Locations and Activities

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - A.M. Navy Yard Ons

LOCATIONS			ACTIVITIES							
City/Town/Neighborhood	Total Riders	Pct. of Riders	Home	School	Work	Pers. Bus.	Work Rel.	Shop-ping	Social/ Rec.	Other/ Unknown
Boston: Financial-Retail	166	56.3%		1.1%	87.9%		1.8%	6.4%	2.9%	
Boston: Waterfront	43	14.6%			75.3%				24.7%	
Boston: Government Center	16	5.5%			82.3%		17.7%			
Boston: Unspecified downtown	13	4.5%							78.6%	21.4%
Boston: South Boston	12	4.1%		10.0%	74.2%				15.9%	
Boston: BU-Fenway-Longwood	10	3.3%			12.4%				87.6%	
Boston: Prudential	10	3.2%			40.1%	30.0%			30.0%	
Cambridge: Harvard Square	6	1.9%							100.0%	
Boston: Back Bay	5	1.5%		30.7%	69.3%					
Boston: North End	4	1.4%			32.8%	67.2%				
Boston: Park Square	3	0.9%			100.0%					
Essex	3	1.0%	100.0%							
Boston: Logan Airport	2	0.6%								100.0%
Quincy	1	0.4%			100.0%					
Chelsea	1	0.5%			100.0%					
TOTAL	295	100.0%	1.0%	1.5%	73.1%	1.9%	2.0%	3.6%	15.3%	1.6%

Unknown 0

CTPS
2/15/01

MBTA Ferry Services

2000 Passenger Survey

Destination Locations and Activities

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - A.M. Peak Navy Yard Ons

LOCATIONS			ACTIVITIES							
City/Town/Neighborhood	Total Riders	Pct. of Riders	Home	School	Work	Pers. Bus.	Work Rel.	Shop-ping	Social/ Rec.	Other/ Unknown
Boston: Financial-Retail	141	65.0%		1.3%	95.2%		2.1%	1.4%		
Boston: Waterfront	33	15.0%			100.0%					
Boston: Government Center	13	6.1%			100.0%					
Boston: South Boston	12	5.6%		10.0%	74.2%					15.9%
Boston: Back Bay	5	2.1%		30.7%	69.3%					
Boston: Prudential	4	1.8%			100.0%					
Boston: Park Square	3	1.2%			100.0%					
Boston: Logan Airport	2	0.8%								100.0%
Quincy	1	0.6%			100.0%					
Boston: BU-Fenway-Longwood	1	0.6%			100.0%					
Boston: North End	1	0.6%			100.0%					
Chelsea	1	0.6%			100.0%					
TOTAL	217	100.0%		2.1%	94.0%		1.3%	0.9%		1.7%

Unknown 0

CTPS
2/15/01

MBTA Ferry Services
2000 Passenger Survey

Destination Locations and Activities

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - A.M. Long Wharf Ons

LOCATIONS			ACTIVITIES							
City/Town/Neighborhood	Total Riders	Pct. of Riders	Home	School	Work	Pers. Bus.	Work Rel.	Shop-ping	Social/ Rec.	Other/ Unknown
Boston: Charlestown	72	100.0%	1.7%	1.7%	76.1%		5.1%		15.4%	
TOTAL	72	100.0%	1.7%	1.7%	76.1%		5.1%		15.4%	

Unknown 0

CTPS
2/15/01

MBTA Ferry Services
2000 Passenger Survey

Destination Locations and Activities

Route: **Charlestown Navy Yard--Long Wharf**

Expanded Results - A.M. Peak Long Wharf Ons

LOCATIONS			ACTIVITIES							
City/Town/Neighborhood	Total Riders	Pct. of Riders	Home	School	Work	Pers. Bus.	Work Rel.	Shop-ping	Social/ Rec.	Other/ Unknown
Boston: Charlestown	53	100.0%			95.6%		2.2%		2.2%	
TOTAL	53	100.0%			95.6%		2.2%		2.2%	
Unknown	0									

MBTA Ferry Services

2000 Passenger Survey

Destination Locations and Activities

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. peak Navy Yard Ons

LOCATIONS			ACTIVITIES							
City/Town/Neighborhood	Total Riders	Pct. of Riders	Home	School	Work	Pers. Bus.	Work Rel.	Shop-ping	Social/ Rec.	Other/ Unknown
Boston: BU-Fenway-Longwood	6	33.3%			100.0%					
Boston: North End	6	33.3%			100.0%					
Boston: Prudential	6	33.3%			100.0%					
TOTAL	18	100.0%			100.0%					
Unknown	0									

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2/15/01

MBTA Ferry Services

2000 Passenger Survey

Destination Locations and Activities

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Lovejoy Boardings

LOCATIONS			ACTIVITIES							
City/Town/Neighborhood	Total Riders	Pct. of Riders	Home	School	Work	Pers. Bus.	Work Rel.	Shop-ping	Social/ Rec.	Other/ Unknown
Boston: Charlestown	13	100.0%			100.0%					
TOTAL	13	100.0%			100.0%					
Unknown	0									

MBTA Ferry Services

2000 Passenger Survey

Destination Locations and Activities

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - A.M. Peak Lovejoy Ons

LOCATIONS			ACTIVITIES							
City/Town/Neighborhood	Total Riders	Pct. of Riders	Home	School	Work	Pers. Bus.	Work Rel.	Shop-ping	Social/ Rec.	Other/ Unknown
Boston: South Boston	41	85.7%			94.4%		5.6%			
Boston: Waterfront	7	14.3%			100.0%					
TOTAL	48	100.0%			95.2%		4.8%			
Unknown	0									

MBTA Ferry Services

2000 Passenger Survey

Destination Locations and Activities

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - Courthouse/WTC P.M. Peak Ons

LOCATIONS			ACTIVITIES							
City/Town/Neighborhood	Total Riders	Pct. of Riders	Home	School	Work	Pers. Bus.	Work Rel.	Shop-ping	Social/ Rec.	Other/ Unknown
Salem	5	13.2%	100.0%							
Melrose	3	7.9%	100.0%							
Reading	3	6.8%	100.0%							
Beverly	3	8.3%	100.0%							
Wakefield	3	6.8%	100.0%							
Winchester	3	6.8%	100.0%							
Boston: North End	3	6.8%	100.0%							
Hamilton	2	4.2%	100.0%							
Lowell	2	4.2%	100.0%							
Manchester	2	4.2%	100.0%							
Methuen	2	4.2%	100.0%							
Rockport	2	4.2%	100.0%							
Andover	2	4.2%	100.0%							
Lawrence	1	2.6%	100.0%							
Belmont	1	2.6%	100.0%							
Billerica	1	2.6%	100.0%							
Westford	1	2.6%	100.0%							
Boston: Charlestown	1	2.6%	100.0%							
Chelmsford	1	2.6%	100.0%							
Danvers	1	2.6%	100.0%							
TOTAL	40	100.0%	100.0%							
Unknown	0									

CTPS
2/16/01

5. Egress from the Ferry

Information Contained

Each Egress from the Ferry report consists of four tables on one page. The format is similar to that of the Access to the Ferry tables discussed in chapter 3. The Egress reports show how passengers completed their trips after alighting from the boats, whereas the Access reports show how passengers got to the boats from the starting points of their trips.

Information in Egress Mode from the Ferry Table

The first table, Egress Mode from the Ferry, shows for the selected group of passengers the number and percent leaving their alighting locations by each of seven modes listed in survey question 6a. These were: Walk directly to your destination; Transfer to the subway and then exit at _____; Transfer to a bus; Transfer to commuter rail; Transfer to a shuttle van; Be picked up/drive in a private car; and Other. The table includes the responses for all of these, although the table headings have been abbreviated. (The line labeled MBTA buses also includes transfers, if any, to local private-carrier routes, excluding school or employer-sponsored shuttles. To avoid double counting in this table, passengers making two or more transfers to reach their final destinations are included only under the first mode transferred to after alighting from boats. For passengers having to walk some distance from a boat to another transit mode (for example from Rowes Wharf to South Station to take the Red Line) the egress mode shown is the transit service rather than walking.

The second part of the first table shows egress times of passengers reporting each mode of egress, from question 6b. The responses are combined into various ranges of minutes, with the percent of riders with egress times in each range shown, as well as the mean values of all responses.

In general, egress times reported by passengers in the boat survey, as in previous transportation surveys, were approximations, as few passengers have timed their egress trips precisely. The wording of the egress time question was "How long will it take to get from this ferry to your destination?" The desired response was the length of time between the boat alighting point and the final destination. Based on comparisons of the times given with the destinations shown, it was evident that some passengers misinterpreted the question. Some apparently gave their total travel times from origin to destination, some gave their times from boat boarding point to destination, and some gave times for the boat portion of the trip alone. Some passengers who transferred to other commuter rail or rapid transit lines or buses included only the line-haul time on the connecting vehicle and not waiting time or additional egress time from alighting

station on the connecting service to final destination. Some passengers included walking times from the boat terminal to the boarding point for a connecting transit service, but not the time from there to the final destination.

In order to obtain useful information, an attempt was made to edit egress time responses that were clearly too short or too long for the destination and egress mode specified. Responses far above or below the range given on other surveys showing trips to the same destination zone by the same egress mode were given further inspection. Times so fast that they could not possibly have been achieved with the headways and normal running time of the connecting transit service specified were adjusted upwards. Unusually long times (such as 45 minutes to reach a building across the street from the boat alighting point) were adjusted downwards. Some passengers may in fact have stopped for breakfast or other errands between alighting from boats and arriving at their ultimate destinations, but such self-imposed delays were not of interest for survey purposes.

Information in Rapid Transit Transfers Table

The second table in the Egress from the Ferry report, Rapid Transit Transfers, separates passengers that transferred from boats to rapid transit trains by rapid transit exit station. Some passengers incorrectly listed the rapid transit station nearest the wharf, where they apparently boarded, rather than the alighting station. In such cases the records were edited to show the most probable rapid transit station used to reach the destination address shown in question 7b.

Information in Bus/Shuttle Transfers Table

The third table in the Egress from the Ferry report, Bus/Shuttle Transfers, separates passengers that transferred from boats to buses or shuttle vans by MBTA bus route, private-carrier, or other provider. Question 6a provided space for bus and van users to specify which ones they used, but not all respondents did so. This information was added to the database if the identity of the transfer route was evident from the boat alighting point and the final destination specified. Because of the relatively small numbers of bus and van transfers, the analysis of the results of the third table is combined with that of bus and shuttle van transfers in the first table.

Bus and van routes shown in the third table include both those with direct transfers from boats and those reached by walking some distance. The percentages shown are percentages of transfers to individual bus or van routes out of transfers to all specified routes, without distinction between buses and vans. In this table, all numbers are those of MBTA bus routes in effect in Spring 2000. "EMP" refers to unspecified employer-sponsored shuttles.

Information in Commuter Rail Transfers Table

The fourth table in the Egress from the Ferry report, Commuter Rail Transfers, separates passengers that transferred from boats to commuter rail lines by the line transferred to. Most of the survey responses came from morning trips, when passengers were traveling toward Boston. Therefore, the only report included at the end of this chapter in which any commuter rail transfers are indicated is that for P.M. peak trips to Lovejoy Wharf on the Courthouse/World Trade Center route. All such transfers were made by walking from Lovejoy Wharf to North Station. Passengers transferring to commuter were counted only in that category in the egress mode summaries. Because of the small numbers of commuter rail transfers, and the limited number of lines, the analysis of the results of the fourth table is combined with that of commuter rail transfers in the first table.

Mode of Egress - South Shore Boat Trips

Walking

Among South Shore boat passengers alighting at the Boston wharves, walking was by far the most common mode of egress, used by 92.7% of those on the Hingham route and by 78.8% of those on the Hull route. For comparison, in the 1998 survey, among Old Colony train riders alighting at South Station, 61.0% on the Middleborough/Lakeville Line and 66.8% on the Plymouth/Kingston Line walked. The combined figure from the two branches was 64.4%. The higher percentages of walking egress trips on the South Shore boat routes is at least partly a reflection of the smaller number of direct egress choices available at the wharves compared with South Station. The lower percent of walking from the Hull route compared with the Hingham route is mostly a result of the direct Blue Line connection available at Long Wharf where the Hull boats terminate.

Rapid Transit

The second most common egress mode for South Shore boat passengers alighting at the Boston wharves was transferring to rapid transit. This was used by 5.8% of those on the Hingham route and by 17.5% of those on the Hull route. For comparison, in the Old Colony survey rapid transit was the egress mode of 30.6% of Middleborough/Lakeville Line riders and 24.5% of Plymouth/Kingston Line riders alighting at South Station, or an average of 27%.

Aquarium station on the Blue Line is located at Long Wharf. At this writing, it is closed for reconstruction, but it was open when the survey was conducted. Rowes Wharf, where the Hingham route terminates, is about one quarter mile on foot from Aquarium station, and about one half mile from South Station. It is also possible to get from Rowes Wharf to Aquarium or South Station using MBTA bus Route 6, but the bus routing in the latter direction does not run directly past the wharf.
In absolute terms, the Hingham route had many more rapid transit transfers than the Hull route, because the latter has much lower total ridership. The largest share of rapid

transit transfer passengers from the Hingham route (39.5%, or 41) had final destinations near Red Line stations, all in Cambridge. The most common was Kendall (27.9%) followed by Harvard (9.6%) and Central (1.9%). As a share of total ridership on the boat, Kendall accounted for only 1.6%.

The second-largest group of Hingham route rapid transit transfers (31.1%, or 32) had final destinations near Orange Line stations. The largest group of these (21.2%) went to Back Bay station. Massachusetts Avenue, Community College, and Wellington attracted two to four riders each (1.9% to 3.8%). The surveys did not show how the passengers got from Rowes Wharf to the Orange Line. The shortest path would have been walking about one half mile to State station.

The third-largest group of Hingham route rapid transit transfers (21.4%, or 22) had final destinations near Green Line stations. These were divided among six stations (Lechmere, Arlington, B.U. Central, Hynes Convention Center, Copley, and Longwood) with two to six destinations each (1.9% to 5.8%). The surveys did not show how these passengers got to the Green Line. The most likely possibilities would have been to take the Blue Line from Aquarium to Government Center or the Red Line from South Station to Park Street.

The Blue Line had the smallest share of final destinations of Hingham rapid transit transfers (7.8% or 8). Bowdoin and Revere Beach had three destinations each, and Government center had two.

Among passengers transferring to rapid transit from the Hull route, the largest group had final destinations near Blue Line stations (35.7%, or 5), but in absolute terms the difference among routes was small. Blue Line destinations were all at Bowdoin (3) or at Government Center or Wood Island (1 each).

The Green Line was second among Hull route transfers with 28.57% (4). These were equally divided among B.U. Central, B.U. East, Longwood, and Eliot. The Red Line was third at 21.4% (3). This included two to Harvard and one to JFK/UMass. The Orange Line was last with 14.3% (2), including one each to Back Bay and Sullivan Square. The Green Line riders probably took the Blue Line to Government Center and the Orange Line riders probably took it to State.

All Other Egress Modes

Less than 2% of the riders from either the Hingham route or the Hull route specified any individual egress mode other than walking. On the Hingham route, 0.2%, or three riders transferred to MBTA bus Route 7 to go to destinations near City Point in South Boston. There were no reported transfers to commuter rail or to shuttle vans. Six riders (0.3%) were driven in cars from Rowes wharf to scattered destinations. Other egress modes were used by 19 riders (1.1%). These included eight who completed their trips by bicycle, seven who transferred to the Inner Harbor boat to the Navy Yard, one who

transferred to the Logan Airport Water Shuttle (which also runs from Rowes Wharf) and two who took taxis.

On the Hull route, 1.3%, (one rider) transferred to MBTA bus Route 93 to go to a destination near City Square in Charlestown. There were no reported transfers to commuter rail or to shuttle vans. One riders (1.3%) was driven in a car from Long wharf to a destination near the Prudential Center. One Hull rider with an Other egress mode transferred to the Navy Yard boat.

Egress Times - South Shore Routes

For all egress modes combined, the mean reported egress time was 10.7 minutes from the Hingham Route and 16.7 minutes from the Hull route. This disparity was mainly a result of the higher proportion of Hingham riders walking to their final destinations as well as of a lower average walking time reported by Hingham passengers. For comparison, among Old Colony riders alighting at South Station, the mean egress time was 14.2 minutes from the Middleborough/Lakeville Line and 13.2 minutes from the Plymouth/Kingston Line.

Walking

The mean time for walking egress was 9.8 minutes from the Hingham route, but 13.7 minutes from the Hull route. The time from the Hingham route was very close to those from the two Old Colony lines at South Station (9.4 and 9.5 minutes). The higher mean walking time from the Hull route was a mostly a result of higher proportions of destinations in Government Center and lower proportions in the Financial-Retail and Waterfront districts among riders who walked from the Hull route than among those who walked from the Hingham route.

Rapid Transit

Rapid Transit egress times were very similar from the two routes, at 26.0 minutes from the Hingham route and 27.3 minutes from the Hull route. For comparison, rapid transit egress times from the two Old Colony lines at South Station averaged21.1 and 21.2 minutes. The higher times from the boats reflect the lack of a direct rapid transit connection at Rowes Wharf, and longer distances from the wharves to rapid transit destinations of boat passengers than from South Station to rapid transit destinations of Old Colony passengers.

Other

Most egress modes other than walking or rapid transit had too few users to allow calculations of meaningful average egress times. Among Hingham route riders transferring to the Navy Yard boats, the average reported egress time was 25.0 minutes. The one Hull boat passenger transferring to a Navy Yard boat reported a time of 15.0 minutes. This difference reflects the extra walking time from Rowes Wharf to Long

Wharf for Hingham passengers and their longer waits for connecting boats after arrival at Rowes Wharf. Among bicycle riders, the average egress time from the Hingham route was 18.5 minutes.

Mode of Egress - Inner Harbor Boat Trips

The mix of egress modes used by Inner Harbor boat passengers varied substantially by route, terminal, and time of day. In the discussion below, egress modes are discussed in the order that they were arranged on the survey form, except that modes that had very little use from any route are grouped together.

Walking

Walking was the egress mode of 100% of survey respondents on A.M. boats going to the Charlestown Navy Yard on the routes from Long Wharf and Lovejoy Wharf. There were no survey responses from passengers on trips from Lovejoy toward the Navy Yard except in the A.M. peak. It would be expected that all or most riders on trips later in the day would also have had walking egress trips. The majority of these riders would have been making return halves of round trips from the Navy Yard, and all of the survey responses from there showed walking as the access mode.

The number of survey responses from passengers boarding P.M. trips at Long Wharf was too small to allow a representative expansion. It would be expected that most of them would have had walking egress at the Navy Yard, since walking was the access mode of 96% of the survey respondents boarding there. The rest would be expected to consist of return halves of trips by park-and-ride or drop-off passengers from scattered origins.

Among passengers boarding A.M. peak boats to the Courthouse or World Trade Center at Lovejoy Wharf, walking was the egress mode of 89.6%. There is little ridership on this route in that direction after the A.M. peak. Passenger counts showed a total of only six riders on all trips leaving Lovejoy after 9:15 A.M. with many trips having no riders and none having more than two. There were four survey returns from passengers indicating that they used P.M. peak trips, although the counts from these trips showed only two riders. Of the four, one walked to a final destination in South Boston. Two others walked to South Station, where one took a commuter train and the other a private-carrier express bus. The third got a ride home from the boat in a private car.

Among passengers boarding A.M. boats to Long Wharf at the Navy Yard, walking was the egress mode of 84.9%. Among A.M. peak riders alone, the walking egress share was 92.8%. The number of survey responses from passengers boarding P.M. trips at the Navy Yard was too small to allow a representative expansion. Walking egress would be expected to account for a much smaller share of P.M. trips than it did of A.M. trips, however. The majority of P.M. boardings would be expected to be made by passengers who boarded A.M. trips at Long Wharf . Among those riders, only 20.6% had walking access to Long Wharf.

Among passengers boarding A.M. boats to Lovejoy Wharf at the Navy Yard, walking was the egress mode of 33.3%. The number of survey responses from passengers boarding P.M. trips at the Navy Yard was too small to allow a representative expansion. The number of survey responses from passengers boarding trips at the Navy Yard after the A.M. peak was too small to allow a representative expansion. Walking egress would be expected to be used by a very small percentage of riders after the A.M. peak, however. The majority of P.M. boardings would be expected to be made by passengers who boarded A.M. trips at Lovejoy Wharf. None of those riders reported walking access to Lovejoy, other than as an intermediate link from another access mode.

Among passengers boarding P.M. peak boats to Lovejoy Wharf at the Courthouse or World Trade Center, walking was the egress mode of only 10.0%. Passenger counts show that 84% of the boardings at the South Boston wharves occur on P.M. peak trips. The number of survey responses from passengers boarding trips outside of the P.M. peak was too small to allow a representative expansion, but of three survey respondents then, two walked to their final destinations.

Rapid Transit

Reported use of rapid transit as an egress mode was heaviest among passengers boarding A.M. peak boats going from the Navy Yard to Lovejoy Wharf, at 66.7%, but in absolute terms this was only 12 riders. The number of survey responses from passengers boarding trips at the Navy Yard after the A.M. peak was too small to allow a representative expansion. Rapid transit would also be expected to be the predominant egress mode of riders on those trips. Many would have been passengers who had boarded at Lovejoy in the A.M. peak, and among those, rapid transit access was reported by 61.5%.

The second-highest reported use of rapid transit for egress among Inner Harbor boat passengers was only 6.0%, by riders boarding A.M. peak trips going to Long Wharf from the Navy Yard. Rapid transit egress would be expected to be much higher among P.M. riders going to Long Wharf, because 41.7% of the riders boarding A.M. trips there reported rapid transit as the mode of access.

The only other reported use of rapid transit as an egress mode form Inner Harbor boats was 2.5%, from P.M. peak boardings on trips to Lovejoy Wharf from the Courthouse of World Trade Center. This was only one passenger, however. This is consistent with the results from A.M. peak boardings on this route at Lovejoy Wharf, which showed no rapid transit access.

There were no reported rapid transit egress trips from boats going to the Navy Yard from either Long Wharf or Lovejoy Wharf. This is as would be expected. The nearest rapid transit station to the Navy Yard is North Station. Most of the passengers boarding Lovejoy - Navy Yard boats at Lovejoy transfer from commuter rail or rapid transit routes on which they have arrived at North Station. The shortest walking distance to North Station from the Navy Yard is about the same as that from Long

Wharf, but starting from the vicinity of Long Wharf, passengers could reach stations other than North Station even more easily if they needed to complete their trips via rapid transit.

A.M. trips from Lovejoy Wharf to the Courthouse or World Trade Center had no reported rapid transit egress, although South Station is within walking distance of the Courthouse wharf. Total P.M. boardings at Lovejoy on this route are very low, and there were no survey responses from passengers making rapid transit transfers.

Commuter Rail

Commuter Rail was the reported egress mode of 87.5% of the passengers boarding P.M. peak trips going toward Lovejoy Wharf from the Courthouse or World Trade Center. This was very consistent with the results of surveys from passengers boarding A.M. peak trips on this route at Lovejoy, of which 85.6% reported access via commuter rail. (Comparisons of the A.M. peak and P.M. peak results indicated that no individual riders completed surveys for both travel directions.)

All of these transfers were to or from lines terminating at North Station. The Rockport/Newburyport line was the largest source of transfers in both peaks, at 42.9% of transfers to trains in the P.M. peak and 73.2% of transfers from trains in the A.M. peak. The difference may have been because a higher proportion of Rockport/ Newburyport transfer passengers who completed surveys happened to do so on the A.M. halves of their trips. The Fitchburg Line was the least important source of transfers, with none going to South Boston in the A.M. peak and only 2.9% (one rider) going away from South Boston in the P.M. peak. This is probably because Fitchburg Line riders going to South Boston can get there more easily by transferring to the Red Line at Porter Square and riding to South Station than by riding to North Station and transferring to boats leaving Lovejoy Wharf.

The only other reported egress via commuter rail from Inner Harbor boats was one passenger who returned home from a work location near Lovejoy Wharf by taking a boat from there to the Courthouse Wharf and walking to South Station to board a train.

It would be expected that about 40% of the riders on boats going to Lovejoy Wharf from the Navy Yard in the P.M. peak would transfer to commuter rail, since 38.5% of the A.M. peak boardings at Lovejoy used commuter rail access. There were no survey returns from P.M. peak trips toward Lovejoy on this route, however.

It would be expected that about 20% of the riders on boats going to Long Wharf from the Navy Yard in the P.M. would transfer to commuter rail, since 20.8.% of the A.M. boardings at Long Wharf used commuter rail access. There were only three survey returns in total from P.M. trips toward Long Wharf on this route, however, and none showed commuter rail transfers.

For reasons similar to those discussed above for rapid transit egress, no commuter rail egress would be expected from passengers alighting at the Navy Yard from either boat route serving it. and none was reported.

All Other Egress Modes

There was little or no reported use of egress modes other than walking, rapid transit, or commuter rail by Inner Harbor boat passengers. Egress via MBTA bus was reported by only one passenger, who arrived at North Station by commuter rail, took a boat from Lovejoy Wharf to the World Trade Center, and transferred to an MBTA Route 7 bus to go to a work destination near City Point. (This response was expanded to represent two riders in the Egress report.) One rider returned home from a work location near Lovejoy Wharf by taking a boat from there to the Courthouse wharf and walking to South Station to board a private carrier express bus.

Egress via an employer-sponsored shuttle was reported by only one passenger, who arrived at North Station by commuter rail, took a boat from Lovejoy Wharf to the World Trade Center, and transferred to an employer-sponsored shuttle. In this case, the shuttle was being run during a temporary relocation of the rider's work location to the Boston Marine Industrial Park while the normal downtown office location was being renovated. (This response was expanded to represent two riders in the Egress report.)

Two riders reported that they were either picked up or drove away in private autos after alighting from Inner Harbor boats. Both passengers were going home from work. One alighted at the Navy Yard after taking a boat from Long Wharf, and was going to a home in Charlestown. The other alighted at one of the South Boston wharves after taking a boat from Lovejoy and was going home to Braintree. (This passenger may have ridden with someone who was driving from South Boston to Braintree anyway.)

One rider (expanded to two in the survey report) took a boat from the Navy Yard to Long Wharf and then transferred to the Airport Water Shuttle to complete a trip to Logan Airport for an unspecified purpose. Two passengers making recreational trips to downtown Boston rode boats from the Navy Yard to Long Wharf and indicated that they continued their trips by other unspecified means. (They may have used sightseeing vehicles or multiple modes.)

The low reported use of egress modes other than walking, rapid transit, or commuter rail was consistent with the low incidence of other modes in access trips. It would be expected that passengers transferring from boats to private autos parked near wharves would be on the homeward-bound portions of their trips, and that most such trips would occur in the P.M. peak. The only one of the Inner Harbor routes for which P.M. peak survey returns included a large enough sample for representative expansion was on trips going toward Lovejoy Wharf from the Courthouse and World Trade Center. No egress trips from that route were reported as driving in cars parked near the Wharf or being picked up. This is consistent with the absence of park-and-ride and drop-off access to Lovejoy Wharf on A.M. peak trips. On the other Inner Harbor routes only two

morning riders (expanded to three) reported being dropped off at a wharf by private autos. Both boarded boats at the Navy Yard going to Long Wharf. Six riders (expanded to 10) reported park-and-ride access. All rode A.M. peak trips, with six boarding boats at the Navy Yard going to Long Wharf, and one boarding a boat at Long Wharf going to the Navy Yard.

One rider (expanded to two) transferred to a boat going from Long Wharf to the Navy Yard after arriving in Boston from and MBTA express bus via the Mass. Turnpike. Six riders, (expanded to seven), transferred from A.M. peak South Shore commuter boats to boats going from Long Wharf to the Navy Yard. The lack of P.M. peak surveys prevented accurate reporting of homeward trips transferring from Inner Harbor boats to express buses or South Shore boats but such transfers would not have been expected to occur in significantly different proportions from A.M. peak access trips.

The Lovejoy - Courthouse/World Trade Center route had one transfer each reported in the A.M. peak and the P.M. peak from the Navy Yard - Lovejoy route. These may have been the only passengers all day who made such transfers. They would not have completed surveys on the return trips, and both completed the surveys on the second of the two boats used, so the boat-to-boat transfers appear only as access trips.

Egress Times - Inner Harbor Routes

For all egress modes combined, the average reported egress times ranged from 4.8 minutes for passengers alighting from the Navy Yard - Lovejoy Wharf route at the Navy Yard in the A.M. peak to 33.3 minutes for passengers boarding the Lovejoy Wharf - Courthouse/World Trade Center route at the South Boston end in the P.M. peak. In general, the shortest access times were reported by passengers who were using the boats near the end of a trip. The longest times were for passengers who were using the boats at the start of long homeward-bound trips.

The short average egress time from Lovejoy boats at the Navy Yard reflected the fact that all responses came from passengers who walked from there to nearby destinations. Their reported egress times ranged from one to ten minutes, with only two of the 13 riders having times longer than five minutes. Passengers on A.M. trips to the Navy Yard from Long Wharf, all of whom also reported Walking egress, had the second-shortest average egress time, at 5.8 minutes. As on the Lovejoy - Navy Yard route, egress times ranged from one to ten minutes, but the Long Wharf route had a higher proportion of times over five minutes, resulting in the slightly higher overall average.

Passengers on A.M. peak trips from Lovejoy Wharf to the Courthouse or World Trade Center had the third-lowest average egress times, at 7.3 minutes. This was almost the same as the average for walking egress trips alone (7.2 minutes), which accounted for 89.6% of the total egress trips. Times for walking egress ranged from one to 15 minutes, depending on the distance of the destination from the alighting wharf, but 77.8% took 10 minutes or less.

Passengers on A.M. peak trips from the Navy Yard to Long Wharf had the fourth-lowest average egress times, at 9.3 minutes. This average was influenced most by walking times, which averaged 8.6 minutes for the 92.8% of riders who walked from Long Wharf to their destinations. Reported walking times ranged from one to 20 minutes, with 84.5% at 10 minutes or less.

Most passengers who did not walk to their destinations from Long Wharf had rapid transit egress trips. For these, the average time was 20.6 minutes. Some passengers who used rapid transit egress reported as egress time only the time from Long Wharf to the rapid transit boarding station. In such cases, the times were adjusted to include typical travel time to the rapid transit station nearest the destination, but final access time from that station to the destinations was not estimated. Therefore, the overall rapid transit average egress times shown are slightly low.

The second-longest average egress times reported were for A.M. peak trips from the Navy Yard to Lovejoy Wharf, at 17.5 minutes. This average was pulled up by the high proportion of riders completing their trips by rapid transit (66.7%). For those alone, the average egress time was 22.5 minutes, compared with 7.5 minutes for passengers with walking egress. The average rapid transit egress time was similar to that for passengers alighting at Long Wharf (20.6 minutes).

The longest average egress times were for passengers on P.M. peak boats going from the Courthouse or World Trade Center toward Lovejoy Wharf, at 33.4 minutes. This average was heavily weighted toward the average for commuter rail egress (36.9 minutes), which was used in 87.5% of the egress trips. For such trips, the boats should be regarded as feeders for the commuter rail lines, rather than the commuter rail lines being regarded as distributors for the boats.

MBTA Ferry Services

2000 Passenger Survey

Egress from the Ferry

Route: **Hingham–Rowes Wharf**

Expanded Results

Egress Mode from the Ferry:

	Number of Riders	Percent of Riders
Walk	1,665	92.7%
Rapid Transit	104	5.8%
MBTA Bus	3	0.2%
Commuter Rail	0	0.0%
Shuttle/van	0	0.0%
Pick up/Drive	6	0.3%
Other	19	1.1%
TOTAL	1,796	100.0%
No Answer	2	

Egress Time (minutes):

	Mean	0-5	6-10	11-15	16-20	21-30	Over 30
Walk	9.8	26.9%	47.8%	17.6%	4.2%	2.7%	0.8%
Rapid Transit	26.0	0.0%	4.7%	11.7%	18.9%	41.0%	23.7%
MBTA Bus							
Commuter Rail							
Shuttle/van							
Pick up/Drive	14.2	0.0%	33.3%	33.3%	33.3%	0.0%	0.0%
Other	19.0	0.0%	39.7%	9.2%	0.0%	51.0%	0.0%
TOTAL	10.7	25.1%	45.4%	17.3%	5.0%	5.3%	2.0%

Rapid Transit Transfers:

Exit Station	Number of Riders	Pct. of Transfers
Kendall	29	27.9%
Back Bay	22	21.2%
Harvard	10	9.6%
Lechmere	6	5.8%
Arlington	4	3.8%
BU Central	4	3.8%
Hynes Convention (	4	3.8%
Mass. Ave.	4	3.8%
Wellington	4	3.8%
Bowdoin	3	2.9%
Revere Beach	3	2.9%
Community College	2	1.9%
Central	2	1.9%
Copley	2	1.9%
Government Center	2	1.9%
Longwood	2	1.9%

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers
7	3	100.0%

Commuter Rail Transfers:

Line	Number of Riders	Pct. of Transfers

MBTA Ferry Services

2000 Passenger Survey

Egress from the Ferry

Route: **Hull—Quincy–Long Wharf**

Expanded Results

Egress Mode from the Ferry:

	Number of Riders	Percent of Riders
Walk	63	78.8%
Rapid Transit	14	17.5%
MBTA Bus	1	1.3%
Commuter Rail	0	0.0%
Shuttle/van	0	0.0%
Pick up/Drive	1	1.3%
Other	1	1.3%
TOTAL	80	100.0%
No Answer	1	

Egress Time (minutes):

	Mean	0-5	6-10	11-15	16-20	21-30	Over 30
Walk	13.7	8.8%	38.6%	33.3%	8.8%	8.8%	1.8%
Rapid Transit	27.3	0.0%	8.3%	25.0%	8.3%	25.0%	33.3%
MBTA Bus	20.0	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Commuter Rail							
Shuttle/van							
Pick up/Drive							
Other	15.0	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
TOTAL	16.1	7.0%	32.4%	32.4%	9.9%	11.3%	7.0%

Rapid Transit Transfers:

Exit Station	Number of Riders	Pct. of Transfers
Bowdoin	3	21.4%
Harvard	2	14.3%
Back Bay	1	7.1%
BU Central	1	7.1%
BU East	1	7.1%
Eliot	1	7.1%
Government Center	1	7.1%
JFK/UMass	1	7.1%
Longwood	1	7.1%
Sullivan Square	1	7.1%
Wood Island	1	7.1%

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers
93	1	100.0%

Commuter Rail Transfers:

Line	Number of Riders	Pct. of Transfers

MBTA Ferry Services

2000 Passenger Survey

Egress from the Ferry

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - Navy Yard A.M. Boardings

Egress Mode from the Ferry:

Egress Time (minutes):

	Number of Riders	Percent of Riders	Mean	0-5	6-10	11-15	16-20	21-30	Over 30
Walk	249	84.9%	8.9	32.9%	49.5%	14.4%	2.0%	1.2%	0.0%
Rapid Transit	36	12.3%	21.2	7.9%	15.6%	14.6%	14.6%	36.2%	11.2%
MBTA Bus	0	0.0%							
Commuter Rail	0	0.0%							
Shuttle/van	0	0.0%							
Pick up/Drive	0	0.0%							
Other	8	2.7%	8.1	39.0%	61.0%	0.0%	0.0%	0.0%	0.0%
TOTAL	293	100.0%	10.5	29.8%	45.3%	14.2%	3.5%	5.7%	1.4%
No Answer	1								

Rapid Transit Transfers:

Exit Station	Number of Riders	Pct. of Transfers
Back Bay	7	19.4%
Harvard	6	16.7%
Museum of Fine Art	6	16.7%
Copley	5	13.9%
North Station	3	8.3%
Ruggles	3	8.3%
Arlington	2	5.6%
BU Central	1	2.8%
Maverick	1	2.8%
North Quincy	1	2.8%
State	1	2.8%

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers

Commuter Rail Transfers:

Line	Number of Riders	Pct. of Transfers

MBTA Ferry Services
2000 Passenger Survey

Egress from the Ferry

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - Long Wharf A.M. Boardings

Egress Mode from the Ferry:

	Number of Riders	Percent of Riders
Walk	72	100.0%
Rapid Transit	0	0.0%
MBTA Bus	0	0.0%
Commuter Rail	0	0.0%
Shuttle/van	0	0.0%
Pick up/Drive	0	0.0%
Other	0	0.0%
TOTAL	72	100.0%
No Answer	0	

Egress Time (minutes):

Mean	0-5	6-10	11-15	16-20	21-30	Over 30
5.8	65.8%	34.2%	0.0%	0.0%	0.0%	0.0%
5.8	65.8%	34.2%	0.0%	0.0%	0.0%	0.0%

Rapid Transit Transfers:

Exit Station	Number of Riders	Pct. of Transfers

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers

Commuter Rail Transfers:

Line	Number of Riders	Pct. of Transfers

MBTA Ferry Services

2000 Passenger Survey

Egress from the Ferry

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - Navy Yard A.M. Peak Boardings

Egress Mode from the Ferry:

	Number of Riders	Percent of Riders
Walk	6	33.3%
Rapid Transit	12	66.7%
MBTA Bus	0	0.0%
Commuter Rail	0	0.0%
Shuttle/van	0	0.0%
Pick up/Drive	0	0.0%
Other	0	0.0%
TOTAL	18	100.0%
No Answer	0	

Egress Time (minutes):

Mean	0-5	6-10	11-15	16-20	21-30	Over 30
7.5	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%
22.5	0.0%	0.0%	25.0%	0.0%	75.0%	0.0%
17.5	16.7%	16.7%	16.7%	0.0%	50.0%	0.0%

Rapid Transit Transfers:

Exit Station	Number of Riders	Pct. of Transfers
Arlington	3	25.0%
Back Bay	3	25.0%
Kenmore	3	25.0%
Longwood/Hospital	3	25.0%

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers

Commuter Rail Transfers:

Line	Number of Riders	Pct. of Transfers

MBTA Ferry Services

2000 Passenger Survey

Egress from the Ferry

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - Lovejoy A.M. Peak Boardings

Egress Mode from the Ferry:

	Number of Riders	Percent of Riders
Walk	13	100.0%
Rapid Transit	0	0.0%
MBTA Bus	0	0.0%
Commuter Rail	0	0.0%
Shuttle/van	0	0.0%
Pick up/Drive	0	0.0%
Other	0	0.0%
TOTAL	13	100.0%
No Answer	0	

Egress Time (minutes):

Mean	0-5	6-10	11-15	16-20	21-30	Over 30
4.8	83.3%	16.7%	0.0%	0.0%	0.0%	0.0%
4.8	83.3%	16.7%	0.0%	0.0%	0.0%	0.0%

Rapid Transit Transfers:

Exit Station	Number of Riders	Pct. of Transfers

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers

Commuter Rail Transfers:

Line	Number of Riders	Pct. of Transfers

MBTA Ferry Services

2000 Passenger Survey

Egress from the Ferry

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - A.M. peak Lovejoy Boardings

Egress Mode from the Ferry:

Egress Time (minutes):

	Number of Riders	Percent of Riders	Mean	0-5	6-10	11-15	16-20	21-30	Over 30
Walk	43	89.6%	7.2	55.6%	22.2%	22.2%	0.0%	0.0%	0.0%
Rapid Transit	0	0.0%							
MBTA Bus	2	4.2%	7.0	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Commuter Rail	0	0.0%							
Shuttle/van	2	4.2%	10.0	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Pick up/Drive	0	0.0%							
Other	0	0.0%							
TOTAL	48	100.0%	7.3	50.0%	30.0%	20.0%	0.0%	0.0%	0.0%
No Answer	0								

Rapid Transit Transfers:

Exit Station	Number of Riders	Pct. of Transfers

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers
7	2	50.0%
EMP	2	50.0%

Commuter Rail Transfers:

Line	Number of Riders	Pct. of Transfers

MBTA Ferry Services
2000 Passenger Survey

Egress from the Ferry

Route: **Lovejoy Wharf–Courthouse/World Trade Center**
Expanded Results - P.M. Peak Courthouse/WTC Ons

Egress Mode from the Ferry:

	Number of Riders	Percent of Riders
Walk	4	10.0%
Rapid Transit	1	2.5%
MBTA Bus	0	0.0%
Commuter Rail	35	87.5%
Shuttle/van	0	0.0%
Pick up/Drive	0	0.0%
Other	0	0.0%
TOTAL	40	100.0%
No Answer	0	

Egress Time (minutes):

	Mean	0-5	6-10	11-15	16-20	21-30	Over 30
Walk	10.0	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Rapid Transit	20.0	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
MBTA Bus							
Commuter Rail	36.9	21.1%	3.7%	3.7%	14.7%	3.7%	53.2%
Shuttle/van							
Pick up/Drive							
Other							
TOTAL	33.4	18.1%	14.4%	3.1%	15.7%	3.1%	45.5%

Rapid Transit Transfers:

Exit Station	Number of Riders	Pct. of Transfers
Wellington	1	100.0%

Bus/Shuttle Transfers:

Route	Number of Riders	Pct. of Transfers

Commuter Rail Transfers:

Line	Number of Riders	Pct. of Transfers
Rockport/Newburyport	15	42.9%
Haverhill/Reading	12	34.3%
Lowell	8	22.9%
Fitchburg	1	2.9%

6. Inner Town/Outer Town Matrix

Information Contained

Each Inner Town/Outer Town Matrix report is a one-page table showing the number of passengers by town of origin at all boarding locations in the selected group, and destination towns of the passengers from each origin town. Each table includes columns for the 10 most common origins and rows for the 16 most common destinations of passengers in the selected group, with both in descending order. (The top 16 destinations from any given origin town are not necessarily the same as those of the report group as a whole, nor are the top 10 origins the same for each destination.) Passengers specifying origins not in the top 10 or destinations not in the top 16 are reported in columns and rows labeled Other.

In addition to the total number of passengers with each origin-destination combination, the tables show the percentages of total riders in the selected group accounted for by passengers from each of the top 10 origins and all other origins combined, and the percentages going to each of the top 16 destinations and to all other destinations combined.

Breakdowns of passenger origins by boat route are contained in chapter 2 of this report. Breakdowns of passenger destinations by route are contained in chapter 5. The tables in those chapters do not include cross-tabulations of ridership by town of origin to town of destination, however.

For the two South Shore commuter boat routes, the outer towns are those at the South Shore ends of trips and the inner towns are those at the Boston ends. For the Inner Harbor routes, inner and outer trip ends are less obvious. Results for each route have been tabulated separately by boarding location. In the tables, the boarding point is treated as the outer end of the boat trip and the alighting point as the inner end regardless of geographical relationships. Most of the routes serve only their two endpoints, so the alighting location is uniquely determined by the boarding location. The Lovejoy Wharf - Courthouse World/Trade Center route serves two wharves in South Boston, but because of low total ridership and relatively short distance between the two wharves, all reports treat them as one boarding or alighting point. The Hull South Shore route serves Quincy and Logan Airport in addition to Hull and Long Wharf, but there were no survey responses for Quincy boardings and only one for an Airport alighting.

Level of Detail Obtained for Origin and Destination

On the survey forms, passengers were asked to identify both their origins and destinations by city, town, or neighborhood, and state, and by the nearest street intersection or landmark. Most respondents provided information at least at the city or town level, but not all included an intersection or landmark. Some also omitted the town of origin or destination, but in most cases these could be determined from other information on the forms. For example, the town could be identified if the passenger reported a walking access time that would only be possible from within the same town as the boarding location.

In the database, all origin and destination towns within Massachusetts reported on surveys were assigned individual numerical codes. The number of riders with origins or destinations outside Massachusetts was very small. A single numerical code was assigned to each other state having any reported origins or destinations. The city of Boston was subdivided into 23 neighborhoods with individual town codes, plus Boston-Unspecified and Boston CBD-Unspecified. Specific origin and destination addresses shown on the survey forms are retained in the database as part of each record, but are too numerous to include separately in summary tables.

Findings - South Shore Routes

On both South Shore Routes, the Financial-Retail district was the single most important destination, but the share of Hingham route riders destined there (61.2%, or 1,101 trips) was significantly greater than that of Hull route riders (40.7%, or 33 trips). All passengers on the Hull route had outer trip end in the town of Hull except for one passenger going from Scituate to work at the airport. Therefore, the distribution of destinations for the route as a whole was essentially that of riders from Hull. The Hingham route had a much larger attraction area, but the top six origin towns accounted for 94% of the passengers. The Financial-Retail district had the greatest number of destinations of passengers originating in each of the top 10 Hingham route origin towns but its importance varied among towns.

The largest single Inner Town/Outer Town Combination was Hingham to Financial-Retail district, with 407 trips, or 22.6% of the route total. The only other pairs with more than 100 trips (5.5%) each were from Scituate, Cohasset, and Weymouth to Financial-Retail, at 196, 156, and 117.

The Waterfront district was the second most important destination location for the Hingham route, at 11.7% (210 trips), but for the Hull route it was only third, at 7.4% (6 trips). The Waterfront was also the second most important destination for passengers from nine of the top 10 Hingham route origins. The exception was Norwell, where it was third, but in absolute terms it was not far below second.

Government Center was the third-largest destination of Hingham route riders, at 7.9% (142 trips), but on the Hull route it was second, at 16.0% (13 trips). Government Center

was also third in importance for eight of the top 10 Hingham origins, Exceptions were Hull for which it was fourth and Norwell, for which it was second. The lower ranking of Government Center among Hull passengers using the Hingham route but the higher ranking on the Hull route reflect differences in convenience of Rowes Wharf and Long Wharf to various downtown destinations. In absolute terms, Hull passengers going to Government Center chose the Hull route over the Hingham route by a small margin (13 trips versus 11), but to all other major destination the Hingham route captured the largest share of riders from Hull.

The top three destinations combined accounted for 80.8% of the trips on the Hingham route and 64.1% of those on the Hull route. Below the top three destinations, there was less consistency in the rankings of destinations both among towns served by the Hingham route and between the Hingham route overall and the Hull route. The largest Inner/Outer pair below the top three destinations was 35 trips (1.9%) from Hingham to South Boston.

Hingham was the largest source of riders going to each of the top seven destinations, but to less common destinations, other towns were usually ahead of Hingham in trip origins. The overall top 10 origin cities and towns accounted for all of the riders going to most individual destination towns or districts. In absolute terms, the largest exception was the Financial-Retail District, with 20 trips (1.8% of its total) from other origins. Government Center, the North End, and Harvard Square each attracted one or two riders from origins outside the top 10.

Findings - Inner Harbor Routes

Charlestown Navy Yard - Long Wharf Route

Of the three Inner Harbor boat routes, the Charlestown Navy Yard - Long Wharf route was most similar to the South Shore routes in its mix of inbound A.M. rider destinations. This is as might be expected, since Long Wharf is also the terminal of the Hull route and is about one quarter mile from the terminal of the Hingham route. On the Navy Yard - Long Wharf route, the Financial-Retail district had the largest share of destinations, at 56.3% (166). This compares with 61.1% on the Hingham route and 40.7% on the Hull route. The Waterfront district was the second-largest destination for Navy Yard boardings, at 14.6% (43), compared with 11.7% (also second place) from the Hingham route and 7.4% (third place) from the Hull route.

The Government Center district was the third-largest destination from the Navy Yard, with 5.4% (16), compared with 7.9% (third place) from the Hingham route and 16.0% (second place) from the Hull route. The top three destinations combined accounted for 76.3% of riders from the Navy Yard compared with 80.7% from the Hingham route and 64.1% from the Hull route. Almost all of the destinations reported by passengers from the Navy Yard were in sections of Boston or Cambridge also reported as destinations by South Shore route passengers. (There were only three surveys, expanded to five riders, from Navy Yard passengers going to other destinations.)

Like the, Hull route, the Navy Yard - Long Wharf Route has a limited attraction area at its outer end. Origins in Charlestown accounted for 96.6% of the Navy Yard boardings, with the remainder being park-and-ride or drop-off passengers from scattered towns north of Boston. Because of the predominance of Charlestown origins, the overall distribution of destinations was essentially the same as that of Charlestown alone. The largest individual Inner Town/Outer Town pair was Charlestown to Financial-Retail district, with 160 riders, or 56.1% of the route total.

On A.M. trips from Long Wharf to Charlestown, a large proportion of passengers are using the boats as the final links from other transit modes. There was much less concentration of origin-destination pairs than on boats traveling in the opposite direction. All of the passengers reported final destinations within Charlestown, but the top 10 origins accounted for only 59.7% of the trips. The largest individual Inner Town/Outer Town pair was Financial-Retail district to Charlestown with 11 trips, or 15.3% of the total. No other pair had more than four trips (5.6%). Outside of the top 10 origins, the last 40% of the riders came from 23 towns or districts with only one or two passengers each.

The number of surveys returned from P.M. trips in either direction on the Navy Yard - Long Wharf route was too small to provide any conclusions about origins and destinations. It is reasonable to assume that P.M. peak Inner Town/Outer Town pairs would be approximately the reverse of A.M. patterns. Informal observations indicate that midday trips carry high proportions of non-repetitive tourist and other recreational traffic.

Charlestown Navy Yard - Lovejoy Wharf Route

The Charlestown Navy Yard - Lovejoy Wharf route has the lowest total ridership of all the MBTA water transportation services. Almost all of the survey responses from boats going toward Lovejoy Wharf were from passengers on A.M. peak trips, which carried a total of 18 riders. Only six surveys were returned, so each was given a weight of 3.0 in the database. The number of responses from trips after the A.M. peak was too small to permit useful expansion.

All of the passengers on A.M. peak trips from Lovejoy Wharf reported trip origins within Charlestown. Destination districts were divided equally one third each between the BU-Fenway-Longwood district, the North End, and the Prudential district. It is possible that some of the riders who did not complete surveys had different destinations than those above, or that they were distributed in different proportions. The maximum possible number of trips to any of the destinations reported above would have been 14, and the maximum to any other destination would have been 12.

All of the survey responses from boats going toward Charlestown came from departures up to 8:20 A.M., which carried a total of only 13 riders. There were also 13 survey responses, so no expansion was needed. All of the passengers reported trip destinations in Charlestown, all within the Navy Yard area. No two passengers had the

same origin towns or districts, however. Five transferred from various commuter rail lines, five from the Green Line, and three from the Orange Line. There were no origins from the vicinity of Lovejoy Wharf.

Lovejoy Wharf - Courthouse/World Trade Center Route

Almost all of the survey responses from boats going away from Lovejoy Wharf on the Lovejoy Wharf - Courthouse/World Trade Center route came from A.M. peak trips. These carried 48 of the 54 daily riders reported in that direction. Destinations in South Boston, where the Courthouse and World Trade Center wharves are both located, accounted for 85.4% of the reported A.M. peak destinations. The remainder were in the Waterfront district, which is a short walk across the old Northern Avenue bridge from the Courthouse wharf.

Trip origins were much more dispersed, with the city of Beverly accounting for the largest share, at 18.8% (9 trips). The largest Inner Town/Outer Town combination was Beverly to South Boston, at 14.6% (7 trips). The top 10 origins accounted for 85.4% of the riders, but only the top five had more than two origins each. The vast majority of the riders (also 85.4%) transferred from commuter rail lines. The remainder consisted of walk-ins from the North End or Charlestown and transfers from the Navy Yard - Lovejoy Wharf route.

Almost all of the survey responses from boats going toward Lovejoy Wharf on the Lovejoy Wharf - Courthouse/World Trade Center route came from P.M. peak trips. These carried 41 of the 49 daily riders reported in that direction. All of the reported P.M. peak origins were in South Boston, where the Courthouse and World Trade Center wharves are both located. Based on the destinations reported by passengers going away from Lovejoy Wharf in the A.M. peak, some P.M. peak origins in the Waterfront district might also be expected, but there was no overlap in the individual survey respondents in the two directions.

P.M. peak trip destinations were more dispersed than A.M. peak origins, with the largest share being 12.5% (5 trips) to Salem. All of these came from South Boston, as that was the only reported origin of any passengers. The top 10 destinations accounted for 69.0% of the total, compared with the 85.4% of A.M. peak riders away from Lovejoy accounted for by the top 10 origins. In the P.M. peak, only the top seven destinations had more than two riders each, and only Salem had more than three. Transfer to commuter rail was the egress mode from Lovejoy in 87.5% of the trips, very similar to the 85.4% of the A.M. peak access to Lovejoy accounted for by transfers from commuter rail. Passengers who did not transfer to commuter rail all either walked to destinations in the North End or Charlestown or transferred to the Orange Line at North Station.

MBTA Ferry Services

2000 Passenger Survey

CTPS
2/22/01

Inner Town/Outer Town Matrix

Route: **Hingham–Rowes Wharf**

Expanded Results - A.M. Hingham Boardings

Inner Town \ Outer Town	Hingham	Scituate	Cohasset	Weymouth	Hull	Marshfield	Norwell	Hanover	Rockland	Quincy	Other & % of row	Total & % of tot.	Unknown
Boston: Fin.-Ret.	407	196	156	117	76	72	48	4	2	3	20 1.8%	1,101 61.2%	0
Boston: Waterfront	64	38	35	19	23	20	2	4	3	3	0 0.0%	210 11.7%	0
Boston: Govt. Ctr.	48	37	20	7	11	9	5	2	0	2	1 0.7%	142 7.9%	0
Boston: S. Boston	35	29	19	4	20	2	0	0	2	0	0 0.0%	111 6.2%	0
Camb: Kendall/MIT	22	6	2	4	3	0	0	0	0	0	0 0.0%	37 2.1%	0
Boston: North End	10	9	0	5	6	2	0	0	2	0	2 5.6%	36 2.0%	0
Boston: Park Sq.	4	9	9	2	0	4	2	0	0	0	0 0.0%	30 1.7%	0
Boston: Prudential	10	11	2	0	0	2	0	0	0	0	0 0.0%	24 1.3%	0
Boston: Back Bay	5	11	2	0	4	0	0	0	0	0	0 0.0%	22 1.2%	0
Boston: Unspec. CBD	5	0	2	6	3	0	0	2	0	0	0 0.0%	18 1.0%	0
Boston: Beacon Hill	0	12	0	4	2	0	0	0	0	0	0 0.0%	18 1.0%	0
Camb: Harvard Sq.	2	0	8	0	2	0	0	0	0	0	1 7.7%	13 0.7%	0
Boston: Fenway	2	0	0	5	4	0	0	0	0	0	0 0.0%	11 0.6%	0
Boston: Charlestown	2	0	0	0	7	0	2	0	0	0	0 0.0%	10 0.6%	0
Medford	2	2	0	0	0	0	0	0	0	0	0 0.0%	4 0.2%	0
Revere	0	0	0	0	3	0	0	0	0	0	0 0.0%	3 0.2%	0
Other No. of Riders % of Column	3 0.5%	0 0.0%	2 0.8%	0 0.0%	2 1.2%	3 2.6%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	10 0.6%	0
TOTAL No. of Riders % of Total	621 34.5%	360 20.0%	257 14.3%	173 9.6%	166 9.2%	114 6.3%	59 3.3%	12 0.7%	9 0.5%	8 0.4%	24 1.3%	1,800 100.0%	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0

MBTA Ferry Services

2000 Passenger Survey

CTPS
1/29/01

Inner Town/Outer Town Matrix

Route: **Hull—Quincy–Long Wharf**

Expanded Results

Inner Town \ Outer Town	Hull	Scituate									Other & % of row	Total & % of tot.	Un-known
Boston: Fin.-Ret.	33	0	0	0	0	0	0	0	0	0	0 0.0%	33 40.7%	0
Boston: Govt. Ctr.	13	0	0	0	0	0	0	0	0	0	0 0.0%	13 16.0%	0
Boston: Waterfront	6	0	0	0	0	0	0	0	0	0	0 0.0%	6 7.4%	0
Boston: Charlestown	4	0	0	0	0	0	0	0	0	0	0 0.0%	4 4.9%	0
Boston: North End	4	0	0	0	0	0	0	0	0	0	0 0.0%	4 4.9%	0
Boston: Park Sq.	4	0	0	0	0	0	0	0	0	0	0 0.0%	4 4.9%	0
Boston: Back Bay	3	0	0	0	0	0	0	0	0	0	0 0.0%	3 3.7%	0
Boston: Fenway	3	0	0	0	0	0	0	0	0	0	0 0.0%	3 3.7%	0
Boston: E. Boston	1	1	0	0	0	0	0	0	0	0	0 0.0%	2 2.5%	0
Boston: S. Boston	2	0	0	0	0	0	0	0	0	0	0 0.0%	2 2.5%	0
Camb: Harvard Sq.	2	0	0	0	0	0	0	0	0	0	0 0.0%	2 2.5%	0
Wellesley	1	0	0	0	0	0	0	0	0	0	0 0.0%	1 1.2%	0
Boston: Unspec. CBD	1	0	0	0	0	0	0	0	0	0	0 0.0%	1 1.2%	0
Boston: No. Dorch.	1	0	0	0	0	0	0	0	0	0	0 0.0%	1 1.2%	0
Boston: Beacon Hill	1	0	0	0	0	0	0	0	0	0	0 0.0%	1 1.2%	0
Boston: Prudential	1	0	0	0	0	0	0	0	0	0	0 0.0%	1 1.2%	0
TOTAL No. of Riders % of Total	80 98.8%	1 1.2%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	81 100.0%	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0

MBTA Ferry Services

2000 Passenger Survey

CTPS
2/22/01

Inner Town/Outer Town Matrix

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - A.M. Navy Yard Boardings

Inner Town \ Outer Town	Boston: Charlestown	Tewksbury	Wakefield	Billerica	Danvers	Middleton	Boxford				Other & % of row	Total & % of tot.	Un-known
Boston: Fin.-Ret.	160	2	0	2	0	1	1	0	0	0	0 0.0%	166 56.3%	0
Boston: Waterfront	43	0	0	0	0	0	0	0	0	0	0 0.0%	43 14.6%	0
Boston: Govt. Ctr.	12	0	2	0	2	0	0	0	0	0	0 0.0%	16 5.4%	0
Boston: Unspec. CBD	13	0	0	0	0	0	0	0	0	0	0 0.0%	13 4.4%	0
Boston: S. Boston	12	0	0	0	0	0	0	0	0	0	0 0.0%	12 4.1%	0
Boston: Fenway	10	0	0	0	0	0	0	0	0	0	0 0.0%	10 3.4%	0
Boston: Prudential	10	0	0	0	0	0	0	0	0	0	0 0.0%	10 3.4%	0
Camb: Harvard Sq.	6	0	0	0	0	0	0	0	0	0	0 0.0%	6 2.0%	0
Boston: Back Bay	5	0	0	0	0	0	0	0	0	0	0 0.0%	5 1.7%	0
Boston: North End	4	0	0	0	0	0	0	0	0	0	0 0.0%	4 1.4%	0
Boston: Park Sq.	3	0	0	0	0	0	0	0	0	0	0 0.0%	3 1.0%	0
Essex	3	0	0	0	0	0	0	0	0	0	0 0.0%	3 1.0%	0
Boston: Logan	2	0	0	0	0	0	0	0	0	0	0 0.0%	2 0.7%	0
Quincy	1	0	0	0	0	0	0	0	0	0	0 0.0%	1 0.3%	0
Chelsea	1	0	0	0	0	0	0	0	0	0	0 0.0%	1 0.3%	0
TOTAL No. of Riders % of Total	285 96.6%	2 0.7%	2 0.7%	2 0.7%	2 0.7%	1 0.3%	1 0.3%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	295 100.0%	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0

MBTA Ferry Services

2000 Passenger Survey

CTPS
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Inner Town/Outer Town Matrix

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - Long Wharf A.M. Boardings

Inner Town \ Outer Town	Boston: Fin.-Ret.	Hull	Quincy	Winthrop	Boston: E. Boston	Boston: Back Bay	Boston: Waterfront	Revere	Westwood	Newton	Other & % of row	Total & % of tot.	Un-known
Boston: Charlestown	11	4	4	4	4	4	4	3	3	2	29 40.3%	72 100.0%	0
TOTAL													
No. of Riders	11	4	4	4	4	4	4	3	3	2	29	72	0
% of Total	15.3%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	4.2%	4.2%	2.8%	40.3%	100.0%	
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0

MBTA Ferry Services

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CTPS
2/23/01

Inner Town/Outer Town Matrix

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Navy Yard Ons

Inner Town \ Outer Town	Boston: Charlestown										Other & % of row	Total & % of tot.	Un-known
Boston: Fenway	6	0	0	0	0	0	0	0	0	0	0 0.0%	6 33.3%	0
Boston: North End	6	0	0	0	0	0	0	0	0	0	0 0.0%	6 33.3%	0
Boston: Prudential	6	0	0	0	0	0	0	0	0	0	0 0.0%	6 33.3%	0
TOTAL No. of Riders % of Total	18 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	18 100.0%	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0

MBTA Ferry Services

2000 Passenger Survey

CTPS
3/16/01

Inner Town/Outer Town Matrix

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Lovejoy Boardings

Inner Town \ Outer Town	Marblehead	Sharon	Somerville: Unspec.	Sudbury	Swampscott	Beverly	Boston: Alls./Brighton	Boston: Unspec. CBD	Boston: Roxbury	Boston: Fenway	Other & % of row	Total & % of tot.	Un-known
Boston: Charlestown	1	1	1	1	1	1	1	1	1	1	3 23.1%	13 100.0%	0
TOTAL													
No. of Riders	1	1	1	1	1	1	1	1	1	1	3	13	0
% of Total	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	23.1%	100.0%	
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0

MBTA Ferry Services

2000 Passenger Survey

CTPS
2/23/01

Inner Town/Outer Town Matrix

Route: **Lovejoy Wharf-Courthouse/World Trade Center**

Expanded Results - A.M. Peak Lovejoy Boardings

Inner Town \ Outer Town	Beverly	Salem	Peabody	Woburn	Boston: Charlestown	Gloucester	Lowell	Malden	Newburyport	Saugus	Other & % of row	Total & % of tot.	Un-known
Boston: S. Boston	7	7	5	5	5	2	0	2	2	0	6 14.6%	41 85.4%	0
Boston: Waterfront	2	0	0	0	0	0	2	0	0	2	1 14.3%	7 14.6%	0
TOTAL													
No. of Riders	9	7	5	5	5	2	2	2	2	2	7	48	0
% of Total	18.8%	14.6%	10.4%	10.4%	10.4%	4.2%	4.2%	4.2%	4.2%	4.2%	14.6%	100.0%	
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0

MBTA Ferry Services
2000 Passenger Survey

CTPS
2/23/01

Inner Town/Outer Town Matrix

Route: **Lovejoy Wharf--Courthouse/World Trade Center**

Expanded Results - P.M. Peak Courthouse/WTC Ons

Inner Town \ Outer Town	Boston: S. Boston										Other & % of row	Total & % of tot.	Un-known
Salem	5	0	0	0	0	0	0	0	0	0	0 0.0%	5 12.5%	0
Melrose	3	0	0	0	0	0	0	0	0	0	0 0.0%	3 7.5%	0
Reading	3	0	0	0	0	0	0	0	0	0	0 0.0%	3 7.5%	0
Beverly	3	0	0	0	0	0	0	0	0	0	0 0.0%	3 7.5%	0
Wakefield	3	0	0	0	0	0	0	0	0	0	0 0.0%	3 7.5%	0
Winchester	3	0	0	0	0	0	0	0	0	0	0 0.0%	3 7.5%	0
Boston: North End	3	0	0	0	0	0	0	0	0	0	0 0.0%	3 7.5%	0
Hamilton	2	0	0	0	0	0	0	0	0	0	0 0.0%	2 5.0%	0
Lowell	2	0	0	0	0	0	0	0	0	0	0 0.0%	2 5.0%	0
Manchester	2	0	0	0	0	0	0	0	0	0	0 0.0%	2 5.0%	0
Methuen	2	0	0	0	0	0	0	0	0	0	0 0.0%	2 5.0%	0
Rockport	2	0	0	0	0	0	0	0	0	0	0 0.0%	2 5.0%	0
Andover	2	0	0	0	0	0	0	0	0	0	0 0.0%	2 5.0%	0
Lawrence	1	0	0	0	0	0	0	0	0	0	0 0.0%	1 2.5%	0
Belmont	1	0	0	0	0	0	0	0	0	0	0 0.0%	1 2.5%	0
Billerica	1	0	0	0	0	0	0	0	0	0	0 0.0%	1 2.5%	0
Other No. of Riders % of Column	4 9.5%	0	0	0	0	0	0	0	0	0	0 0.0%	4 10.0%	0
TOTAL No. of Riders % of Total	42 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	42 100.0%	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0

7. Trip Purpose and Alternate Means

Information Contained

Each Trip Purpose and Alternate Means report consists of five tables on one page. The first table, Trip Purposes, shows the number and percentage of the riders in the selected group having each of nine trip purposes. These were cross-tabulations of the results of questions 3a and 7a, which show the activities preceding and following the boat trip. The first seven trip purposes listed are Home-based trips. These are trips having the activity at either the beginning (question 3a) or end (question 8a) shown as At home, and the activity at the opposite end shown as one of the seven other purposes on the survey check-off lists.

The eighth trip purpose, Work-based trips, consists of trips having the activity at either the beginning or end shown as At work, and the activity at the opposite end shown as any of the trip purposes on the survey check-off lists other than At home. Trips from work to work are included, as some respondents were traveling between two jobs.

The ninth trip purpose listed, Non Home or Work-based consists of trips that did not have At home or At Work shown as the activity at either trip end but did show the activities at both ends of the trip.

The second table in the Trip Purpose and Alternate Means Report is Alternate Means of Transportation. This shows the number riders in the selected group indicating that they used each of the travel modes listed in question 15 instead of the boats on some days. It also shows the percentage distribution of alternate modes among these riders who used any alternate modes (not the percentages of alternate mode use out of total ridership). Some passengers apparently misunderstood question 15 as referring to access or egress rather than alternate transportation. For example, if a passenger showed five-day-week use of the boat in question 8, with driving as the mode of access in question 4a, but also showed driving five days a week in question 15, it was assumed that question 15 was answered incorrectly. In such cases, the records were edited to reflect travel modes more accurately. Finally, this table shows the average number of days per week that passengers indicated use of alternate modes.

The third table provides breakdowns of private carrier bus routes used as alternate means of transportation. The fourth table provides breakdowns of boarding stations of passengers using commuter rail as an alternative to a boat. The fifth table provides breakdowns of boarding stations of passengers using rapid transit or route numbers of passengers using MBTA buses as alternatives to a boat. The third, fourth, and fifth tables are each able to show a maximum of five carriers, stations, or routes. If more than five were specified by passengers in the selected group, the top four are listed and

the rest are combined as Other. Alternatives unidentified by carrier, station, or route are not included in these breakdowns. If a passenger specified a stations or route that could be used as part of a connection to a boat but not as an alternative, it was assumed that the reference was to an access or egress mode and the result was modified accordingly.

Trip Purposes

Home-based work trips accounted for the largest numbers of riders by far on all of the South Shore and Inner Harbor boat routes, but the importance varied among routes. Of the two South Shore routes, the Hull route had the higher incidence, at 98.8%, but the Hingham route was close behind, at 96.7%. For comparison, in the Old Colony rail survey, 81.6% of riders on the Middleborough/Lakeville Line and 85.5% on the Plymouth/ Kingston Line were making home-based work trips. The higher rates for the South Shore boat routes are partly a result of the fact that the Hull route has only peak-direction, peak period service and the Hingham route was surveyed only on trips departing Hingham from start of service to just after the A.M. peak. Travel for purposes other than going from home to work is usually a more important component of ridership in hours after the A.M. peak than during the peak.

All of the home-based work trips reported in the South Shore boat surveys were by passengers going from home to work. The Old Colony surveys included a few passengers going from work to home, but these accounted for under 1.0% of the responses, and most were from P.M. peak trains.

On the Hull route, the only trip in a category other than Home-based work was a home-based Work-related trip reported by one passenger. On the Hingham route, there were some responses in each of five trip categories other than Home-based work, but only Work-based trips at 2.0% (36 trips) accounted for more than 1.0% of the total. About two thirds of the passengers reporting Work-based trips indicated that they were on their way to work after stopping at an exercise center or their child's daycare center. These trips were in effect home-to-work trips with brief intermediate stopovers. Another 0.8% (15 riders) were making Home-based Work-related trips.

Among the Inner Harbor routes, passengers on the Navy Yard - Lovejoy Wharf route had the highest incidence of Home-based work travel. During A.M. peak hours, 100% of the riders on boats leaving the Navy Yard and 92.3% of those on boats leaving Lovejoy were going from home to work. The only exception was one passenger on a boat leaving Lovejoy going to work from an unspecified activity. Based on the time of day, this was probably a stopover on the way from home to work.

The Lovejoy Wharf - Courthouse/World Trade Center route had the second-highest Home-to-work travel. On A.M. peak trips leaving Lovejoy, 95.8% of the riders were going from home to work, with the rest making work-related trips from home. On P.M. peak trips going toward Lovejoy, 87.8% of the riders were going from work to home.

The rest were going home either from work-related activities (7.3%) or from recreational activities (4.9%).

The Navy Yard - Long Wharf route had the lowest rate of Home-based work travel of any of the boat routes. On A.M. trips from the Navy Yard, 73.0% of riders were going from home to work, as were 77.8% of the riders on A.M. trips from Long Wharf. Of those not going from home to work on A.M. trips from the Navy Yard, the largest group (8.8%) was going from home to social or recreational activities, followed by trips between two social or recreational activities (6.8%), and trips from home to a store (3.7%). The only other trip purpose with more than 1.0% was trips from home to school (1.4%). Most of the home-based trips originated at condominiums located within a short walk of the Navy Yard wharf. The majority of the trips with social or recreational activity at both ends began either at a hotel near the Navy Yard wharf or at the *U.S.S. Constitution*, also nearby. The proximity of these origins to the wharf makes it the most convenient transit alternative for the start of trips from there to downtown Boston, but few trips for any purpose are attracted from more distant starting points.

Of the passengers not going from home to work on A.M. trips from Long Wharf, the largest group (13.9%) consisted of tourists going from hotels in downtown Boston to the *Constitution* or other attractions near the Navy Yard wharf. The next-largest group (5.6%) was going from work to work-related destinations in the Navy Yard. The remainder were scattered among several trip purposes, each of which accounted for less then 1.5% of the total.

Alternate Means of Transportation.

Hingham Route

On the Hingham route, 59.2% of all passengers on surveyed trips used some other means of travel instead the Hingham boat to make the same trip on some days. Because of reporting of multiple alternate modes by some passengers, the number of reports of alternate modes was equivalent to 66.4% of survey trip riders. On average, among riders who reported some use of alternate means of transportation, the boat was nevertheless used on the majority of travel days.

Of the total reports of use of alternate modes, 73.2 % were of driving alone, with an average use of 0.8 days per week. The second most common alternative reported was MBTA Bus or Subway, at 14.3%, and a use of 0.6 days per week. As would be expected, almost all of the rapid transit boarding stations reported were on the Braintree branch of the Red Line. Of those specifying a station, the largest number (44.6%) used Quincy Center, followed by Braintree (22.9%). The choice of rapid transit station was influenced partly by the location of the trip origin, but there was some reported use of each of the Braintree branch stations.

Carpools and vanpools accounted for 4.4% of the alternate travel modes, with an average use of 1.0 days per week, MBTA commuter rail made up 4.2%, also at 1.0 days.

passengers who used the boat less than one day a week and one from a passenger who used the boat two days a week.) The rest of the alternate means were split between Drive alone and Other, at 20.0% each, but this was only one rider each. The reported Other mode was taxi.

Lovejoy Wharf - Courthouse/World Trade Center Route

Of passengers boarding A.M. peak trips from Lovejoy Wharf, 65.2% indicated some use of alternate travel modes. Because of reporting of multiple alternatives, the number of reports of alternate modes was equivalent to 79.2% of survey trip riders. The most common alternate mode was Other, at 35.2% and 1.1 days a week, consisting entirely of walking trips. This was followed by MBTA Bus/Subway trips, at 29.4%. Most of these involved boarding the Orange or Green lines at North Station. Some of those who specified North Station may have used bus Route 4, which runs from there to the World Trade Center. (Most of the boat riders transferred from commuter rail trains arriving at North Station.)

The remaining alternate mode reports were divided equally between Drive Alone and Private-carrier bus, at 17.6% each. All of the private-carrier trips were on the World Trade Center shuttle, operated for employees of Fidelity Investments.

Of passengers boarding P.M. peak trips from the Courthouse or World Trade Center, 65.0% indicated some use of alternate travel modes. Because of reporting of multiple alternatives, the number of reports of alternate modes was equivalent to 85.4% of survey trip riders. The most common alternate mode was Drive alone, at 32.1%, and 1.1 days a week. This was followed closely by private-carrier bus, at 31.6%, and 0.8 days a week. As on A.M. peak trips from Lovejoy, all private-carrier trips used the World Trade Center shuttle. Use of MBTA Bus/Subway was the third most common alternative, at 18.1% and 0.8 days, Most of the riders in this group did not specify a route or boarding station. There was some use of MBTA bus Route 4.

The next most common alternate mode was Other, at 12.2%, consisting entirely of walking trips. Carpool/vanpool made up the remainder, at 5.8%.

MBTA Ferry Services

2000 Passenger Survey

Trip Purpose and Alternate Means

Route: **Hingham–Rowes Wharf**

Expanded Results - Hingham A.M. Boardings

Trip Purposes

	Number of Riders	Percent of Riders	Cumulative Percentage
Home-based Work	1,737	96.7%	96.7%
Home-based School	2	0.1%	96.8%
Home-based Shopping	0	0.0%	96.8%
Home-based Social Activity	0	0.0%	96.8%
Home-based Personal Business	0	0.0%	96.8%
Home-based Work-related	15	0.8%	97.6%
Home-based Other	7	0.4%	98.0%
Work-based	36	2.0%	100.0%
Non Home or Work-based	0	0.0%	100.0%
TOTAL	1,797	100.0%	100.0%
No Answer	0		

Alternate Means of Transportation

	Number of Riders	Percent of Riders*	Avg. Days Used/Week
Drive alone	874	73.2%	0.8
Carpool/vanpool	52	4.4%	1.0
Private-carrier bus	3	0.3%	0.4
MBTA Commuter rail	50	4.2%	1.0
MBTA Bus/Subway	171	14.3%	0.6
Other	41	3.4%	0.1
TOTAL RIDERS	1,194		

Private carriers used	Riders

MBTA commuter rail stations used	Riders
Quincy Center	21
Halifax	8
South Weymouth	7
Abington	6
Other	3

MBTA subway stations/ bus routes used	Riders
Quincy Center	68
Braintree	36
Quincy Adams	23
Wollaston	19
North Quincy	9

**Note: Percent of riders may total to more than 100 percent due to multiple responses.*

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MBTA Ferry Services

2000 Passenger Survey

Trip Purpose and Alternate Means

Route: **Hull—Quincy–Long Wharf**

Expanded Results

Trip Purposes

	Number of Riders	Percent of Riders	Cumulative Percentage
Home-based Work	80	98.8%	98.8%
Home-based School	0	0.0%	98.8%
Home-based Shopping	0	0.0%	98.8%
Home-based Social Activity	0	0.0%	98.8%
Home-based Personal Business	0	0.0%	98.8%
Home-based Work-related	1	1.2%	100.0%
Home-based Other	0	0.0%	100.0%
Work-based	0	0.0%	100.0%
Non Home or Work-based	0	0.0%	100.0%
TOTAL	81	100.0%	100.0%
No Answer	0		

Alternate Means of Transportation

	Number of Riders	Percent of Riders*	Avg. Days Used/Week
Drive alone	27	50.0%	0.8
Carpool/vanpool	3	5.5%	0.0
Private-carrier bus	2	3.7%	0.0
MBTA Commuter rail	2	3.7%	0.0
MBTA Bus/Subway	9	16.6%	1.2
Other	11	20.3%	0.3
TOTAL RIDERS	54		

Private carriers used	Riders
JBL Bus Lines	2

MBTA commuter rail stations used	Riders
Quincy Center	1

MBTA subway stations/ bus routes used	Riders
Quincy Center	5
North Quincy	2

**Note: Percent of riders may total to more than 100 percent due to multiple responses.*

MBTA Ferry Services

2000 Passenger Survey

Trip Purpose and Alternate Means

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - Navy Yard A.M. Boardings

Trip Purposes

	Number of Riders	Percent of Riders	Cumulative Percentage
Home-based Work	216	73.0%	73.0%
Home-based School	4	1.4%	74.3%
Home-based Shopping	11	3.7%	78.0%
Home-based Social Activity	26	8.8%	86.8%
Home-based Personal Business	3	1.0%	87.8%
Home-based Work-related	9	3.0%	90.9%
Home-based Other	2	0.7%	91.6%
Work-based	5	1.7%	93.2%
Non Home or Work-based	20	6.8%	100.0%
TOTAL	296	100.0%	100.0%
No Answer	0		

Alternate Means of Transportation

	Number of Riders	Percent of Riders*	Avg. Days Used/Week
Drive alone	79	48.0%	1.4
Carpool/vanpool	5	3.1%	0.9
Private-carrier bus	3	2.3%	2.5
MBTA Commuter rail	0	0.0%	
MBTA Bus/Subway	19	11.7%	1.2
Other	57	34.7%	0.5
TOTAL RIDERS	165		

Private carriers used	Riders
MGH Shuttle	3

MBTA commuter rail stations used	Riders

MBTA subway stations/ bus routes used	Riders
Route 93	4
Community College	4
Sullivan Square	1

**Note: Percent of riders may total to more than 100 percent due to multiple responses.*

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MBTA Ferry Services

2000 Passenger Survey

Trip Purpose and Alternate Means

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - Long Wharf A.M. Boardings

Trip Purposes

	Number of Riders	Percent of Riders	Cumulative Percentage
Home-based Work	56	77.8%	77.8%
Home-based School	1	1.4%	79.2%
Home-based Shopping	0	0.0%	79.2%
Home-based Social Activity	1	1.4%	80.6%
Home-based Personal Business	0	0.0%	80.6%
Home-based Work-related	0	0.0%	80.6%
Home-based Other	0	0.0%	80.6%
Work-based	4	5.6%	86.1%
Non Home or Work-based	10	13.9%	100.0%
TOTAL	72	100.0%	100.0%
No Answer	0		

Alternate Means of Transportation

	Number of Riders	Percent of Riders*	Avg. Days Used/Week
Drive alone	11	26.9%	1.2
Carpool/vanpool	1	2.7%	4.0
Private-carrier bus	3	9.0%	2.4
MBTA Commuter rail	0	0.0%	
MBTA Bus/Subway	17	40.0%	0.8
Other	9	21.2%	0.3
TOTAL RIDERS	42		

Private carriers used	Riders
MGH Shuttle	2
Employer Shuttle	1

MBTA commuter rail stations used	Riders

MBTA subway stations/ bus routes used	Riders
Route 93	7
Aquarium	4
North Station	3
Back Bay	2
Haymarket	1

Note: Percent of riders may total to more than 100 percent due to multiple responses.

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MBTA Ferry Services

2000 Passenger Survey

Trip Purpose and Alternate Means

Route: **Charlestown Navy Yard-Lovejoy Wharf**

Expanded Results - A.M. Peak Navy Yard Ons

Trip Purposes

	Number of Riders	Percent of Riders	Cumulative Percentage
Home-based Work	18	100.0%	100.0%
Home-based School	0	0.0%	100.0%
Home-based Shopping	0	0.0%	100.0%
Home-based Social Activity	0	0.0%	100.0%
Home-based Personal Business	0	0.0%	100.0%
Home-based Work-related	0	0.0%	100.0%
Home-based Other	0	0.0%	100.0%
Work-based	0	0.0%	100.0%
Non Home or Work-based	0	0.0%	100.0%
TOTAL	18	100.0%	100.0%
No Answer	0		

Alternate Means of Transportation

	Number of Riders	Percent of Riders*	Avg. Days Used/Week
Drive alone	0	0.0%	
Carpool/vanpool	0	0.0%	
Private-carrier bus	6	50.0%	3.0
MBTA Commuter rail	0	0.0%	
MBTA Bus/Subway	3	25.0%	0.0
Other	3	25.0%	0.0
TOTAL RIDERS	12		

Private carriers used	Riders
MGH Shuttle	6

MBTA commuter rail stations used	Riders

MBTA subway stations/ bus routes used	Riders
Route 93	3

**Note: Percent of riders may total to more than 100 percent due to multiple responses.*

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MBTA Ferry Services

2000 Passenger Survey

Trip Purpose and Alternate Means

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - Lovejoy A.M. Peak Boardings

Trip Purposes

	Number of Riders	Percent of Riders	Cumulative Percentage
Home-based Work	12	92.3%	92.3%
Home-based School	0	0.0%	92.3%
Home-based Shopping	0	0.0%	92.3%
Home-based Social Activity	0	0.0%	92.3%
Home-based Personal Business	0	0.0%	92.3%
Home-based Work-related	0	0.0%	92.3%
Home-based Other	0	0.0%	92.3%
Work-based	1	7.7%	100.0%
Non Home or Work-based	0	0.0%	100.0%
TOTAL	13	100.0%	100.0%
No Answer	0		

Alternate Means of Transportation

	Number of Riders	Percent of Riders*	Avg. Days Used/Week
Drive alone	1	20.0%	0.0
Carpool/vanpool	0	0.0%	
Private-carrier bus	0	0.0%	
MBTA Commuter rail	0	0.0%	
MBTA Bus/Subway	3	60.0%	4.3
Other	1	20.0%	1.0
TOTAL RIDERS	5		

Private carriers used	Riders

MBTA commuter rail stations used	Riders

MBTA subway stations/ bus routes used	Riders
Route 93	3

**Note: Percent of riders may total to more than 100 percent due to multiple responses.*

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MBTA Ferry Services

2000 Passenger Survey

Trip Purpose and Alternate Means

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - A.M. Peak Lovejoy Boardings

Trip Purposes

	Number of Riders	Percent of Riders	Cumulative Percentage
Home-based Work	46	95.8%	95.8%
Home-based School	0	0.0%	95.8%
Home-based Shopping	0	0.0%	95.8%
Home-based Social Activity	0	0.0%	95.8%
Home-based Personal Business	0	0.0%	95.8%
Home-based Work-related	2	4.2%	100.0%
Home-based Other	0	0.0%	100.0%
Work-based	0	0.0%	100.0%
Non Home or Work-based	0	0.0%	100.0%
TOTAL	48	100.0%	100.0%
No Answer	0		

Alternate Means of Transportation

	Number of Riders	Percent of Riders*	Avg. Days Used/Week
Drive alone	6	17.6%	1.6
Carpool/vanpool	0	0.0%	
Private-carrier bus	6	17.6%	1.3
MBTA Commuter rail	0	0.0%	
MBTA Bus/Subway	11	29.4%	1.8
Other	13	35.2%	1.1
TOTAL RIDERS	38		

Private carriers used	Riders
World Trade Ctr. Bus	6

MBTA commuter rail stations used	Riders

MBTA subway stations/ bus routes used	Riders
North Station	9
Route 93	2

**Note: Percent of riders may total to more than 100 percent due to multiple responses.*

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MBTA Ferry Services

2000 Passenger Survey

Trip Purpose and Alternate Means

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - P.M. Peak Courthouse/WTC Ons

Trip Purposes

	Number of Riders	Percent of Riders	Cumulative Percentage
Home-based Work	36	87.8%	87.8%
Home-based School	0	0.0%	87.8%
Home-based Shopping	0	0.0%	87.8%
Home-based Social Activity	2	4.9%	92.7%
Home-based Personal Business	0	0.0%	92.7%
Home-based Work-related	3	7.3%	100.0%
Home-based Other	0	0.0%	100.0%
Work-based	0	0.0%	100.0%
Non Home or Work-based	0	0.0%	100.0%
TOTAL	41	100.0%	100.0%
No Answer	0		

Alternate Means of Transportation

	Number of Riders	Percent of Riders*	Avg. Days Used/Week
Drive alone	11	32.1%	1.1
Carpool/vanpool	2	5.8%	2.5
Private-carrier bus	11	31.6%	0.8
MBTA Commuter rail	0	0.0%	
MBTA Bus/Subway	6	18.1%	0.8
Other	4	12.2%	1.8
TOTAL RIDERS	35		

Private carriers used	Riders
World Trade Ctr. Bus	11

MBTA commuter rail stations used	Riders

MBTA subway stations/ bus routes used	Riders
Route 4	2

**Note: Percent of riders may total to more than 100 percent due to multiple responses.*

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8. Socioeconomic Data

Information Contained

Each Socioeconomic Data report consists of four tables on one page. The first table is Age of Riders. It shows the number and percentage of riders in the selected group in each age range listed on survey question 16. The second table in the report is Gender of Riders. It shows the number and percentage of male riders and female riders in the selected group based on survey question 23.

The third table in the report is Occupations of Riders. It shows the number and percentage of riders in the selected group with each of the seven occupations listed or all other occupations, based on survey question 21.

The fourth table in the report is Annual Household Incomes of Riders. It shows the number and percentage of riders in the selected group in each of the six household income ranges listed in survey question 22. After the fourth table is a single line showing mean household size of respondents in the group. No distribution of household sizes is provided.

Age of Riders

On both of the South Shore commuter boat routes, responses were concentrated most heavily in the three age groups from 25 to 64. These accounted for 98.7% of the riders on the Hull route and for 96.2% of those on the Hull route. For comparison, in the Old Colony commuter rail survey the same three age groups accounted for 85.6% of the riders on the Middleborough/Lakeville Line and for 87.9% on the Plymouth/Kingston Line. The Hull route had no responses from riders 17 and under or 65 and older, and only 1.3% were in the 18 to 24 age group. The Hingham route also had no riders aged 17 or under, but had 1.9% in the 18 to 24 range and 1.8% in the 65 or older range. The very low use of the South Shore commuter boats within age groups that would include mostly students or retirees is at least partly a reflection of the high fares on the boats compared with other MBTA services with similar trip lengths.

The most common individual age range on the Hull route was 45 to 64, at 46.8%. On the Hingham route, ages 35 to 44 were slightly ahead of ages 45 to 64, at 36.2% to 35.7%. On both Old Colony lines ages 45 to 64 were most common but the differences in shares among that range and the 25 to 34 and 35 to 44 ranges were much smaller than on the South Shore boat routes.

The Inner Harbor boat routes showed a greater spread of passenger ages than the South Shore routes, but there were also large variations in the distribution of ages among the

Inner Harbor routes. On morning trips leaving the Navy Yard for Long Wharf, 89.0% of the riders were in the three age groups from 25 to 64. In contrast with the South Shore routes, the most common age group was 25 to 34, at 36.6%. Ages 65 and older accounted for 7.6%, mainly because of tourists staying at a hotel in the Navy Yard. Ages 18 to 24 accounted for 2.8% and ages 17 and under for 0.7%, but the latter was only two riders.

On morning trips leaving Long Wharf for the Navy Yard, 92.4% of the riders were in the three age groups from 25 to 64. This was a slightly greater concentration than in the opposite direction. More significantly, the largest group leaving Long Wharf was in the 45 to 64 age range, at 51.5 %, versus 31.7% in the opposite direction. This is partly because the survey population on boats leaving the Navy Yard was made up mostly of residents of that area, but the population on boats going toward the Navy Yard was made up largely of Charlestown workers and visitors. Morning trips leaving Long Wharf had no reported riders over age 65, but 6.1% were between 18 and 24 and 1.5% age 17 or under. (The latter was only one rider.)

On the Navy Yard - Lovejoy Wharf route, all of the morning survey responses on trips leaving the Navy Yard were from A.M. peak trips. (Passenger counts showed only one morning rider outside the morning A.M. peak.) As on the Long Wharf route, morning Navy Yard boardings were accounted for predominantly by Charlestown residents, but the distribution of ages on the two routes differed. On the Lovejoy route, 83.4% of riders were in the three age groups from 25 to 64, but ages 25 to 34 accounted for 66.7% versus 36.6% on the Long Wharf route. The Lovejoy route had no reported riders over age 44, compared with 31.7% in ages 45 to 64 and 7.6 % age 65 or older on the Long Wharf route. On the Lovejoy route 16.7% of riders were ages 18 to 24, but none 17 or under, compared with 2.8% and 0.7% on the Long Wharf route.

All of the survey responses from boats leaving Lovejoy Wharf for the Navy Yard also came from A.M. peak trips. On these, only 61.6% were in the age ranges from 25 to 64. This was the lowest concentration found on any of the boat routes. Ages 45 to 64 and ages 18 to 24 were tied for the largest concentrations, at 30.8% each. There were no riders 17 or under but 7.7% (one rider) age 65 or older. It should be noted that total ridership on the route and the totals in any age range were all so small that the percentage distributions are not very significant.

On boats leaving Lovejoy Wharf for the Courthouse and World Trade Center, the only morning survey responses were from A.M. peak trips. All of the riders were in the three age ranges from 25 to 64. The largest group was ages 25 to 34, at 47.9%. These were all home-to-work trips, so the age distribution would be expected to reflect that of workers employed in the area around the South Boston wharves.

Most of the surveys from boats leaving the Courthouse and World Trade Center for Lovejoy Wharf came from P.M. peak trips, and most of the riders were going home from work. Thus, age distribution would be expected to be similar to that on A.M. peak trips away from Lovejoy. (There were no apparent duplications of individual survey

respondents in the A.M. and P.M. returns.) Nevertheless, on P.M. peak boats going toward Lovejoy, only 87.5% of the riders were in age ranges 25 to 64. The ranges 25 to 34 and 45 to 64 were tied for first place, at 30.0% each. Ages 65 and older accounted for 5.0%, and ages 18 to 24 for 7.5%, but there were no riders age 17 or under.

Gender of Riders

The gender of riders on both South Shore boat routes was fairly evenly divided between male and female. On the Hingham route the proportion of male riders was slightly higher at 54.7% versus 45.2% female. On the Hull route these proportions were reversed, at 56.2% female and 43.7% male. For comparison, in the Old Colony rail survey, the Plymouth/Kingston Line had 49% male riders, and the Middleborough/ Lakeville Line had 44%.

On the Navy Yard - Long Wharf route, the gender of riders on A.M. trips leaving the Navy Yard was also fairly evenly divided, at 45.9% male and 54.1% female. On trips toward the Navy Yard, however, 67.4% of the respondents were male. In contrast, on A.M. peak boats going toward the Navy Yard from Lovejoy Wharf, 84.6% of the respondents were female. On A.M. peak trips toward Lovejoy Wharf from the Navy yard, the percentages of male and female riders were equal.

On, A.M. peak trips going toward the Courthouse or World Trade Center from Lovejoy Wharf, 61.9% of the riders were male. This contrasts with the 84.6% of female riders going from Lovejoy Wharf to the Navy Yard, although both routes carried mostly riders transferring from commuter rail. The gender division of P.M. peak riders going from the Courthouse or World Trade Center to Lovejoy Wharf was quite consistent with that of A.M. peak riders away from Lovejoy on this route, at 61.7% male.

Occupations of Riders

Technical/Professional

On all of the boat routes, the most common occupation was Technical/Professional. This was partly because this category covered a much greater number of possible occupations than any other category listed on the survey form. On A.M. peak boats going from the Navy Yard to Lovejoy Wharf, 100% of the riders placed themselves in this category. A.M. peak boats going toward the Courthouse or World Trade Center from Lovejoy Wharf had the second-highest proportion of Technical/Professional riders, at 89.1%. Among morning riders in both directions on the Navy Yard - Long Wharf route and toward Boston on the Hingham and Hull routes as well as among P.M. peak riders from the Courthouse or World Trade Center toward Lovejoy Wharf Technical/Professional occupations accounted for 75.0% to 80.0% of all reported occupations. The only route with under 75.0% Technical/Professional occupations was A.M. peak trips from Lovejoy Wharf to the Navy Yard, at 53.8%. This route also had the lowest total ridership, so distributions are less significant.

Secretarial/Clerical

There was much less consistency among routes in rankings of occupations other than Technical/Professional. Secretarial/Clerical placed second on both South Shore routes, at 9.8% on the Hingham route and 16.0% on the Hull route. For comparison, on the two Old Colony commuter rail routes, 19.2% and 15.1% of the riders reported Secretarial/ Clerical jobs.

A.M. peak boats going from Lovejoy Wharf to the Navy Yard had the highest incidence of Secretarial/Clerical workers, at 23.1%, but in absolute numbers this was only three riders. (This also contributed to the unusually low proportion of Technical/ Professional workers on that route.) All of the other routes had much smaller proportions of Secretarial/Clerical workers. None were reported on A.M. trips from the Navy Yard to Lovejoy or from Lovejoy to the Courthouse or World Trade Center. On A.M. trips on the Navy - Yard Long Wharf route, 3.1% of riders leaving Long Wharf and 2.7% leaving the Navy Yard reported Secretarial/Clerical jobs. On P.M. peak trips leaving the Courthouse or World Trade Center the Secretarial/Clerical proportion was 5.3%.

Retail/Sales

The only boat routes with over 5.0% of riders reported in Retail/Sales occupations were A.M. trips on the Hingham route (6.0%) and P.M. peak trips from the Courthouse or World Trade Center (5.3%). There were no Retail/Sales jobs reported among riders on the Hull route, the Navy Yard - Lovejoy route in either direction, or toward the Courthouse or World Trade Center in the A.M. Among A.M. riders on the Navy Yard - Long Wharf route, 3.1% of those boarding at Long Wharf and 3.8% boarding at the Navy Yard had Retail/Sales jobs.

Service/Trades

The route with the highest reported proportion of Service/Trades occupations was A.M. peak trips toward the Navy Yard from Lovejoy Wharf, at 15.4%, but this was only two riders. Next were A.M. peak trips from Lovejoy or toward the Courthouse or World Trade Center (10.9%), P.M. peak trips toward Lovejoy on the same route (7.9%), and A.M. trips toward Long Wharf from the Navy Yard (6.8%). No other route had over 3.5% of its riders in Service/Trade jobs, but only A.M. peak trips from the Navy Yard toward Lovejoy Wharf had none reported.

Student

Students accounted for only a small proportion of commuter boat ridership, probably because of a combination of route location and fare structure. The highest reported proportion of students was on A.M. peak trips from Lovejoy Wharf to the Navy Yard, at 7.7%, but this was only one rider. A.M. trips from Long Wharf to the Navy Yard were next, at 3.1% (2 riders). On A.M. trips from the Navy Yard to Long Wharf, student

ridership was 2.1% (6 riders). On the Hingham route it was only 0.2% (4 riders). There were no students reported on the Hull route, on A.M. peak trips from the Navy Yard to Lovejoy or from Lovejoy to the Courthouse or World Trade Center, or on P.M. peak trips from the Courthouse or World Trade Center.

Homemaker

Only two routes showed any trips by Homemakers. On A.M. trips from the Navy Yard to Long Wharf there were six such riders (2.1%) and on the Hull route there was one (1.2%). Since Homemakers by definition work at home, they would not be expected to make many trips during the hours of the commuter boat survey, when most of the riders were going to or from work.

Unemployed/Retired

Only three routes had any passengers reported as Unemployed/Retired, The highest proportion and absolute number were both found on A.M. trips from the Navy Yard to Long Wharf, at 5.8% and 17 riders. This was largely because of retired tourists staying at a hotel in the Navy Yard. P.M. peak trips from the Courthouse or World Trade Center toward Lovejoy Wharf had 5.3% retired or unemployed riders but this was only two passengers. On the Hingham route, only 0.2% or riders were retired or unemployed, but because of the much higher total ridership, this meant eight riders.

Other

This category was used for riders who checked Other as their occupation on Question 21 on the survey and either did not write in an occupation or wrote in one that could not be re-classified into one of the seven occupation groups listed on the form. The only route with over 2.5% of its riders in Other occupations was A.M. trips from Long Wharf to the Navy Yard, at 9.4% (6 riders). The Hingham route had the largest absolute number (9), but it was only 0.5% of the total on that route. The two Lovejoy Wharf routes had no passengers in either direction with Other occupations.

Annual Household Incomes of Riders

This table shows the number and percentage of riders checking each annual household income range in question 22 on the survey, plus the cumulative percentages with incomes in or below each individual range. This question had the highest "no-response" rate (10%) of any on the survey form. This is typical of survey responses to income questions. Many respondents refuse to divulge their income even though the surveys are anonymous. Others may be uncertain of total household income although they would be willing to report their individual incomes. Answers to many of the questions on the boat survey form could be deduced from responses to other questions, allowing editing of records to reduce the no-response rates , but this could not be done for question 22.

Among boat riders who did respond to the income question, there were significant variations among routes in the percentages in each income range. The Hingham route had the highest reported average income, with 74.7% reporting household incomes of over $80,000. For comparison, in the Old Colony survey only 29.2% of the riders on the Middleborough/Lakeville Line and 39.5% on the Plymouth/Kingston Line reported incomes in this range. To a slight extent, the higher average income on the Hingham boats would be a result of inflation between 1998, when the Old Colony surveys were done, and 2000, when the boat surveys were done. Other factors include the high fares relative to distance on the boats, which would deter use by lower income riders, and the need for most boat riders to use auto access, which would restrict use by riders who cannot afford to own cars.

On the Hull route 54.4% of riders reported household incomes of over $80,000. Although well below the Hingham boat average, this was still above the Old Colony averages. Fares on the Hull route were more consistent with commuter rail fares than were those on the Hingham route, and the convenience of boat service relative to other transit alternatives is greater from Hull than from many of the towns in the Hingham route service area. In addition, the Hull route has much higher proportions of walk-in and drop-off traffic than the Hingham route, so auto availability is less essential.

There were also high proportions of riders with incomes over $80,000 on A.M. trips leaving the Navy Yard for Long Wharf (70.6%) and for Lovejoy Wharf (66.7%), reflecting the predominance of residents of condominiums near the Charlestown wharf among respondents. A.M. departures from Long Wharf for the Navy Yard also had 66.7% of riders reporting incomes over $80,000. This average was pulled up by responses from suburban residents who used the boats as the final link to Charlestown from other transit modes.

On the Lovejoy Wharf - Courthouse/World Trade Center route, incomes of over $80,000 were reported by 44.7% of A.M. peak riders boarding at Lovejoy, and by 42.9% of P.M. peak riders going toward Lovejoy. The majority of riders on this route transferred to or from North Side commuter rail lines. The proportions in the highest income range were slightly higher than that found on the Plymouth/Kingston Old Colony Line.

Boats going to the Navy Yard from Lovejoy Wharf in the A.M. peak had the lowest proportion of riders with incomes over $80,000, at 20.0%. Although this route departs from the same location as the Courthouse/World Trade Center route, the Navy Yard route draws a smaller proportion of its ridership from commuter rail transfers, and a higher proportion from origins within Boston. Because of the low total ridership on the Navy Yard - Lovejoy route, the Socioeconomic data results from it are of limited significance.

At the opposite extreme, there were no reported household incomes of under $20,000 among passengers in either direction on the Navy Yard - Lovejoy Wharf route or among those on A.M. peak trips from Lovejoy Wharf to the Courthouse or World Trade Center.

On the Hingham route, only 0.2% were in the lowest income range. On the other routes, incomes below $20,000 were reported by 1.1% to 3.5% of riders, except on P.M. peak trips from the Courthouse or World Trade Center toward Lovejoy where it was 5.7%. (The latter figure was based on one survey, from a retiree making a non-repetitive recreational trip.)

Mean Household Sizes of Riders

On most of the boat routes, reported mean household sizes ranged between 2.6 and 3.0. The Hingham route, which serves an entirely suburban population, had the highest reported mean, at 2.96. This was very close to the findings on the two Old Colony lines, which had means of 3.00 and 3.01. Passengers boarding A.M. peak trips on the two routes leaving the Navy Yard had significantly lower mean household sizes than the other routes, at 2.00 on the Lovejoy Wharf route and 2.04 on the Long Wharf route. This reflects the smaller average household sizes of Charlestown condominium residents, who account for the majority of riders on these routes, compared with the suburban households of many or most of the riders on the other routes.

MBTA Ferry Services

2000 Passenger Survey

Socioeconomic Data

Route: **Hingham–Rowes Wharf**

Expanded Results - Hingham A.M. Boardings

Age of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
17 and Under	0	0.0%	0.0%
18 - 24	34	1.9%	1.9%
25 - 34	437	24.3%	26.2%
35 - 44	650	36.2%	62.5%
45 - 64	641	35.7%	98.2%
65 and Older	33	1.8%	100.0%
TOTAL	1,795	100.0%	100.0%
No Answer	3		

Gender of Riders:

	Number of Riders	Percent of Riders
Male	970	54.7%
Female	803	45.2%
TOTAL	1,773	100.0%
No Answer	25	

Occupations of Riders:

	Number of Riders	Percent of Riders
Retail/Sales	106	6.0%
Service/Trades	57	3.2%
Student	4	0.2%
Secretarial/Clerical	173	9.8%
Homemaker	0	0.0%
Technical/Professional	1,403	79.7%
Unemployed/Retired	8	0.5%
Other	9	0.5%
TOTAL	1,760	100.0%
No Answer	38	

Annual Household Incomes of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
Under $20,000	4	0.2%	0.2%
$20,000 - $29,999	15	0.9%	1.2%
$30,000 - $39,999	59	3.6%	4.8%
$40,000 - $59,999	146	9.0%	13.7%
$60,000 - $79,999	188	11.5%	25.3%
Over $80,000	1,218	74.7%	100.0%
TOTAL	1,630	100.0%	100.0%
No Answer	167		
Mean Household Size	2.96		

MBTA Ferry Services

2000 Passenger Survey

Socioeconomic Data

Route: **Hull—Quincy–Long Wharf**

Expanded Results - A.M. Peak Hull Ons

Age of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
17 and Under	0	0.0%	0.0%
18 - 24	1	1.3%	1.3%
25 - 34	11	13.9%	15.2%
35 - 44	30	38.0%	53.2%
45 - 64	37	46.8%	100.0%
65 and Older	0	0.0%	100.0%
TOTAL	79	100.0%	100.0%
No Answer	2		

Gender of Riders:

	Number of Riders	Percent of Riders
Male	35	43.7%
Female	45	56.2%
TOTAL	80	100.0%
No Answer	1	

Occupations of Riders:

	Number of Riders	Percent of Riders
Retail/Sales	0	0.0%
Service/Trades	2	2.5%
Student	0	0.0%
Secretarial/Clerical	13	16.0%
Homemaker	1	1.2%
Technical/Professional	63	77.8%
Unemployed/Retired	0	0.0%
Other	2	2.5%
TOTAL	81	100.0%
No Answer	0	

Annual Household Incomes of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
Under $20,000	2	2.9%	2.9%
$20,000 - $29,999	2	2.9%	5.9%
$30,000 - $39,999	6	8.8%	14.7%
$40,000 - $59,999	11	16.2%	30.9%
$60,000 - $79,999	10	14.7%	45.6%
Over $80,000	37	54.4%	100.0%
TOTAL	68	100.0%	100.0%
No Answer	13		

Mean Household Size 2.61

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MBTA Ferry Services

2000 Passenger Survey

Socioeconomic Data

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - A.M. Navy Yard Boardings

Age of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
17 and Under	2	0.7%	0.7%
18 - 24	8	2.8%	3.4%
25 - 34	106	36.6%	40.0%
35 - 44	60	20.7%	60.7%
45 - 64	92	31.7%	92.4%
65 and Older	22	7.6%	100.0%
TOTAL	290	100.0%	100.0%
No Answer	5		

Gender of Riders:

	Number of Riders	Percent of Riders
Male	134	45.8%
Female	158	54.1%
TOTAL	293	100.0%
No Answer	1	

Occupations of Riders:

	Number of Riders	Percent of Riders
Retail/Sales	11	3.8%
Service/Trades	20	6.8%
Student	6	2.1%
Secretarial/Clerical	8	2.7%
Homemaker	6	2.1%
Technical/Professional	219	75.0%
Unemployed/Retired	17	5.8%
Other	5	1.7%
TOTAL	292	100.0%
No Answer	3	

Annual Household Incomes of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
Under $20,000	3	1.1%	1.1%
$20,000 - $29,999	8	3.1%	4.2%
$30,000 - $39,999	3	1.1%	5.3%
$40,000 - $59,999	38	14.5%	19.8%
$60,000 - $79,999	25	9.5%	29.4%
Over $80,000	185	70.6%	100.0%
TOTAL	262	100.0%	100.0%
No Answer	32		
Mean Household Size	2.04		

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MBTA Ferry Services
2000 Passenger Survey

Socioeconomic Data

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - A.M. Long Wharf Boardings

Age of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
17 and Under	1	1.5%	1.5%
18 - 24	4	6.1%	7.6%
25 - 34	14	21.2%	28.8%
35 - 44	13	19.7%	48.5%
45 - 64	34	51.5%	100.0%
65 and Older	0	0.0%	100.0%
TOTAL	66	100.0%	100.0%
No Answer	6		

Gender of Riders:

	Number of Riders	Percent of Riders
Male	43	67.4%
Female	20	32.5%
TOTAL	64	100.0%
No Answer	7	

Occupations of Riders:

	Number of Riders	Percent of Riders
Retail/Sales	2	3.1%
Service/Trades	1	1.6%
Student	2	3.1%
Secretarial/Clerical	2	3.1%
Homemaker	0	0.0%
Technical/Professional	51	79.7%
Unemployed/Retired	0	0.0%
Other	6	9.4%
TOTAL	64	100.0%
No Answer	6	

Annual Household Incomes of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
Under $20,000	2	3.5%	3.5%
$20,000 - $29,999	1	1.8%	5.3%
$30,000 - $39,999	5	8.8%	14.0%
$40,000 - $59,999	7	12.3%	26.3%
$60,000 - $79,999	4	7.0%	33.3%
Over $80,000	38	66.7%	100.0%
TOTAL	57	100.0%	100.0%
No Answer	14		
Mean Household Size	2.71		

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MBTA Ferry Services
2000 Passenger Survey

Socioeconomic Data

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Navy Yard Ons

Age of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
17 and Under	0	0.0%	0.0%
18 - 24	3	16.7%	16.7%
25 - 34	12	66.7%	83.3%
35 - 44	3	16.7%	100.0%
45 - 64	0	0.0%	100.0%
65 and Older	0	0.0%	100.0%
TOTAL	18	100.0%	100.0%
No Answer	0		

Gender of Riders:

	Number of Riders	Percent of Riders
Male	9	50.0%
Female	9	50.0%
TOTAL	18	100.0%
No Answer	0	

Occupations of Riders:

	Number of Riders	Percent of Riders
Retail/Sales	0	0.0%
Service/Trades	0	0.0%
Student	0	0.0%
Secretarial/Clerical	0	0.0%
Homemaker	0	0.0%
Technical/Professional	18	100.0%
Unemployed/Retired	0	0.0%
Other	0	0.0%
TOTAL	18	100.0%
No Answer	0	

Annual Household Incomes of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
Under $20,000	0	0.0%	0.0%
$20,000 - $29,999	0	0.0%	0.0%
$30,000 - $39,999	0	0.0%	0.0%
$40,000 - $59,999	3	16.7%	16.7%
$60,000 - $79,999	3	16.7%	33.3%
Over $80,000	12	66.7%	100.0%
TOTAL	18	100.0%	100.0%
No Answer	0		

Mean Household Size	2.00

MBTA Ferry Services
2000 Passenger Survey

Socioeconomic Data

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Lovejoy Wharf Ons

Age of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
17 and Under	0	0.0%	0.0%
18 - 24	4	30.8%	30.8%
25 - 34	2	15.4%	46.2%
35 - 44	2	15.4%	61.5%
45 - 64	4	30.8%	92.3%
65 and Older	1	7.7%	100.0%
TOTAL	13	100.0%	100.0%
No Answer	0		

Gender of Riders:

	Number of Riders	Percent of Riders
Male	2	15.3%
Female	11	84.6%
TOTAL	13	100.0%
No Answer	0	

Occupations of Riders:

	Number of Riders	Percent of Riders
Retail/Sales	0	0.0%
Service/Trades	2	15.4%
Student	1	7.7%
Secretarial/Clerical	3	23.1%
Homemaker	0	0.0%
Technical/Professional	7	53.8%
Unemployed/Retired	0	0.0%
Other	0	0.0%
TOTAL	13	100.0%
No Answer	0	

Annual Household Incomes of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
Under $20,000	0	0.0%	0.0%
$20,000 - $29,999	2	20.0%	20.0%
$30,000 - $39,999	0	0.0%	20.0%
$40,000 - $59,999	4	40.0%	60.0%
$60,000 - $79,999	2	20.0%	80.0%
Over $80,000	2	20.0%	100.0%
TOTAL	10	100.0%	100.0%
No Answer	3		

Mean Household Size	2.64

MBTA Ferry Services

2000 Passenger Survey

Socioeconomic Data

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - A.M. peak Lovejoy Wharf Ons

Age of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
17 and Under	0	0.0%	0.0%
18 - 24	0	0.0%	0.0%
25 - 34	23	47.9%	47.9%
35 - 44	11	22.9%	70.8%
45 - 64	14	29.2%	100.0%
65 and Older	0	0.0%	100.0%
TOTAL	48	100.0%	100.0%
No Answer	0		

Gender of Riders:

	Number of Riders	Percent of Riders
Male	29	61.9%
Female	18	38.0%
TOTAL	47	100.0%
No Answer	0	

Occupations of Riders:

	Number of Riders	Percent of Riders
Retail/Sales	0	0.0%
Service/Trades	5	10.9%
Student	0	0.0%
Secretarial/Clerical	0	0.0%
Homemaker	0	0.0%
Technical/Professional	41	89.1%
Unemployed/Retired	0	0.0%
Other	0	0.0%
TOTAL	46	100.0%
No Answer	2	

Annual Household Incomes of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
Under $20,000	0	0.0%	0.0%
$20,000 - $29,999	5	10.6%	10.6%
$30,000 - $39,999	2	4.3%	14.9%
$40,000 - $59,999	5	10.6%	25.5%
$60,000 - $79,999	14	29.8%	55.3%
Over $80,000	21	44.7%	100.0%
TOTAL	47	100.0%	100.0%
No Answer	2		

Mean Household Size 2.75

CTPS
2/26/01

MBTA Ferry Services

2000 Passenger Survey

Socioeconomic Data

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - P.M. Peak Courthouse/WTC Ons

Age of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
17 and Under	0	0.0%	0.0%
18 - 24	3	7.5%	7.5%
25 - 34	12	30.0%	37.5%
35 - 44	11	27.5%	65.0%
45 - 64	12	30.0%	95.0%
65 and Older	2	5.0%	100.0%
TOTAL	40	100.0%	100.0%
No Answer	0		

Gender of Riders:

	Number of Riders	Percent of Riders
Male	23	61.7%
Female	14	38.2%
TOTAL	38	100.0%
No Answer	1	

Occupations of Riders:

	Number of Riders	Percent of Riders
Retail/Sales	2	5.3%
Service/Trades	3	7.9%
Student	0	0.0%
Secretarial/Clerical	2	5.3%
Homemaker	0	0.0%
Technical/Professional	29	76.3%
Unemployed/Retired	2	5.3%
Other	0	0.0%
TOTAL	38	100.0%
No Answer	2	

Annual Household Incomes of Riders:

	Number of Riders	Percent of Riders	Cumulative Percentage
Under $20,000	2	5.7%	5.7%
$20,000 - $29,999	0	0.0%	5.7%
$30,000 - $39,999	3	8.6%	14.3%
$40,000 - $59,999	10	28.6%	42.9%
$60,000 - $79,999	5	14.3%	57.1%
Over $80,000	15	42.9%	100.0%
TOTAL	35	100.0%	100.0%
No Answer	5		

Mean Household Size 2.89

CTPS
2/26/01

9. Usage Rates by Fare Type

Information Contained

Each Usage Rates by Fare Type report consists of four tables on one page. The first table is Number of Days per Week Riders Use Ferries, and is based on survey question 8. It shows the number and percentage of riders in the selected group using boat service each number of days per week, from less than one to five on South Shore routes, which only run on weekdays, and from less than one to seven on Inner Harbor routes, some of which have weekend service. It also shows the cumulative percentages up to and including each number of days per week.

The second table in the report is Seasonal Variation of Usage, and is based on survey question 10. It shows the number and percentage of riders in the selected group using boat service the same amount year-round, less in the winter than in the summer, or other.

The third table in the report is Duration of Stay in Boston, and is based on the combined results of survey questions 2 and 13. The value computed as the duration of stay is actually the elapsed time between the boarding times shown in question 2, for initial trip, and question 13 for the return trip. Therefore, it includes the travel time on board the initial boat trip of the day, along with any time that the respondent included for waiting on the boat prior to departure. Scheduled running times range from five minutes for the Navy Yard - Lovejoy Wharf run to 60 minutes for the Hull - Long Wharf run.

The ranges of duration of stay shown in the table are Less than 8 hours, 8 to 9.5 hours, 9.5 to 11 hours, More than 11 hours, and No Return Trip. The label "Duration of Stay in Boston" implies that the inner trip end for all passengers is in Boston, but as discussed in chapter 4, small numbers of passengers on some of the routes continue through Boston to other cities or towns.

Following the Duration of Stay table is a single line showing the number of riders in the selected group using the boat at relatively constant times, based on the response to survey question 14.

The fourth table in the report is Usage Rates by Fare Type. It shows the number and percentage of riders in the selected group who paid their boat fares by each fare payment method listed in survey question 5. The choices differed slightly between South Shore and Inner Harbor routes, because of differences in fare payment options offered on these routes. The table also shows the average number of days per week that

the riders using each fare payment method used boat service. This is based on the responses to survey question 8.

Number of Days Per Week Riders Use Ferries

On all of the boat routes, the largest group of riders indicated that they used the service five days a week. The proportion in this group varied among routes, however. The two South Shore routes had the heaviest five-day-a-week ridership, at 77.8% on the Hull route, and 76.8% on the Hingham route. Neither route has weekend service, so five days is the maximum possible weekly usage, and all of this must be on weekdays. For comparison, the Old Colony commuter rail survey showed usage of five or more days a week at 76.0% on the Middleborough/Lakeville Line, and 75,2% on the Plymouth/ Kingston Line. Both Old Colony lines have daily service, so passengers riding fewer than seven days could have ridden fewer than five weekdays. Nevertheless, the results indicate that South Shore boat riders and South Shore rail riders are about equally committed to their respective services.

Among Inner Harbor routes, only the Navy Yard - Long Wharf route has daily service; the other two routes run only on weekdays. The highest frequency of five-day a week ridership reported was by passengers boarding A.M. peak boats going from the Navy Yard toward Lovejoy Wharf, at 66.7%. Total A.M. service from the Navy Yard to Long Wharf was close behind, with 66.5% reporting use five to seven days a week. This included 4.3% at six days and 5.3% at seven days. (As on the Old Colony rail lines, ridership less than seven days a week could have included a combination of weekdays and weekend days.)

Among riders on the Lovejoy - Courthouse/World Trade Center route, 65.3% on A.M. peak trips from Lovejoy and 62.5% on P.M. peak trips toward Lovejoy were five-day a week riders. On A.M. peak trips from Long Wharf to the Navy Yard, 60.5% were at least five-day-a-week riders. This included 4.2% at six days, but none at seven days. A.M. peak riders on trips from Lovejoy Wharf to the Navy Yard had the lowest five-day-a-week use, at 41.7%.

At the opposite extreme, use of boats less than one day a week showed large variation among routes. These results are less reliable than those from regular riders, because occasional or one-time riders often assume that surveys do not pertain to them, and do not return them.

On the South Shore routes, the Hull route had no responses from riders in either the category of less than one day a week or that of one day. Because of the infrequent service on this route and the location of the South Shore terminal, infrequent travelers. may not be aware that it is an option for them. The Hingham route had 0.9% of riders in the less than one day group, and 1.0% in the one day group.

Among Inner Harbor routes, only A.M. peak trips from the Navy Yard to Lovejoy Wharf had no responses from less-than-one-day riders, but 16.7% were one-day riders.

Because of the small total ridership on this route, it is possible that there are occasional riders on some days but that there were none on the survey day. On the other Inner Harbor routes, ridership less than one day a week ranged from 5.0% on A.M. peak trips from the Navy Yard to Long Wharf to 19.7% on A.M. peak trips from Long Wharf to the Navy Yard. The latter figure was mostly a result of tourists going from downtown Boston hotels to the *U.S.S. Constitution*. The only other route with over 7.5% of its ridership under one day a week was A.M. peak trips from Lovejoy to the Navy Yard, at 16.7%. This resulted from tourist traffic transfers from commuter rail.

Seasonal Variation of Usage

Commuter boats are more vulnerable to weather-related problems than are most other MBTA transit modes. For this reason, ridership is typically lowest in winter months and highest in summer months. This is the opposite of the pattern on many services, where bad winter weather encourages greater use of transit, but summer vacations reduce transit use. The boat surveys were conducted in late April, so they would have included a mix of year-round and seasonal riders.

Despite weather-related problems, the majority of riders on every boat route indicated that their use of the service was the same year-round. On the South Shore routes, 94.7% of those on the Hingham route and 93.8% on the Hull route indicated uniform year-round use. Among the Inner Harbor routes, A.M. peak passengers going from Lovejoy Wharf to the Courthouse or World Trade Center had the heaviest uniform year-round use, at 95.8%. P.M. peak riders going toward Lovejoy on the same route were next, at 87.5%. On the Navy Yard - Long Wharf route 81.0% of A.M. peak riders from Long Wharf and 78.5% of those from the Navy Yard were uniform year-round riders. A.M. peak riders on the Navy Yard - Lovejoy Wharf route had the lowest year-round use, at 66.7% in each direction.

On most routes, the majority of riders who did not use service the same amount year-round used it less in the winter than in the summer. The main exception was among A.M. peak Navy Yard boardings of passengers going to Long Wharf. Among these, 78.5% were year-round riders and 9.3% rode less in Winter than in summer, but 12.2% indicated Other variations. Among these were tourists who happened to be riding during the survey week, but would not have used the service at all at other times. Also included were many riders who rode less in summer or more in winter because they walked instead of taking the boat in fair weather.

Duration of Stay in Boston

The durations of stay in Boston, as shown in the reports, vary among routes. This is partly a result of actual differences, and partly a result of the calculation method, as discussed in the introduction to this chapter. Passengers making round trips on the Hull route have the least possible range of stays in Boston. The shortest possible span would be 9.75 hours, with a 7:25 A.M. Hull departure and a 5:10 P.M. Boston return. The longest possible would be 10.9 hours, with a 6:50 A.M. Hull departure and a 5:45 P.M.

Boston return. (Actual time in Boston would be one hour less in each case.) The report shows that 97.5% of riders had durations of stays between 9.5 and 11 hours, and 2.5% stayed over 11 hours. (The latter would have resulted from passengers who showed boarding times more than five minutes prior to departure times.)

The Hingham route, which has all-day service, had a much greater spread of durations of stays in Boston. Spans of 9.5 to 11 hours were also the most common, but accounted for only 58.1% of the total. Spans of 8 to 9.5 hours were next, at 22.4%. The scheduled running time from Hingham to Rowes Wharf is 35 minutes, compared with 60 minutes from Hull to Long Wharf, so the time spans for the Hingham route include a smaller component of time on the boat. Only 3.1% of Hingham riders had durations of under 8 hours in Boston. This is as would be expected, as the majority of riders were making trips to work locations in Boston, and most full-time jobs would require stays of over 8 hours. Durations of over 11 hours were reported by 15.4%. Only 1.0% reported that they would not be using Hingham boats on their return trips.

Among Inner Harbor route riders, passengers on A.M. peak trips from Lovejoy Wharf to the Courthouse or World Trade Center had the shortest average durations of stays in Boston. The most common was 8 to 9.5 hours, at 61.9%, and another 14.3% had stays of less than 8 hours. There were no reported times over 11 hours, but 9.5% were only riding one way. The scheduled running time on the boat is 15 minutes from Lovejoy to the Courthouse or 20 minutes to the World Trade Center, but actual times can be shorter. On P.M. peak trips from the Courthouse or World Trade Center to Lovejoy, the report shows that 68.2% of the riders were making their only trips of the day. The sample for this variable is biased, however, as two-way riders had already had an opportunity to complete surveys on their A.M. trips, but one-way P.M. riders were getting surveys for the first time. Of the P.M. peak riders who had also made earlier trips in the opposite direction, 39.0% had Boston stay durations of 8 to 9.5 hours and another 28.3% had durations less than 8 hours, As on A.M. trips from Lovejoy, there were no reported stays of over 11 hours. (With the hours of operation of this route, the maximum possible duration would be 12.0 hours, but passenger counts show very little ridership on the earliest departures from Lovejoy and the latest returns to that point.)

On the Navy Yard - Long Wharf route, the most common duration of stay for A.M. riders from the Long Wharf was 8 to 9.5 hours, at 40.8%, but 9.5 to 11.0 hours was next, at 26.6%. Only 2.2% had durations over 11.0 hours, but 17.1% were not making return trips. In the opposite direction, among A.M. riders from the Navy Yard, durations of 9.5 to 11 hours were most common, at 41.1%. Stays of under 8 hours were a distant second, at 18.8%. Durations of over 11 hours accounted for 16.5%, which was the highest proportion in this group on any Inner Harbor route. One-way trips were being made by 9,2%. The scheduled running time on this route is 10 minutes, so durations include little time in transit

The Navy Yard - Lovejoy Wharf route had the highest overall incidence of one-way riders of any of the boat routes as well as the lowest total ridership. On A.M. peak trips from the Navy Yard, 50.0% of the riders were not planning to return by boat. All of the

others indicated average stays of 9.5 to 11.0 hours. On A.M. peak trips from Lovejoy Wharf, 38.5% of the riders were not planning to return by boat. The other 50.0% indicated average stays of 9.5 to 11.0 hours. Among those passengers who did plan to return by boat, 50.0% indicated durations of 9.5 to 11 hours, 37.5% showed 8 to 9.5 hours and the rest less than 8 hours. The scheduled running time on this route is only 5 minutes, so durations include almost no time in transit. This route is short enough for walking to be a feasible alternative in good weather. It is also possible to travel between the same general areas of the two terminals via MBTA bus route 93.

Percent of Riders with Constant Schedules

As would be expected, the Hull route, which offers the fewest choices of Boston arrival and departure times of any of the boat routes, had the highest proportion of riders who usually rode at the same times every day, at 84.0%. On the Hingham route, which offers all-day service, only 59.0% reported constant schedules. This implies that lack of flexibility in travel times as well as lack of trips at specific individual times is a deterrent to ridership on the Hull route.

Among Inner Harbor routes, the highest proportion of passengers with constant schedules was found on P.M. peak trips from the Courthouse or World Trade Center to Lovejoy Wharf, at 78.1%. This figure was heavily influenced by the responses from riders who only used P.M. peak service. In that group, 85.7% had constant schedules, compared with only 55.6% of those who made two-way trips. All of the one-way riders with constant schedules transferred to commuter rail lines at North Station. Apparently they felt that the P.M. boat trips gave them acceptable connecting times to the trains they wanted to ride, but that A.M. boat trips involved too much delay.

On the rest of the Inner Harbor routes, the percentages of riders with constant schedules ranged from a low of 52.5% on A.M. trips from the Navy Yard to Long Wharf to a high of 66.7% on A.M. trips from the Navy Yard to Lovejoy Wharf. The low percentage of constant schedules on the Long Wharf route was made possible by the longer span of operating hours and more frequent departures compared with the other Inner Harbor routes. (A.M. riders on trips from Long Wharf toward the Navy Yard had the second-lowest incidence of constant schedules, at 57.8%.)

Usage Rates by Fare Type

South Shore Routes

The two South Shore boat routes offer the same range of fare options, but the actual fares in most categories differ. On both routes, the most popular fare at the time of the survey was the 10-ride ticket, used by 92.5% of the riders on the Hull route and by 74.5% of those on the Hingham route. At that time, the one-way full fare was $4.00 on the Hingham route and $3.00 on the Hull route. Use of a 10-ride ticket provided a discount of 15% off the full fare on the Hingham route, and 16.7% on the Hull route.

Full fares were paid by only 1.5% of Hingham boat riders and 1.2% of Hull riders, consistent with the low reported rates of infrequent riding on both routes.

Adult monthly passes were used by 21.8% of Hingham boat riders, but by only 3.7% of Hull boat riders. The same pass was required on either route. The break-even cost per trip between a pass and a 10-ride ticket occurred at 20 round trips a month for a Hingham boat rider, but at 27.2 for a Hull boat rider. Since both routes operate only on weekdays, Hingham riders would have needed to use the boat almost every weekday to save money with a pass. Hull boat riders would never have saved money by using a pass if they traveled only via the Hull boat. A pass would have allowed free transfer to the subway in Boston, but in most cases use of a 10-ride ticket and a subway pass would have cost less than use of a boat pass. The few pass users on the Hull route apparently used them mainly for convenience, or because they were subsidized by their employers.

On most other MBTA services, the break-even point between passes and the next-lowest fare alternative is much lower than on the commuter boats, resulting in greater pass use. For example in the 1998 survey, passes were used by 58.7% and 56.6% of the riders on the two Old Colony lines.

Neither South Shore route had any reported child or student fares, consistent with the fact that neither one had any reported riders age 17 or under. (Children and students below college level usually have low survey response rates, so the absence of any surveys from that group does not prove that there were no riders in that age bracket.) The Hull route also showed no senior citizen or disability fares, but the Hingham route had 1.6% of its fares in that category. The Hull route had no riders over age 65, and apparently also had no riders qualifying for disability fares. On the Hingham route, 85% of the users of senior citizen or disability fares were age 65 or over, implying that the remainder qualified for disability fares. Of the riders age 65 or older, 24% reported that they used 10-ride tickets rather than senior citizen tickets, even though this resulted in a cost per ride of $3.40 instead of $2.00. All of the latter were going from home to work, and they may not have realized that they qualified for the senior citizen discount.

Other methods of fare payment were reported by 2.4% of riders on the Hull route and by 0.2% on the Hingham route. On the Hull route, there were two such passengers. One was using a special reduced ticket for Logan Airport employees. This passenger was going to the airport wharf, which is served as part of the unsubsidized portion of the route, and otherwise has fares that would be prohibitively high for commuters. The second passenger reporting an Other fare gave no indication of what it was. On the Hingham route, Other fare results were expanded from two surveys, one of which showed use of an MBTA employee pass and the other of which did not specify what the Other fare was.

As would be expected, among Hingham route passengers, monthly pass users had the highest frequency of ridership, at an average of 4.9 days a week, but 10-ride ticket users were close behind, at 4.5 days. Adult cash fare riders rode an average of 3.2 days per week. On the Hull route, the one Adult cash fare rider reported five-day a week use,

but may not have made a round trip every day. The three pass users had slightly more frequent use than the 10-ride ticket users (4.7 versus 4.6 days) but not enough to justify the higher cost of the pass.

Inner Harbor Routes

The three Inner Harbor ferry routes all offer the same fares and fare options, but use of these fares varies substantially among routes, and even among directions on routes. At the time of the survey, the Adult cash fare on all routes was $1.00. The only multiple-ride ticket available was a 60-ride ticket, which reduced the cost per ride to 75 cents. The lowest level MBTA pass accepted was the Combo Plus. If used exclusively on the boat, it would have required 64 one-way rides, or 32 round trips a month in order to be more cost-effective than a 60-ride ticket. The Combo Plus pass could also be used on MBTA local bus routes and at downtown rapid transit stations, however.

Navy Yard - Long Wharf Route

Among Inner Harbor boats surveyed, A.M. trips from the Navy Yard to Long Wharf had the most ridership, with 293 riders. Among these, the most common fare payment type was Adult cash fares, reported by 50.4%. Full-fare passengers were also among the least frequent riders, at an average of 3.8 days per week. The second-largest group was 60-ride ticket users, with an average rate of 4.6 days per week. Pass users were the most frequent riders, at 5.5 days, but accounted for only 7.8% of total riders. Of those using passes, 26% transferred to rapid transit lines to complete their trips. The rest used only the boats for the trips they were making, but may have used other services for other purposes.

Senior citizen/disabled reduced fares were reported by 7.3% of A.M. riders from the Navy Yard to Long Wharf. Of these 87.5% were over age 65 and 12.5% under age 65 but with a disability. All of the senior citizens were starting their trips either at homes near the Navy Yard wharf or at a hotel there. The average use rate for these reduced fares was 2.7 days a week.

There was no reported use of visitor passes, but these would have been more likely to appear on trips later in the day, which were not surveyed. There were also no reported child or student fares. One passenger reported use of an Other fare, but did not specify what it was.

In the opposite direction, on A.M. boats leaving Long Wharf, the most common fare payment method was Adult monthly passes, at 48.3%. Almost all of the pass users transferred from other MBTA services and presumably used the passes to ride those services. Those needing Combo Plus or higher passes for the connecting services could ride the boats at no additional cost. These passengers used the boats an average of 4.4 days week, but may have used the connecting services more often.

The second most common fare payment method on A.M. boats from Long Wharf was Adult cash fares, at 37.9%. For these riders, the average use rate was only 2.0 days per week. Use of 60-ride tickets was third, at 12.0%, but passengers using these fares had the highest average use, at 4.9 days per week. A few of these riders transferred from the Blue Line, and might have saved money if they had used Combo Plus passes instead.

There was only one reported Senior citizen/disabled fare, used by a passenger over age 65. There were no reports of visitor passes, Child/student, or Other fares. As on trips from the Navy Yard, use of visitor passes would be expected to be more common on trips from Long Wharf later in the day that were not surveyed.

Lovejoy Wharf - Courthouse/World Trade Center Route

This route has the second-highest ridership of the Inner Harbor ferry routes. It had by far the highest rate of pass use of any of the routes, at 80.9% on A.M. peak trips leaving Lovejoy and 82.2% on P.M. peak trips toward Lovejoy. Almost all of the A.M. pass users transferred from commuter rail at North Station and were using commuter rail passes to ride the boats at no extra cost. Similarly, almost all of the P.M. pass users transferred to commuter rail at North Station and were using their rail passes. The average boat use rate was 4.4 days among the A.M. pass users and 4.5 days among the P.M. pass users.

A.M. peak riders from Lovejoy who did not use passes were equally divided between use of adult cash fares and 60-ride tickets, at 9.5% each. The 60-ride passengers had the most frequent use, at 4.5 days a week. The cash fare passengers rode an average of only 2.0 days.

P.M. peak riders toward Lovejoy who did not use passes were mostly divided between use of Adult cash fares and Senior citizen/disabled fares, at 6.7% each. The Senior citizen/disabled fares were divided equally between senior and disabled, and had an average use rate of 1.5 days week. The Adult cash fare passengers rode an average of only 0.4 days. There was also one passenger reporting an Other fare. This was an authorized free rider with a pass from the Mass. Commission for the Blind, who rode 5.0 days a week. There were no Child/student or visitor passes reported in either direction on this route.

Navy Yard - Lovejoy Wharf Route

This route has the lowest ridership of all the MBTA water transportation services. On A.M. peak trips from Lovejoy, the most common fare payment method was Adult monthly passes, at 61.5%. All of these riders transferred from commuter rail or rapid transit lines and used the same passes to ride on those lines. The average use rate of these riders was only 3.5 days on the boats. Adult cash fares were second, at 30.7%, and an average use rate of 2.3 days a week. There was one Senior citizen/disabled fare, from a passenger over age 65 who rode 5.0 days a week.

On A.M. peak trips leaving the Navy Yard, the most common fare was Adult cash, at 50.0% and an average rate of 3.0 days week. This was very similar to the 50.4% and 3.8 days among A.M. peak riders leaving the Navy Yard for Long Wharf. The second most common fare for A.M. peak passengers from the Navy Yard to Lovejoy was 60-ride tickets, used by 33.3% at an average of 5.0 days a week. This compares with 33.6% and 4.6 days for passenger from the Navy Yard to Long Wharf.

The remainder of riders to Lovejoy (16.6%) used Adult monthly passes, and rode an average of 5.0 days. This result was based on one survey, from a rider who transferred to the Orange Line at North Station. There were no visitor passes, Child/student, or Other fares reported by passengers in either direction on this route.

MBTA Ferry Services

2000 Passenger Survey

Usage Rates by Fare Type

Route: **Hingham–Rowes Wharf**

Expanded Results - Hingham A.M. Boardings

Number of Days per Week Riders Use Ferries

	Number of Riders	Percent of Riders	Cumulative Percentage
Less Than One	16	0.9%	0.9%
One Day	18	1.0%	1.9%
Two Days	40	2.2%	4.1%
Three Days	119	6.6%	10.7%
Four Days	224	12.5%	23.2%
Five Days	1,380	76.8%	100.0%
Six Days	0	0.0%	100.0%
Seven Days	0	0.0%	100.0%
TOTAL	1,797	100.0%	100.0%
No Answer	1		

Seasonal Variation of Usage

	Number of Riders	Percent of Riders	Cumulative Percentage
Same year-round	1,696	94.7%	94.7%
Less in winter	66	3.7%	98.4%
Other	28	1.6%	100.0%
TOTAL	1,790	100.0%	100.0%
No Answer	7		

Duration of Stay in Boston

	Number of Riders	Percent of Riders	Cumulative Percentage
Less than 8 hours	55	3.1%	3.1%
8 to 9.5 hours	402	22.4%	25.5%
9.5 to 11 hours	1043	58.1%	83.6%
More than 11 hours	276	15.4%	99.0%
No Return Trip	19	1.0%	100.0%
TOTAL	1795	100.0%	100.0%
No Answer	4		

Percent of Riders with Constant Schedules:

59.0%

Usage Rates by Fare Type

Fare Payment Type	Number of Riders	Percent of Riders	Number of Days Used per Week
Adult cash fare	26	1.5%	3.2
Adult monthly pass	391	21.8%	4.9
10-ride ticket	1,332	74.5%	4.5
Senior citizen/disabled	28	1.6%	4.1
Child/student	0	0.0%	
Other	3	0.2%	5.0
All payment types	1,788	100.0%	4.6

MBTA Ferry Services
2000 Passenger Survey

Usage Rates by Fare Type

Route: **Hull—Quincy–Long Wharf**

Expanded Results

Number of Days per Week Riders Use Ferries

	Number of Riders	Percent of Riders	Cumulative Percentage
Less Than One	0	0.0%	0.0%
One Day	0	0.0%	0.0%
Two Days	3	3.7%	3.7%
Three Days	4	4.9%	8.6%
Four Days	11	13.6%	22.2%
Five Days	63	77.8%	100.0%
Six Days	0	0.0%	100.0%
Seven Days	0	0.0%	100.0%
TOTAL	81	100.0%	100.0%
No Answer	0		

Seasonal Variation of Usage

	Number of Riders	Percent of Riders	Cumulative Percentage
Same year-round	76	93.8%	93.8%
Less in winter	4	4.9%	98.8%
Other	1	1.2%	100.0%
TOTAL	81	100.0%	100.0%
No Answer	0		

Duration of Stay in Boston

	Number of Riders	Percent of Riders	Cumulative Percentage
Less than 8 hours	0	0.0%	0.0%
8 to 9.5 hours	0	0.0%	0.0%
9.5 to 11 hours	78	97.5%	97.5%
More than 11 hours	2	2.5%	100.0%
No Return Trip	0	0.0%	100.0%
TOTAL	80	100.0%	100.0%
No Answer	1		

Percent of Riders with Constant Schedules:

84.0%

Usage Rates by Fare Type

Fare Payment Type	Number of Riders	Percent of Riders	Number of Days Used per Week
Adult cash fare	1	1.2%	5.0
Adult monthly pass	3	3.7%	4.7
10-ride ticket	75	92.5%	4.6
Senior citizen/disabled	0	0.0%	
Child/student	0	0.0%	
Other	2	2.4%	5.0
All payment types	81	100.0%	4.7

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MBTA Ferry Services

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Usage Rates by Fare Type

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - A.M. Navy Yard Boardings

Number of Days per Week Riders Use Ferries:

	Number of Riders	Percent of Riders	Cumulative Percentage
Less Than One	14	5.0%	5.0%
One Day	5	1.8%	6.8%
Two Days	15	5.3%	12.1%
Three Days	35	12.5%	24.6%
Four Days	25	8.9%	33.5%
Five Days	160	56.9%	90.4%
Six Days	12	4.3%	94.7%
Seven Days	15	5.3%	100.0%
TOTAL	281	100.0%	100.0%
No Answer	14		

Seasonal Variation of Usage

	Number of Riders	Percent of Riders	Cumulative Percentage
Same year-round	219	78.5%	78.5%
Less in winter	26	9.3%	87.8%
Other	34	12.2%	100.0%
TOTAL	279	100.0%	100.0%
No Answer	15		

Duration of Stay in Boston

	Number of Riders	Percent of Riders	Cumulative Percentage
Less than 8 hours	52	18.8%	18.8%
8 to 9.5 hours	40	14.4%	33.2%
9.5 to 11 hours	113	41.1%	74.3%
More than 11 hours	46	16.5%	90.8%
No Return Trip	25	9.2%	100.0%
TOTAL	276	100.0%	100.0%
No Answer	19		

Percent of Riders with Constant Schedules:

52.5%

Usage Rates by Fare Type

Fare Payment Type	Number of Riders	Percent of Riders	Number of Days Used per Week
Adult cash fare	147	50.4%	3.8
Adult monthly pass	23	7.8%	5.5
60-ride book	98	33.6%	4.6
Senior citizen/disabled	21	7.3%	2.7
Visitor pass	0	0.0%	
Child/student	0	0.0%	
Other	1	0.6%	5.0
All payment types	293	100.0%	4.1

MBTA Ferry Services

2000 Passenger Survey

Usage Rates by Fare Type

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - A.M. Long Wharf Boardings

Number of Days per Week Riders Use Ferries:

	Number of Riders	Percent of Riders	Cumulative Percentage
Less Than One	14	19.7%	19.7%
One Day	4	5.6%	25.4%
Two Days	0	0.0%	25.4%
Three Days	6	8.5%	33.8%
Four Days	4	5.6%	39.4%
Five Days	40	56.3%	95.8%
Six Days	3	4.2%	100.0%
Seven Days	0	0.0%	100.0%
TOTAL	71	100.0%	100.0%
No Answer	2		

Seasonal Variation of Usage

	Number of Riders	Percent of Riders	Cumulative Percentage
Same year-round	51	81.0%	81.0%
Less in winter	11	17.5%	98.4%
Other	1	1.6%	100.0%
TOTAL	63	100.0%	100.0%
No Answer	8		

Duration of Stay in Boston

	Number of Riders	Percent of Riders	Cumulative Percentage
Less than 8 hours	9	13.2%	13.2%
8 to 9.5 hours	27	40.8%	54.0%
9.5 to 11 hours	18	26.6%	80.6%
More than 11 hours	1	2.2%	82.8%
No Return Trip	11	17.1%	99.9%
TOTAL	66	100.0%	99.9%
No Answer	6		

Percent of Riders with Constant Schedules:

57.8%

Usage Rates by Fare Type

Fare Payment Type	Number of Riders	Percent of Riders	Number of Days Used per Week
Adult cash fare	27	37.9%	2.0
Adult monthly pass	34	48.3%	4.4
60-ride book	8	12.0%	4.9
Senior citizen/disabled	1	1.7%	0.0
Visitor pass	0	0.0%	
Child/student	0	0.0%	
Other	0	0.0%	
All payment types	72	100.0%	3.5

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Usage Rates by Fare Type

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Navy Yard Ons

Number of Days per Week Riders Use Ferries:

	Number of Riders	Percent of Riders	Cumulative Percentage
Less Than One	0	0.0%	0.0%
One Day	3	16.7%	16.7%
Two Days	0	0.0%	16.7%
Three Days	3	16.7%	33.3%
Four Days	0	0.0%	33.3%
Five Days	12	66.7%	100.0%
Six Days	0	0.0%	100.0%
Seven Days	0	0.0%	100.0%
TOTAL	18	100.0%	100.0%
No Answer	0		

Seasonal Variation of Usage

	Number of Riders	Percent of Riders	Cumulative Percentage
Same year-round	12	66.7%	66.7%
Less in winter	6	33.3%	100.0%
Other	0	0.0%	100.0%
TOTAL	18	100.0%	100.0%
No Answer	0		

Duration of Stay in Boston

	Number of Riders	Percent of Riders	Cumulative Percentage
Less than 8 hours	0	0.0%	0.0%
8 to 9.5 hours	0	0.0%	0.0%
9.5 to 11 hours	9	50.0%	50.0%
More than 11 hours	0	0.0%	50.0%
No Return Trip	9	50.0%	100.0%
TOTAL	18	100.0%	100.0%
No Answer	0		

Percent of Riders with Constant Schedules:

66.7%

Usage Rates by Fare Type

Fare Payment Type	Number of Riders	Percent of Riders	Number of Days Used per Week
Adult cash fare	9	50.0%	3.0
Adult monthly pass	3	16.6%	5.0
60-ride book	6	33.3%	5.0
Senior citizen/disabled	0	0.0%	
Visitor pass	0	0.0%	
Child/student	0	0.0%	
Other	0	0.0%	
All payment types	18	100.0%	4.0

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MBTA Ferry Services

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Usage Rates by Fare Type

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Lovejoy Boardings

Number of Days per Week Riders Use Ferries:

	Number of Riders	Percent of Riders	Cumulative Percentage
Less Than One	2	16.7%	16.7%
One Day	0	0.0%	16.7%
Two Days	1	8.3%	25.0%
Three Days	3	25.0%	50.0%
Four Days	1	8.3%	58.3%
Five Days	5	41.7%	100.0%
Six Days	0	0.0%	100.0%
Seven Days	0	0.0%	100.0%
TOTAL	12	100.0%	100.0%
No Answer	1		

Seasonal Variation of Usage

	Number of Riders	Percent of Riders	Cumulative Percentage
Same year-round	8	66.7%	66.7%
Less in winter	3	25.0%	91.7%
Other	1	8.3%	100.0%
TOTAL	12	100.0%	100.0%
No Answer	1		

Duration of Stay in Boston

	Number of Riders	Percent of Riders	Cumulative Percentage
Less than 8 hours	1	7.7%	7.7%
8 to 9.5 hours	3	23.1%	30.8%
9.5 to 11 hours	4	30.8%	61.6%
More than 11 hours	0	0.0%	61.6%
No Return Trip	5	38.5%	100.1%
TOTAL	13	100.0%	100.1%
No Answer	0		

Percent of Riders with Constant Schedules:

61.5%

Usage Rates by Fare Type

Fare Payment Type	Number of Riders	Percent of Riders	Number of Days Used per Week
Adult cash fare	4	30.7%	2.3
Adult monthly pass	8	61.5%	3.5
60-ride book	0	0.0%	
Senior citizen/disabled	1	7.6%	3.0
Visitor pass	0	0.0%	
Child/student	0	0.0%	
Other	0	0.0%	
All payment types	13	100.0%	3.1

MBTA Ferry Services

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Usage Rates by Fare Type

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - A.M. Peak Lovejoy Boardings

Number of Days per Week Riders Use Ferries:

	Number of Riders	Percent of Riders	Cumulative Percentage
Less Than One	0	0.0%	0.0%
One Day	5	10.2%	10.2%
Two Days	2	4.1%	14.3%
Three Days	5	10.2%	24.5%
Four Days	5	10.2%	34.7%
Five Days	32	65.3%	100.0%
Six Days	0	0.0%	100.0%
Seven Days	0	0.0%	100.0%
TOTAL	49	100.0%	100.0%
No Answer	0		

Seasonal Variation of Usage

	Number of Riders	Percent of Riders	Cumulative Percentage
Same year-round	46	95.8%	95.8%
Less in winter	0	0.0%	95.8%
Other	2	4.2%	100.0%
TOTAL	48	100.0%	100.0%
No Answer	0		

Duration of Stay in Boston

	Number of Riders	Percent of Riders	Cumulative Percentage
Less than 8 hours	7	14.3%	14.3%
8 to 9.5 hours	30	61.9%	76.2%
9.5 to 11 hours	7	14.3%	90.5%
More than 11 hours	0	0.0%	90.5%
No Return Trip	5	9.5%	100.0%
TOTAL	48	100.0%	100.0%
No Answer	0		

Percent of Riders with Constant Schedules:

61.9%

Usage Rates by Fare Type

Fare Payment Type	Number of Riders	Percent of Riders	Number of Days Used per Week
Adult cash fare	4	9.5%	2.0
Adult monthly pass	38	80.9%	4.4
60-ride book	4	9.5%	4.5
Senior citizen/disabled	0	0.0%	
Visitor pass	0	0.0%	
Child/student	0	0.0%	
Other	0	0.0%	
All payment types	47	100.0%	4.2

MBTA Ferry Services

2000 Passenger Survey

Usage Rates by Fare Type

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - P.M. Peak Courthouse/WTC Ons

Number of Days per Week Riders Use Ferries:

	Number of Riders	Percent of Riders	Cumulative Percentage
Less Than One	3	7.5%	7.5%
One Day	4	10.0%	17.5%
Two Days	0	0.0%	17.5%
Three Days	0	0.0%	17.5%
Four Days	8	20.0%	37.5%
Five Days	25	62.5%	100.0%
Six Days	0	0.0%	100.0%
Seven Days	0	0.0%	100.0%
TOTAL	40	100.0%	100.0%
No Answer	0		

Seasonal Variation of Usage

	Number of Riders	Percent of Riders	Cumulative Percentage
Same year-round	35	87.5%	87.5%
Less in winter	4	10.0%	97.5%
Other	1	2.5%	100.0%
TOTAL	40	100.0%	100.0%
No Answer	0		

Duration of Stay in Boston

	Number of Riders	Percent of Riders	Cumulative Percentage
Less than 8 hours	3	9.0%	9.0%
8 to 9.5 hours	4	12.4%	21.4%
9.5 to 11 hours	3	10.4%	31.8%
More than 11 hours	0	0.0%	31.8%
No Return Trip	21	68.2%	100.0%
TOTAL	30	100.0%	100.0%
No Answer	10		

Percent of Riders with Constant Schedules:

78.1%

Usage Rates by Fare Type

Fare Payment Type	Number of Riders	Percent of Riders	Number of Days Used per Week
Adult cash fare	2	6.7%	0.4
Adult monthly pass	32	82.2%	4.5
60-ride book	0	0.0%	
Senior citizen/disabled	2	6.7%	1.5
Visitor pass	0	0.0%	
Child/student	0	0.0%	
Other	1	4.1%	5.0
All payment types	39	100.0%	4.0

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10. Automobile Availability Data

Information Contained

Each Automobile Availability Data report consists of four tables on one page. The first table is Licensed Drivers. It shows the number and percentage of riders in the selected group who did and did not have drivers licenses, based on survey question 18. The second table in the report is Riders with Automobiles Available for Trip. It shows the number and percentage of riders in the selected group who did and did not have vehicles available for the same trip on the survey day, based on survey question 20.

The third table in the report is Vehicles Owned per Household. It shows the number and percentage of riders in the selected group who indicated that their households owned each number of cars or trucks from none to five or more based on survey question 19.

The fourth table in the report is Vehicles Owned per Capita. It shows the number and percentage of riders from households in various per capita vehicle ownership ranges between none and two or more. This table is based on a cross-tabulation of the results of survey questions 19 (vehicle ownership per household) and 17 (household size).

On both South Shore commuter boat routes, the vast majority of riders were not transit dependent, based on auto availability data. In part, this result was related to the heavy reliance on park-and-ride as the mode of access, since passengers using that mode necessarily had cars. The survey results do not answer the question as to whether significant numbers of additional riders without cars could be attracted to boat service if more convenient means of station access were available.

On the Inner Harbor routes, the percentage of riders with autos available for their trips was much lower than on the South Shore routes. This was largely a matter of choice, however, as many urban residents are able to use public transportation for routine travel and can rent cars as needed for other trips.

Licensed Drivers

Almost all of the passengers on both South Shore commuter boat routes, (99.8% on the Hingham route and 98.8% on the Hull route) were licensed drivers. This was even higher than the 95.0% and 96.3% found on two Old Colony commuter rail branches in the 1998 survey. The number of riders without licenses was too small to draw any conclusions as to why they did not have licenses but, none were under age 18 or over age 65.

Among riders on the Inner Harbor routes, 100% of those on A.M. peak trips from the Navy Yard to Lovejoy Wharf and 99.0% of those on A.M. trips from the Navy Yard to Long Wharf had licenses. License rates on the other routes ranged from 89.2% on A.M. trips from Long Wharf to the Navy Yard to 92.3% on A.M. peak trips from Lovejoy Wharf to the Navy Yard. Expanded results showed a combined total of 19 passengers without licenses on surveyed Inner Harbor trips. Of these, three were age 17 or under, two were legally blind, and four had annual household incomes below $20,000. Six others did not answer the income question, but some of them may also have been in the lowest income bracket. The remaining four had no evident characteristics that would preclude having licenses, so they may have chosen not to have them.

Riders with Automobiles Available for Trip

Licensed drivers do not always own automobiles, and those that do may not have them available for commuting. Presumably, most passengers who use park-and-ride access to a boat could use the same vehicles to complete their trips, but some might consider these vehicles to be suitable only for short distances. Passengers on the Hingham route had the highest reported rate of auto availability, at 97.1%. Only 92.2% drove to the Hingham Wharf, so some who used other means of access had cars that they left at home. On the Hull route, 91.4% had autos available, but only 74.1% drove to the Wharf. (The smaller service area of that route made other access options more practical than they were for the Hingham route.)

Auto Availability rates among passengers on the Inner Harbor routes were all much lower than among South Shore Boat passengers. The highest auto availability was among passengers on P.M. peak trips from the Courthouse or World Trade Center to Lovejoy Wharf, at 73.7%. All of those without vehicles available nevertheless reported household ownership of at least one vehicle, and half reported ownership of two or more. Seven of the 10 had licenses. Therefore, few, if any of them were entirely transit dependent.

Among passengers boarding A.M. boats for Long Wharf at the Navy Yard, 69.3% had autos available. The rate among A.M. passengers boarding boats for Lovejoy wharf at the Navy Yard was slightly lower, at 66.7%, the same as the rate for A.M. boardings at Lovejoy on trips going to the courthouse or World Trade Center. The lowest auto availability rates were found among A.M. peak passengers going from Lovejoy to the Navy Yard (46.2%), and A.M. passengers going from Long Wharf to the Navy Yard (57.6%).

It should be noted that none of the Inner Harbor ferry routes provides the only public transportation alternative available to its passengers to make their trips. Passengers on the Navy Yard - Long Wharf route could also travel from the Navy Yard to the Financial-Retail district on MBTA bus Route 93. The same route could be used by passengers on the Navy Yard - Lovejoy Wharf route to travel from the Navy Yard to the North Station area. Most of those who would need to transfer from the bus to a rapid transit line to complete their trips already have to transfer from the boats. MBTA bus

Route 4 from North Station to the World Trade Center provides an alternative to the Lovejoy Wharf - Courthouse/World Trade Center route, with about the same scheduled running time. The route 93 and Route 4 bus fares were lower than the boat fares at the time of the survey (cash fare 60 cents versus $1.00) and the differential is now even greater (75 cents versus $1.25).

Vehicles Owned Per Household

On both South Shore boat routes, the most common number of vehicles owned per household was two, with 64.9% of the riders on the Hingham route and 60.5% on the Hull route reporting that number. For comparison, in the Old Colony survey 49.1% of the riders on the Middleborough/Lakeville Line and 59.4% on the Plymouth/Kingston Line were from two-vehicle households. On the Hingham boat route, 14.4% of riders were from one-vehicle households but none had no vehicles. Three or more vehicles were reported by 20.7%, slightly lower than the combined 23.5% on the Old Colony lines. On the Hull route, 25.9% were from one-vehicle households and 2.5% from no-vehicle households. Only 11.1% reported three or more vehicles.

Overall auto ownership was much lower among passengers on the Inner Harbor routes than among those on the South Shore routes. As noted above, this is partly because many of the urban residents using the Inner Harbor routes are able to meet their transportation needs without owning autos. Among Inner Harbor passengers, those on the Lovejoy Wharf - Courthouse/World Trade Center route had the highest overall vehicle ownership. On A.M. peak trips from Lovejoy, 52.1% of riders were from two-vehicle households, as were 52.6% of those on P.M. peak trips toward Lovejoy. One-vehicle households were reported by 37.5% % of the A.M. and 36.8 % of the P.M. riders, but there were no reports of no-vehicle households. Three or more vehicles were reported by 10.4% in the A.M. and by 10.5% in the P.M. Ridership on this route consists predominantly of passengers transferring to or from commuter rail lines. Many of these passengers would have left cars parked at the rail stations at their outer trip ends.

Auto ownership was lowest among passengers boarding A.M. peak boats from the Navy Yard to Lovejoy wharf. The most common number was one vehicle, at 66.7%. The rest were evenly divided between no vehicles and two vehicles, at 16.7% each. Because of low total ridership and a lower than average survey response rate, these figures are less reliable than those from other routes. Passengers going from the Navy Yard to Lovejoy Wharf would be expected to have similar characteristics to those going from the Navy Yard to Long Wharf on A.M. trips. For those riders, the most common number was also one vehicle, but it accounted for only 48.1%. Only 10.6% had no vehicles, but 32.6% had two and 9.2% had three or more.

Passengers on A.M. peak trips from Lovejoy to the Navy Yard also showed low auto ownership, but as in the opposite direction this was based on a small number of riders. On the boats from Lovejoy, 53.8% had one vehicle and 23.1% had none. Only 7.7% had two vehicles, but 15.4 % had three. None had more than three.

Passengers on A.M. trips from Long Wharf to the Navy Yard had the second-highest auto ownership among Inner Harbor routes. The most common figure was one vehicle, at 34.4%, but two vehicles were close behind, at 31.3%. There were no vehicles in 15.6% of rider households, but three or more in 18.8%. As on the Lovejoy – Courthouse/ World Trade Center route, a majority of passengers boarding A.M. trips at Long Wharf were making transfers from other transit services. The Long Wharf route has a higher concentration of rapid transit transfers by passengers starting from close-in suburbs, but the Lovejoy route has more transfers of commuter rail passengers from outer suburbs.

Vehicles Owned Per Capita

Differences in numbers of vehicles per household could be partly a reflection of differences in household size. In terms of commuting, the per capita vehicle ownership rate is more significant than the household rate. A figure of 1.0 or more vehicles per capita implies that each household member would have a vehicle available as needed. A figure below 1.0 indicates that some sharing of a household vehicle is required. The survey question on average household size did not differentiate between children and adults, so it was not possible to calculate ratios of vehicles owned to persons of driving age. Therefore, a per capita vehicle ownership rate below 1.0 does not necessarily mean that sharing of vehicles among licensed drivers in a household would be needed.

On the South Shore routes, average household size was slightly lower among passengers on the Hull route (2.61) than among those on the Hingham route (2.96). Therefore, although Hull passengers had fewer average vehicles per household, per capita vehicle rates were much closer. On the Hull route 50.0% had 1.0 or more vehicles per capita compared with 49.8% on the Hingham route.

Among the Inner Harbor routes, passengers on A.M. trips from the Navy Yard had the smallest average household sizes, at 2.04 on the Long Wharf route and 2.00 on the Lovejoy Wharf route. This reflects the predominance of Navy Yard condominium residents among respondents. Therefore, although only 41.8% of those on the Long Wharf route had two or more vehicles per household, 53.3% had 1.0 or more vehicles per capita. This was higher than the corresponding per capita figures on both South Shore boat routes. On the Navy Yard - Lovejoy route only 33.3% had at least 1.0 vehicles, per capita, but again this may be inaccurate because of the low ridership and low survey response.

Riders on the Lovejoy Wharf - Courthouse/World Trade Center route had the highest average household sizes among Inner Harbor passengers, at 2.89 on P.M. peak trips toward Lovejoy and 2.75 on A.M. peak trips from Lovejoy. These figures were between those of the Hingham route (2.96) and the Hull route (2.61), reflecting the largely suburban population served by the Courthouse/World Trade Center route. The higher average household size compared with other Inner Harbor routes offset the higher household auto ownership. On P.M. peak trips toward Lovejoy, per capita vehicle ownership was 1.0 or greater for 45.9% of riders, but on A.M. peak trips from Lovejoy the figure was only 24.4%.

Passengers on A.M. trips to the Navy Yard also had predominantly suburban household characteristics, with average household sizes of 2.71 on the Long Wharf route and 2.64 on the Lovejoy route. Combined with the relatively low household vehicle ownership on this route, this meant that only 37.6% on the Long Wharf route and 23.1% on the Lovejoy route had 1.0 or more vehicles per capita.

MBTA Ferry Services
2000 Passenger Survey

Automobile Availability Data

Route: **Hingham–Rowes Wharf**

Expanded Results - Hingham A.M. Boardings

Licensed Drivers:

	Number of Riders	Percent of Riders
Licensed	1,784	99.8%
Not Licensed	4	0.2%
TOTAL	1,788	100.0%
No Answer	10	

Riders with Automobiles Available for Trip:

	Number of Riders	Percent of Riders
Auto Available	1,735	97.1%
No Auto Available	51	2.9%
TOTAL	1,786	100.0%
No Answer	13	

Vehicles Owned per Household:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	0	0.0%	0.0%
One Vehicle	257	14.4%	14.4%
Two Vehicles	1,155	64.9%	79.4%
Three Vehicles	295	16.6%	96.0%
Four Vehicles	58	3.3%	99.2%
Five or More Vehicles	14	0.8%	100.0%
TOTAL	1,779	100.0%	100.0%
No Answer	19		

Vehicles Owned per Capita:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	0	0.0%	0.0%
Less than 0.5 Vehicles	160	9.6%	9.6%
0.5 to 0.99 Vehicles	678	40.6%	50.1%
1.0 to 1.49 Vehicles	731	43.7%	93.8%
1.5 to 1.99 Vehicles	79	4.7%	98.6%
2.0 or More Vehicles	24	1.4%	100.0%
TOTAL	1,672	100.0%	100.0%
No Answer	127		

Mean Household Size	2.96

MBTA Ferry Services

2000 Passenger Survey

Automobile Availability Data

Route: **Hull—Quincy–Long Wharf**

Expanded Results

Licensed Drivers:

	Number of Riders	Percent of Riders
Licensed	80	98.8%
Not Licensed	1	1.2%
TOTAL	81	100.0%
No Answer	0	

Riders with Automobiles Available for Trip:

	Number of Riders	Percent of Riders
Auto Available	74	91.4%
No Auto Available	7	8.6%
TOTAL	81	100.0%
No Answer	0	

Vehicles Owned per Household:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	2	2.5%	2.5%
One Vehicle	21	25.9%	28.4%
Two Vehicles	49	60.5%	88.9%
Three Vehicles	7	8.6%	97.5%
Four Vehicles	2	2.5%	100.0%
Five or More Vehicles	0	0.0%	100.0%
TOTAL	81	100.0%	100.0%
No Answer	0		

Vehicles Owned per Capita:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	2	2.9%	2.9%
Less than 0.5 Vehicles	8	11.4%	14.3%
0.5 to 0.99 Vehicles	25	35.7%	50.0%
1.0 to 1.49 Vehicles	35	50.0%	100.0%
1.5 to 1.99 Vehicles	0	0.0%	100.0%
2.0 or More Vehicles	0	0.0%	100.0%
TOTAL	70	100.0%	100.0%
No Answer	11		

Mean Household Size 2.61

MBTA Ferry Services

2000 Passenger Survey

Automobile Availability Data

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - Navy Yard A.M. Boardings

Licensed Drivers:

	Number of Riders	Percent of Riders
Licensed	287	99.0%
Not Licensed	3	1.0%
TOTAL	290	100.0%
No Answer	4	

Riders with Automobiles Available for Trip:

	Number of Riders	Percent of Riders
Auto Available	199	69.3%
No Auto Available	88	30.7%
TOTAL	287	100.0%
No Answer	7	

Vehicles Owned per Household:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	29	10.2%	10.2%
One Vehicle	137	48.1%	58.2%
Two Vehicles	93	32.6%	90.9%
Three Vehicles	24	8.4%	99.3%
Four Vehicles	1	0.4%	99.6%
Five or More Vehicles	1	0.4%	100.0%
TOTAL	285	100.0%	100.0%
No Answer	10		

Vehicles Owned per Capita:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	29	10.4%	10.4%
Less than 0.5 Vehicles	20	7.2%	17.6%
0.5 to 0.99 Vehicles	81	29.1%	46.8%
1.0 to 1.49 Vehicles	134	48.2%	95.0%
1.5 to 1.99 Vehicles	8	2.9%	97.8%
2.0 or More Vehicles	6	2.2%	100.0%
TOTAL	278	100.0%	100.0%
No Answer	17		
Mean Household Size	2.04		

MBTA Ferry Services
2000 Passenger Survey

Automobile Availability Data

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - A.M. Long Wharf Boardings

Licensed Drivers:

	Number of Riders	Percent of Riders
Licensed	58	89.2%
Not Licensed	7	10.8%
TOTAL	65	100.0%
No Answer	6	

Riders with Automobiles Available for Trip:

	Number of Riders	Percent of Riders
Auto Available	38	57.6%
No Auto Available	28	42.4%
TOTAL	66	100.0%
No Answer	6	

Vehicles Owned per Household:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	10	15.6%	15.6%
One Vehicle	22	34.4%	50.0%
Two Vehicles	20	31.3%	81.3%
Three Vehicles	11	17.2%	98.4%
Four Vehicles	0	0.0%	98.4%
Five or More Vehicles	1	1.6%	100.0%
TOTAL	64	100.0%	100.0%
No Answer	7		

Vehicles Owned per Capita:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	10	15.6%	15.6%
Less than 0.5 Vehicles	6	9.4%	25.0%
0.5 to 0.99 Vehicles	24	37.5%	62.5%
1.0 to 1.49 Vehicles	19	29.7%	92.2%
1.5 to 1.99 Vehicles	4	6.3%	98.4%
2.0 or More Vehicles	1	1.6%	100.0%
TOTAL	64	100.0%	100.0%
No Answer	8		

Mean Household Size	2.71

MBTA Ferry Services
2000 Passenger Survey

Automobile Availability Data

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Navy Yard Boardings

Licensed Drivers:

	Number of Riders	Percent of Riders
Licensed	18	100.0%
Not Licensed	0	0.0%
TOTAL	18	100.0%
No Answer	0	

Riders with Automobiles Available for Trip:

	Number of Riders	Percent of Riders
Auto Available	12	66.7%
No Auto Available	6	33.3%
TOTAL	18	100.0%
No Answer	0	

Vehicles Owned per Household:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	3	16.7%	16.7%
One Vehicle	12	66.7%	83.3%
Two Vehicles	3	16.7%	100.0%
Three Vehicles	0	0.0%	100.0%
Four Vehicles	0	0.0%	100.0%
Five or More Vehicles	0	0.0%	100.0%
TOTAL	18	100.0%	100.0%
No Answer	0		

Vehicles Owned per Capita:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	3	16.7%	16.7%
Less than 0.5 Vehicles	6	33.3%	50.0%
0.5 to 0.99 Vehicles	3	16.7%	66.7%
1.0 to 1.49 Vehicles	6	33.3%	100.0%
1.5 to 1.99 Vehicles	0	0.0%	100.0%
2.0 or More Vehicles	0	0.0%	100.0%
TOTAL	18	100.0%	100.0%
No Answer	0		

Mean Household Size	2.00

MBTA Ferry Services

2000 Passenger Survey

Automobile Availability Data

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Lovejoy Boardings

Licensed Drivers:

	Number of Riders	Percent of Riders
Licensed	12	92.3%
Not Licensed	1	7.7%
TOTAL	13	100.0%
No Answer	0	

Riders with Automobiles Available for Trip:

	Number of Riders	Percent of Riders
Auto Available	6	46.2%
No Auto Available	7	53.8%
TOTAL	13	100.0%
No Answer	0	

Vehicles Owned per Household:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	3	23.1%	23.1%
One Vehicle	7	53.8%	76.9%
Two Vehicles	1	7.7%	84.6%
Three Vehicles	2	15.4%	100.0%
Four Vehicles	0	0.0%	100.0%
Five or More Vehicles	0	0.0%	100.0%
TOTAL	13	100.0%	100.0%
No Answer	0		

Vehicles Owned per Capita:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	3	23.1%	23.1%
Less than 0.5 Vehicles	3	23.1%	46.2%
0.5 to 0.99 Vehicles	4	30.8%	76.9%
1.0 to 1.49 Vehicles	2	15.4%	92.3%
1.5 to 1.99 Vehicles	0	0.0%	92.3%
2.0 or More Vehicles	1	7.7%	100.0%
TOTAL	13	100.0%	100.0%
No Answer	0		

Mean Household Size 2.64

MBTA Ferry Services
2000 Passenger Survey

Automobile Availability Data

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - A.M. Peak Lovejoy Boardings

Licensed Drivers:

	Number of Riders	Percent of Riders
Licensed	43	89.6%
Not Licensed	5	10.4%
TOTAL	48	100.0%
No Answer	0	

Riders with Automobiles Available for Trip:

	Number of Riders	Percent of Riders
Auto Available	32	66.7%
No Auto Available	16	33.3%
TOTAL	48	100.0%
No Answer	0	

Vehicles Owned per Household:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	0	0.0%	0.0%
One Vehicle	18	37.5%	37.5%
Two Vehicles	25	52.1%	89.6%
Three Vehicles	5	10.4%	100.0%
Four Vehicles	0	0.0%	100.0%
Five or More Vehicles	0	0.0%	100.0%
TOTAL	48	100.0%	100.0%
No Answer	0		

Vehicles Owned per Capita:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	0	0.0%	0.0%
Less than 0.5 Vehicles	2	4.4%	4.4%
0.5 to 0.99 Vehicles	32	71.1%	75.6%
1.0 to 1.49 Vehicles	9	20.0%	95.6%
1.5 to 1.99 Vehicles	2	4.4%	100.0%
2.0 or More Vehicles	0	0.0%	100.0%
TOTAL	45	100.0%	100.0%
No Answer	2		
Mean Household Size	2.75		

MBTA Ferry Services
2000 Passenger Survey

Automobile Availability Data

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - P.M. Peak Courthouse/WTC Ons

Licensed Drivers:

	Number of Riders	Percent of Riders
Licensed	36	92.3%
Not Licensed	3	7.7%
TOTAL	39	100.0%
No Answer	1	

Riders with Automobiles Available for Trip:

	Number of Riders	Percent of Riders
Auto Available	28	73.7%
No Auto Available	10	26.3%
TOTAL	38	100.0%
No Answer	1	

Vehicles Owned per Household:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	0	0.0%	0.0%
One Vehicle	14	36.8%	36.8%
Two Vehicles	20	52.6%	89.5%
Three Vehicles	2	5.3%	94.7%
Four Vehicles	1	2.6%	97.4%
Five or More Vehicles	1	2.6%	100.0%
TOTAL	38	100.0%	100.0%
No Answer	1		

Vehicles Owned per Capita:

	Number of Riders	Percent of Riders	Cumulative Percentage
No Vehicles	0	0.0%	0.0%
Less than 0.5 Vehicles	7	18.9%	18.9%
0.5 to 0.99 Vehicles	13	35.1%	54.1%
1.0 to 1.49 Vehicles	16	43.2%	97.3%
1.5 to 1.99 Vehicles	1	2.7%	100.0%
2.0 or More Vehicles	0	0.0%	100.0%
TOTAL	37	100.0%	100.0%
No Answer	3		

Mean Household Size	2.89

11. Customer Service Data and Reasons for Using Ferries

Information Contained

Each Customer Service Data and Reasons for Using Ferries report consists of two tables on one page. The first table, Service Quality, summarizes the results of Survey question 26. In this question, passengers gave their opinions on each of 15 service quality measures, on a scale of one to five. On this scale, one was Very Poor, three was Average, and five was Very Good. Two and four were not labeled, but can be considered to mean Below Average and Above Average. In addition, passengers were asked to place check marks beside the three service quality measures on the list that they considered most important. For each measure, the table shows the mean rating, the percent of passengers that assigned each rating value, the total number of responses, the number that did not respond, and the number that checked each measure as one of the three most important. (The non-responses are excluded from percentages.)

The second table in this report, Reasons for Using Ferry Service, shows the number and percentage of passengers checking each of the reasons listed in survey question 25. Because of differences in the kind of service provided by the South Shore routes and the Inner Harbor routes, they are separated below for purposes of discussion.

Service Quality – South Shore Routes

The survey instructions asked respondents to check the three service measures that they considered most important, but many respondents checked either more or less than three. In the service quality tables, the service measures are listed in the same order that they appeared on the survey form. In the discussion below, however, they are listed in descending order of the number of passengers that listed them as the most important service measures on the Hingham route, which carried by far the greatest share of South Shore boat riders. Few of the measures ranked in the same order among Hingham and Hull boat passengers but many were similar.

1. Travel Time/Speed

Travel time/speed was the service quality measure cited by the largest number of Hingham boat passengers (31.6%) as one of the three most important. Among Hull passengers it was only third, but was cited by 27.1%. The scheduled time between Hingham and Rowes Wharf is 35 minutes in each direction. Because of the one-way loop operation used on the Hull route, the scheduled time from Hull to Long Wharf in the morning is 60 minutes, but the time from Long Wharf to Hull in the evening is only 20 minutes. Despite the long morning trips time, the boat is able to attract passengers

because of the long overland alternatives from Hull. Bus service from Hull to the Red Line requires 55 minutes or more from Pemberton Point just to reach Quincy Center and requires one intermediate transfer. Including access time, many Hull residents would save little or no time by using the Hingham boat instead of the Hull boat.

Travel time/speed was rated as Average or better by 97.0% of riders on the Hingham route, but by only by 85.9% on the Hull route, with mean ratings of 4.2 and 3.8. This was in the mid-range of ratings for all service quality measures, on the Hingham route in a tie for seventh place, but was fourth-lowest on the Hull route.

Ratings of Very Good were given by 43.1% on the Hingham route and33.3% on the Hull route. Ratings of Very Poor were given by 0.7% and 6.4%. Because of the low level of transit dependency in the boat service areas, many potential riders who regarded boat speeds as unsatisfactory compared with driving probably continued to drive, and were therefore not included in the survey sample.

2. On-Time Performance

On-Time Performance was cited by the second-largest number of Hingham boat passengers (31.4%) as one of the three most important service quality measures. It was also second on the Hull route, at 33.3%. This quality was rated as Average or better by 97.6% of riders on the Hingham route, but by only by 90.1% on the Hull route, with mean ratings of 4.4 and 4.0. This tied it with several other measures for second-highest rating on the Hingham route, but on the Hull route it was only tenth. Boats on the Hingham route run non-stop between Hingham and Rowes Wharf. Morning trips on the Hull route make intermediate stops at Quincy Fore River and Logan Airport between Hull and Long Wharf, creating more possibilities for delays. (The route is run this way because the present operator added it as a variation to a pre-existing unsubsidized route from Quincy to the Airport.)

Ratings of Very Good were given by 56.9% on the Hingham route but only 41.3% on the Hull route. Ratings of Very Poor were given by 0.4% and 0.0%. Performance was, however, rated as below Average but above Very Poor by 10.0% of Hull riders, compared with 2.0% of Hingham riders.

3. Frequency of Service

Frequency of service was cited by the third-largest number of Hingham boat passengers (29.9%) as one of the three most important service quality measures. It was first on the Hull route, at 37.0%. Frequency might have been expected to be less important for Hull passengers, since that route has only two round trips a day compared with 21 on the Hingham route. The reason for the difference in rankings was that Hingham riders in general considered frequency to be an important quality with which they were satisfied, but Hull riders considered it an important quality with which they were unsatisfied.

Frequency was rated as Average or better by 94.4% of riders on the Hingham route, but by only by 46.3% on the Hull route, with mean ratings of 3.9 and 2.5. This placed it tenth on the Hingham route, but last on the Hull route. Ratings of Very Good were given by 27.0% on the Hingham route but only 5.0% on the Hull route. Ratings of Very Poor were given by 0.5% and 22.5%. Another 31.3% of Hull riders rated frequency as below Average but above Very Poor, compared with only 5.1% of Hingham riders.

4. Parking Availability

Parking availability was cited by the fourth-largest number of Hingham boat passengers (28.0%) as one of the three most important service quality measures. It was only thirteenth on the Hull route, at 6.2%. Park-and-ride access is used by 94% of the Hingham boat riders, but by only 77% of the Hull boat riders. The much larger total volume on the Hingham route forces most riders to walk further from their cars to the wharf at Hingham than at Hull.

Parking availability was rated as Average or better by 83.6% of riders on the Hingham route, but by 96.1% on the Hull route, with mean ratings of 3.7 and 4.6. This placed it in a tie for twelfth on the Hingham route, but in a tie for highest rating on the Hull route. Ratings of Very Good were given by only 27.3% on the Hingham route but by 75.3% on the Hull route. Ratings of Very Poor were given by 3.7% and 0.0%. Another 12.7% of Hingham riders rated parking availability as below Average but above Very Poor, compared with only 3.9% of Hull riders. As would be expected, passengers on later boats were more likely than those on earlier boats to rate parking availability below Average. Some passengers on earlier trips may have departed earlier than they would have preferred to in order to avoid later parking problems.

5. Availability of Seating

Below the top four measures cited above, individual service measures were rated as very important by much smaller numbers of riders. This was partly because the instructions called for indicating only the three most important measures, and the majority of riders used up their three votes among the top four measures.

Availability of seating ranked fifth among Hingham boat passengers (15.0%) as a very important service quality measure. It was only ninth on the Hull route, at 7.4%. This difference is attributable to the higher peak loads on the Hingham boats. Passenger counts showed as many as 346 riders on individual Hingham boat trips. The two inbound Hull trips had 40 passengers each. (Some additional riders would have been picked up in Quincy, but Hull riders were on board first.)

Seating availability was rated as Average or better by 84.7% of riders on the Hingham route, but by 97.5% on the Hull route, with mean ratings of 3.5 and 4.3. This placed it next to lowest on the Hingham route, but in a tie for seventh best on the Hull route. Ratings of Very Good were given by only 16.8% on the Hingham route but by 48.1% on the Hull route. Ratings of Very Poor were given by 2.8% and 0.0%. Another 12.4% of

Hingham riders rated availability of seating as below Average but above Very Poor, compared with only 2.5% of Hull riders. As would be expected, the lowest rankings for seating availability on the Hingham route came from passengers on the most heavily patronized trips.

6. Personal Safety

Personal Safety ranked sixth among Hingham boat passengers (14.2%) as a very important service quality measure. It was fourth on the Hull route, at 22.2%. It was rated as Average or better by 98.9% of riders on the Hingham route, and by 98.8% on the Hull route, with mean ratings of 4.4 and 4.5. This put it in a tie for second best on the Hingham route, and in a tie for third best on the Hull route. Ratings of Very Good were given by 56.0% on the Hingham route and by 59.0% on the Hull route. Ratings of Very Poor were given by 0.3% and 0.0%. Another 0.9% of Hingham riders rated personal safety as below Average but above Very Poor, as did 1.3% of Hull riders.

Most of the passengers who rated personal safety below Average did not elaborate. Those that did make written comments cited locked emergency exit doors, improper storage of food supplies, age of some boats, and alleged racing with private competing boats, as safety concerns on the Hingham route.

7. Vessel Condition

Vessel Condition ranked seventh among Hingham boat passengers (8.3%) as a very important service quality measure. It was tied for ninth on the Hull route, at 7.5%. It was rated as Average or better by 98.0% of riders on the Hingham route, and by 98.7% on the Hull route, with mean ratings of 4.5 and 4.4. This put it in first place on the Hingham route, but in a tie for fifth best on the Hull route. Ratings of Very Good were given by 62.5% on the Hingham route and by 50.0% on the Hull route. Ratings of Very Poor were given by 0.6% and 0.0%. Another 1.3% on each route rated vessel condition as below Average but above Very Poor.

The MBTA has somewhat less control over the vessels used on the Hull route, since it is served incidentally to an unsubsidized route, in contrast with the Hingham route which is entirely a contract service. Nevertheless, the operators of the Hull route are motivated to provide high quality vessels, since most of their traffic is premium-fare airport-access trips.

8. Comfort of Ride

Comfort of ride ranked eighth among Hingham boat passengers (8.3%) as a very important service quality measure. It was fifth on the Hull route, at 13.5%. It was rated as Average or better by 97.9% of riders on the Hingham route, and by 98.7% on the Hull route, with mean ratings of 4.4 and 4.5. This put it in a tie for second best on the Hingham route, and in a tie for third best on the Hull route. Ratings of Very Good were given by 51.0% on the Hingham route and by 62.0% on the Hull route. Ratings of

Very Poor were given by 0.1% and 0.0%. Another 2.0% on the Hingham route and 1.3% on the Hull route rated ride comfort as below Average but above Very Poor.

Comfort of ride for boat service is largely determined by weather conditions, but in general larger vessels provide smoother rides than smaller ones.

9. Vehicle Security in Parking Lot

Vehicle security in parking lot ranked ninth among Hingham boat passengers (5.7%) as a very important service quality measure. It was tied for eleventh on the Hull route, at 4.9%. It was rated as Average or better by 84.1% of riders on the Hingham route, and by 93.4% on the Hull route, with mean ratings of 3.4 and 4.0. This was the lowest mean rating for any measure on the Hingham route, but was tied for tenth best on the Hull route. Ratings of Very Good were given by only 15.3% on the Hingham route and by 30.7% on the Hull route. Ratings of Very Poor were given by 3.0% and 2.7%. Another 12.9% on the Hingham route and 4.0% on the Hull route rated vehicle security as below Average but above Very Poor.

The low ratings for vehicle security should be a matter of concern, The majority of riders on both routes use park-and-ride access. Actual or perceived lack of vehicle security can be a deterrent to ridership growth even if capacity is not an issue.

10. Availability of Schedules

Availability of schedules ranked tenth among Hingham boat passengers (5.4%) as a very important service quality measure. It was sixth on the Hull route, at 7.4%. It was rated as Average or better by 97.2% of riders on the Hingham route, but by only 66.3% on the Hull route, with mean ratings of 4.1 and 3.1. This was the ninth highest rating for any measure on the Hingham route, but was next to last on the Hull route. Ratings of Very Good were given by 35.1% on the Hingham route but by only 18.8% on the Hull route. Ratings of Very Poor were given by 0.2% and 16.3%. Another 2.6% on the Hingham route and 17.5% on the Hull route rated schedule availability as below Average but above Very Poor.

The MBTA prints schedules for all of the South Shore and Inner Harbor boat routes. These are available at the same locations as MBTA bus schedules, and are also available to varying extents at the boat docks. At Rowes Wharf there is an enclosed waiting room and ticket office with schedules available. There is also a ticket office in Hingham. Hull boat passengers purchase their tickets on the boat at either end of the trips. On the side of Long Wharf use by the Hull boats, schedules are posted, but copies of schedules are not obviously available. Difficulty in obtaining schedule information can be a major deterrent to attracting new riders.

11. Condition of Docks

Condition of docks ranked eleventh among Hingham boat passengers (3.8%) as a very important service quality measure. It was fourteenth on the Hull route, at 3.7%. It was rated as Average or better by 89.6% of riders on the Hingham route, and by only 91.5% on the Hull route, with mean ratings of 3.8 and 4.2. This was the eleventh highest rating for any measure on the Hingham route, and was ninth on the Hull route. Ratings of Very Good were given by 26.6% on the Hingham route and by only 51.9% on the Hull route. Ratings of Very Poor were given by 1.5% and 3.9%. Another 7.0% on the Hingham route and 6.5% on the Hull route rated dock condition as below Average but above Very Poor.

The docks used by the South Shore boats are not owned by the MBTA, but are leased from other public agencies or private owners. The Rowes Wharf dock is in the best condition of any, as it is part of a luxury hotel complex.

12. Safety While Boarding

Safety while boarding ranked twelfth among Hingham boat passengers (3.3%) as a very important service quality measure. It was eighth on the Hull route, at 8.6%. It was rated as Average or better by 97.1% of riders on the Hingham route, and by 94.8% on the Hull route, with mean ratings of 4.2 and 4.3. This tied it for seventh highest, or about in the middle, on both routes. Ratings of Very Good were given by 61.0% on the Hingham route but by only 43.0% on the Hull route. Ratings of Very Poor were given by 0.5% and 2.6%. Another 2.5% on the Hingham route and 2.6% on the Hull route rated safety while boarding as below Average but above Very Poor.

Safety while boarding is determined partly by dock condition, as rated above. It is also determined by other factors such as the angles of the gangways between fixed and floating dock sections, how tightly boats are moored to the docks, and how attentive crew members are in assisting passengers to board or alight.

13. Helpfulness of Crew

Helpfulness of crews ranked thirteenth among Hingham boat passengers (1.5%) as a very important service quality measure. It was seventh on the Hull route, at 9.9%. It was rated as Average or better by 96.8% of riders on the Hingham route, and by 98.7% on the Hull route, with mean ratings of 4.4 and 4.6. This tied it for second highest on the Hingham route and for highest on the Hull route. Ratings of Very Good were given by 53.4% on the Hingham route and by 66.2% on the Hull route. Ratings of Very Poor were given by 0.5% and 0.0%. Another 2.7% on the Hingham route and 1.3% on the Hull route rated helpfulness of crews as below Average but above Very Poor.

One factor in the higher ranking of helpfulness of crews on the Hull boats is that lower ridership results in fewer passengers for the crews to have to attend to. This was reflected in the responses to the surveys, which were distributed and collected by the

crews. On trips on the Hingham route that were surveyed the overall average response rate was 47%, or about the same rate as for a typical MBTA commuter rail passenger survey. On the Hull route, the response rate was 100%.

14. Availability of Tickets and Passes

Availability of Tickets and Passes ranked fourteenth among Hingham boat passengers (0.5%) as a very important service quality measure. It was eleventh on the Hull route, at 4.9%. It was rated as Average or better by 97.0% of riders on the Hingham route, and by 98.8% on the Hull route, with mean ratings of 4.3 and 4.4. This placed it for sixth highest on the Hingham route and tied it for fifth highest on the Hull route. Ratings of Very Good were given by 47.8% on the Hingham route and by 60.3% on the Hull route. Ratings of Very Poor were given by 0.4% and 1.3%. Another 2.6% on the Hingham route but 0.0% on the Hull route rated availability of tickets and passes as below Average but above Very Poor.

Although it is essential to have a ticket or pass in order to ride the boats, most passengers took it for granted that these would be available, accounting for the low ranking in overall importance. Tickets for the Hingham boat are available at the Hingham terminal throughout the operating span of the route, and at Rowes wharf for all P.M. departures. Tickets for the Hull route are sold only on the boat, but with the low volume of ridership this should not be a problem. Boat passes are available at various locations in addition to the boat terminals, but are not sold on the boats. As discussed in chapter 9, the price of the boat pass relative to other options does not make it cost-effective for most riders.

15. Information by Telephone/Internet

Information by Telephone/Internet ranked last among passengers on both South Shore boat routes as a very important service quality measure, at 0.3% on the Hingham route and 1.2% on the Hull route. It was also the quality not rated at all by the largest numbers of riders on both routes, being omitted by 28.8% of Hingham route and 14.8% of Hull route riders. Presumably, those who gave no rating had not attempted to obtain telephone or internet information recently. Among those who did rank it, 90.6% on the Hingham route and 86.9% on the Hull route, called it Average or better, resulting in mean ratings of 3.7 and 3.5. This placed it only twelfth and thirteenth highest. Ratings of Very Good were given by only 25.4% on the Hingham route and by 18.8% on the Hull route. Ratings of Very Poor were given by 3.6% and 2.9%. Another 5.8% on the Hingham route and 10.1% on the Hull route rated information by telephone/internet as below Average but above Very Poor.

Passengers seeking information about boat service can call the boat operators or the MBTA or check any of their websites. They can also call SmarTraveler. The survey results do not indicate which information sources passengers impressions of information service were based on. The quality of MBTA information is more directly

controllable by MBTA management than is that of information provided by the boat operators or SmarTraveler.

Service Quality – Inner Harbor Routes

In the discussion below, service quality measures are listed in descending order of the number of passengers that listed them as the most important service measures surveyed trips on all Inner Harbor routes combined. In most cases, this is the same order as the ranking on A.M. trips from the Charlestown Navy Yard to Long Wharf, which accounted for 60% of Inner Harbor survey riders. Ranking differed somewhat from these on individual routes but were generally similar for the top three.

1. On-Time Performance

On-Time Performance was the service quality measure cited by the largest number of Inner Harbor ferry passengers (36.0%) as one of the three most important. (On the South Shore routes it was a close second place.) It was also first on all individual Inner Harbor routes except for A.M. trips from Long Wharf to Charlestown, where it was second, and P.M. peak trips from the Courthouse or World Trade Center to Lovejoy Wharf, where it was third. In the latter two cases the absolute differences in the number of riders checking the measures that ranked first, second, and third were very small.

On-Time Performance was rated as Average or better by 99.5% of riders on combined Inner Harbor routes. The mean ratings was 4.6, which put it in a tie with Helpfulness of Crew as the highest rated measure. There were no ratings of Very Poor for this measure. The only ranking of below Average but above Very Poor came from A.M. peak passengers going from Lovejoy to the Courthouse or World Trade Center, at 4.8%, but this was only one passenger. This is the longest of the Inner Harbor routes, with a scheduled running time of 20 minutes from Lovejoy to the World Trade Center. Scheduled times on the Navy Yard routes are only five minutes to Lovejoy and 10 minutes to Long Wharf. The Courthouse/World Trade Center route also crosses paths with more other boat routes than the Navy Yard boats do. Therefore, the Navy Yard routes have less potential for delays.

2. Frequency of Service

Frequency of service was cited by the second-largest number of Inner Harbor boat passengers (33.8%) as one of the three most important service quality measures. (On the two South Shore routes it placed third and first.) It was also first on all individual Inner Harbor routes except for A.M. trips from Long Wharf to Charlestown, where it was first, and A.M. peak trips from Lovejoy Wharf to Charlestown where it was tied for first.

Frequency was rated as Average or better by 91.4% of riders on combined Inner Harbor routes. The mean rating for frequency of service was only 4.2, which was the third-lowest rating of any of the measures. The greatest satisfaction with frequency was

found among riders on A.M. trips from Long Wharf the Navy Yard, with 100% ratings of Average or better, and a mean of 4.6. This route has peak-period headways of 15 minutes, with 30-minute service during midday and early evening hours.

The lowest satisfaction with frequency was found among A.M. peak passengers going from Lovejoy Wharf to the Courthouse of World Trade Center, with a mean of 3.7. None of these passengers rated frequency as Very Poor, but 24.8% thought it was below average. The second-lowest satisfaction was among P.M. peak riders going toward Lovejoy on the same route, with a mean of 3.8. Among these passengers, 2.7% rated frequency as Very Poor and another 13.9% rated it below Average. This route has irregular A.M. peak headways, varying from 20 to 30 minutes. In the P.M. peak, headways range from 20 to 50 minutes. Most of the passengers on this route transfer to or from North Side commuter trains. Dissatisfaction with frequency may result more from insufficient coordination between train and boat schedules than from frequency *per se*. Trains on the various North Side routes arrive at and depart from North Station at staggered times, so a boat connection that is convenient for transfers with one route cannot be equally convenient for all routes.

3. Travel Time/Speed

Travel time/speed was the service quality measure cited by the third-largest number of Inner Harbor ferry passengers (23.4%) as one of the three most important. (On the two South Shore routes it was first and third.) It was also third on A.M. trips in both directions on the Navy Yard - Long Wharf route, and on A.M. peak trips from Lovejoy Wharf to the Courthouse or World Trade Center. On P.M. peak trips to Lovejoy on the latter route it was first (though only slightly above the second and third place measures). On A.M. peak trips from the Navy Yard to Lovejoy Wharf it was tied with many other measures for second place, but on A.M. peak trips in the opposite direction on the same route, none of the respondents considered it to be among the three most important measures.

Overall, 99.2% of Inner Harbor riders rated Travel time/speed as Average or better, with a mean of 4.6. This put it in a tie for the third-highest mean rating. No riders on any of the routes rated travel time/speed as Very Poor, but 4.2% on P.M. peak trips from the Courthouse or World Trade Center to Lovejoy rated it below Average. As discussed under On time performance, the latter route has the longest scheduled running times of any of the Inner Harbor routes.

4. Personal Safety

Personal Safety ranked fourth among Inner Harbor boat passengers (12.8%) as a very important service quality measure, but was far behind the top three. (On the two South Shore routes it was sixth and fourth.) On individual Inner Harbor routes, the importance of safety ranged from a tie for second place, on A.M. peak trips from the Navy Yard to Lovejoy Wharf, to no citations by A.M. peak passengers traveling in the opposite direction on the same route. All riders on all Inner Harbor routes rated

personal safety as Average or better, with a mean of 4.6. This put it in a tie for the third-highest mean rating.

5. Vessel Condition

Vessel Condition ranked fifth among Inner Harbor boat passengers (9.2%) as a very important service quality measure. (On the two South Shore routes it was seventh and ninth.) On individual Inner Harbor routes, the importance of vessel condition ranged from a tie for second place, on A.M. peak trips from the Navy Yard to Lovejoy Wharf, to no citations by A.M. peak passengers traveling in the opposite direction on the same route. Vessel condition was rated average or better by 99.5% of Inner Harbor riders, with a mean of 4.4. This was the eighth highest mean rating. The only ratings of less than Average came from 0.9% of passengers on A.M. trips from the Navy Yard to Long Wharf, but none called condition Very Poor. One passenger specified that the below Average rating was a result of a problem with lavatory maintenance.

6. Availability of Schedules

Availability of schedules ranked fifth among Inner Harbor boat passengers (8.8%) as a very important service quality measure. (On the two South Shore routes it was tenth and sixth.) Availability of schedules was rated Average or better by 95.0% of Inner Harbor riders, with a mean of 4.2. This was the fourth-lowest mean rating. There were no ratings of Very Poor, but on several routes there were some ratings of below Average. This was the case on P.M. peak trips from the Courthouse or World Trade Center to Lovejoy (6.8%), on A.M. peak trips from the Navy Yard to Lovejoy (16.7%), and on A.M. trips from the Navy Yard to Long Wharf (4.6%).

The MBTA publishes schedules for all of the Inner Harbor Ferry routes, and these are supposed to be available at all locations where schedules for MBTA bus routes are distributed. None of the Inner Harbor ferry terminals except Long Wharf have staffed ticket offices. Schedules are posted at all terminals, and there racks for self-service distribution of schedules at at least one end of each route, but the racks are not always kept filled. To attract new riders, it is important to have schedule information readily available at all terminals of all routes.

7. Comfort of Ride

Comfort of ride ranked seventh among Inner Harbor boat passengers (8.0%) as a very important service quality measure. (On the two South Shore routes it was eighth and fifth.) Comfort of ride was rated Average or better by 99.5% of Inner Harbor riders, with a mean of 4.5. This was a tie for the sixth-highest mean rating. There were no ratings of Very Poor, but on two routes there were some ratings of below Average. This was the case on A.M. peak trips to the Courthouse or World Trade Center from Lovejoy (5.3%), and on A.M. trips from the Navy Yard to Long Wharf (0.6%). In both cases, these results were expanded from only one survey. The passenger from Lovejoy did not elaborate on the reason for the low rating. For the passenger from the Navy Yard, the

reason was apparently low seating availability on one of the more heavily patronized trips, discussed further under the Availability of Seating measure.

8. Availability of Seating

Availability of seating ranked eighth among Inner Harbor boat passengers (5.7%) as a very important service quality measure. (On the two South Shore routes it was fifth and ninth.) It was rated Average or better by 99.0% of Inner Harbor riders, with a mean of 4.6. This was a tie for the third-highest mean rating. There were no ratings of Very Poor, but on two routes there were some ratings of below average. This was the case on P.M. peak trips from the Courthouse or World Trade Center to Lovejoy (2.8%), and on A.M. trips from the Navy Yard to Long Wharf (1.3%). The former results were expanded from only one survey. The latter were expanded from two surveys. On the Long Wharf route, both passengers who rated seating as below average were on a trip that trip had 29 riders. The boats usually used on this route have 35 interior seats and additional open-deck seating, On the Courthouse/World Trade Center route the passenger who rated seating as below average was on a trip that carried nine riders on the survey day. The maximum on any trip was 11. Seating capacity on the boats used on this route ranges from 18 to 26 interior seats.

9. Helpfulness of Crew

Helpfulness of crew ranked ninth among Inner Harbor boat passengers (5.1%) as a very important service quality measure. (On the two South Shore routes it was thirteenth and seventh.) It was rated Average or better by all Inner Harbor riders, with a mean of 4.6. This was a tie for the highest mean rating. The means on individual routes all ranged between 4.5 and 4.8.

10. Safety While Boarding

Safety while boarding ranked tenth among Inner Harbor boat passengers (3.5%) as a very important service quality measure. (On the two South Shore routes it was twelfth and eighth.) It was rated Average or better by 99.1% of Inner Harbor riders, with a mean of 4.5. This was a tie for the sixth-highest mean rating. There were no ratings of Very Poor, but on A.M. peak trips from Lovejoy to the Courthouse or World Trade Center, 9.9% gave a rating of below Average. This was based on two surveys, from passengers who did not elaborate.

11. Condition of Docks

Condition of docks was tied with availability of tickets and passes in eleventh place as a very important service measure among Inner Harbor boat passengers (3.1%). (On the two South Shore routes it was eleventh and fourteenth.) It was rated Average or better by 98.3% of Inner Harbor riders, with a mean of 4.3. This was a tie for the ninth-highest mean rating. The only rating of Very Poor came from P.M. peak riders from the Courthouse or World Trade Center to Lovejoy Wharf at 4.2%. Another 4.2% on this

route gave a rating above Very Poor but lower than Average. Both of these ratings came from individual surveys, from passengers who boarded at the World Trade Center wharf. Both made comments indicating that their objections were actually with the walking path from commuter rail at North Station to Lovejoy Wharf. Because of Central Artery construction, the walking path is indirect, and in places requires passengers to cross or walk along roadways used by large construction vehicles.

There were no ratings of Very Poor on other routes, but on A.M. trips from the Navy Yard to Long Wharf 1.6% rated condition as below Average. This was based on one survey, from a passenger who did not elaborate.

11. Availability of Tickets and Passes

Availability of tickets and passes was tied with condition of docks in eleventh place as a very important service measure among Inner Harbor boat passengers (3.1%). (On the two South Shore routes it was fourteenth and eleventh.) It was rated Average or better by 94.3% of Inner Harbor riders, with a mean of 4.3. This was a tie for the ninth-highest mean rating. On three routes there were some ratings of Very Poor for this measure. This was the case on P.M. peak trips from the Courthouse or World Trade Center to Lovejoy (3.6%), on A.M. peak trips from Lovejoy to the Navy Yard (8.3%), and on A.M. trips from the Navy Yard to Long Wharf (1.6%). The first two of these were based on single surveys, and the third was based on three.

The one Very Poor rating from a P.M. peak trip from the Courthouse was from a first-time rider who had been confused about how to pay. The one passenger going from Lovejoy to the Navy Yard did not elaborate, but used a commuter rail pass. Of the three passengers from the Navy Yard, one paid a single-ride fare, one used a 60-ride ticket, and one used a Combo Plus pass, although not transferring to or from other MBTA services that day. None of these riders specified why they felt ticket availability was poor. The need to pay cash for 60-ride tickets (then priced at $45) may have been viewed as inconvenient.

An additional 3.6% on the P.M. peak trips from the Courthouse or World Trade Center rated availability of tickets as below Average, as did 13.4% on A.M. peak trips from Lovejoy on the same route and 4.7% on A.M. trips from the Navy Yard to Long Wharf. The first of these was based on one survey, from a commuter rail transfer passenger who used a pass. The second was based on two surveys, including one from a commuter rail transfer passenger who used a pass and one from a 60-ride ticket user. The Navy Yard-Long Wharf below-Average ratings were based on 10 surveys, including seven from passengers who paid single-ride fares and three from passengers who used 60-ride tickets.

None of the passengers who gave ratings of below average indicated what their problems with ticket availability were. There are no ticket offices at any of the Inner Harbor boat terminals except Long Wharf. Single-ride tickets are sold on board the boats on all routes. Passengers on the Navy Yard - Long Wharf route can purchase 60-

ride tickets only at Long Wharf. It is unclear from published information about the other two routes whether or not 60-ride tickets are supposed to be available on board, but very few of the riders on those routes use such tickets.

Monthly passes are available through MBTA pass outlets or through employer pass programs. Most of the passengers who use passes on the Inner Harbor boats transfer to or from other MBTA modes for which the same passes are valid. Complaints about ticket availability on the Navy Yard - Long Wharf route came mainly from passengers on the most heavily patronized trips, which carried between 27 and 34 passengers each on the survey day. Because of the short (10-minute) running time on the boat, collection of cash fares may have resulted in some delays for alighting passengers.

13. Parking Availability

Parking availability ranked thirteenth among Inner Harbor boat passengers (1.8%) as a very important service quality measure. (On the two South Shore routes it was fourth and thirteenth.) It was also the measure on which the second-largest number of Inner Harbor passengers (36.3%) expressed no opinion. The only Inner Harbor route with any reported park-and-ride access trips was the Navy Yard - Long Wharf route, on which it accounted for 2.7% of the access to the Navy Yard wharf. Some of the passengers who rated parking availability may have been referring to that at boarding stations of services from which they transferred to boats.

Of passengers who did give rating to parking availability, only 58.7% called it Average or better. Ratings of Very Poor were given by 26.5%, and of below Average by 14.8%. The mean rating was 3.1, which was the lowest of any service quality. The only route on which there were no ratings of Very Poor was A.M. peak trips from the Navy Yard to Lovejoy Wharf, used mostly by residents of condominiums within walking distance of Lovejoy Wharf. Nevertheless, 25.0% of these riders rated parking as below Average. On the other routes, ratings of Very Poor ranged from 24.7% by passengers using P.M. peak trips from the Courthouse or World Trade Center to Lovejoy Wharf (most of whom were on their way to North Station to take commuter rail home) to 38.1% among A.M. peak passengers on trips from Lovejoy to the Navy Yard (most of whom transferred from commuter rail or rapid transit.

Based on the present origins or access modes of passengers who gave ratings of Very Poor to parking, it is unlikely that many would have switched to driving access if more parking were available at the ferry terminals. Therefore, many of them may simply have been reporting on the fact that there was little or no parking available at the terminals rather than omit this measure entirely, as many others did.

14. Vehicle Security in Parking Lot

Vehicle security in parking lot ranked fourteenth among Inner Harbor boat passengers (1.2%) as a very important service quality measure. (On the two South Shore routes it was ninth and eleventh.) This was the measure on which the largest number of Inner

Harbor passengers (49.5%) expressed no opinion. The low importance attached by Inner Harbor passengers to vehicle security is consistent with the facts that not only very few boat passengers use direct park-and-ride access, but that very few have trips that would be likely to include such access even if good secure parking were available.

Of those that did rate vehicle security, 80.5% called it Average or better, 12.5% called it Very Poor and 7.0% called it below Average. It is unclear how these opinions were formed, since almost none of the passengers would have had occasion to park at the boat terminals. The lowest ratings for vehicle security were given by passengers boarding A.M. peak boats at Lovejoy, including 25.0% of those going to the Navy Yard and 21.8% of those going to the Courthouse or World Trade Center. Of all the passengers on all Inner Harbor routes who rated vehicle security as Very Poor, only one actually used park-and-ride access, to the Navy Yard terminal

15. Information by Telephone/Internet

Information by Telephone/Internet ranked last among Inner Harbor boat passengers (0.6%) as a very important service quality measure. (On both South Shore routes it was also last.) It was also the service measure on which the third-largest number of Inner Harbor passengers (32.6%) expressed no opinion. Of those that did rate information, 93.0% called it Average or better. The mean rating was only 4.1, making it the thirteenth lowest-rated service attribute. (For comparison, on the Hingham route, 90.6% called information service Average or better, and the mean was only 3.7 because of a smaller percentage rating the service as very good.)

Printed schedules for the Inner Harbor boats, like those for the South Shore boats, list telephone numbers for MBTA information and for SmarTraveler, and also show the MBTA website address. Unlike the South Shore schedules, however, they do not include telephone numbers for the boat operators themselves. As with the case of the South Shore routes, the Inner Harbor surveys did not show which information service passengers had in mind when giving ratings.

A total of only three surveys gave ratings of Very Poor to information service. One of these included a complaint that information about the Navy Yard - Long Wharf route was not on the MBTA website. This may have been temporary, or a user error, as a check in March 2001 showed that the route was included on the MBTA website. A total of 12 surveys gave ratings of below Average to information service, but none of these included specific complaints about information in the comments section.

Reasons for Using Service – South Shore Routes

1. Avoid Driving/Traffic

On both South Shore boat routes, the most common reason checked for using the service was Avoid Driving/Traffic, with 85.1% on the Hull route and 82.6% on the Hingham route. This was also the most common reason cited by Old Colony rail

passengers in the 1998 survey, but was slightly lower, at 70.5% and 75.2%. The difference is partly because many Old Colony riders had recently switched from other transit modes that had already allowed them to avoid traffic.

2. Convenience

Convenience was the second most common reason for using South Shore boats, checked by 74.0% of riders on the Hingham route and by 81.4% on the Hull route. The higher percentage on the Hull route reflects the fact that driving to Boston is much less convenient from Hull than from most of the towns served by the Hingham route, and other public transportation from Hull is more time-consuming than the Hull boat. As a result, the Hull boat is more attractive to its users relative to their other alternatives than is the Hingham boat to its users relative to their other alternatives.

3. Speed/Travel Time

About half of all South Shore boat riders (53.2% on the Hingham route and 46.9% on the Hull route) checked "Speed/travel time" as a reason for using the service. The slightly lower percentage on the latter line reflects the slower effective speed of inbound trips on the Hull route. The scheduled time from Hingham to Rowes Wharf in Boston is 35 minutes in each direction. Hull is currently served as part of a one-way loop. Morning trips make intermediate stops at Quincy Fore River and Logan Airport, resulting in a 60-minute scheduled time from Hull to Long Wharf in Boston. On P.M. trips, Hull is the first stop after Long Wharf, and the scheduled running time is only 20 minutes. Despite the long morning running time, the Hull boat is still time-competitive with other alternatives because of the long overland distance to Boston from the Hull peninsula.

4. Downtown Parking Cost/Availability

Below the top three reasons, there was less consistency between responses of passengers on the two South Shore routes. Downtown Parking Cost/Availability was cited as a reason by equal proportions of riders on both routes (27.1%). This made it the fourth most important reason for Hingham boat riders, but only the sixth most important for Hull boat riders. The percentage was very close to those found on both Old Colony commuter rail lines in the 1998 survey (26.1% and 23.1%). Other surveys have yielded similar results.

The relatively low percentage of riders citing this reason indicates that downtown parking cost and capacity constraints provided only moderate incentives to use public transportation. These incentives are implicitly insufficient for trip-makers who continue to drive.

5. Environmentally Responsible

Environmentally responsible was the fifth most important reason cited by riders on both South Shore routes, but was checked by a much smaller proportion of Hingham boat riders (17.6%) than of Hull boat riders (32.0%). The reason for this large difference appears to be most closely related to differences in access modes and times. Among Hingham boat riders, 92.2% reported park-and-ride access and for these, the average access time was 14.1 minutes. Among Hull boat riders, only 74.1% used park-and-ride access, and their average access time was only 6.1 minutes. Riders whose trips involved lower ratios of auto travel segments to boat travel segments would be more likely to feel that they were being environmentally responsible than passengers with higher ratios.

6. Inexpensive Way to Travel

The cost of boat service relative to other alternatives was a less important consideration for users of the Hingham route (12.1%, sixth place) than for those of the Hull route (37.0%, fourth place). The Hull route has significantly lower fares than the Hingham route. At the time of the survey, the fare from Hingham to Boston was $4.00 for a single ride or $3.40 per trip using a 10-ride ticket. On the Hull route the corresponding fares were $3.00 and $2.50. The same monthly pass was needed on both routes, but very few riders on the Hull route used passes.

MBTA bus route 220 provides service from near the Hingham wharf to the Red Line. In Spring 2000, a passenger using a Combo pass for 21 round trips a month would have had a cost of $1.10 per trip to travel from Hingham to Boston this way. To travel from Hull to the Red Line entirely by public transportation requires a connection to Route 220 via a subsidized private carrier bus. At the time of the survey this required payment of a 75 cent cash fare in addition to the Route 220 and Red Line fares. Added to the Combo pass fare this would have made a total cost of $1.85 per trip to get to Boston. Therefore, the difference between boat fares and combined bus and Red Line fares was much smaller from Hull then from Hingham.

Although the bus and Red Line fare from Hull to Boston was less than the 10-ride boat fare, the boat provided shorter travel time. The combined scheduled bus time from Pemberton Point to Quincy Center alone ranged from 54 to 58 minutes in the A.M. peak. The scheduled Red Line time from Quincy Center to South Station was another 20 minutes, excluding transfer and waiting times. The boat time from Pemberton Point to Long Wharf was 60 minutes, and many of the boat riders had final destinations closer to Long Wharf than to South Station.

7. Only Transportation Available

Of the seven reasons for using boat service listed on the survey form, "Only transportation available" was checked by the smallest numbers of riders (1.5% on the Hingham route and 2.4% on the Hull route). Among Hingham route passengers, 94.4% drove or rode as passengers in cars that were parked at the terminal and another 4.6%

were dropped off by private autos. Presumably, most of these passengers could have used the same autos either to access other transportation facilities or to drive all the way to Boston. Nevertheless, two thirds of those who said that the boat was the only transportation available got to the Hingham terminal by driving and parking. On the Hull route, only two riders indicated that the boat was the only transportation available, but both used park-and-ride access.

8. Other

Reasons for using the boat that were not variations of reasons listed directly on the survey form were indicated by 8.4% of riders on the Hingham route, but by only 3.7% on the Hull route. On the Hingham route, the most common Other reason was boat is fun/enjoyable, reported by 3.8% of all riders. Next were read/relax on the boat, at 2.8%, and avoid using other MBTA service, at 0.8%. No individual other reason was listed by more then 0.5% of all riders, but these included get work done (0.4%), socialize/chat (0.3%), comfort (0.3%), and reliability (0.1%). The breakdown of Other reasons on the Hull route was fun/enjoyable (2.5%) and read/relax on the boat (1.2%).

Reasons for Using Service – Inner Harbor Routes

The Inner Harbor ferries function mainly as distributors for other public transportation modes, in contrast with the South Shore commuter boats which provide line-haul services to Boston from suburban areas. Therefore, it would be expected that reasons for using the Inner Harbor ferries differ somewhat from reasons for using commuter boats.

1. Convenience

Convenience was the second most common reason for using Inner Harbor ferries, checked by 81.9% of all riders. (On the South Shore routes it placed second.) Among passengers traveling in four of the six possible route and direction combinations, convenience was cited by 75% to 87%. On A.M. peak trips from the Navy Yard to Lovejoy Wharf the figure was 100%. On A.M. trips from Long Wharf to the Navy Yard, the figure was only 63.9%. The lower latter figure is probably a result of the fact that this ferry route provides a less direct final link for many of its passengers than do most of the other routes. No other reason was checked by a higher percentage of riders on any of the Inner Harbor routes.

2. Avoid Driving/Traffic

Avoid Driving/Traffic, was a distant second most common reason for using Inner Harbor ferries, at 56.4% overall, in contrast with the South Shore routes where it was the most common reason. This difference is because most of the Inner Harbor riders would have completed their trips by using other mass transit service or by walking rather than by driving if the ferries had not been available. The importance of avoid driving/traffic ranged from a low of 46.1% among A.M. peak riders going from Lovejoy to the Navy

Yard to a high of 66.6% among riders traveling in the opposite direction on the same route. The latter was based on a very small sample. Otherwise, the maximum was 59.3%, among A.M. passengers going from the Navy Yard to Long Wharf. Many passengers who specified this reason were probably referring to their motive for using mass transit in general rather than for using ferries for portions of their trips.

3. Speed/Travel Time

Speed/Travel Time was cited by 48.8% of Inner Harbor riders, making it the third most important reason for using every Inner Harbor route. This was close to the rates on the South Shore routes, on which it was also third in importance. Passengers least concerned with speed/travel time were those on A.M. peak trips from Lovejoy Wharf to the Courthouse or World Trade Center (28.5%). Passengers most concerned were those on A.M. peak trips from the Navy Yard to Lovejoy Wharf (66.6%).

4. Inexpensive Way to Travel

The cost of boat service relative to other alternatives was the fourth most important reason overall for use of the Inner Harbor route, at 40.9%. The highest proportion with this opinion was found on among riders on A.M. peak trips from the Navy Yard to Lovejoy Wharf (66.6%) but this was based on a very small sample. Otherwise, the maximum was 48.8%, among A.M. passengers going from the Navy Yard to Long Wharf. For the majority of the latter riders, using the boat was not the least expensive transit alternative available. Nearly half of them (46.3%) reported that they paid the cash fare, which was then $1.00. Another 31.6% used 60-ride tickets, which reduced the cost to 75 cents. Most of them could instead have used MBTA bus route 93 between the Navy Yard and downtown Boston, for a cash fare of 60 cents. Therefore, although these riders claimed to be cost-conscious, unless they were unaware of the bus service they were not attempting to minimize cost.

5. Downtown Parking Cost/Availability

Downtown Parking Cost/Availability was cited by 27.7% of Inner Harbor riders, or slightly more than the 27.1% using South Shore boats for the same reason. Passengers least concerned about downtown parking were those on A.M. trips from Long Wharf to the Navy Yard (3.3%). These passengers had final destinations in Charlestown, and riding the boat from Long Wharf would not have avoided any need for downtown parking that they would otherwise have faced. The second-lowest concern was among A.M. peak riders from Lovejoy Wharf to the Navy Yard (15.3%) for a similar reason. The greatest concern about downtown parking was among A.M. riders from the Navy Yard to Long Wharf (37.6%). Most of the riders on this route began their trips at homes near the Navy Yard Terminal, and many could have driven downtown from there if they had chosen to. (Of these riders, 69.3% had autos available on the survey day.)

6. Environmentally Responsible

Environmentally responsible was the sixth most important reason cited by riders on the Inner Harbor routes, at 20.9% overall. (This was slightly higher than the proportion citing the same reason on the Hingham route, but lower than that on the Hull route.) Excluding A.M. peak passengers from the Navy Yard to Lovejoy Wharf, none of whom cited this reason, expressions of environmental concern were lowest among A.M. peak riders from Long Wharf to the Navy Yard (18.0%) and highest among P.M. peak riders from the Courthouse or World Trade Center to Lovejoy Wharf (25.6%). Most of the riders on all the Inner Harbor routes would probably have used other transit alternatives if the ferries had not been available. Therefore, concerns about environmental responsibility may have reflected their reasons for using mass transit in general rather than the ferries in particular.

Ridership on the Navy Yard-Long Wharf route is sufficiently heavy that it could not all be accommodated on bus Route 93 without some increase of service on that route. Therefore, the ferry route does serve to reduce bus emissions in downtown Boston. The boats also have internal combustion engines, however, resulting in increased emissions over the harbor. Ridership on the other Inner Harbor routes is too low to have had any impact on required bus frequencies.

7. Only Transportation Available

Of the seven reasons for using boat service listed on the survey form, "Only transportation available" was checked by the smallest numbers of Inner Harbor riders overall, at 6.4%. The only route on which the proportion exceeded 8.5% was A.M. peak trips from Lovejoy Wharf to the Navy Yard, at 30.7%, but this was based on a small sample. Most of the passengers who gave this reason indicated that they did not have autos available for the trips that day, but all of them were making trips for which other MBTA services could have been substituted for the ferry segment. Therefore, none of the riders were entirely dependent on the ferries.

8. Other

Reasons for using the boat that were not variations of reasons listed directly on the survey form were indicated by 10.7% of riders on all Inner Harbor routes combined. By far the most common "Other" reason was fun/enjoyable, reported by 7.1% of Inner Harbor riders. This was nearly double the 3.8% rate for this reason on the South Shore Hingham route. It provides a partial explanation for riders choosing the Inner Harbor ferries over less expensive transportation alternatives. The only route on which no riders listed this reason was A.M. peak trips from the Navy Yard to Lovejoy Wharf, but that was based on a small sample.

The second most common Other reason, was read/relax, at 1.6%. This was slightly below the 2.8% (also second place) on the Hingham route, but the shorter Inner Harbor routes allow less time for reading. As might be expected, all riders giving this reason

were on the two longer Inner Harbor routes. The third most common Other reason, cited by 0.8%, was reliability. The remaining other reasons were exercise (0.6%), avoid walking in bad weather (0.2%) and avoid using other MBTA service (0.2%). (The passengers who cited exercise had longer walking access or egress trips than they would have if they had used more direct transit alternatives.)

MBTA Ferry Services

2000 Passenger Survey

Customer Service Data and Reasons for Using Ferries

Route: **Hingham–Rowes Wharf**

Expanded Results A.M. Hingham Ons

Service Quality	Mean	Very Poor		Average		Very Good	Total	No Answer	Impor-tance*
Vessel condition	4.5	0.6%	1.3%	7.1%	28.4%	62.5%	1,753	45	150
Condition of docks	3.8	1.5%	7.0%	27.6%	37.3%	26.6%	1,768	31	68
Personal safety	4.4	0.3%	0.9%	9.2%	33.7%	56.0%	1,778	20	256
Safety while boarding	4.2	0.5%	2.5%	13.4%	40.7%	43.0%	1,756	42	59
Parking availability	3.7	3.7%	12.7%	24.3%	32.0%	27.3%	1,773	25	503
Vehicle security	3.4	3.0%	12.9%	38.1%	30.7%	15.3%	1,728	70	103
Availability of schedules	4.1	0.2%	2.6%	16.9%	45.2%	35.1%	1,764	35	97
Info by phone/internet	3.7	3.6%	5.8%	31.0%	34.2%	25.4%	1,280	518	6
On-time performance	4.4	0.4%	2.0%	9.3%	31.4%	56.9%	1,775	23	564
Helpfulness of crew	4.4	0.5%	2.7%	10.3%	33.1%	53.4%	1,747	51	27
Availability of tix/passes	4.3	0.4%	2.6%	12.5%	36.7%	47.8%	1,760	38	9
Comfort of ride	4.4	0.1%	2.0%	9.1%	37.8%	51.0%	1,767	31	149
Availability of seating	3.5	2.8%	12.4%	32.7%	35.2%	16.8%	1,762	37	270
Frequency of service	3.9	0.5%	5.1%	21.7%	45.7%	27.0%	1,766	32	537
Travel time/speed	4.2	0.7%	2.3%	12.6%	41.3%	43.1%	1,779	19	569

*The number of respondents who indicated that this service quality measure was one of the three most important to them. Many respondents checked no measures while others checked more than three.

Reasons for Using MBTA Ferry Service	Number of Riders	Percent of Riders†
Convenience	1,331	74.0%
Speed/Travel time	958	53.2%
Avoid driving/traffic	1,487	82.6%
Inexpensive way to travel	217	12.1%
Parking cost/availability	488	27.1%
Environmentally responsible	316	17.6%
Only transportation available	27	1.5%
Other	151	8.4%
TOTAL RIDERS	1,798	

† Note: Percent of riders may total to more than 100 percent due to multiple responses.

CTPS
3/2/01

MBTA Ferry Services

2000 Passenger Survey

Customer Service Data and Reasons for Using Ferries

Route: **Hull—Quincy–Long Wharf**

Expanded Results

Service Quality	Mean	Very Poor		Average		Very Good	Total	No Answer	Importance*
Vessel condition	4.4	0.0%	1.3%	9.0%	39.7%	50.0%	78	3	6
Condition of docks	4.2	3.9%	6.5%	10.4%	27.3%	51.9%	77	4	3
Personal safety	4.5	0.0%	1.3%	9.0%	30.8%	59.0%	78	3	18
Safety while boarding	4.3	2.6%	2.6%	14.3%	19.5%	61.0%	77	4	7
Parking availability	4.6	0.0%	3.9%	3.9%	16.9%	75.3%	77	4	5
Vehicle security	4.0	2.7%	4.0%	18.7%	44.0%	30.7%	75	6	4
Availability of schedules	3.1	16.3%	17.5%	27.5%	20.0%	18.8%	80	1	10
Info by phone/internet	3.5	2.9%	10.1%	37.7%	30.4%	18.8%	69	12	1
On-time performance	4.0	0.0%	10.0%	20.0%	28.8%	41.3%	80	1	27
Helpfulness of crew	4.6	0.0%	1.3%	5.2%	27.3%	66.2%	77	4	8
Availability of tix/passes	4.4	1.3%	0.0%	14.1%	24.4%	60.3%	78	3	4
Comfort of ride	4.5	0.0%	1.3%	5.1%	31.6%	62.0%	79	2	11
Availability of seating	4.3	0.0%	2.5%	15.2%	34.2%	48.1%	79	2	6
Frequency of service	2.5	22.5%	31.3%	30.0%	11.3%	5.0%	80	1	30
Travel time/speed	3.8	6.4%	7.7%	21.8%	30.8%	33.3%	78	3	22

*The number of respondents who indicated that this service quality measure was one of the three most important to them. Many respondents checked no measures while others checked more than three.

Reasons for Using MBTA Ferry Service	Number of Riders	Percent of Riders†
Convenience	66	81.4%
Speed/Travel time	38	46.9%
Avoid driving/traffic	69	85.1%
Inexpensive way to travel	30	37.0%
Parking cost/availability	22	27.1%
Environmentally responsible	26	32.0%
Only transportation available	2	2.4%
Other	3	3.7%
TOTAL RIDERS	81	

† Note: Percent of riders may total to more than 100 percent due to multiple responses.

CTPS
1/29/01

MBTA Ferry Services

2000 Passenger Survey

Customer Service Data and Reasons for Using Ferries

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - A.M. Navy Yard Boardings

Service Quality	Mean	Very Poor		Average		Very Good	Total	No Answer	Impor-tance*
Vessel condition	4.3	0.0%	0.9%	12.7%	41.1%	45.4%	290	4	23
Condition of docks	4.3	0.0%	1.6%	11.3%	39.7%	47.5%	288	6	4
Personal safety	4.6	0.0%	0.0%	7.4%	30.1%	62.5%	293	1	45
Safety while boarding	4.6	0.0%	0.0%	3.8%	34.8%	61.4%	290	5	8
Parking availability	3.1	25.7%	15.0%	13.2%	10.4%	35.6%	198	97	4
Vehicle security	3.8	13.8%	5.8%	19.9%	11.5%	49.1%	160	134	3
Availability of schedules	4.3	0.0%	4.6%	12.2%	36.5%	46.8%	288	6	25
Info by phone/internet	4.1	0.7%	6.5%	24.6%	22.7%	45.4%	205	90	3
On-time performance	4.8	0.0%	0.0%	0.6%	21.3%	78.0%	291	4	111
Helpfulness of crew	4.8	0.0%	0.0%	0.4%	24.5%	75.2%	287	7	13
Availability of tix/passes	4.3	1.6%	4.7%	12.9%	28.1%	52.9%	279	15	8
Comfort of ride	4.5	0.0%	0.6%	6.7%	33.8%	58.8%	292	3	20
Availability of seating	4.6	0.0%	1.3%	2.1%	33.4%	63.3%	293	1	14
Frequency of service	4.2	0.0%	6.8%	13.6%	36.4%	43.3%	291	3	103
Travel time/speed	4.6	0.0%	0.0%	1.9%	31.8%	66.3%	293	1	66

*The number of respondents who indicated that this service quality measure was one of the three most important to them. Many respondents checked no measures while others checked more than three.

Reasons for Using MBTA Ferry Service	Number of Riders	Percent of Riders†
Convenience	254	86.2%
Speed/Travel time	161	54.6%
Avoid driving/traffic	175	59.3%
Inexpensive way to travel	143	48.8%
Parking cost/availability	111	37.6%
Environmentally responsible	67	22.8%
Only transportation available	18	6.1%
Other	28	9.6%
TOTAL RIDERS	295	

† Note: Percent of riders may total to more than 100 percent due to multiple responses.

CTPS
3/2/01

MBTA Ferry Services

2000 Passenger Survey

Customer Service Data and Reasons for Using Ferries

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - A.M. Long Wharf Ons

Service Quality	Mean	Very Poor		Average		Very Good	Total	No Answer	Impor-tance*
Vessel condition	4.4	0.0%	0.0%	16.0%	25.4%	58.7%	72	0	7
Condition of docks	4.3	0.0%	0.0%	21.5%	23.7%	54.7%	72	0	2
Personal safety	4.7	0.0%	0.0%	5.7%	19.8%	74.5%	72	0	6
Safety while boarding	4.6	0.0%	0.0%	7.7%	22.2%	69.8%	71	1	4
Parking availability	3.4	30.8%	6.5%	6.7%	3.6%	52.1%	40	32	1
Vehicle security	4.6	4.4%	0.0%	4.4%	17.8%	74.4%	28	43	0
Availability of schedules	4.5	0.0%	0.0%	13.1%	27.1%	60.0%	68	3	8
Info by phone/internet	4.4	3.0%	3.0%	15.2%	12.7%	66.5%	41	30	0
On-time performance	4.8	0.0%	0.0%	1.7%	20.7%	77.6%	72	0	23
Helpfulness of crew	4.8	0.0%	0.0%	1.6%	19.8%	78.2%	71	1	6
Availability of tix/passes	4.6	0.0%	0.0%	8.2%	18.9%	72.8%	63	9	0
Comfort of ride	4.5	0.0%	0.0%	10.6%	26.5%	62.9%	72	0	5
Availability of seating	4.7	0.0%	0.0%	0.0%	22.5%	76.9%	70	2	6
Frequency of service	4.6	0.0%	0.0%	7.0%	29.0%	64.0%	72	0	26
Travel time/speed	4.7	0.0%	0.0%	3.5%	23.6%	73.4%	68	3	19

*The number of respondents who indicated that this service quality measure was one of the three most important to them. Many respondents checked no measures while others checked more than three.

Reasons for Using MBTA Ferry Service	Number of Riders	Percent of Riders†
Convenience	46	63.9%
Speed/Travel time	26	36.6%
Avoid driving/traffic	34	47.3%
Inexpensive way to travel	19	26.9%
Parking cost/availability	2	3.3%
Environmentally responsible	13	18.0%
Only transportation available	6	8.3%
Other	13	18.8%
TOTAL RIDERS	72	

† Note: Percent of riders may total to more than 100 percent due to multiple responses.

MBTA Ferry Services
2000 Passenger Survey

Customer Service Data and Reasons for Using Ferries

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Navy Yard Boardings

Service Quality	Mean	Very Poor		Average		Very Good	Total	No Answer	Impor-tance*
Vessel condition	4.3	0.0%	0.0%	0.0%	66.7%	33.3%	18	0	3
Condition of docks	4.3	0.0%	0.0%	0.0%	66.7%	33.3%	18	0	3
Personal safety	4.8	0.0%	0.0%	0.0%	16.7%	83.3%	18	0	3
Safety while boarding	4.5	0.0%	0.0%	16.7%	16.7%	66.7%	18	0	3
Parking availability	3.3	0.0%	25.0%	50.0%	0.0%	25.0%	12	6	3
Vehicle security	3.3	0.0%	25.0%	50.0%	0.0%	25.0%	12	6	3
Availability of schedules	4.0	0.0%	16.7%	16.7%	16.7%	50.0%	18	0	3
Info by phone/internet	3.4	20.0%	0.0%	40.0%	0.0%	40.0%	15	3	0
On-time performance	4.8	0.0%	0.0%	0.0%	16.7%	83.3%	18	0	6
Helpfulness of crew	4.5	0.0%	0.0%	0.0%	50.0%	50.0%	18	0	0
Availability of tix/passes	4.3	0.0%	0.0%	16.7%	33.3%	50.0%	18	0	3
Comfort of ride	4.3	0.0%	0.0%	16.7%	33.3%	50.0%	18	0	3
Availability of seating	4.8	0.0%	0.0%	0.0%	16.7%	83.3%	18	0	0
Frequency of service	4.0	0.0%	16.7%	0.0%	50.0%	33.3%	18	0	3
Travel time/speed	4.7	0.0%	0.0%	0.0%	33.3%	66.7%	18	0	3

*The number of respondents who indicated that this service quality measure was one of the three most important to them. Many respondents checked no measures while others checked more than three.

Reasons for Using MBTA Ferry Service	Number of Riders	Percent of Riders†
Convenience	18	100.0%
Speed/Travel time	12	66.6%
Avoid driving/traffic	12	66.6%
Inexpensive way to travel	12	66.6%
Parking cost/availability	3	16.6%
Environmentally responsible	0	0.0%
Only transportation available	0	0.0%
Other	0	0.0%
TOTAL RIDERS	18	

† Note: Percent of riders may total to more than 100 percent due to multiple responses.

MBTA Ferry Services

2000 Passenger Survey

Customer Service Data and Reasons for Using Ferries

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Lovejoy Boardings

Service Quality	Mean	Very Poor		Average		Very Good	Total	No Answer	Importance*
Vessel condition	4.6	0.0%	0.0%	7.7%	23.1%	69.2%	13	0	0
Condition of docks	4.6	0.0%	0.0%	0.0%	38.5%	61.5%	13	0	1
Personal safety	4.9	0.0%	0.0%	0.0%	7.7%	92.3%	13	0	0
Safety while boarding	4.8	0.0%	0.0%	7.7%	7.7%	84.6%	13	0	0
Parking availability	3.4	30.0%	10.0%	0.0%	10.0%	50.0%	10	3	0
Vehicle security	3.5	25.0%	0.0%	25.0%	0.0%	50.0%	8	5	0
Availability of schedules	4.5	0.0%	0.0%	7.7%	38.5%	53.8%	13	0	0
Info by phone/internet	4.1	0.0%	0.0%	25.0%	37.5%	37.5%	8	5	0
On-time performance	4.6	0.0%	0.0%	7.7%	23.1%	69.2%	13	0	2
Helpfulness of crew	4.8	0.0%	0.0%	7.7%	0.0%	92.3%	13	0	1
Availability of tix/passes	4.4	8.3%	0.0%	8.3%	8.3%	75.0%	12	1	0
Comfort of ride	4.5	0.0%	0.0%	7.7%	30.8%	61.5%	13	0	1
Availability of seating	4.5	0.0%	0.0%	7.7%	30.8%	61.5%	13	0	0
Frequency of service	4.3	0.0%	7.7%	7.7%	30.8%	53.8%	13	0	2
Travel time/speed	4.7	0.0%	0.0%	7.7%	15.4%	76.9%	13	0	0

*The number of respondents who indicated that this service quality measure was one of the three most important to them. Many respondents checked no measures while others checked more than three.

Reasons for Using MBTA Ferry Service	Number of Riders	Percent of Riders†
Convenience	10	76.9%
Speed/Travel time	5	38.4%
Avoid driving/traffic	6	46.1%
Inexpensive way to travel	4	30.7%
Parking cost/availability	2	15.3%
Environmentally responsible	3	23.0%
Only transportation available	4	30.7%
Other	1	7.6%
TOTAL RIDERS	13	

† Note: Percent of riders may total to more than 100 percent due to multiple responses.

MBTA Ferry Services

2000 Passenger Survey

Customer Service Data and Reasons for Using Ferries

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - A.M. Peak Lovejoy Boardings

Service Quality	Mean	Very Poor		Average		Very Good	Total	No Answer	Impor-tance*
Vessel condition	4.4	0.0%	0.0%	19.9%	14.9%	64.6%	46	2	2
Condition of docks	4.5	0.0%	0.0%	9.9%	24.8%	64.6%	46	2	0
Personal safety	4.5	0.0%	0.0%	14.9%	19.9%	64.6%	46	2	2
Safety while boarding	4.2	0.0%	9.9%	5.0%	34.8%	49.7%	46	2	0
Parking availability	2.2	38.1%	30.5%	15.2%	0.0%	15.2%	30	18	0
Vehicle security	2.7	21.8%	10.9%	43.5%	10.9%	10.9%	21	27	0
Availability of schedules	4.1	0.0%	10.6%	10.6%	42.5%	37.2%	43	4	5
Info by phone/internet	4.0	0.0%	7.6%	22.9%	22.9%	45.7%	30	18	0
On-time performance	4.6	0.0%	4.8%	4.8%	14.3%	76.2%	48	0	18
Helpfulness of crew	4.6	0.0%	0.0%	11.1%	22.3%	66.9%	41	6	2
Availability of tix/passes	4.2	0.0%	13.4%	13.4%	13.4%	60.5%	34	13	2
Comfort of ride	4.1	0.0%	5.3%	21.3%	37.2%	37.2%	43	4	5
Availability of seating	4.4	0.0%	0.0%	14.9%	24.8%	59.6%	46	2	5
Frequency of service	3.7	0.0%	24.8%	9.9%	29.8%	34.8%	46	2	14
Travel time/speed	4.1	0.0%	5.3%	26.6%	26.6%	42.5%	43	4	7

*The number of respondents who indicated that this service quality measure was one of the three most important to them. Many respondents checked no measures while others checked more than three.

Reasons for Using MBTA Ferry Service	Number of Riders	Percent of Riders†
Convenience	38	80.9%
Speed/Travel time	13	28.5%
Avoid driving/traffic	25	52.3%
Inexpensive way to travel	9	19.0%
Parking cost/availability	9	19.0%
Environmentally responsible	9	19.0%
Only transportation available	2	4.7%
Other	2	4.7%
TOTAL RIDERS	47	

† Note: Percent of riders may total to more than 100 percent due to multiple responses.

CTPS
3/2/01

MBTA Ferry Services

2000 Passenger Survey

Customer Service Data and Reasons for Using Ferries

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - P.M. Peak Courthouse/WTC Ons

Service Quality	Mean	Very Poor		Average		Very Good	Total	No Answer	Impor-tance*
Vessel condition	4.4	0.0%	0.0%	6.8%	41.9%	51.3%	40	0	8
Condition of docks	4.1	4.2%	4.2%	12.1%	35.1%	44.5%	40	0	5
Personal safety	4.5	0.0%	0.0%	5.3%	42.3%	52.4%	40	0	6
Safety while boarding	4.3	0.0%	0.0%	16.6%	39.1%	44.1%	39	1	2
Parking availability	3.4	24.7%	4.8%	15.2%	4.8%	48.6%	22	18	0
Vehicle security	4.0	6.6%	17.0%	10.4%	6.6%	60.3%	16	23	0
Availability of schedules	3.7	0.0%	6.8%	41.9%	23.0%	28.3%	40	0	2
Info by phone/internet	4.2	0.0%	3.6%	16.6%	31.8%	46.9%	29	11	0
On-time performance	4.7	0.0%	0.0%	2.8%	30.6%	67.3%	37	2	14
Helpfulness of crew	4.7	0.0%	0.0%	0.0%	30.6%	69.3%	39	1	1
Availability of tix/passes	4.4	3.6%	3.6%	5.7%	29.6%	57.8%	29	10	2
Comfort of ride	4.5	0.0%	0.0%	9.4%	31.4%	59.2%	40	0	4
Availability of seating	4.4	0.0%	2.8%	14.7%	22.0%	61.2%	37	2	3
Frequency of service	3.8	2.7%	13.9%	23.6%	20.9%	38.7%	39	1	15
Travel time/speed	4.2	0.0%	4.2%	18.4%	27.2%	50.2%	40	0	16

*The number of respondents who indicated that this service quality measure was one of the three most important to them. Many respondents checked no measures while others checked more than three.

Reasons for Using MBTA Ferry Service	Number of Riders	Percent of Riders†
Convenience	30	75.4%
Speed/Travel time	19	48.6%
Avoid driving/traffic	23	57.6%
Inexpensive way to travel	11	28.2%
Parking cost/availability	7	18.8%
Environmentally responsible	10	25.6%
Only transportation available	1	2.6%
Other	6	16.2%
TOTAL RIDERS	39	

† Note: Percent of riders may total to more than 100 percent due to multiple responses.

12. Potential Usage of New Services

Information Contained

Each Potential Usage of New Services report consists of three tables on one page. The first table, Potential Weekend Usage, shows the number of riders indicating that they would use Saturday service, Sunday service, or both, separated by year-round use and summer-only use. The results in this table are based on the responses to survey question 9.

The second table, Usage of Bicycle Facilities shows the number and percentage of riders indicating that they would use facilities for accommodating bicycles at dockside or on board vessels regularly, occasionally, or not at all. The results in this table are based on responses to survey question 11.

The third table, Potential New Ferries, shows the number and percentage of passengers indicating that they would use various potential new ferry routes listed on the survey from or given as write-in suggestions by the passengers. The results in this table are based on responses to survey question 12.

Potential Weekend Usage

Interpretation of Report Tables

Each Potential Weekend Use table has three parts, each of which has separate but related totals and percentages. To the top and left is a nine-cell table with cross-tabulations of responses for Saturday use (Year-round, Summer-only, or Not at all) with responses for the same three levels of Sunday use. The percentages shown in each cell are based on the ratio of the value in that cell to the total number of passengers who gave a response for both Saturday and Sunday. Total numbers of passengers who gave responses for each Saturday use level but no response for Sunday are shown in the No Answer column to the right, but are not included in the percentage calculations. Similarly, numbers of passengers who responded to the Sunday use question but not the Saturday use question are shown in the No Answer row below the nine-cell table, but are not included in the percentage calculations in that table.

The second part of the Potential Weekend use table is a three-cell column on the right side, labeled Saturday total. This shows the number and percent of riders who gave responses for each level of Saturday use, either with or without responses for Sunday use, but the percentages are based only on riders who gave some response for Saturday use.

The third part of the Potential Weekend use table is a three-cell row at the bottom, labeled Sunday total. This shows the number and percent of riders who gave responses for each level of Sunday use, either with or without response for Saturday use, but the percentages are based only on riders who gave some response for Sunday use.

The No Answer rate for either one or both parts of question 9 was much larger than for most other questions. This is attributable to the fact that in most questions passengers were describing their current travel habits, but in question 9 they were asked how they might use hypothetical new services. Actual use of Saturday and Sunday service would depend on frequency and on specific arrival and departure times. Some passengers who indicated that they would use Saturday or Sunday service would probably not do so with the actual schedules offered. Some passengers who did not answer question 9 would find weekend service attractive if it were offered, and would use it. As with all questions on the survey, question 9 shows only the views of passengers who were using commuter boat or ferry service on weekdays in the Spring of 2000. It does not show potential use of weekend service by people who might ride only on weekends.

South Shore Routes

At present (as at the time of the survey), neither of the South Shore routes offers weekend service. On the Hingham route, 69% of inbound A.M. riders who gave responses for both Saturday and Sunday use indicated that they would use either or both sometimes, and 31% indicated that they would not use weekend service at all. On the Hull route, 72.5% indicated that they would make some weekend trips and 27.5% that they would make none.

On both South Shore boat routes, the most common response for weekend use was year-round on both Saturday and Sunday, at 49.0% on the Hingham route, and 54.9% on the Hull route. Another 11.6% on the Hingham route and 7.8% on the Hull route indicated that they would use both Saturday and Sunday service in Summer only. (The survey did not ask how frequently riders would use service on each weekend day, other than Summer only versus year-round.)

Of boat passengers who responded for Saturday service (whether or not they responded for Sunday service) on the Hingham route, 55.4% indicated they would ride year-round, 15.1% Summer only, and 29.3% not at all. On the Hull route the corresponding percentages were 64.0%, 14.6%, and 21.3%.

Of passengers who responded for Sunday service (whether or not they responded for Saturday service) on the Hingham route, 49.5% indicated they would ride year-round, 14.2% Summer only, and 36.2% not at all. On the Hull route the corresponding percentages were 54.9%, 11.7%, and 33.3%.

For comparison, on the Old Colony commuter rail lines, which have both weekday and weekend service, the 1998 survey showed that only 52.5% of riders on the Middleborough/Lakeville Line and 48.4% on the Plymouth/ Kingston line rode at all

on weekends. Only 2.5% and 1.2% reported that they rode regularly on both Saturdays and Sundays. With 39.3% and 40.1% reporting occasional use for both. These results suggests that actual weekend use of South Shore commuter boat service by weekday riders would be significantly lower than indicated by the boat survey responses.

Inner Harbor Routes

At present (as at the time of the survey), the Navy Yard - Long Wharf route has service on Saturdays and Sundays as well as on weekdays, but the other two routes operate on weekdays only. Presumably, passengers on the Navy Yard - Long Wharf route who answered survey question 9 were describing their actual use as of Spring 2000, but those on the other two routes were estimating use of hypothetical new service.

Navy Yard - Long Wharf Route

On the Navy Yard - Long Wharf route, 88.8% of A.M. riders from the Navy Yard who gave responses for both Saturday and Sunday use indicated that they rode on either or both weekend days sometimes, and only 11.2% indicated that they did not use weekend service at all. In contrast, among A.M. riders boarding at Long Wharf, only 43.6% indicated any weekend use and 56.4% indicated no weekend use. This difference is attributable to the fact that respondents boarding at the Navy Yard were predominantly residents of condominiums near the Charlestown wharf who were going to work. For these riders, the ferry service would also be convenient for shopping and recreational travel to downtown Boston on weekends. Respondents boarding at Long Wharf were predominantly going to work in Charlestown after transferring from other transit services from outlying Boston neighborhoods or suburbs. These riders would have had much less need to travel to Charlestown on weekends than on weekdays. The weekend usage rate is similar to that found among Old Colony commuter rail riders, as discussed in the South Shore section above.

Among the riders going from the Navy Yard to Long Wharf who gave responses for both Saturday and Sunday use, the most common was year-round use both Saturday and Sunday, at 82.5%. Another 3.2% indicated Saturday and Sunday Summer-only use. Among the riders going from Long Wharf to the Navy Yard who gave responses for both Saturday and Sunday use, the most common response after no weekend use was year-round use both Saturday and Sunday, at 35.0%. Another 9.7% indicated Saturday and Sunday Summer-only use.

Of passengers from the Navy Yard who responded for Saturday service (whether or not they responded for Sunday service), 83.7% indicated they rode year-round, 5.2% Summer only, and 11.0% not at all. For boardings at Long Wharf, the corresponding percentages were 32.5%, 11.5%, and 56.1%. Of passengers from the Navy Yard who responded for Sunday service (whether or not they responded for Saturday service), 82.7% indicated they rode year-round, 4.4% Summer only, and 12.8% not at all. For boardings at Long Wharf, the corresponding percentages were 34.6%, 9.6%, and 55.7%.

Navy Yard - Lovejoy Wharf Route

On the Navy Yard - Lovejoy Wharf route, 75.0% of A.M. riders from the Navy Yard who gave responses for both Saturday and Sunday use indicated that if weekend service were offered they would ride on either or both weekend days sometimes, and 25.0% indicated that they would not use weekend service at all. This is lower sometime weekend use than actually found among riders on the Navy Yard - Long Wharf route (88.8%). Furthermore, the rate of anticipated year-round Saturday and Sunday use was much lower on the Lovejoy route (25.0% versus 82.5%). All of the survey riders boarding at the Navy Yard to go to Lovejoy were going to work from homes near the Navy Yard wharf. All of them either worked at locations within walking distance of Lovejoy or transferred to the Orange or Green lines to reach destinations in other sections of Boston. The same riders can already use the Navy Yard - Long Wharf route on weekends, and for travel to many non-work destinations it is at least convenient as weekend service to Lovejoy would be. This explains the limited demand for weekend service from the Navy Yard to Lovejoy.

Estimated use rates of weekend service by A.M. peak riders going from Lovejoy Wharf to the Navy Yard were somewhat higher than those in the opposite direction. Weekend use at least sometimes was indicated by 87.5%, with no weekend use by only 12.5%. As on trips toward Lovejoy, 25.0% indicated year-round use both Saturday and Sunday, and another 50.0% indicated Summer-only Saturday and Sunday use. The difference was that 12.5% from Lovejoy but none from the Navy Yard indicated Summer Saturday use but no Sunday use. (Results in both directions were based on small samples.) All of the A.M. peak riders going from Lovejoy to the Navy Yard transferred from either rapid transit or commuter rail, to go to work in Charlestown. Actual patterns of weekend use, if service were offered, would be expected to be similar to that found among passengers going from Long Wharf to the Navy Yard, where only 43.6% used weekend service at all, but 35.0% used it Saturday and Sunday year-round. In any case, weekday ridership on the Navy Yard - Lovejoy route is so low that weekend service carrying even fewer riders could not be justified.

Lovejoy Wharf - Courthouse/World Trade Center Route

On the Lovejoy Wharf - Courthouse/World Trade Center route, only 22.2% of A.M. peak riders from Lovejoy Wharf who gave responses for both Saturday and Sunday use indicated that if weekend service were offered they would ride on either or both weekend days sometimes, and 77.8% indicated that they would not use weekend service at all. This was the lowest anticipated weekend use rate reported by riders on any of the survey routes. Most of the riders from Lovejoy had transferred from commuter rail lines and were going from home to work destinations in South Boston. Weekend non-work destinations would be more likely to be located in sections of Boston not conveniently accessed by boat service to the Courthouse of World Trade Center.

The results among P.M. peak riders going from the Courthouse or World Trade Center to Lovejoy Wharf were different, even though most of the riders were transferring to commuter rail to go home from work. Among those going toward Lovejoy, 52.9% indicated that they would make some weekend trips and 47.1% that they would make none. Possibly the P.M. sample included a higher proportion of riders who worked in South Boston on weekends as well as weekdays. Nevertheless, the A.M. and P.M. peak results both showed that there would be only about 10 year-round Saturday and Sunday riders.

Potential Usage of Bicycle Facilities

At present, bicycle access is used by only a very small percentage of commuter boat or ferry riders. On the South Shore routes, 0.4% (7 passengers) on the Hingham route but none on the Hull route used bicycle access. Six of the Hingham riders who reported bicycle access also used bicycle egress, implying that they brought their bicycles on board the boats. On the Inner Harbor routes, there were no reported bicycle access or egress trips. The survey results indicate that bicycle access or egress by present riders on all routes would increase if facilities for bicycles were provided at dockside or on board vessels. On the South Shore routes, this would result in some easing of parking constraints at the terminals. On the Inner Harbor routes, it would improve access or egress times slightly for some riders, but would have no impact on traffic congestion or parking. The potential for attracting new riders by providing bicycle facilities was not determined.

In absolute terms, the South Shore Hingham route showed the greatest potential for diverting riders to bicycle access or egress. On that route, the responses indicate that 3.2% of the riders (57) would use bicycle access or egress regularly, and another 19.0% (341) would use it occasionally. On the Hull route the corresponding figures were 15.4% (12 riders) and 24.4% (19). The majority of those on both of these routes who would switch to bicycle use for portions of their trips currently use park-and-ride access at the outer terminal. Increased bicycle access would reduce parking capacity requirements at Hingham and Hull. Some riders might still drive to these terminals and use bicycles only for egress at the Boston end if they were able to bring bicycles on board or keep them securely at the Boston terminals.

Among Inner Harbor ferry riders, the greatest interest in bicycle facilities came from passengers on A.M. trips from the Navy Yard to Long Wharf. The results indicate that of these, 5.6% (16) would use bicycles regularly, and another 18.7% (53) occasionally for portions of their trips. Almost all of these passengers walk to the Navy Yard wharf, and most have walking times of five minutes or less, so improved bicycle facilities would have almost no impact on parking requirements and very limited travel time benefits for riders at that end. The majority of these riders also walk from Long Wharf to their final destinations, but have walking times of 10 to 15 minutes at that end. Therefore, the time savings from bicycle use would be mostly in egress.

Among passengers on A.M. trips from Long Wharf to the Navy Yard 6.2% (4) would use bicycles regularly, and another 15.4% (10) occasionally for portions of their trips. These passengers use a variety of access modes, but none drive to Long Wharf. All of them walk to their final destinations from the Navy Yard wharf, and report egress times of 10 minutes or less. Provision of bicycle facilities would produce limited benefits for these riders, and would have no impact on traffic congestion.

Among passengers on A.M. peak trips from the Navy Yard to Lovejoy Wharf 16.7% (3) would use bicycles regularly, and another 33.3% (6) occasionally for portions of their trips. All of them walk to the Navy Yard wharf, and most report access times of five minutes or less. At the inner trip end, all either walk to their final destinations or transfer to rapid transit. The time savings from bicycle use would be mostly in egress. Because of the short length of this route, passengers with bicycles could also use them in place of the entire ferry segment.

Among passengers on A.M. peak trips from Lovejoy Wharf to the Navy Yard one passenger would use a bicycle regularly, and another one occasionally for portions of their trips. One of them now transfers at Lovejoy from commuter rail and the other from the Green Line. Both walk to their final destinations in Charlestown with egress times of five minutes or less. It is unclear why either rider would use the boat at all if they used a bicycle for part of the trip.

Among passengers on A.M. peak trips from Lovejoy Wharf to the Courthouse or World Trade Center, 22.9% (11) would use a bicycle regularly, and another 10.4% (5) occasionally for portions of their trips. More than half of these riders now transfer at Lovejoy from commuter rail, with the rest divided between walk-ins and transfers from the Navy Yard - Lovejoy boat. At the South Boston end, all walk to their destinations. Those who would benefit most from bicycle egress are seven who have 15-minute walks. The rest reported egress times of five minutes or less.

Among passengers on P.M. peak trips to Lovejoy Wharf from the Courthouse or World Trade Center, none indicated that they use a bicycle regularly, but 7.5% (3) would use bicycles occasionally for portions of their trips. All of these riders have walking access of five minutes or less to the boarding terminal. One transfers at Lovejoy to commuter rail and the other two walk 10 minutes to their final destinations.

Potential New Ferries

South Shore

The South Shore Boat survey forms listed Scituate to Boston and Other points in Quincy to Boston as check-off choices for new boat services, and also provided space to write in suggestions for service from other South Shore points to Boston. Among Hingham boat riders, Scituate to Boston was by far the most popular choice, indicated by 28.3% of the passengers, or and expanded total of 509 riders. As would be expected, passengers with trip origins in Scituate accounted for the largest share of requests for Scituate

service, with 57.2% (291). This was 81% of all the Scituate riders on the route. Marshfield, which is directly south of Scituate provided 18.6% (95) of the Scituate service requests.

Passengers with Hingham, Cohasset, and Norwell trip origins each accounted for 6.0% (31) of the requests. Norwell is directly west of Scituate. Cohasset is directly north of Scituate. Passengers from there would have to start in the opposite direction from Boston to reach a Scituate terminal, but for some it would be closer than Hingham. It is unlikely that passengers with trip origins in Hingham would switch to a Scituate boat. The respondents may have hoped that such a boat would reduce crowding on the Hingham boats or that it would reduce the likelihood of construction of the Greenbush commuter rail line. The final 6% of requests for Scituate service came from riders with origins in seven different South Shore cities or towns, none of which generated more than 2% (10) of the requests.

The second most common request for new services from Hingham boat riders was for a route from Cohasset to Boston made by 13.7% (246). Passengers with trip origins in Cohasset accounted for the largest share of requests for Cohasset service, with 60.2% (149). This was 58% of all the Cohasset riders on the route. Scituate, which is directly south of Cohasset, provided 27.3% (67) of the Cohasset service requests. The majority of the Scituate riders who requested Cohasset service also requested Scituate service. Passengers with trip origins in Hingham were the third-largest source of requests for Cohasset service, at 5.3% (13). Cohasset is east of Hingham. The Hingham boat terminal is on the west side of Hingham , on the border of Weymouth. Depending on the location of a terminal in Cohasset, some riders from Hingham might find it more convenient than a Hingham terminal, but as with the case of Hingham passengers requesting Scituate service, the motivation may have been to reduce crowding on the Hingham boats or avoid construction of the Greenbush line.

The third most common request for new services from Hingham boat riders was the check-off choice of additional routes from Quincy made by 5.6% (101). At present, the only commuter boat route from Quincy to Boston runs from the Fore River, and makes an intermediate stop at Logan Airport. This route is unsubsidized and has higher fares than the Hingham route. In the past, a route from Marina Bay in the Squantum section of Quincy was operated briefly. The largest share of requests for Quincy service came from Weymouth, with 36.6% (37). Passengers from Weymouth must travel east to the Hingham terminal. A Quincy terminal would be to the west. The second-largest source of requests for Quincy service came from Hingham, with 30.2% (31). It is unclear why Hingham residents would prefer a Quincy terminal to the Hingham terminal. A Quincy terminal would be further away from most if not all of their trip origins. Hull residents accounted for 13.3% (13) of the Quincy service requests. These riders may actually have been hoping for increased frequency of the Quincy - Boston boats that also stop in Hull.

The only other new service requested by more than 1.5% of Hingham route riders was for more frequent service from Hull, made by 3.3% (60). At present, Hull is served by

only two inbound A.M. peak boats and two outbound P.M. peak boats. Most of the passengers who requested more frequent Hull service had trip origins in that town (as do nearly all of the present Hull boat riders), but there were a few requests from scattered other towns. Requests for a new route from Marshfield were made by 1.3% (24) of the Hingham riders, mostly residents of Marshfield.

Users of the Hull commuter boat were much less inclined to request additional services than were users of the Hingham route. The Scituate check-off choice was selected by 7.4% (6). It is unclear why, since all of them had trip origins in Hull. Boarding in Scituate would require traveling in the opposite direction from Boston, through Cohasset. The Quincy check-off choice was selected by 2.4% (2), but access to any Quincy terminal from Hull would require driving past the Hingham terminal. These passengers may actually have wanted to have more of the present Quincy boats stop in Hull.

Requests for direct service from Hull to Boston were made by 3.7% (3) of the Hull boat riders. At present, morning trips from Hull to Boston stop at Quincy and Logan Airport on the way, making a total scheduled time of 60 minutes. On outbound P.M. trips, Hull is the first stop after Boston, and the scheduled time is only 20 minutes. Before being combined with the Quincy route, Hull service was provided by a route that ran only between Hull and Long Wharf, but a slower boat was used, so the running time was 50 minutes each way. There was also only round trip a day then.

Inner Harbor

The Inner Harbor ferry survey forms listed Lovejoy Wharf to Russia Wharf and East Boston to Long Wharf as check-off choices for new boat services, and also provided space to write in suggestions for service from other North Shore points to Boston. Among riders on most of the Inner Harbor routes, the most popular choice for a new route was Lovejoy Wharf to Russia Wharf. Lovejoy Wharf is near North Station. Russia Wharf is in the Fort Point Channel at the Congress Street bridge, and is the closest to South Station that it would currently be possible to operate ferries. Expanded results from all surveyed trips combined on the Inner Harbor routes showed a total of 51 requests for Lovejoy - Russia Wharf service, equivalent to 10.5% of all riders. More than half of these requests were from riders on A.M. trips from the Navy Yard to Long Wharf. These riders would have had to use the Navy Yard - Lovejoy route in order to connect with a Lovejoy - Russia Wharf route.

Expanded results from all surveyed trips combined on the Inner Harbor routes showed a total of 34 requests for an East Boston - Long Wharf route, with the majority from users of the Navy Yard - Long Wharf route. These two routes would connect at Long Wharf. An East Boston - Long Wharf route was operated from 1995 to 1997, but attracted few riders. Midday service was interlined with the Navy Yard - Long Wharf route, so it was possible to ride between the Navy Yard and East Boston without transferring. The requests for East Boston service included three surveys from riders going from East Boston to the Navy Yard by taking the Blue Line to Aquarium station

(which is at Long Wharf) and transferring to the Navy Yard boat. Otherwise, none of the requests came from passengers with origins or destination in East Boston on the survey day.

The most common write-in request for North Shore service to Boston was for a route from Salem, with an expanded 27 requests, followed by a route from Beverly, with 16. A Salem - Boston route was given a brief trial by a private operator in 1999, but was discontinued when EOTC demonstration funds ran out. Most of the passengers requesting Salem service were not going to or from Salem on the survey day.

As with other survey questions, the question on potential new services does not reveal demand for such services by anyone who was not riding one of the present boat routes on the survey day. At present, most of the North Shore communities from which it might be possible to operate commuter boat service to Boston are served either directly or indirectly by the Newburyport/Rockport commuter rail line or by MBTA express bus routes. The ferry routes from Lovejoy Wharf to the Navy Yard and to the Courthouse and World Trade Center are used primarily by commuter rail passengers as links to their final destinations, but ridership on both ferry routes is low. This does not necessarily show the full potential of boat service from the North Shore, but does suggest that the number of new transit users likely to be attracted by such service is limited.

MBTA Ferry Services

2000 Passenger Survey

Potential Usage of New Services

Route: **Hingham–Rowes Wharf**

Expanded Results - A.M. Hingham Boardings

Potential Weekend Usage

SATURDAY USAGE	SUNDAY USAGE: Year-round	Summer only	Not At All	No Answer	Saturday Total
Year-round	691 49.0%	31 2.2%	50 3.5%	153	925 55.4%
Summer only	2 0.1%	164 11.6%	32 2.3%	54	252 15.1%
Not at all	2 0.1%	2 0.1%	437 31.0%	48	489 29.3%
No answer	18	7	3	102	
Sunday Total	713 49.5%	204 14.2%	522 36.2%		

Potential Usage of Bicycle Facilities

	Number of Riders	Percent of Riders	Cumulative Percentage
Yes, regularly	57	3.2%	3.2%
Yes, occasionally	341	19.0%	22.2%
Not at all	1,396	77.8%	100.0%
TOTAL	1,794	100.0%	100.0%
No Answer	5		

Potential New Ferries

Terminal Locations	Number of Riders	Percent of Riders
Scituate–Boston	509	28.3%
Quincy–Boston	101	5.6%
Cohasset	246	13.7%
Duxbury or Kingston	6	0.3%
Hingham Direct to Logan	1	0.1%
Hingham Harbor	1	0.0%
Hull if more frequent	60	3.3%
Hull to Boston Direct	1	0.1%
Hyannis or Other Cape Cod	3	0.2%
Marshfield	24	1.3%
Nantasket Pier	12	0.6%
Plymouth	18	1.0%
Quincy Fore River to Boston Direct	3	0.1%
Unspecified	55	3.1%
Weymouth	1	0.0%

MBTA Ferry Services
2000 Passenger Survey

Potential Usage of New Services

Route: **Hull—Quincy–Long Wharf**

Expanded Results - A.M. Hull Boardings

Potential Weekend Usage

SATURDAY USAGE	SUNDAY USAGE: Year-round	Summer only	Not At All	No Answer	Saturday Total
Year-round	28 54.9%	2 3.9%	1 2.0%	17	48 64.0%
Summer only	0 0.0%	4 7.8%	2 3.9%	5	11 14.6%
Not at all	0 0.0%	0 0.0%	14 27.5%	2	16 21.3%
No answer	0	0	0	6	
Sunday Total	28 54.9%	6 11.7%	17 33.3%		

Potential Usage of Bicycle Facilities

	Number of Riders	Percent of Riders	Cumulative Percentage
Yes, regularly	12	15.4%	15.4%
Yes, occasionally	19	24.4%	39.7%
Not at all	47	60.3%	100.0%
TOTAL	78	100.0%	100.0%
No Answer	3		

Potential New Ferries

Terminal Locations	Number of Riders	Percent of Riders
Scituate–Boston	6	7.4%
Quincy–Boston	2	2.4%
Hull to Boston Direct	3	3.7%
Plymouth	1	1.2%
Unspecified	6	7.4%

MBTA Ferry Services

2000 Passenger Survey

Potential Usage of New Services

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - A.M. Navy Yard Boardings

Potential Weekend Usage

SATURDAY USAGE	SUNDAY USAGE: Year-round	Summer only	Not At All	No Answer	Saturday Total
Year-round	206 82.5%	3 1.2%	4 1.6%	18	231 83.7%
Summer only	0 0.0%	8 3.2%	0 0.0%	6	14 5.2%
Not at all	0 0.0%	0 0.0%	28 11.2%	2	30 11.0%
No answer	0	0	0	17	
Sunday Total	206 82.7%	11 4.4%	32 12.8%		

Potential Usage of Bicycle Facilities

	Number of Riders	Percent of Riders	Cumulative Percentage
Yes, regularly	16	5.6%	5.6%
Yes, occasionally	53	18.7%	24.3%
Not at all	215	75.7%	100.0%
TOTAL	284	100.0%	100.0%
No Answer	11		

Potential New Ferries

Terminal Locations	Number of Riders	Percent of Riders
Lovejoy–Russia Wharf	28	9.6%
East Boston–Long Wharf	24	8.3%
Beverly	4	1.4%
Charlestown to Airport	8	2.7%
Charlestown to Courthouse/WTC	7	2.4%
Danversport	1	0.4%
Gloucester	2	0.8%
Haverhill or Bradford	1	0.4%
Lovejoy to Airport	1	0.6%
Lynn	6	2.2%
Marblehead	3	1.2%
Rockport	1	0.4%
Salem	13	4.4%
Swampscott	1	0.6%
Unspecified	18	6.3%

MBTA Ferry Services
2000 Passenger Survey

Potential Usage of New Services

Route: **Charlestown Navy Yard–Long Wharf**

Expanded Results - A.M. Long Wharf Boardings

Potential Weekend Usage

SATURDAY USAGE	SUNDAY USAGE: Year-round	Summer only	Not At All	No Answer	Saturday Total
Year-round	18 35.0%	0 0.0%	0 0.0%	0	18 32.2%
Summer only	0 0.0%	5 9.7%	0 0.0%	1	6 11.5%
Not at all	0 0.0%	0 0.0%	29 56.4%	2	31 56.1%
No answer	0	0	0	16	
Sunday Total	18 34.6%	5 9.6%	29 55.7%		

Potential Usage of Bicycle Facilities

	Number of Riders	Percent of Riders	Cumulative Percentage
Yes, regularly	4	6.2%	6.2%
Yes, occasionally	10	15.4%	21.5%
Not at all	51	78.5%	100.0%
TOTAL	65	100.0%	100.0%
No Answer	7		

Potential New Ferries

Terminal Locations	Number of Riders	Percent of Riders
Lovejoy–Russia Wharf	9	12.4%
East Boston–Long Wharf	7	10.6%
Charlestown to East Boston	1	1.9%
Charlestown to Rowes Wharf	1	1.6%
Charlestown to South Station	2	3.5%
Quincy Fore River to Boston Direct	1	1.6%
Salem	1	1.6%
Unspecified	6	8.8%
Winthrop	2	3.3%
Winthrop	1	1.6%

MBTA Ferry Services
2000 Passenger Survey

Potential Usage of New Services

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Navy Yard Boardings

Potential Weekend Usage

SATURDAY USAGE	SUNDAY USAGE: Year-round	Summer only	Not At All	No Answer	Saturday Total
Year-round	3 25.0%	0 0.0%	0 0.0%	0	3 16.6%
Summer only	0 0.0%	6 50.0%	0 0.0%	3	9 50.0%
Not at all	0 0.0%	0 0.0%	3 25.0%	3	6 33.3%
No answer	0	0	0	0	
Sunday Total	3 25.0%	6 50.0%	3 25.0%		

Potential Usage of Bicycle Facilities

	Number of Riders	Percent of Riders	Cumulative Percentage
Yes, regularly	3	16.7%	16.7%
Yes, occasionally	6	33.3%	50.0%
Not at all	9	50.0%	100.0%
TOTAL	18	100.0%	100.0%
No Answer	0		

Potential New Ferries

Terminal Locations	Number of Riders	Percent of Riders
Lovejoy–Russia Wharf	3	16.6%
East Boston–Long Wharf	0	0.0%
Lovejoy to Long Wharf	3	16.6%

MBTA Ferry Services
2000 Passenger Survey

Potential Usage of New Services

Route: **Charlestown Navy Yard–Lovejoy Wharf**

Expanded Results - A.M. Peak Lovejoy Boardings

Potential Weekend Usage

SATURDAY USAGE	SUNDAY USAGE: Year-round	Summer only	Not At All	No Answer	Saturday Total
Year-round	2 25.0%	0 0.0%	0 0.0%	1	3 27.2%
Summer only	0 0.0%	4 50.0%	1 12.5%	0	5 45.4%
Not at all	0 0.0%	0 0.0%	1 12.5%	2	3 27.2%
No answer	0	0	0	2	
Sunday Total	2 25.0%	4 50.0%	2 25.0%		

Potential Usage of Bicycle Facilities

	Number of Riders	Percent of Riders	Cumulative Percentage
Yes, regularly	1	7.7%	7.7%
Yes, occasionally	1	7.7%	15.4%
Not at all	11	84.6%	100.0%
TOTAL	13	100.0%	100.0%
No Answer	0		

Potential New Ferries

Terminal Locations	Number of Riders	Percent of Riders
Lovejoy–Russia Wharf	4	30.7%
East Boston–Long Wharf	1	7.6%
Marblehead	1	7.6%
Unspecified	2	15.3%

MBTA Ferry Services

2000 Passenger Survey

Potential Usage of New Services

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - A.M. Peak Lovejoy Boardings

Potential Weekend Usage

SATURDAY USAGE	SUNDAY USAGE: Year-round	Summer only	Not At All	No Answer	Saturday Total
Year-round	9 21.9%	0 0.0%	0 0.0%	2	11 23.5%
Summer only	0 0.0%	0 0.0%	0 0.0%	4	4 9.5%
Not at all	0 0.0%	0 0.0%	32 77.8%	0	32 66.8%
No answer	0	0	0	0	
Sunday Total	9 21.9%	0 0.0%	32 78.0%		

Potential Usage of Bicycle Facilities

	Number of Riders	Percent of Riders	Cumulative Percentage
Yes, regularly	11	22.9%	22.9%
Yes, occasionally	5	10.4%	33.3%
Not at all	32	66.7%	100.0%
TOTAL	48	100.0%	100.0%
No Answer	0		

Potential New Ferries

Terminal Locations	Number of Riders	Percent of Riders
Lovejoy–Russia Wharf	4	9.5%
East Boston–Long Wharf	2	4.7%
Beverly	11	23.8%
Lovejoy to Boston Design center	2	4.7%
Newburyport	2	4.7%
Salem	4	9.5%
Salem or Lynn to WTC	4	9.5%
Unspecified	4	9.5%

MBTA Ferry Services
2000 Passenger Survey

Potential Usage of New Services

Route: **Lovejoy Wharf–Courthouse/World Trade Center**

Expanded Results - P.M. Peak Courthouse/WTC Ons

Potential Weekend Usage

SATURDAY USAGE	SUNDAY USAGE: Year-round	Summer only	Not At All	No Answer	Saturday Total
Year-round	10 33.6%	0 0.0%	1 3.4%	0	11 35.8%
Summer only	0 0.0%	4 13.5%	0 0.0%	0	4 13.0%
Not at all	0 0.0%	0 0.0%	14 47.1%	1	15 51.0%
No answer	0	0	0	8	
Sunday Total	10 34.4%	4 13.7%	15 51.7%		

Potential Usage of Bicycle Facilities

	Number of Riders	Percent of Riders	Cumulative Percentage
Yes, regularly	0	0.0%	0.0%
Yes, occasionally	3	7.5%	7.5%
Not at all	37	92.5%	100.0%
TOTAL	40	100.0%	100.0%
No Answer	0		

Potential New Ferries

Terminal Locations	Number of Riders	Percent of Riders
Lovejoy–Russia Wharf	3	9.4%
East Boston–Long Wharf	0	0.0%
Beverly	1	4.1%
Gloucester	1	4.1%
Lynn	2	6.7%
Salem	9	24.1%
Unspecified	3	9.4%

13. Summary of Written Comments and Suggestions

Information Contained

In addition to collecting data about the travel patterns and demographic characteristics of commuter boat and ferry riders, another purpose of the passenger survey was to elicit opinions about service quality. The direct questions on this subject, the results of which are presented in Chapter 11, partly fulfilled this purpose. The survey form also provided a box for written comments and suggestions. The size of the box limited comments to a maximum of about 100 words, but a few passengers continued comments out into the margins.

All comments that were not strictly facetious were tallied manually. A standard checklist of the most frequent comments was drawn up after a preliminary sampling of comments. Additional space was allowed for tallying comments not included on the standard list. Separate tallies were made for each route. The final results were entered in a series of spreadsheets, allowing summaries to be made in many ways. In all, there were 808 comments from riders on the Hingham route, 71 from the Hull route, 227 from the Navy Yard - Long Wharf route, 21 from the Navy Yard - Lovejoy Wharf route, and 27 from the Lovejoy Wharf - Courthouse/World Trade Center route. Comments from the two South Shore routes are summarized in separate sets of spreadsheets at the end of this chapter. Comments from the three Inner Harbor routes are summarized in a single set of spreadsheets, but with results from each of the three routes shown separately. The most frequent comments are discussed below.

Not all surveys contained comments, but some contained two or more separate comments. For the Hingham route, the average number of comments per survey was 0.96. For the Hull route, the average was 0.88. (For comparison, in the 1998 Old Colony commuter rail survey, the average number of comments was 0.87.) The Inner Harbor routes had much lower average comment rates, ranging from 0.39 to 0.46 per survey. Because of the relatively short running times on these routes, passengers who turned in surveys at the ends of their trips had less time to think of or write comments than passengers on South Shore routes. It is also probable that because Inner Harbor riders spend less time each day on the boats than South Shore riders, they have fewer issues of sufficient concern to generate written comments.

It should be noted that as with all of the survey responses, the comments on the South Shore and Inner Harbor boat surveys are only those of people who were using the service at the time the survey was conducted. They do not include opinions of potential riders that chose not to use boat service for various reasons. The comments are largely negative, although often constructive. This was to be expected, as people with

complaints are generally more vocal than those satisfied with the *status quo*. It is likely that negative perceptions held by people that use boat service are held to an even stronger extent by those that could use it but do not. Hence, correcting problems cited, where feasible, is important for attracting new riders as well as retaining present ones.

The method used for tallying comments did not permit application of expansion factors at the same level applied to the preceding survey questions. The number of forms returned from surveyed trips ranged from about 33% to 100% of the riders on those trips. Assuming that the comments are representative, each comment would represent views of about one to three passengers. On the Hingham route, the average expansion factor would be 1.46. On the Hull route, it would be 1.0. On the Inner Harbor routes combined, it would be 1.63. In most of the discussion below, relative incidences of comments are measured by comparing ratios of the number of comments to the number of returned surveys.

For purposes of analysis, the tallied comments were divided into 10 categories. In descending order of the number of comments from all routes combined, these categories and the page on which discussion of each starts are as follows:

Many of these were divided into two or more sub-categories. Overall, the top two categories accounted for 54% of all comments, the top four for 81%, and the top six for 92%. Relative importance varied somewhat among routes.

Boat Equipment/Facilities

The largest comment category overall, with 271, was boat equipment/facilities. This rank resulted from the high number of comments from Hingham boat riders, equal to 31% of the survey returns on that route. As in other categories, individual respondents sometimes accounted for more than one comment, so the actual percentage of respondents who had equipment comments was somewhat lower than this figures. On the Hull and Inner Harbor routes, boat equipment issues were of much less concern, ranking third or fourth. Furthermore, no individual comment about equipment was repeated on more than one survey from those routes, implying that in general their riders had few specific complaints about equipment.

Opinions of Catamarans versus Older Boats

This issue, which pertained only to Hingham boat riders, accounted for more than half of the boat equipment comments on that route (142 of 262). Peak service on the Hingham route requires five boats. The operator has been phasing in fast catamarans in place of older craft. At the time of the survey, the number of catamarans in the fleet had recently been increased to three, but there was still some uncertainty among passengers as to which trips would be run with which boats. Records from the survey day show that catamarans were used on seven of the ten inbound A.M. survey trips. Published schedules call for travel times of 35 minutes in each direction between Hingham and Rowes Wharf, but passenger comments show that the older boats were not capable of meeting this schedule.

Almost all of the passengers who made written comments about boat equipment preferred the catamarans, though a small number liked the more leisurely pace of the older boats. One passenger indicated that the boat operated by the competing unsubsidized carrier on the Hingham route was the best of all. In addition to the slower speed of the older boats, passengers commented about their generally poorer condition, particularly with respect to noise and exhaust emissions.

Complaints Related to Seating/Crowding

Within the Boat Equipment/Facilities category, the second largest sub-category, again mostly because of comments from Hingham riders, was complaints related to seating. There were 44 such comments equivalent to 5% of Hingham Line respondents. Most of the complaints were related more to load factors than to seating *per se*. Ridership on the nine survey trips arriving in Boston before 9:30 A.M. ranged from 113 to 346 per trip, with all reported loads in excess of 160 occurring on trips served by catamarans. Nevertheless, there were complaints of crowding on both newer and older boats. In some cases, there were apparently more seats than riders, but some passengers had to stand because of other occupying more than one seat.

There were no complaints about seating on the Hull route. The ridership figures furnished for the survey day on this route showed only Hull boardings and not Quincy boardings. On inbound trips, Hull riders are the first to board, so seating should not be a problem. On outbound trips, passengers from the Airport board first, and Quincy commuters from downtown Boston board along with Hull passengers, but the travel time between Long Wharf and Hull is much shorter outbound than inbound.

The boats used on the Inner Harbor routes are much smaller than those used on the South Shore routes, but average ridership is also much lower. The maximum number of riders reported on any surveyed trip on the Navy Yard - Long Wharf route was 34, or about the same as the number of seats on the boats normally assigned to the route. On the Navy Yard - Lovejoy route ridership did not exceed six per trip, and on the Lovejoy - Courthouse/World Trade Center route it did not exceed 15. Seating capacities of boats used on these routes range from 18 to 26.

Comments About On-Board Food/Refreshments

Comments about on-board food and refreshments were the third largest sub-category of equipment comments on the Hingham route, with 14. Almost all of the comments were complaints about high prices or slow service. The South Shore boats are the only MBTA service on which food is sold, and as the scheduled trip time is only 35 minutes, on-board refreshments are non-essential.

Food is not sold on the Inner Harbor boats. One passenger on the Lovejoy – Courthouse/World Trade Center route requested that coffee be available on board, but this would be impractical because of the interior layout of the boat, the limited crew size, and the relatively short (15 minute) scheduled time from Lovejoy to the Courthouse.

Complaints about Temperature/Ventilation Control

The fourth-largest sub-category under Boat Equipment and Facilities was complaints about temperature/ventilation control with 11 complaints from Hingham boat riders. The relatively small number of complaints suggests that this was mostly a matter of individual temperature preferences rather than extremes of heat or cold. One rider on the Hull route complained of lack of heat in one area of the boat, but there were no complaints from the Inner Harbor passengers.

Comments About Bicycles on Board

Only five passengers commented about bicycles being brought on board Hingham boats, but these comments were placed in a separate category because they are related to survey question 11 on potential use of bicycle facilities. Of the five comments, one was from a passenger asking to be able to bring a bicycle on board. The other four were from passengers complaining about bicycles already being brought on board and interfering with circulation of other passengers. At present, there is relatively little use of bicycle access to the boats. If bicycles are to be officially allowed on board, procedures will need to be established and enforced to prevent bicycles from blocking the loading ramps at the docks.

Other Comments

Aside from the comments discussed above, 19 different comments related to Boat Equipment/Facilities were recorded by Hingham boat riders, but only one appeared on more than five surveys each. There were 11 complaints about condition of restrooms on boats. These complaints were scattered, with no more than two from any individual trip, but were made by passengers on both old and new boats on the survey day. Although the total number of complaints was fairly small, the pattern suggests that there was a maintenance problem that should be addressed.

The only other complaints made by more than two riders each on Hingham boats was five complaints of insufficient on-board light for reading, and five complaints of annoyance by cell-phone users. Complaints about lighting came from passengers on both old and new boats, with no more than two from any individual trip.

No comment about boat equipment was repeated by more than one rider on the Hull or Inner Harbor routes.

Service and Schedules

The second-largest number of comments and suggestions received (268) pertained to service and schedules. On all routes except the Hingham route, it was the largest comment category. The number of such comments was equivalent to 34% of all Old Colony survey returns. The actual percentage of respondents that made such comments was somewhat lower, since some surveys contained several different ones.

Requests for More Service

South Shore Routes

The majority of the service comments on all routes were requests for more service. On the Hingham route, the most common requests for additional service (49 of 123) were for more Boston departures between 7:00 and 9:00 P.M. At present, the service day ends with hourly departures at 6:30, 7:30, and 8:30 P.M. Outbound riders were not surveyed, but passenger counts showed totals of 200, 137, and 69 riders on these trips. It is likely that with half-hourly early evening headways, ridership on the present three trips would decrease, but that there would be some overall ridership gain.

The second most common request was for service to Hingham later than 8:30 P.M., with a total of 27 requests. At present, the boat is not an option for people who must work late or want to remain late in Boston for other reasons. Passengers for whom the present schedules are totally unacceptable would not have been on the surveyed boats.

Boat passengers who occasionally stay late in Boston do have the option of taking the Red Line and MBTA bus Route 220 back to Hingham, but this alternative is slower than a boat trip would be. For the benefit of late riders with cars parked in Hingham, two Route 220 trips leaving Quincy Center at 9:30 and 10:30 P.M. make side diversions to the Hingham boat terminal. Otherwise, the terminal is about one half mile off Route 220.

The only other time for which there were more than 10 requests for service from Hingham riders was weekends and holidays, with 23 requests. At present, service on the Hingham route is provided only on weekdays and minor holidays. As discussed in chapter 12, survey question 9 asked passengers about potential use of weekend service. Therefore, many passengers interested in weekend service may have felt that additional written comments were not needed.

On the Hull route, the most common service request (23 of 50) was for A.M. peak trips running directly from Hull to Boston instead of via Quincy and Logan Airport as at present. This could theoretically reduce the morning time from the present 60 minutes to the 20 minutes offered in outbound P.M. service. It would, however, increase the operating cost substantially, as the present service is provided as a by-product of an independent route intended primarily to carry airport passengers at premium fares. In the past when Hull was served by a separate route, much slower boats were used, and the running time was 50 minutes in each direction. Returning to a separate operation would likely result in only a small saving in inbound time at the expense of a large increase in outbound time.

A much smaller number of Hull riders (6) asked for late night service. At present, the only two trips leave Boston at 5:15 and 5:50 P.M., so it is unclear what these riders would have considered to be late night. One other rider suggested departures at 7:00, 8:00 and 9:00 P.M. At present, the Airport-Quincy route has seven departures from Long Wharf between 6:45 and 10:50 P.M. that do not stop at Hull. Based on the scheduled times of trips that do stop at Hull, the added running time of a side diversion there is about 10 minutes. The first four of these outbound trips are now scheduled to depart back from Quincy to the airport only five minutes after arrival, so an outbound Hull diversion would not be possible without revising the inbound evening schedule. Likewise, the scheduled layover time at the airport between trips is only five minutes, with another five minutes scheduled at Long Wharf. Therefore, Hull side trips would require progressively later departures for subsequent trips in both directions. Whether or not this would be acceptable to the operator and airport passengers is unknown.

Inner Harbor Routes

Among Inner Harbor passengers, the most common service request (24 of 46) was for later weekday service. Almost all of these requests came from passengers on the Navy Yard - Long Wharf route. At present, the last trip leaves Long Wharf at 8:00 P.M., returning from the Navy Yard at 8:15. Passenger counts on the survey day showed 11 and 5 riders respectively on these trips. This may have included some riders making round-trip excursions. After the end of service, it is possible to travel from downtown Boston to the Navy Yard using MBTA bus Route 93 either alone or in combination with rapid transit. It is also possible to walk to the Navy Yard from North Station.

There were also five requests for more frequent service overall, including four from Navy Yard - Long Wharf passengers. At present, this route offers 15-minute peak and 30-minute midday and early evening headways. Ridership counts from the survey day suggest that 15-minute service might be justified for more of the midday, at least in warmer months.

There were seven requests pertaining to weekend service, of which six came from the Navy Yard - Long Wharf route. At present, this is the only one of the boat routes with weekend as well as weekday service. On weekends, boats leave Long Wharf every 30 minutes from 10:00 A.M. to 6:00 P.M., returning from the Navy Yard 10 minutes later.

The requests for more service included earlier starting times, later ending times, and shorter headways.

Requests for More Catamarans/Faster Boats

Requests for more catamarans or other faster boats (42) came entirely from passengers on the Hingham route. This is consistent with the general preference for faster boats demonstrated in the Boat Equipment comments. At the time the survey was conducted, the operator of this route, Harbor Cruises LLC, was running a mixed fleet of fast catamarans and older, slower boats. On the survey day, three of the five vessels used to provide peak-period service were catamarans, and two were older boats. Passengers' comments indicated that there was still some uncertainty as to which kind of vessel could be expected on a particular trip.

The Hull route, operated by Harbor Express as a by-product of airport service, was served exclusively with catamarans. The Inner Harbor routes, operated by Harbor Cruises LLC, were all served by small older boats. All three Inner Harbor routes operate in areas where slow speeds are mandated both by the amount of other boat traffic and by the proximity to the shoreline, where damage from wakes could be a problem. Because of the short distances on these routes, higher top speeds would make little difference in travel time even if they were permitted.

Terminal Facilities

The third-largest number of comments overall (155) pertained to terminal facilities, but this ranking resulted entirely from Hingham route comments.

Parking Facilities

More than half of the comment about terminal facilities made by Hingham route passengers (79 of 150) pertained to parking, and more than half of these (42) were complaints about insufficient parking capacity or suggestions on how to increase it. Park-and-ride access was reported by 94.2% of the passengers on the route. Based on expanded survey results, 1,650 parking spaces would have been needed by the time the 9:15 A.M. boat departed. The official capacity of the MBTA lot at Hingham is only 1,292, but there is some additional space in private paid lots near the wharf.

The next-largest group of parking comments from Hingham riders (16) pertained to safety issues such as adequacy of lighting and lack of security for vehicles in the lot. Comments about poor traffic flow either within the lot or at the intersection of the driveway with state route 3A were next (14). The boat terminal is north of Route 3A, and the great majority of riders approach the terminal from the east. Therefore, turning moves leaving the terminal after outbound boat arrivals are more of a problem than those preceding inbound departures. Furthermore, departing traffic occurs in spikes after boat arrivals, but arriving traffic is somewhat more dispersed. On the survey day, the maximum ridership on an individual outbound trip was 298, on the boat arriving at

5:55 P.M. At the reported average park-and-ride rate, this would have put about 275 vehicles onto Route 3A at a time when other commuting traffic on the road would also still have been heavy.

Finally, there were seven comments pertaining to parking fees. Most supported retention of the present free parking at Hingham. Although this is inconsistent with the policy at most MBTA commuter rail and rapid transit stations, the boat fares alone are much higher than other MBTA fares for trips from similar distances from Boston.

Only one passenger on the Hull route complained of inadequate parking. Survey results on that route show that 60 cars were parked at or near the Pemberton Point terminal. The facilities there are not under the control of the MBTA, and parking capacity information is not readily available. It appears, however, that parking would not become an issue unless service frequency were increased from the present two round trips a day.

On the Inner Harbor routes, park-and-ride access is used only by a small number of riders, all boarding at Charlestown on the route to Long Wharf. There were no written comments about parking from passengers on any of the three Inner Harbor routes.

Docking, Boarding and Waiting Facilities (except safety issues)

The second-largest number of written comments from Hingham boat riders about terminal facilities pertained to docking, boarding, and waiting facilities. Excluding safety issues, there were 59 such comments. The greatest number of these (35) called for trying to speed up unloading at one or both terminals by providing either wider ramps or using two ramps simultaneously. Present ramps require passengers to move in single file between boat and wharf. On the survey day, there were maximum loads of 346 passengers arriving at Rowes Wharf and 298 at Hingham.

The next-largest group of comments (13) called for installing awnings over the ramps and approaches at one or both terminals to protect boarding and alighting passengers during inclement weather. The remaining comments pertained to issues such as lack of newspaper recycling bins, trash barrels, and restrooms at the terminals.

Passengers on the other routes had few comments about docking facilities. Because of the much lower ridership on those routes, congestion on ramps is not an issue. One Hull passenger complained of people cutting in line instead of queuing up to board. On the survey day there were maximum loads of 40 inbound and 63 outbound, so the potential for gaining advantage by cutting in line was small.

One passenger on the Lovejoy - Courthouse/World Trade Center route asked that a more direct walkway between North Station and Lovejoy Wharf be opened. At present, passengers transferring between commuter trains and boats (as most riders on the boats do) must follow an indirect path, mingling with heavy construction vehicles. The walking time from train platform to dock at typical walking speeds is about five

minutes. Unfortunately, because of Central Artery construction in the area, it is not feasible to open a more direct path that would be safe for pedestrians.

One passenger on the Navy Yard - Long Wharf route complained about the general condition of Aquarium station on the Blue Line. This station is located at Long Wharf. Only about 6% of riders alighting from this boat route at Long Wharf in the morning transfer to rapid transit, but about 40% of the morning boat riders boarding there transfer. Subsequent to the survey, Aquarium station was shut down for major reconstruction that is still in progress. This should correct the problems cited in the passenger's comment.

Docking, Boarding and Waiting Facilities (safety issues)

The remaining 12 comments from Hingham passengers about terminal facilities pertained to safety issues. Most of these were not specific enough to act on. Despite the small number of comments, safety inspections of all of the docking areas would be advisable to avoid possible injuries to passengers or boat crews.

One passenger on the Hull route complained of unsafe docking facilities. There were no safety complaints about terminal facilities on the Inner Harbor routes.

General Praise

The fourth largest comment category was general praise for commuter boat or ferry service. These comments consisted mostly of single words or short sentences, such as "Service is great." There were 71 such comments from the Hingham route, equal to 8.4% of the total returned surveys on that route. Similarly, on the Hull route there were seven such comments, equivalent to 8.6% of returned surveys. The Inner Harbor routes showed a higher rate of General Praise comments, with 40 (13.0% of returns). This does not necessarily mean that Inner Harbor passengers were more satisfied with their service than South Shore riders. As noted at the beginning of this chapter, the short travel times on the Inner Harbor routes provided less opportunity to write comments at all on forms that were handed in on-board. This probably resulted in Inner Harbor passengers being less specific in their comments than South Shore riders, resulting in more of the Inner Harbor comments being tallied in the General category.

Passengers on all routes who had complaints or constructive criticism were sufficiently specific in their written comments to allow them to be placed in one of the other nine comment categories used in this chapter.

Requests/Suggestions for Additional Services

The fifth-largest number of written comments on the survey were categorized as requests/suggestions for additional services. As discussed in chapter 12, survey question 12 provided several check-off choices for new boat routes with space for additional write ins. Some passengers who checked off or wrote in choices for new

routes requested the same ones in their written comments. In some cases, the results of the written comments were re-coded as responses to question 12 during survey processing. Overall, passengers were more inclined to use question 12 to vote for new routes, so the results in chapter 12 provide a better sample.

All of the additional boat routes suggested by Hingham passengers in the written comments were also included in the question 12 responses, except for one suggestion for an auto-carrying ferry between unspecified terminals on the South and North Shores. None of the existing North and South Shore boat terminals are equipped for loading vehicles, and it is unclear if any of them have sufficient water depth to accommodate ferries that could carry enough vehicles to be economically viable. Such service is more properly be an issue for the Highway Department than for the MBTA.

Hull passengers made no written suggestions for new boat routes. Requests for improvements to Hull service are discussed under Service and Schedules. On the Inner Harbor surveys, the only suggestion for a new route that did not also appear in question 12 responses was for a commuter boat to Newport, Rhode Island. Such a route would not be very practical, as it would have to either go around the outside of Cape Cod or through the Cape Cod Canal. At present, the fastest scheduled boat between Boston and Provincetown, which is the nearest point to Boston on the Cape, is 90 minutes. The shortest water distance from Newport to Boston would be about twice as far, and would include a restricted-speed section through the canal. At present, A.M. peak scheduled bus time from Newport to Boston is one hour and 45 minutes, or 15 minutes longer than the fastest boat time between Boston and Provincetown only.

The boat surveys did not include any specific questions about possible commuter rail extensions, but 20 passengers on the Hingham boats had written comments. Of these, 14 were opposed to the Greenbush extension and six were in favor of it. The Hingham boat provides only one boarding point for all of its riders. The Greenbush extension would include stations in Weymouth, Hingham, Cohasset, and Scituate, which accounted for 78.3% of the riders on the Hingham boats. Most riders would have both shorter access times and shorter overall travel times by using Greenbush trains instead of boats. Under the present fare structures, most passengers would also pay lower fares on trains. Therefore, there is substantial potential for diversion of riders from the Hingham boat to the Greenbush Line.

The 1998 Old Colony survey found that about 100 riders had shifted from commuter boats to Old Colony trains in the first year of train operation. This was a loss of about 7% in boat ridership, which was quickly offset by new boat riders. The present Old Colony lines do not provide direct service to any of the towns that would be served by a Greenbush line except for Weymouth. That town accounted for 9.6% of Hingham boat survey riders. Therefore, the impact of a Greenbush Line would be expected to be much greater.

Boat Operations

The sixth-largest comment category was boat operations. On the Hingham route, there were 48 such comments, equivalent to 5.7% of all survey returns. Of these comments, 11 pertained to various safety concerns, with five passengers alleging that crews were racing with other boats or taking other unnecessary risks. Many of the remaining comments were related to problems inherent in a fleet having a mix of fast and slow boats. These included reports of the faster boats overtaking slower ones that left first and either passing them or having to wait at the arrival terminal. A few passengers felt that boats were not being run as fast as they could be in the Inner Harbor, which includes the segment between Rowes Wharf and Castle Island at the outer end of South Boston.

On the Hull route, the only comment about boat operations pertained to importance of schedule adherence. On the Inner Harbor routes, there were individual complaints about arriving passengers not having enough time to disembark before more passengers boarded, about boats not waiting long enough at the dock for passengers, about the length of trip time between Lovejoy Wharf and the World Trade Center, and about off-peak schedules at Lovejoy Wharf not allowing for convenient transfers between the two routes serving that location.

The comment about boats not waiting long enough at the dock reflects the fact that some of the boat crews do not adhere to the published schedules. A random check of one trip on each Inner Harbor route in February 2001 found one boat leaving Lovejoy for the Courthouse and World Trade Center 1.5 minutes before the published departure time, and the Courthouse 2.5 minutes ahead of schedule. Although the crew indicated that all regular riders were accounted for, such practice would not be helpful to new or occasional riders whose arrival at the dock was constrained by work schedules.

When the survey was conducted, all boats going from Lovejoy Wharf to the World Trade Center made an intermediate stop at the Courthouse, but returned directly from the World Trade Center to Lovejoy. Scheduled times from Lovejoy to the World Trade Center ranged from 20 to 25 minutes in both directions, despite the more direct route toward Lovejoy. Additional non-stop service from Lovejoy to the World Trade Center was implemented in January 2001, with three trips each way in the A.M. peak and four each way in the P.M. peak. Running times are not shown, but the intervals between departures at each end imply running times of about 15 minutes.

Lack of coordination between schedules of the two routes serving Lovejoy Wharf results partly from differences in headways. The greatest demand for transfers would be expected to be for travel from the Navy Yard to the Courthouse or World Trade Center in A.M. hours and in the opposite direction in P.M. hours. At present, boats are scheduled to leave the Navy Yard for Lovejoy Wharf every 20 minutes from 6:40 to 9:20 A.M., then hourly to 3:20 P.M. and every 20 minutes to 6:40 P.M. Departures from Lovejoy are 10 minutes earlier or later than these. The Lovejoy - Courthouse/World Trade Center route has less regular headways, varying between 20, 25, and 30 minutes

in the A.M. peak until 9:15, then at 10:00 and hourly to 3:00 P.M., then at 3:50 and ranging from 15 to 30 minutes until 6:10 P.M. Return trips from the World Trade Center are 20 to 25 minutes later.

The terminal facilities at Lovejoy allow two boats to be docked there simultaneously, but because of the different headways on the two routes, passengers from most trips from the Navy Yard had to wait for 15 minutes or longer to continue to South Boston at the time of the survey. (The new express trips have added some connection possibilities.) At midday, although both routes run on hourly headways, arrival and departure times are such that a passenger from the Navy Yard would have to wait 35 minutes for a connection to South Boston. For passengers returning home from South Boston to Charlestown, some trips make close connections at Lovejoy but other do not. Based on present ridership levels on the three Inner Harbor routes, it appears that service from the Navy Yard to the Courthouse and World Trade Center would attract more riders than either of the present Lovejoy Wharf routes. Consideration should be given either to coordinating the schedules of the two Lovejoy routes or to interlining them to permit travel from the Navy Yard to South Boston without a transfer.

Personnel

The seventh-largest comment category was personnel. On the Hingham route, there were 25 such comments, equivalent to 3.0% of all survey returns. Of these, 23 praised the crews, while two complained of some bad employees. On the Hull route, there were four commendations for crew (4.9% of surveys) and no complaints. On the combined Inner Harbor routes there were nine comments about crews (2.9% of returns), all favorable. On the Navy Yard - Long Wharf route, five passengers had general words of praise for crews. Another cited the patience of crews in assisting first-time tourist riders who make up a large part of the off-peak ridership on the route. On the Lovejoy Wharf - Courthouse/World Trade Center route, two riders had general praise for crews and one appreciated that the boat was held at Lovejoy to wait for transfers from the Navy Yard. There were no written comments about crews from passengers on the Navy Yard - Lovejoy route.

Fare/Ticketing Issues

The eighth-largest comment category was fare/ticketing issues. Most of the comments came from the Hingham route, from which there were 22, equivalent to 2.6% of all survey returns. Of these, eight were complaints in some form about the level of fares, or the lack of price breaks on multiple-ride fares. As discussed in chapter 9, the Hingham boat does have much higher fares than are charged for other MBTA services from comparable distances from Boston.

The other 14 comments pertained to the method of fare collection, with six requesting that single and 10-ride tickets be available on board the boats rather than only at the terminals. Selling single-ride tickets would be comparable to the practice on commuter rail lines, but multiple-ride tickets and passes for commuter rail are sold only at major

stations or independent agencies. Single-ride fares are sold on the Inner Harbor boats, but because of the lower fare and lower ridership, the amount of cash that boat crews have to handle is much less than it would be on Hingham boats.

Hull boat passengers made no written comments about fares. The operator of this boat does not have ticket offices at either Hull or Long Wharf, so single-ride and 10-ride tickets are sold on board. The maximum number of riders per trip is much smaller than that on the Hingham route, however. (On the survey day the Hull route had a maximum load of 64 riders, compared with 346 on the Hingham route.)

On the Inner Harbor routes, the only comment about fares was a complaint from one rider on the Navy Yard - Long Wharf route about the inability to purchase 60-ride tickets on board the boats. These tickets are sold at an office at Long Wharf, but there is no ticket office at the Navy Yard. It is unclear from published information whether passengers on the two Lovejoy Wharf routes must also go to Long Wharf to purchase 60-ride tickets, but use of such tickets on those routes is low. The majority of riders on those routes transfer from either commuter rail or rapid transit and use the same passes on the boats that they use on those routes.

Feeder Service Connections

The ninth-largest comment category was feeder service connections. The Hingham route had 10 such comments, equivalent to 1.2% of all survey returns. The limited connections currently available at the Boston end result in destinations of boat riders being most heavily concentrated within walking distance of Rowes Wharf. Passengers who do not use the boats because of lack of connections would not have been included in the survey population.

The only connection comment made by more than one Hingham boat passenger was a request for a shuttle bus from Rowes Wharf to Copley Place, made by three riders. At present, there is no direct transit service from the boat to the Back Bay area. Various combinations of rapid transit lines can be used to make the trip. Most of the boat passengers going to the vicinity of Copley Place took either the Orange Line or the Green Line, which they accessed either by walking to the State or Government Center stations or by walking to Aquarium station and using the Blue Line as a connecting link. A few walked all the way from Rowes Wharf to Back bay destinations.

One rider complained about infrequent Blue Line service resulting in having to run to catch the boat. In peak hours, Blue Line trains are scheduled to run every three to four minutes, compared with 15 to 30-minute boat headways. After arriving at Aquarium station, however, passengers must go up a long escalator. The walking time from the surface at Aquarium station to Rowes Wharf is about five minutes. It would appear that the problem with Blue Line access has more to do with the overall trip than with the Blue Line itself.

The rest of the comments about Hingham boat connections pertained to the Hingham end of the trip. Judging by the small number of comments, and the high level of park-and-ride access, there is very little interest in feeder service to Hingham among present riders, but there is no measure of whether other potential riders are kept away by lack of access. Hull boat riders had no comments about feeder service connections.

Only four Inner Harbor ferry riders made any written comments about feeder service connections. Two passengers on the Navy Yard - Long Wharf route complained that late arrivals at Long Wharf caused them to miss connections with Hingham boats. Like riders transferring from the Blue Line to the Hingham boat, passengers transferring from the Navy Yard boat must walk about five minutes from Long Wharf to Rowes Wharf. Between 3:55 and 6:55 P.M., boats from the Navy Yard are scheduled to arrive at Long Wharf every 15 minutes, at 10, 25, 40, and 55 minutes past the hour. In several cases, Hingham boats are scheduled to leave Rowes Wharf five minutes later than arrivals of Navy Yard boats at Long Wharf. Passengers trying to make such connections have no margin of error. If they miss the first connection, the next one is 15 or 20 minutes later, and may also be to a slower boat. The survey results indicated that only 10 riders on inbound A.M. peak boats from Hingham had destinations in Charlestown. Of these, seven completed their trips by transferring to Long Wharf - Navy Yard boats. It is unknown how many more riders could have been attracted with better connections.

One rider on the Long Wharf - Navy Yard route suggested that shuttle bus connections be provided at both ends of the route to collect and distribute passengers. At present, most of the riders boarding the boats in Charlestown have origins within walking distance of the Navy Yard wharf. MBTA bus Routes 92 and 93 provide direct service to downtown Boston from most of the rest of Charlestown as well as from the Navy Yard. The Orange Line also provides service to downtown Boston from the Community College and Sullivan Square stations in Charlestown. Therefore, it is unlikely that feeder service at the Charlestown end would attract many riders. Similarly, at the Long Wharf end, people with destinations not convenient to Long Wharf can already reach them more easily by using existing transit alternatives from Charlestown than they could by using a combination of the boat and new feeder service.

One passenger on the Lovejoy Wharf - Courthouse/World Trade Center route requested better coordination of the boat schedules with those of commuter rail schedules at North Station. The difficulty in this is that there are four different commuter rail lines serving North Station, all with slightly different arrival times and departure times, and none with uniform headways. Only a very small number of the passengers on any one train trip transfer to or from boats, so train schedules are dictated by considerations more important than the boat connections. The boat route has insufficient slack in its schedules to allow for a change in the time of one trip without affecting times of other trips. The only way to improve connections significantly would be to run boats so frequently that passengers did not have to be concerned with using specific boat trips to connect with specific trains. Patronage on the boats as currently run is so low, however, that it does not appear that more frequent

service would attract enough more riders to justify the cost. Passengers also have the alternative of taking MBTA bus Route 4, which runs from North Station to the World Trade Center via the Courthouse. Service frequencies and scheduled running times are similar for Route 4 and the boats. The buses stop directly in front of North Station instead of requiring a walk to or from Lovejoy Wharf.

Information/Announcements

The smallest number of comments on the surveys (9) pertained to information and announcements. Four of these comments came from Hingham riders, with no single comment made by more than one rider. One asked that up-to-date weather information for the boat route be posted on the MBTA website. One complained of having been given incorrect telephone information, and another complained of having gotten no response to an internet inquiry. The fourth asked that results of the survey be posted. There were also three complaints, placed in the boat equipment category, of on-board loudspeakers being too loud.

The only comment about information from the Hull route was one request for prompt information about trips being dropped because of mechanical problems with the boats. It is unclear how such information would be given out. At present, the terminals lack remote communication devices.

There were three comments about information from Inner Harbor riders. One passenger on the Lovejoy Wharf – Courthouse/World Trade Center route suggested that the service should be marketed better so that people know it is available. This could be done starting with posters in the Courthouse and the World Trade Center, since these are the largest potential ridership sources for the boat. Another passenger on the same route asked that schedules for the boats be posted at the docks. Schedules already are posted, but the present posting locations may not be sufficiently conspicuous. This should be reviewed. One passenger on the Navy Yard - Long Wharf route complained that information about the route was not on the MBTA website. It is unclear whether this was true at the time or whether the passenger was simply unable to navigate through the website to locate it. As of this writing (March 2001) information on all MBTA water transportation services is provided on the MBTA information website. In addition, information can be obtained from the boat operator's own website.

Summary of Written Comments and Suggestions on Hingham Boat Surveys

Comment Category	Total Comments
Boat Equipment/Facilities	
Opinions of Catamarans vs. Older Boats	
Prefer catamarans	66
Retire old boats	25
Old boats smell/fumes	20
Old boats are bad/slow/smell	16
Older boats in poor condition, leak	5
Old boats noisy	2
Keep a slow boat in fleet, for aesthetics	2
"Massachusetts" (unsubsidized service) is most comfortable	1
Hard to plan when don't know if boat will be old or new	1
Use slower boats for later commutes or few passengers	1
Put a third catamaran in service	1
Keep third catamaran for Provincetown route	1
Don't use single-deck vessels in non-summer months	1
Subtotal Opinions of Catamarans vs. Older Boats	**142**
Complaints Related to Seating/Crowding	
Catamarans are crowded	8
Boats are too crowded, seats full over 15 min. before departure	7
7:45 boat too crowded	7
Morning boats are crowded	6
7:15 boat too crowded	4
Outside benches on 2nd level should be facing rear	2
Old boats too crowded	1
Have to get to Hingham early, and then commute for an hour!	1
8:15 trip too crowded	1
There are enough seats, depending on trip and boat	1
7:30 am has enough seats, others don't	1
Should have seating for handicapped/elderly/disabled people	1
Downstairs benches on "Laura" are too small for 2 people	1
Seats too close together for winter	1
People should not be allowed to save seats	1
Have seats on main deck	1
Subtotal Complaints Related to Seating/Crowding	**44**
Comments About On-Board Food/Refreshments	
Beer/wine too expensive	6
Concession prices are too high	4
Coffee/tea too expensive	2
Should have toasters at all times on all boats	1
Food service should be more user-friendly	1
Subtotal Comments About On-Board Food/Refreshments	**14**
Complaints About Temperature/Ventilation Control	
No air circulation - too hot or too cold	5
In winter it is too hot for bundled passengers	2
Too hot	1
Older boats too cold	1
No heat in winter on Quincy/Hull boats	1
Crews should monitor temperatures	1
Subtotal Complaints About Temperature/Ventilation Control	**11**
Comments About Bicyles On Board	
Bikes should be last off	2
Accommodate bikes-want to bike to/from ferry	1
On 630 am trip bikes block walkway	1
Enforce no-bike rule	1
Subtotal Comments About Bicyles On Board	**5**

Summary of Written Comments and Suggestions on Hingham Boat Surveys

Comment Category	Total Comments
Other Boat Equipment/Facilities Issues	
Restrooms smell/disgusting	11
Interior lighting needs improvement for reading	5
Don't allow cell phones	5
Have separate area for cell phones	2
Environmentally, the boats fail	3
Have space for luggage/require use of luggage bins	3
Loudspeakers are too loud	3
Groups of passengers in booths talk loudly, annoying others	1
Clean windows so riders can see the view	2
Wash seats	2
Tables are too small	2
Crews don't recycle their trash	1
Have classical music	1
Turn off TV	1
Post no-smoking signs	1
Have smoking on outside decks	1
Have phone onboard	1
Have magazine swap	1
Subtotal Other Boat Equipment/Facilities Issues	**46**
Total Boat Equipment/Facilities	**262**
Service and Schedules	
Requests for More Service	
More early evening	
Add 7 or 8 pm Rowes to Hingham	23
9 pm boat to Hingham on weekdays	21
Add 7 pm boat	5
Evening later than present end	
Run later service on weekdays	13
More later pm outbound	5
Run very late boat, 11 pm or 12 am	4
Run later service on Thursdays/Fridays	3
10 pm trip	1
Would pay more for 930 or 1030 PM boat in non-summer	1
Weekend/Holiday Service	
Run weekend service, on later schedule	10
Provide weekend service	8
Saturday service	2
Weekends in summer	1
Late Saturday night service, 11 pm to 12 am	1
Late night holiday service	1
More service overall	
Unspecified frequency	5
Run every 15 minutes	2
More morning peak	
Add boat between 6:30 & 7:30 am	3
Have a 7 am boat	2
Add 8 am run	1
8:15-8:45 am need another boat	1
9:00/9:30 am trip - allow flexibility to take kids to school	1
More early am	
Add trip before 6 am	2

Summary of Written Comments and Suggestions on Hingham Boat Surveys

Comment Category	Total Comments
Requests for More Service (continued)	
More middle of the day	
Unspecified frequency	2
Too many gaps in afternoon boats	1
Add 3 pm outbound	1
More evening peak	
4:15 boat to Hingham	1
Add trip between 6:30 & 7:30 pm	1
Additional 6:45pm boat	1
Subtotal Requests for More Service	123
Requests for Catamarans/Faster Boats	
Adding a catamaran at 8 am helped a lot	9
Run only catamarans in rush hours	6
Keep a 6:30 am catamaran	4
Run a 5 pm catamaran	4
Add a 6:45 am catamaran	3
Another high speed 7:45 - 8:45 am	2
Have 8:15 catamaran	2
Add 4 pm catamaran	2
Afraid catamarans will move to tourist work in summer	2
7:30 am boat should be fast boat	1
Alternate catamaran at 8:00 and 8:15 am	1
Schedule a 3 pm fast boat	1
4:45 pm boat is too slow	1
Run a high speed from Boston 5:45 or 5:50 pm	1
Run half-hourly high-speed service in evening	1
Bring back fast boat at 7:30 am & 6:30 pm	1
Expand high speed service between Hingham & Boston	1
Subtotal Requests for Catamarans/Faster Boats	42
Total Service and Schedules	165
Terminal Facilities	
Parking Facilities	
Parking Capacity	
Need more Hingham parking	23
Parking fills at 9 am	6
Build a garage at Hingham	5
Ban longterm/overnight parking	2
Plan for flexibility if parking is converted to garage	1
Too many handicapped parking places	1
Complaint of spaces being used for carpool staging	1
Give monthly riders priority in spaces over tourists	1
Parking always available	1
Scituate/Cohasset service would ease Hingham parking	1
Subtotal	42
Parking Lot Safety/Security	
Need more lighting in parking lot.	6
Light the driveway behind ticket building	5
Need more security of vehicles in parking	3
Parking lot feels unsafe	1
Need better drainage of parking lot	1
Subtotal	16

Summary of Written Comments and Suggestions on Hingham Boat Surveys

Comment Category	Total Comments
Traffic Circulation In/Around Parking Lot	
Slow exiting parking in Hingham	4
Long time to get from boat to parking	2
Enforce parking regs - situation is out of hand	5
Need traffic light coordination on Rte 3A	2
Provide police to ease traffic	1
Subtotal	14
Parking Fees	
Free parking is a huge asset	4
Would carpool if parking at Hingham not free	1
I pay for parking to be close, saves 5 minutes	1
Ridiculous to ticket for parking outside the lines	1
Subtotal	7
Subtotal Parking Facilities	**79**
Docking, Boarding and Waiting Facilities (except safety issues)	
Widen ramps	21
Need covered walkway at Hingham	8
Need wider ramp at Hingham	7
Need more bins for recycling newspapers	6
Disembarking is slow/bad	5
Put awning at Rowes Wharf for rain	2
Cover dock areas	2
Have restroom at ticket office	2
Have boats visible from ticket office waiting room	1
Too much waiting in the rain	1
Gate at top of Rowes Wharf ramp is too narrow	1
Have 2 ramps at Rowes	1
Improve docks	1
Put trash barrels near exits on the docks	1
Subtotal Docking, Boarding and Waiting Facilities (except safety issues)	**59**
Safety Issues at Docks	
Hingham dock/walk dangerous	4
Docks/ramps slippery when wet	3
Docking is unsafe and inefficient	2
Ramps have broken rails	1
Clear dock of extra ramps at Rowes	1
Clean up docks	1
Subtotal Safety Issues at Docks	**12**
Total Terminal Facilities	**150**
General Praise for Hingham Commuter Boat	
Great, good service, etc.	62
Service improved since current operator got the contract	3
Would move/change jobs if no boat	1
Boat is only way I've ever travelled	1
Would not drive again if I did not have to	1
Time-competitive with drive from Scituate to Boston	1
Better than being in traffic	1
Love the cleanliness and view	1
Total General Praise for Hingham Commuter Boat	**71**

Summary of Written Comments and Suggestions on Hingham Boat Surveys

Comment Category	Total Comments
Requests/Suggestions for Additional Services	
Additional Boat Routes	
More Hull trips	11
Scituate	9
Plymouth	4
More direct Hull service	3
Cohasset	1
Duxbury	1
Car ferry between North and South Shore	1
How can Scituate service compete with new Hingham catamaran?	1
Subtotal Additional Boat Routes	**31**
Opinion of Boat vs. Greenbush Commuter Rail	
Don't build Greenbush Line	7
Boat better than the train would be	4
Boat is less invasive than train	1
Boat so convenient, wouldn't take train if available	1
Additional boat stops would have less resistance than Greenbush	1
Train would be a good alternative	2
Need more ferries or commuter rail to avoid 3A traffic	2
More rail and boat service from South Shore	1
I'd take train if it were available	1
Subtotal Opinion of Boat vs. Greenbush Commuter Rail	**20**
Total Requests/Suggestions for Additional Services	**51**
Boat Operations	
Boat Operations - Safety Issues	
Stop racing private competing boats to dock	3
Captains take unnecessary risks with boats	2
Have occasional safety drills with passengers	1
Does Coast Guard allow more passengers than seats?	1
No seats left 7 minutes before departure is unsafe	1
Snacks & cups stored under seats, unsanitary	1
Exit doors are tied shut	1
Make shorter safety speech	1
Subtotal Boat Operations - Safety Issues	**11**
Boat Operations - Other Issues	
Fast boats have to wait for slow boats at dock	5
Boats leave before scheduled departure	3
7:30 and 7:45 am boats arrive at same time	3
Catamaran speed is offset by slow unloading & parking lot jams	3
5:15 & 5:45 scheduled trips arrive same time	2
Schedule fast boats so they don't overtake slow boats	2
Previous service was more on-time	2
7:30 slow boat blocks 8:00 fast boat at Rowes Wharf	1
Consistent speed in different trips is important	1
Two catamarans should be able to unload at once	1
Old boats irregular on schedule	1
Have backup boat	1
Don't cancel boat service for breakdowns	1
Change 6:30 pm outbound to 6:40 to avoid overtaking 6:15	1
Don't disembark catamarans while slower boats disembarking	1
5:20 and 5:40pm boats don't leave on time	1
5:20 & 5:40pm scheduled to harass independent boat operator	1
BHC crews still need to learn to dock boats	1
If unloading boat by rear door, announce before arrival	1

Summary of Written Comments and Suggestions on Hingham Boat Surveys

Comment Category	Total Comments
Boat Operations - Other Issues (continued)	
Boats go slower than necessary at some points on route	1
Raise speed limit in harbor to 10-15mph	1
Would like to get in quicker	1
Speed good on catamarans	1
Have boats ready in advance, so passengers don't stand in cold	1
Subtotal Boat Operations - Other Issues	**37**
Total Boat Operations	**48**
Personnel	
Excellent crew	23
some bad employees	2
Total Personnel	**25**
Fare/Ticketing Issues	
Comments About Fare Levels	
Fares are too expensive	1
Why does it cost more than rest of MBTA?	1
Allow free transfer to rapid transit without boat pass	1
Give better incentives to use multiday pass	1
Monthly pass doesn't save money vs. 10-ride ticket	1
Would pay for a pass if more flexible	1
Try off-peak pricing to build up weekday off-peak usage	1
Don't charge for bikes	1
Subtotal Comments About Fare Levels	**8**
Comments/Suggestions About Ticket and Pass Sales Procedures	
Sell single and 10-ride tickets on boats	6
Rowes Wharf ticket office understaffed, slow	2
Provide reserved ticketing/passes for faster boats	1
Use debit cards to avoid buying passes	1
Use card swipe system to collect fares before boarding	1
Hingham ticket office is great	1
Need 30-trip pass	1
Need 20-ride pass	1
Subtotal Comments/Suggestions About Ticket and Pass Sales Procedures	**14**
Total Fare/Ticketing Issues	**22**
Feeder Service Connections	
Run shuttle to Copley Place in Boston	3
Blue Line is infrequent-have to run to catch boat	1
Run buses to boat from Scituate and Hingham	1
More buses to the boats	1
Need safe bike route to boat	1
Have shuttle to wharf from far end of Hingham parking lot	1
Offer Hingham town shuttle for 1.00	1
Poor taxi service at Hingham	1
Total Feeder Service Connections	**10**
Information/Announcements	
Post weather condition on website	1
Given incorrect info on phone	1
Made inquries via internet, never got answer	1
Please post results of survey	1
Total Information/Announcements	**4**

Summary of Written Comments and Suggestions on Hingham Boat Surveys

Recap of Total Comments by Category	Total Comments
Boat Equipment/Facilities	262
Service and Schedules	165
Terminal Facilities	150
General Praise for Hingham Commuter Boat	71
Requests/Suggestions for Additional Services	51
Boat Operations	48
Personnel	25
Fare/Ticketing Issues	22
Feeder Service Connections	10
Information/Announcements	4
Total Comments	**808**
Total Surveys	**846**
Average Comments per Survey	**0.96**

Summary of Written Comments and Suggestions on Hull Boat Surveys

Comment Category	Total Comments
Boat Equipment/Facilities	
Clean windows so we can see the view	1
Heat upstairs better	1
Have people put luggage in bins	1
Hull boats smell musty	1
Total Boat Equipment/Facilities	**4**
Service and Schedules	
Requests for More Service	
Direct service from Hull to Boston in a.m.	23
More Hull service	11
Late night Hull service	6
In a.m., pick up at Quincy first, then Hull	4
More service Boston to Hull, direct	2
One more outbound trip before 5:15 pm	1
One more outbound trip after 5:50 pm	1
More evening service at 7, 8, 9 pm	1
Weekend service from Hull	1
Total Service and Schedules	**50**
Terminal Facilities	
Docking, Boarding and Waiting Facilities	
Don't let people cut in line by walking in front of boat	1
Current docking facilities are unsafe	1
Subtotal Docking, Boarding and Waiting Facilities	**2**
Parking Facilities	
Need more parking	1
Total Terminal Facilities	**3**
General Praise for Hull Commuter Boat	
Great, good service, etc.	7
Boat Operations	
Prompt and on-time is important	1
Personnel	
Excellent crew	4
Information/Announcements	
Notify quickly when boat is out of commission	2
Recap of Total Comments by Category	
Boat Equipment/Facilities	4
Service and Schedules	50
Terminal Facilities	3
General Praise for Hull Commuter Boat	7
Boat Operations	1
Personnel	4
Information/Announcements	2
Total Comments	**71**
Total Surveys	**81**
Average Comments per Survey	**0.88**

Summary of Written Comments and Suggestions on Inner Harbor Boat Surveys

Comment Category	Navy Yard-Long Wharf	Navy Yard-Lovejoy	Lovejoy - CH/WTC	Total Comments
Boat Equipment/Facilities				
Use bigger boats	0	0	1	1
Steps into boat are too steep	0	1	0	1
Big boats have bad plumbing and the smell is bad	1	0	0	1
Betty Jo is comfortable	0	0	1	1
Would love to buy coffee on the boat	0	0	1	1
Total Boat Equipment/Facilities	**1**	**1**	**3**	**5**
Service and Schedules				
Requests for More Service - Weekdays				
Run later service on weekdays	23	1	0	24
More frequent service in general	4	0	1	5
More late service in summer	3	0	0	3
Trips every 15 min. all day	1	1	1	3
More frequent service in afternoons	0	2	0	2
Extend hours	1	0	0	1
Trips every 15 min. until 8 pm	1	0	0	1
Run every half hour until 1 am	1	0	0	1
Coordinate boat and train schedules at North Sta/Lovejoy	0	0	2	2
Run a 6:45 am boat	1	0	0	1
Need boat with connection to 5:45 pm Lowell train	0	0	1	1
Change 4:25 Courthouse departure to 4:30	0	0	1	1
Run a trip from WTC after the Provincetown boat arrives	0	0	1	1
Subtotal Requests for More Service - Weekdays	**35**	**4**	**7**	**46**
Requests for More Service - Weekends				
Run two ferries on weekend	2	0	0	2
More early and later trips on weekend	2	0	0	2
Earlier weekend a.m. trips	1	0	0	1
Extend weekend service	1	0	0	1
Start weekend service	0	0	1	1
Subtotal Requests for More Service - Weekends	**6**	**0**	**1**	**7**
Total Service and Schedules	**41**	**4**	**8**	**53**
Terminal Facilities				
Open a walkway from Lovejoy to North Station	0	0	1	1
Aquarium Sta (at Long Wharf) is bad - smells, has poor lighting	1	0	0	1
Total Terminal Facilities	**1**	**0**	**1**	**2**
General Praise for Inner Harbor Ferries				
Great, good service, etc.	11	4	5	20
Service improved since current operator got the contract	13	0	0	13
Great way to avoid Big Dig	1	0	0	1
No need to build more roads	1	0	0	1
Finally catching on - I used to ride alone	0	0	1	1
Service adds to the unique character of Boston	0	0	1	1
Ferry makes such obvious sense	1	0	0	1
Look forward to the ride	0	0	1	1
Boat commuters are nice	1	0	0	1
Total General Praise for Inner Harbor Ferries	**28**	**4**	**8**	**40**

Summary of Written Comments and Suggestions on Inner Harbor Boat Surveys

Comment Category	Navy Yard-Long Wharf	Navy Yard-Lovejoy	Lovejoy - CH/WTC	Total Comments
Requests/Suggestions for Additional Services				
Charlestown to World Trade Center	3	0	0	3
South Station to Navy Yard	1	0	0	1
Boston to Newport	1	0	0	1
Total Requests/Suggestions for Additional Services	**5**	**0**	**0**	**5**
Boat Operations				
Unload passengers before loading passengers	1	0	0	1
Should wait longer at docks for arrival and departures	1	0	0	1
Travel time from World Trade Center to North Sta. very high	0	1	0	1
Off-peak scheds of the two Lovejoy routes don't allow transfers	0	0	1	1
Total Boat Operations	**2**	**1**	**1**	**4**
Personnel				
Excellent crew	5	0	2	7
A.M. Lovejoy/Courthouse crew waits for Navy Yard transfers	0	0	1	1
Longwharf to Charlestown crew is patient with tourists	1	0	0	1
Total Personnel	**6**	**0**	**3**	**9**
Fare/Ticketing Issues				
Sell 60-ride book on board	1	0	0	1
Feeder Service Connections				
Late arrival causes missed conection to Hingham boat	2	0	0	2
Improve commuter rail connections to/from ferry	0	0	1	1
Run shuttle buses to bring people to/from ferry terminals	1	0	0	1
Total Feeder Service Connections	**3**	**0**	**1**	**4**
Information/Announcements				
Market boat &schedules more...people don't know it is there	0	0	1	1
Post schedule on dock	0	0	1	1
Website has no Long Wharf to Charlestown info	1	0	0	1
Total Information/Announcements	**1**	**0**	**2**	**3**
Recap of Total Comments by Category				
Boat Equipment/Facilities	1	1	3	5
Service and Schedules	41	4	8	53
Terminal Facilities	1	0	1	2
General Praise for Inner Harbor Ferries	28	4	8	40
Requests/Suggestions for Additional Services	5	0	0	5
Boat Operations	2	1	1	4
Personnel	6	0	3	9
Fare/Ticketing Issues	1	0	0	1
Feeder Service Connections	3	0	1	4
Information/Announcements	1	0	2	3
Total Comments	**89**	**10**	**27**	**126**
Total Surveys	**227**	**21**	**59**	**307**
Average Comments per Survey	**0.39**	**0.48**	**0.46**	**0.41**

MBTA Ferry Passenger Survey

This survey will help us determine how ferry service in Boston Harbor can be improved. Please answer as many questions as you can. After completing the survey, you may either hand it to a member of the crew or drop it in the mail (no stamp is needed). ***Your answers are confidential and you will not be put on any mailing lists.*** *THANK YOU!*

1. Which ferry route are you riding?

2-1 ❑ Hingham–Rowes Wharf
-2 ❑ Hull–Quincy–Logan–Long Wharf

1a. At which terminal did you board this ferry? Office Use Only

_____ 3 [ ]

2. What time did you board this ferry?

4 [:] ❑ A.M. ❑ P.M.

3a. Where were you before starting this trip?

5-1 ❑ At home
-2 ❑ At school
-3 ❑ At work
-4 ❑ At a store
-5 ❑ At the doctor or other personal business
-6 ❑ At a work-related errand or meeting
-7 ❑ At a restaurant, or social or recreational activity
-8 ❑ Other _____ 6 [ ]

3b. Where is that (the place indicated in question 3a) located?

7 _____
(address or nearest street intersection or landmark)

8 _____
(city/town)

4a. How did you get to the boarding terminal?

9-1 ❑ Walked directly (from home, work, school, etc.)
-2 ❑ Was dropped off from a private car
-3 ❑ Drove and parked at or near terminal
-4 ❑ Rode as passenger in car parked at or near terminal 10 [ ]
-5 ❑ Transferred from a bus/shuttle (which route? _____)
-6 ❑ Other _____ 11 [ ]

4b. How long did it take to get to the boarding terminal?

12 _____ minute(s)

5. How did you pay your fare for *this* ferry trip?

13-1 ❑ Adult cash fare
-2 ❑ Adult monthly pass
-3 ❑ 10-ride ticket
-4 ❑ Senior citizen or person with disabilities reduced fare
-5 ❑ Child/student reduced cash fare
-6 ❑ Other _____ 14 [ ]

6a. What will you do when you leave *this* ferry?

15-1 ❑ Walk directly to your destination (work, school, etc.) 16 [ ]
-2 ❑ Transfer to the subway and then exit at _____ station
-3 ❑ Transfer to a bus (which route?_____)
-4 ❑ Transfer to commuter rail (which line? _____)
-5 ❑ Transfer to a shuttle van (which one?_____)
-6 ❑ Be picked up/drive in a private car
-8 ❑ Other _____ 17 [ ]

6b. How long will it take to get from this ferry to your destination?

18 _____ minute(s)

Continues inside ☞

7a. Where will you be at the end of this one-way trip (your destination)?

19-1 ❑ At home
-2 ❑ At school
-3 ❑ At work
-4 ❑ At a store
-5 ❑ At the doctor or other personal business
-6 ❑ At a work-related errand or meeting
-7 ❑ At a restaurant, or social or recreational activity
-8 ❑ Other _____ ☐

7b. Where is that located?

20 _____
(address or nearest street intersection or landmark)

21 _____
(city/town)

8. How many days per week do you ride this ferry service?

22-1 ❑ Less than 1 day
-2 ❑ 1 day
-3 ❑ 2 days
-4 ❑ 3 days
-5 ❑ 4 days
-6 ❑ 5 days

9. If weekend service were offered, would you ride on . . . 23 ☐

Saturdays? ❑ Yes, year-round ❑ Yes, Summer only ❑ No, not at all
Sundays? ❑ Yes, year-round ❑ Yes, Summer only ❑ No, not at all

10. Does your usage of this service vary with the season?

24-1 ❑ No, I ride the same amount year-round
-2 ❑ Yes, I ride less in the winter than in the summer
-3 ❑ Other _____

11. If bicycles were accommodated at dockside and aboard the vessel, would you use a bicycle for a portion of this trip?

25-1 ❑ Yes, frequently
-3 ❑ Yes, occasionally
-5 ❑ No, not at all

12. Which of the following ferry services would you use regularly if they were offered? (Check all that apply.)

26 ❑ Scituate to Boston
27 ❑ Other points in Quincy to Boston
28 ❑ Other South Shore points to Boston (List the boarding location most convenient for you, such as Plymouth, Cohasset, etc.)

29 _____

13. At what time will you (or did you) make a return trip today?

30 ☐ : ☐ A.M. ☐ P.M. 31 ❑ No return trip

14. Do you usually ride at the same times every day?

32-1 ❑ Yes, my schedule is relatively constant
-2 ❑ No, I often ride other trips, including those at _____

_____ 33

15. Do you use any other means of transportation *instead* of this ferry to make this portion of your trip? (Check all that apply. If you use more than one means, indicate in the space next to each how many days per week you typically use that means.)

34 ❑ Drive alone 35____
36 ❑ Carpool or vanpool 37____ 45 ☐☐☐
38 ❑ Private-carrier bus 39____ (which carrier?_____)
40 ❑ MBTA commuter rail from _____ station 41____
42 ❑ MBTA bus and/or subway from _____ station 43____
44 ❑ Other _____ 46 ☐

16. What is your age?

47-1 ❑ 17 or under
-2 ❑ 18–24
-3 ❑ 25–34
-4 ❑ 35–44
-5 ❑ 45–64
-6 ❑ 65 or over

17. How many people live in your house or apartment, including yourself?

48 _____

18. Do you have a driver's license?

49-1 ❑ Yes -2 ❑ No

19. How many vehicles (cars and trucks) are owned by your household?

50-1 ❑ None -3 ❑ 2 vehicles -5 ❑ 4 vehicles
-2 ❑ 1 vehicle -4 ❑ 3 vehicles -6 ❑ 5 or more vehicles

20. Did you have a vehicle available for this trip today?

51-1 ❑ Yes -2 ❑ No

21. What is your primary occupation?

52-1 ❑ Retail/Sales -4 ❑ Secretarial/Clerical -7 ❑ Technical/Professional
-2 ❑ Service/Trades -5 ❑ Homemaker -8 ❑ Unemployed/Retired
-3 ❑ Student -6 ❑ Other _____ 53 ☐

22. What is your annual household income?

54-1 ❑ Under $20,000 -3 ❑ $30,000–$39,999 -5 ❑ $60,000–$79,999
-2 ❑ $20,000–$29,999 -4 ❑ $40,000–$59,999 -6 ❑ $80,000 or more

23. What is your gender?

55-1 ❑ Male -2 ❑ Female

24. What is your zip code at home? 56 _____

at work (or school)? 57 _____

25. What are your main reasons for using this ferry service?

58 ❑ Convenience
59 ❑ Speed/travel time
60 ❑ Avoid driving/traffic
61 ❑ Inexpensive way to travel
62 ❑ Downtown parking cost/availability
63 ❑ Environmentally responsible
64 ❑ Only transportation available
❑ Other _____ 65 ☐

26. Fifteen measures of service quality are listed below. Please circle a number after each measure to indicate how you feel about the service on *this* ferry route. (Leave blank any measures that don't apply.) **Then, place a check mark beside the three measures most important to you.**

		Very Poor		Average		Very Good	✔
66	Condition/cleanliness of vessel	1	2	3	4	5	81____
67	Condition of docking facilities	1	2	3	4	5	82____
68	Personal safety on boat	1	2	3	4	5	83____
69	Safety while boarding/exiting	1	2	3	4	5	84____
70	Parking availability	1	2	3	4	5	85____
71	Vehicle security in parking lot	1	2	3	4	5	86____
72	Availability of schedules	1	2	3	4	5	87____
73	Information by telephone/Internet	1	2	3	4	5	88____
74	On-time performance	1	2	3	4	5	89____
75	Helpfulness of crew	1	2	3	4	5	90____
76	Availability of tickets/passes	1	2	3	4	5	91____
77	Comfort of ride	1	2	3	4	5	92____
78	Availability of seating	1	2	3	4	5	93____
79	Frequency of service	1	2	3	4	5	94____
80	Travel time/speed	1	2	3	4	5	95____

Comments/Suggestions:

MBTA Ferry Passenger Survey

This survey will help us determine how ferry service in Boston Harbor can be improved. Please answer as many questions as you can. After completing the survey, you may either hand it to a member of the crew or drop it in the mail (no stamp is needed). ***Your answers are confidential and you will not be put on any mailing lists.*** *THANK YOU!*

1. Which ferry route are you riding?

2-1 ❑ Long Wharf–Charlestown Navy Yard
-2 ❑ Lovejoy Wharf–Charlestown Navy Yard
-3 ❑ Lovejoy Wharf–Courthouse/World Trade Center

1a. At which terminal did you board this ferry? Office Use Only

_____ 3 [| |]

2. What time did you board this ferry?

4 [:] ❑ A.M. ❑ P.M.

3a. Where were you before starting this trip?

5-1 ❑ At home
-2 ❑ At school
-3 ❑ At work
-4 ❑ At a store
-5 ❑ At the doctor or other personal business
-6 ❑ At a work-related errand or meeting
-7 ❑ At a restaurant, or social or recreational activity
-8 ❑ Other _____ 6 [ ]

3b. Where is that (the place indicated in question 3a) located?

7 _____
(address or nearest street intersection or landmark)

8 _____
(city/town)

4a. How did you get to the boarding terminal?

9-1 ❑ Walked directly (from home, work, school, etc.)
-2 ❑ Was dropped off from a private car 10 [| | |]
-4 ❑ Drove or rode as passenger in car parked at or near terminal
-5 ❑ Transferred from a bus/shuttle (which route? _____)
-6 ❑ Transferred from commuter rail (which line? _____)
-7 ❑ Transferred from the subway (which line? _____)
-8 ❑ Other _____ 11 [|]

4b. How long did it take to get to the boarding terminal?

12 _____ minute(s)

5. How did you pay your fare for *this* ferry trip?

13-1 ❑ Adult cash fare
-2 ❑ Adult monthly pass (circle one): 14 Combo Plus Zone 1–9
-3 ❑ 60-ride book
-4 ❑ Senior citizen or person with disabilities reduced fare
-5 ❑ Visitor Pass
-6 ❑ Child/student reduced cash fare
-7 ❑ Other _____ 15 [|]

6a. What will you do when you leave *this* ferry?

16-1 ❑ Walk directly to your destination (work, school, etc.) 17 [| | |]
-2 ❑ Transfer to the subway and then exit at _____ station
-3 ❑ Transfer to a bus (which route?_____)
-4 ❑ Transfer to commuter rail (which line? _____)
-5 ❑ Transfer to a shuttle van (which one?_____)
-6 ❑ Be picked up/drive in a private car
-8 ❑ Other _____ 18 [|]

Continues inside ☞

6b. How long will it take to get from this ferry to your destination?

19 _____ minute(s)

7a. Where will you be at the end of this one-way trip (your destination)?

20-1 ❑ At home
-2 ❑ At school
-3 ❑ At work
-4 ❑ At a store
-5 ❑ At the doctor or other personal business
-6 ❑ At a work-related errand or meeting
-7 ❑ At a restaurant, or social or recreational activity
-8 ❑ Other _____ 21 ☐

7b. Where is that located?

22 _____
(address or nearest street intersection or landmark)

23 _____
(city/town)

8. How many days per week do you ride this ferry service?

24-1 ❑ Less than 1 day
-2 ❑ 1 day
-3 ❑ 2 days
-4 ❑ 3 days
-5 ❑ 4 days
-6 ❑ 5 days
-7 ❑ 6 days
-8 ❑ 7 days

9. If weekend service were offered, would you ride on . . . 25 ☐

Saturdays? ❑ Yes, year-round ❑ Yes, Summer only ❑ No, not at all
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27-1 ❑ Yes, frequently
-3 ❑ Yes, occasionally
-5 ❑ No, not at all

12. Which of the following ferry services would you use regularly if they were offered? (Check all that apply.)

28 ❑ Lovejoy Wharf–Russia Wharf
29 ❑ East Boston–Long Wharf
30 ❑ Other North Shore points–Boston (List the boarding location most convenient for you, such as Lynn, Salem, etc.)
31 _____

13. At what time will you (or did you) make a return trip today?

32 ☐ : ❑ A.M. ❑ P.M. 33 ❑ No return trip

14. Do you usually ride at the same times every day?

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36 ❑ Drive alone 37____
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42 ❑ MBTA commuter rail from _____ station 43____
44 ❑ MBTA bus and/or subway from _____ station 45____
46 ❑ Other _____ 48 ☐

16. What is your age?

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-3 ❑ Student -6 ❑ Other _____ 55 ☐

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-2 ❑ $20,000–$29,999 -4 ❑ $40,000–$59,999 -6 ❑ $80,000 or more

23. What is your gender?

57-1 ❑ Male -2 ❑ Female

24. What is your zip code at home? 58 _____

at work (or school)? 59 _____

25. What are your main reasons for using this ferry service?

60 ❑ Convenience 64 ❑ Downtown parking cost/availability
61 ❑ Speed/travel time 65 ❑ Environmentally responsible
62 ❑ Avoid driving/traffic 66 ❑ Only transportation available
63 ❑ Inexpensive way to travel ❑ Other _____ 67 ☐

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69	Condition of docking facilities	1	2	3	4	5	84_____
70	Personal safety on boat	1	2	3	4	5	85_____
71	Safety while boarding/exiting	1	2	3	4	5	86_____
72	Parking availability	1	2	3	4	5	87_____
73	Vehicle security in parking lot	1	2	3	4	5	88_____
74	Availability of schedules	1	2	3	4	5	89_____
75	Information by telephone/Internet	1	2	3	4	5	90_____
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77	Helpfulness of crew	1	2	3	4	5	92_____
78	Availability of tickets/passes	1	2	3	4	5	93_____
79	Comfort of ride	1	2	3	4	5	94_____
80	Availability of seating	1	2	3	4	5	95_____
81	Frequency of service	1	2	3	4	5	96_____
82	Travel time/speed	1	2	3	4	5	97_____

Comments/Suggestions: