



Onboard Survey Results

INTRODUCTION

This chapter provides the analysis of data collected through the onboard survey. Information is provided about passenger demographics, trip characteristics, and perceptions of the quality of service. This survey was conducted January 21, 22, and 24, 2009. The survey form is shown in Appendix A.

SURVEY FINDINGS

Responses from the usable questionnaires were entered into a database and an analysis was performed in a spreadsheet program. In addition to the individual responses, route and time frame were included for each response to permit detailed analysis by route or time of day. The responses are summarized in the following sections.

For the routes surveyed, total average daily ridership was 881 passengers on weekdays and 406 passengers on Saturday. Please note that this number does not include MiniBus, only the established fixed routes. There were 481 usable responses of approximately 2,160 boardings with a survey response rate of approximately 22 percent. The rate is calculated based upon the number of patrons boarding the bus compared with those who filled out a questionnaire. Table III-1 shows the response rate by time and day.

Time/Day	Wednesday	Thursday	Saturday	Total
Before 10 a.m.	18.8%	14.4%	5.6%	38.8%
10 a.m. to 2 p.m.	15.7%	15.4%	9.2%	40.3%
After 2 p.m.	8.4%	7.7%	4.8%	20.9%
Total	42.8%	37.6%	19.6%	100.0%

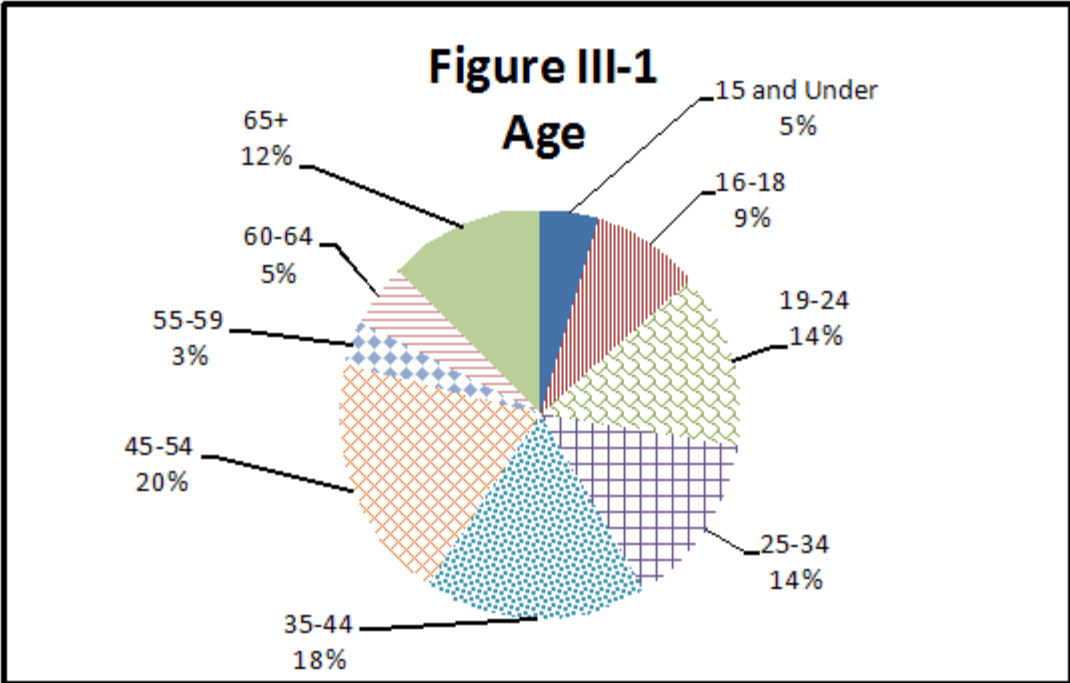
Source: LSC Onboard Survey, 2009.

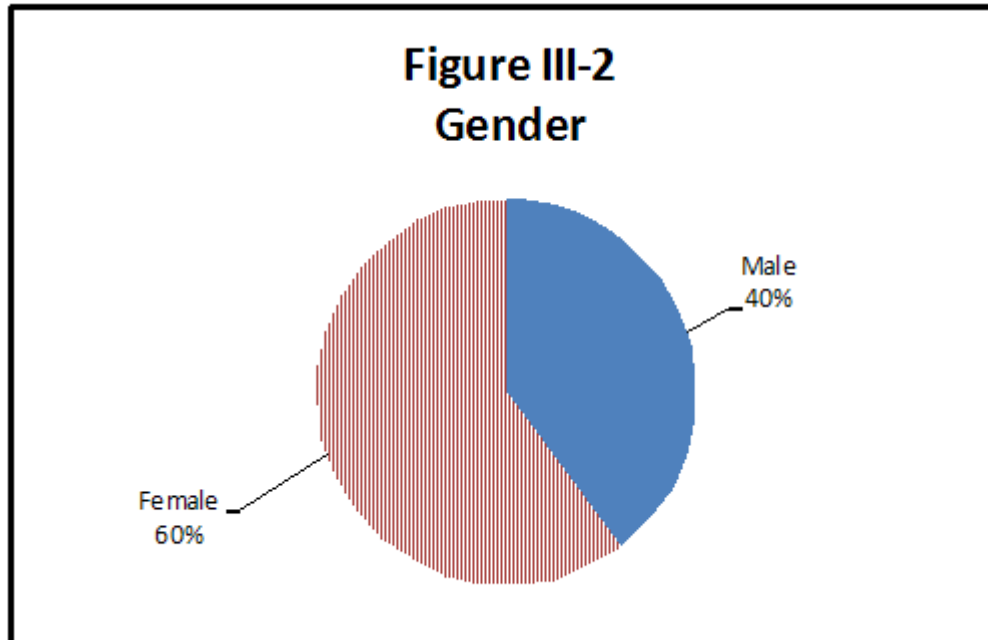
Demographic Characteristics

There were a number of questions asked to determine demographic characteristics of transit riders on KeyLine Transit. Respondents were asked to complete information on every trip which they took regarding the characteristics of the trip. The demographic information is summarized from *unduplicated* individuals responding to the questions. For the survey, there were 329 unduplicated individual responses. This sample provides an error range of +/- 3.9 percent at the 95 percent confidence level.

Age and Gender

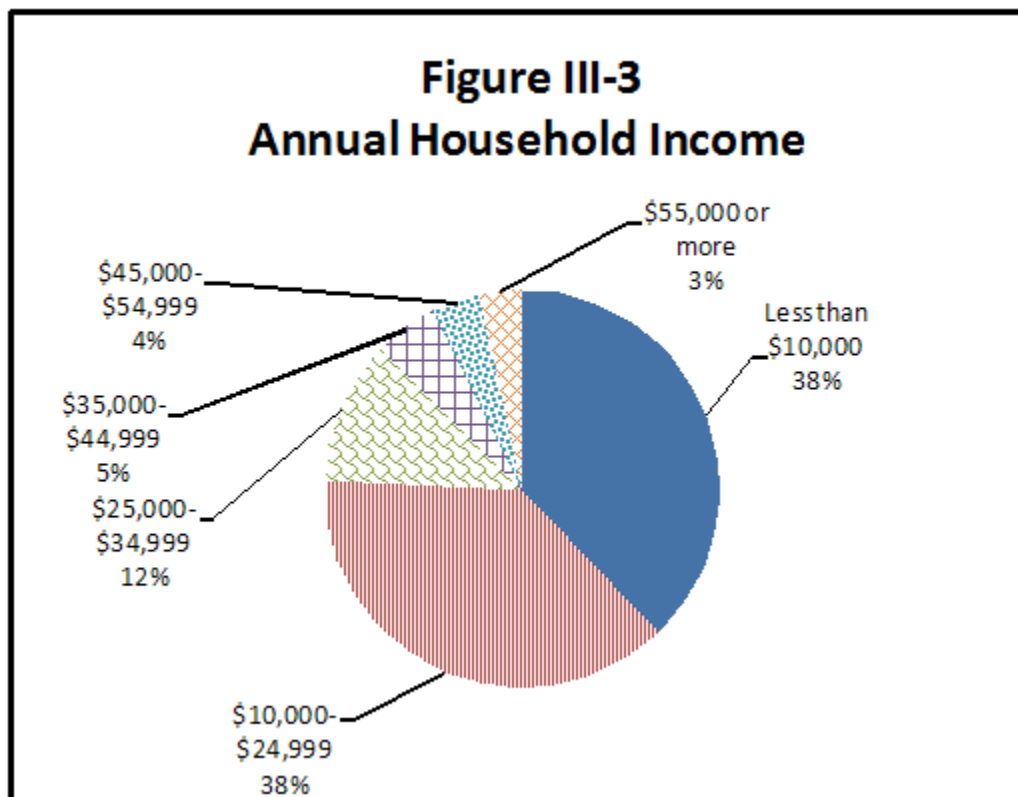
The average age of the respondents was 40 years, with ages ranging from 13 to 99 years. Age 50 was the most frequent age of the respondents. The passenger age group cohorts are shown in Figure III-1. As can be seen in this figure, approximately 17 percent of the passengers are seniors (60+) and another 14 percent are youth (18 years and younger). The largest age group is the 45-54 range (20 percent). This survey shows that 60 percent of the respondents were female and 40 percent were male. The gender split of respondents is shown in Figure III-2.





Annual Household Income

Income plays an important role in determining transit ridership and transit needs in Dubuque. The household income of respondents is shown in Figure III-3.



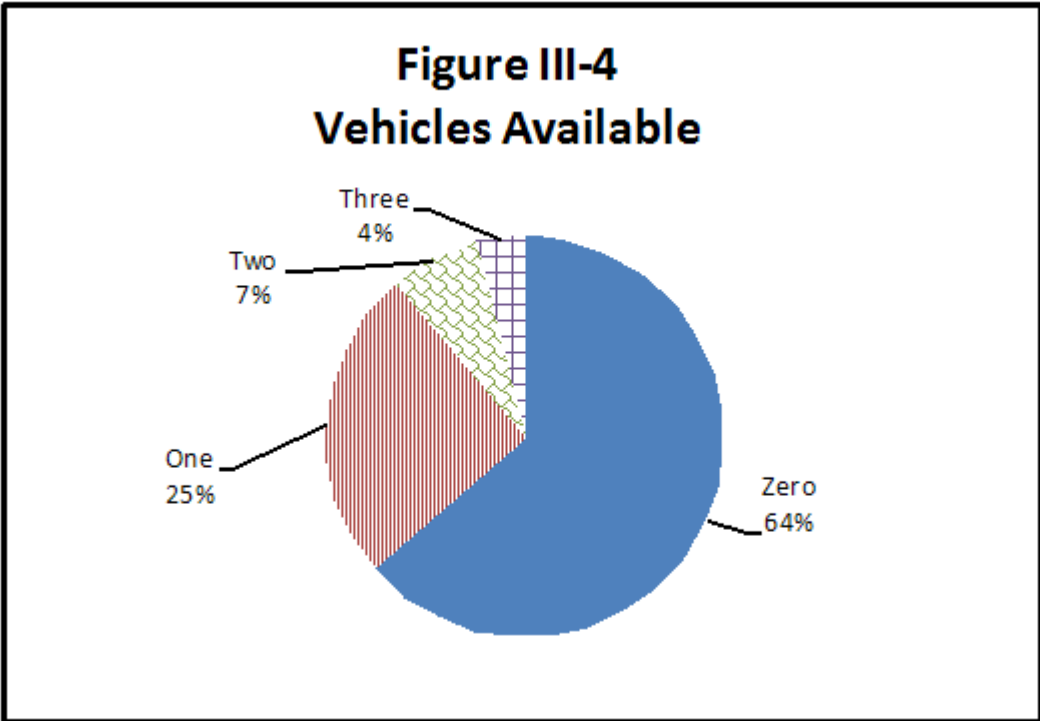
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The most frequent responses by KeyLine Transit riders was that their income was either less than \$10,000 or between \$10,000 and \$24,999 annually, representing 38 percent of respondents respectively. Thus, 76 percent of KeyLine Transit riders make below \$25,000 annually. Only a small percentage of respondents—three percent—reported earning more than \$55,000 annually.

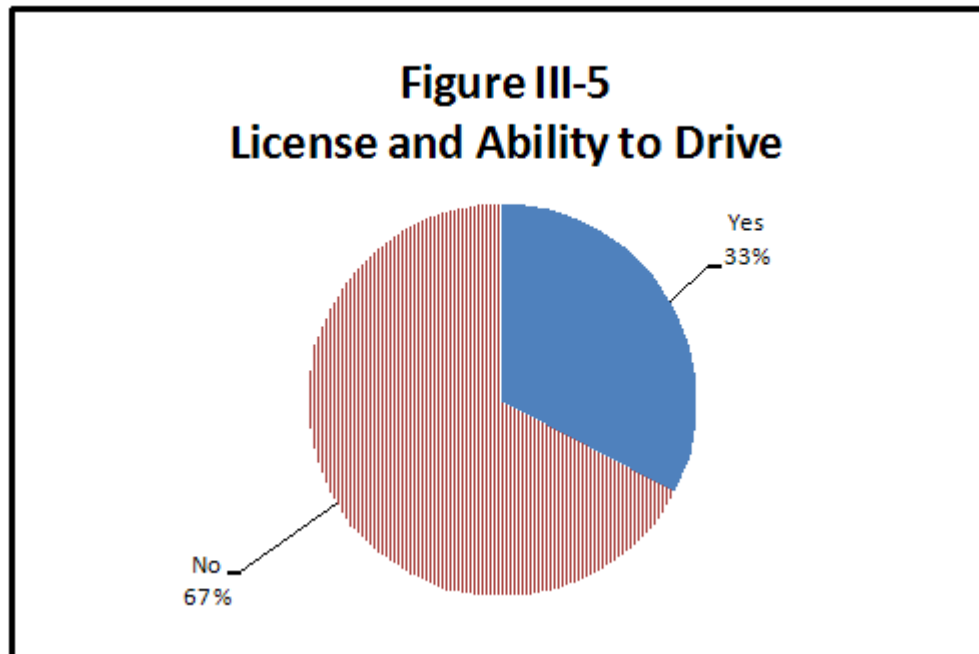
Vehicle Ownership and Licensed Driver

Vehicle ownership for households and the ability to drive play key roles in the demand for public transportation. Lack of a private vehicle or the inability to drive influence people to use public transportation. This comparison provides an indication of the number of *choice riders* compared to those who are transit-dependent.

Figure III-4 shows the proportion of passengers with operating vehicles available in their household. As illustrated, the greatest portion of passengers (64 percent) live in households with no vehicles. Another 25 percent live in single-vehicle households. Approximately four percent of respondents live in households with three or more vehicles.



Sixty-seven percent of passengers do not have a driver's license or are not able to drive, as shown in Figure III-5. These two attributes show that there presumably are very few choice riders using the system, as the majority of passengers have limited vehicle access or do not possess the ability to drive.



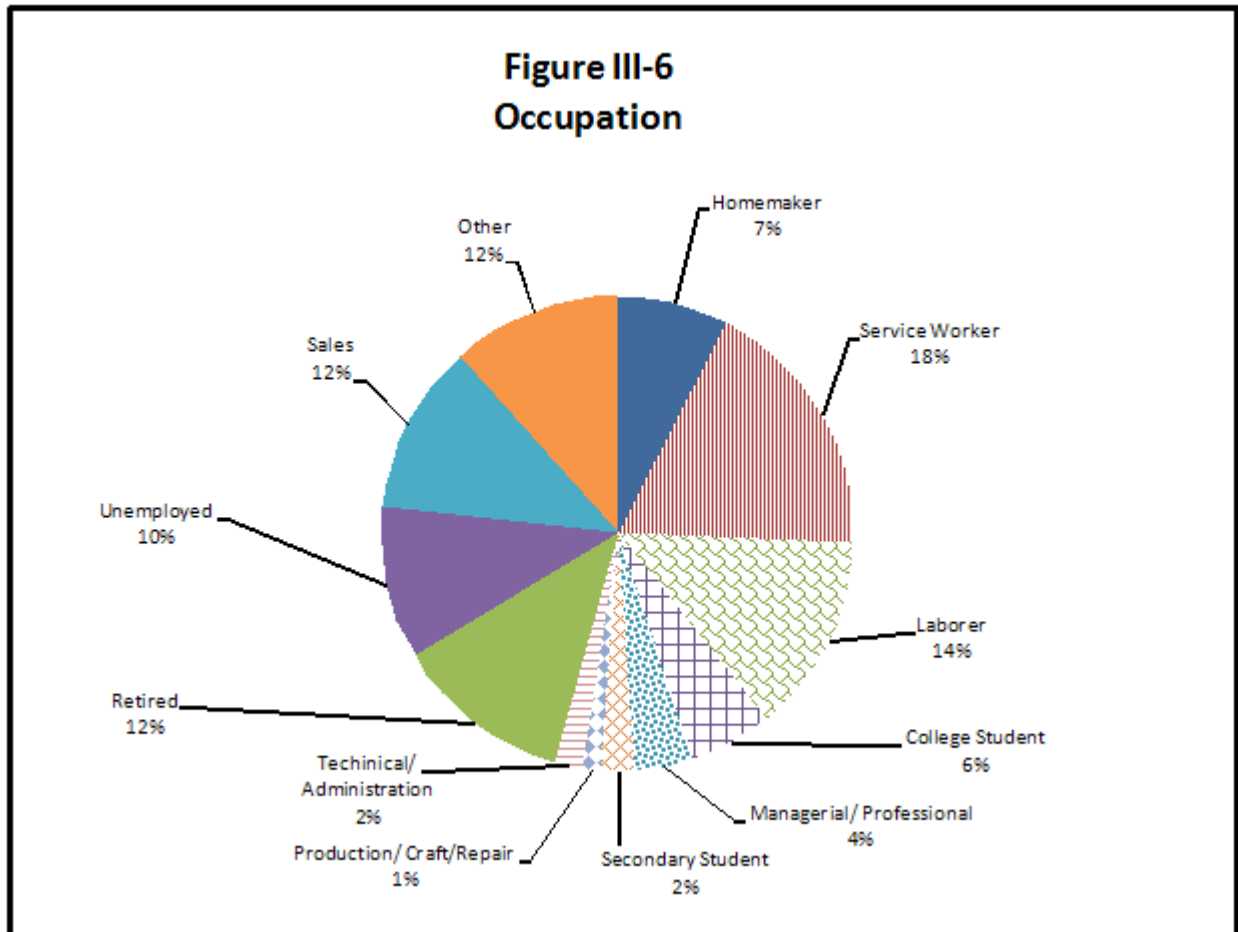
Employment

Passengers were asked to indicate the number of part-time and full-time employed persons over 15 years of age in their household. An average of 0.9 individuals were employed full-time and 0.7 were employed part-time. Of these employed individuals over the age of 15 in each of the respondent's households, approximately 54 percent are employed full-time and 46 percent are employed part-time. This question was directed to determine the employment within the region to aid in planning transit service for job access.

Occupation

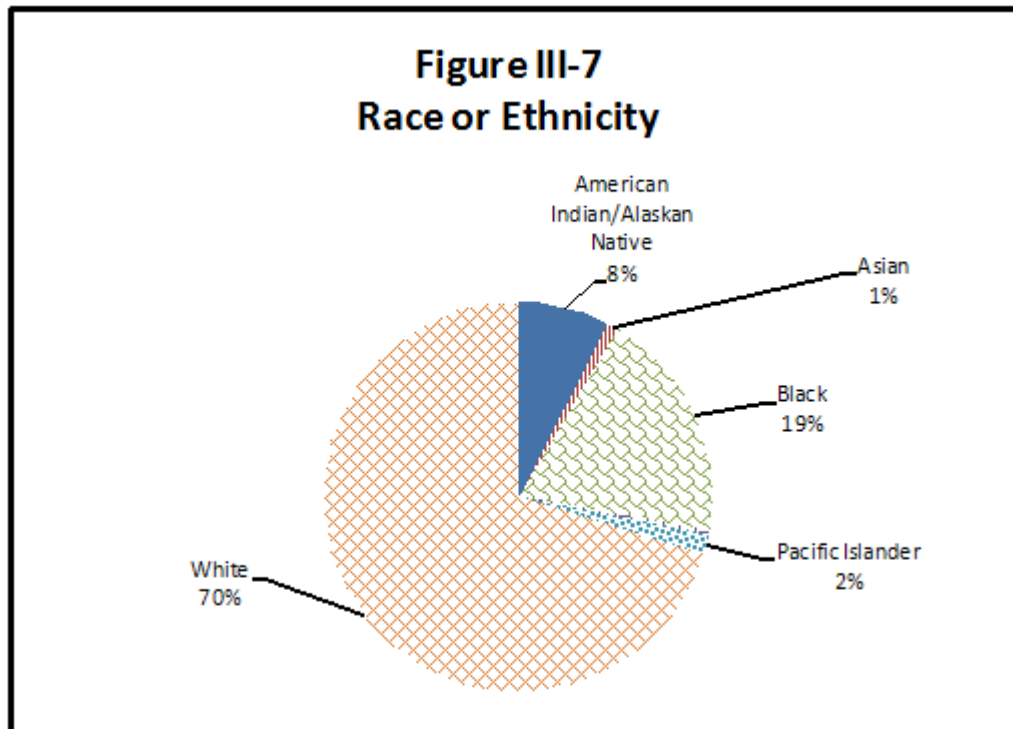
Passengers were asked to indicate their occupation using several industry categories. Results are shown in Figure III-6. Passengers represent a broad spectrum of occupations. The highest responses were from those who reported occupations such as "Service Worker" (18 percent), "Laborer" (14 percent) followed by "Retired" (12 percent). Individuals who listed themselves as "Unemployed" as their occupa-

tion represented ten percent of respondents. Students made up approximately six percent of the respondents.



Ethnicity

Ethnicity is shown in Figure III-7. Whites made up about 70 percent of the passengers, and African American/Blacks were about 19 percent. Approximately eight percent of the respondents indicated being American Indian/Alaskan Native. The remaining riders reported being Hispanic, Asian, Pacific Islander, or other ethnic groups.



Source of Information

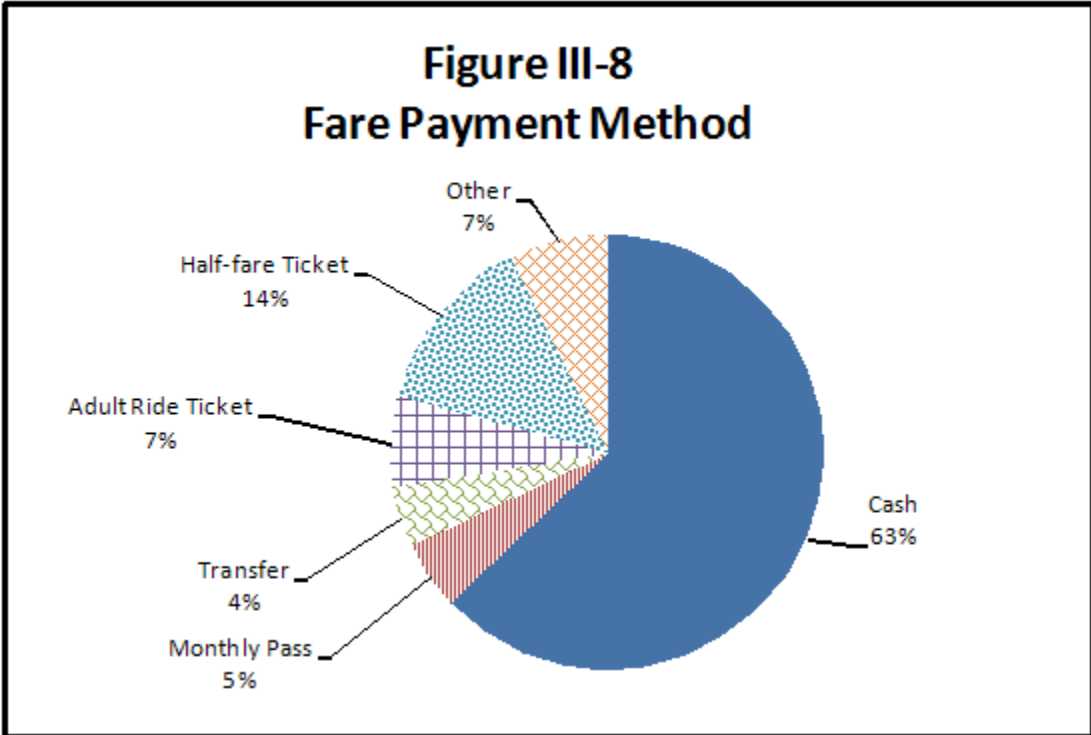
Passengers were asked to indicate how they get information about KeyLine Transit. The responses are shown in Table III-2. The primary sources of information are from the drivers, bus guides, and schedules. Other sources of information include bus stop sign/bench/shelter, transfer stations, told by someone, and the Internet. Newspaper/magazine and shopping center/store were identified by far fewer respondents as the way they receive information about KeyLine Transit.

Driver	110	26%
Bus Guide	87	20%
Schedules	54	13%
Bus Stop Sign/Bench/Shelter	51	12%
Someone Told Me	49	12%
Other	22	5%
Transfer Location	17	4%
Internet	13	3%
Local Business	10	2%
Newspaper/Magazine	6	1%
Shopping Center/Store	6	1%

Source: LSC Onboard Survey, 2009.

Fare Payment

One important aspect in transit service is the fare structure. While not a significant source of revenue for any transit agency, fares can aid in covering a small portion of operating costs. This information is important in the marketing of service such as knowing how many patrons are using bus passes compared with those who pay cash. Figure III-8 provides the responses patrons provided with regard to fare payment method. As illustrated in Figure III-8, the main method of payment for patrons is cash. Nearly 63 percent of the unduplicated surveyed responses indicated a fare payment using cash. The next most cited responses were using a half-fare ticket (14 percent) or an adult fare ticket (seven percent). Only a small portion of respondents (four percent) reported using a transfer.

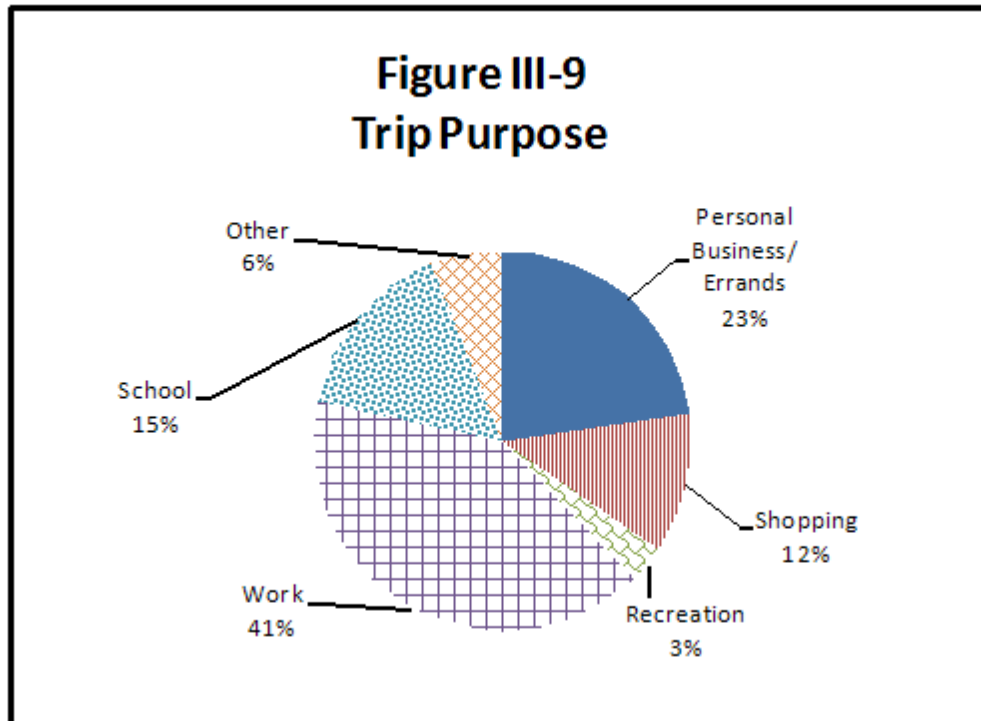


Trip Characteristics

The survey asked passengers to provide information about the individual trip they were making on KeyLine Transit. Passengers were asked to provide this information each time they were on a run that was sampled.

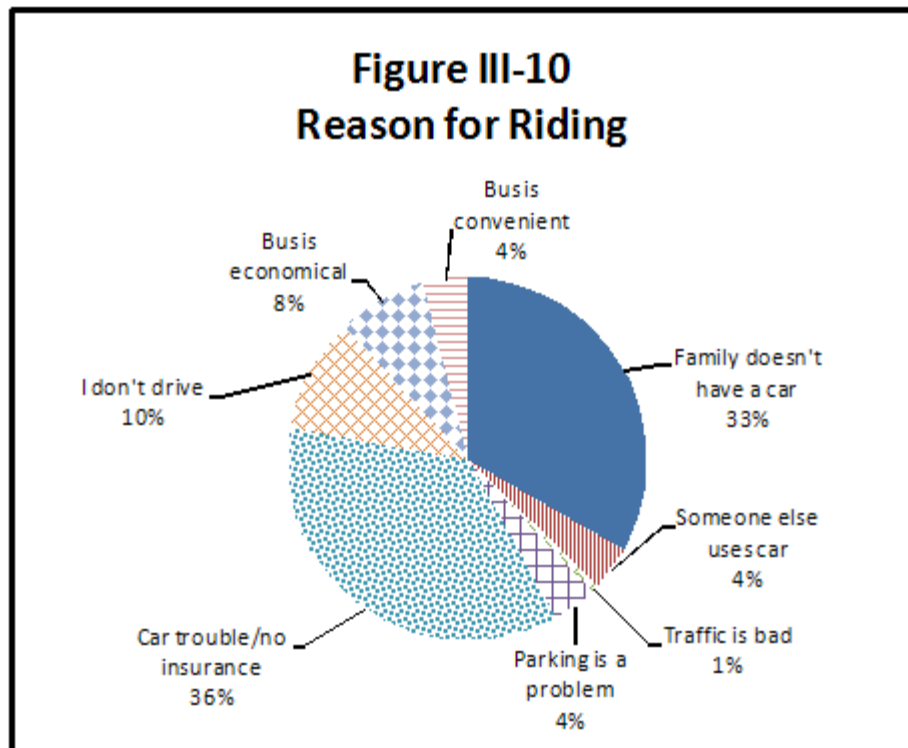
Trip Purpose

Passengers were asked the one purpose for which they most often rode the bus. Trip purposes are shown in Figure III-9. The primary trip purpose (41 percent) was to go to and from work. The second most common (23 percent) purpose was for personal business and errands. The third most common trip purpose reported was for school or college with 15 percent of respondents. Not surprisingly, shopping and recreational trips ranked very low by respondents.



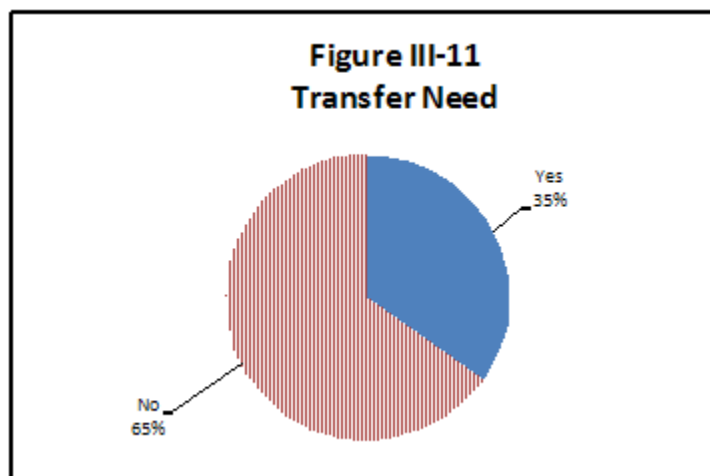
Reason for Riding

Passengers were asked the most important reason they ride the bus. As shown in Figure III-10, the top reasons for riding the bus are passengers who have car trouble/no insurance (36 percent), whose family does not have a car (33 percent), and passengers who do not drive (10 percent). A small percentage of respondents reported that the bus was an economical or convenient way to travel.



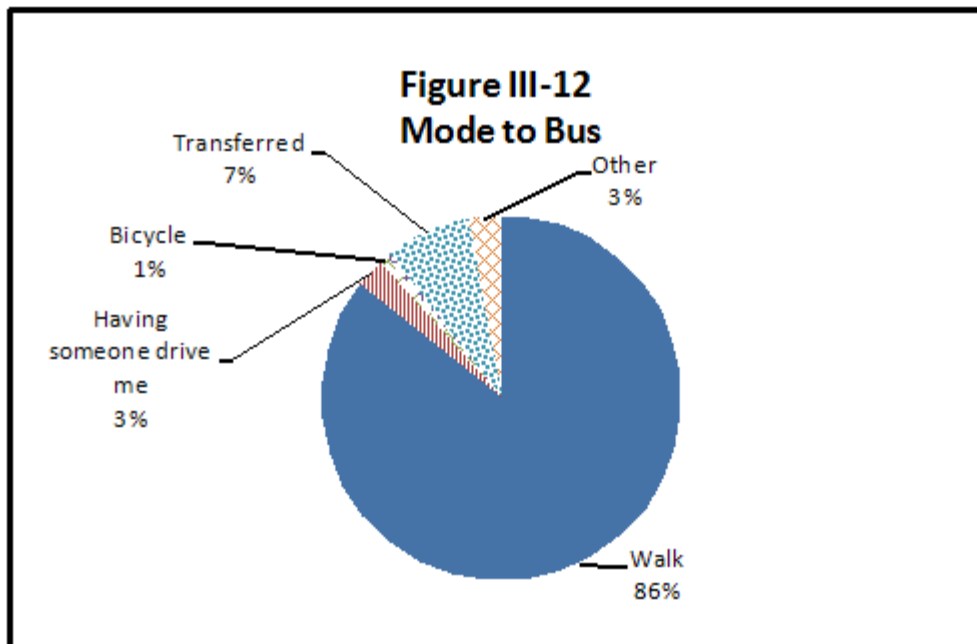
Transfers

Figure III-11 illustrates the need for passengers to transfer to complete their trip. Nearly 65 percent indicated that they would not require a transfer, while approximately 35 percent needed to transfer to complete their trip. The most popular bus to transfer to was overwhelmingly the Red Route toward the Mall/Wal-Mart with 43 percent of respondents. The next highest routes to transfer to were the Grey Route toward the Mall and the Green Route toward Shopko/Goodwill with 13 and 11 percent of respondents respectively.

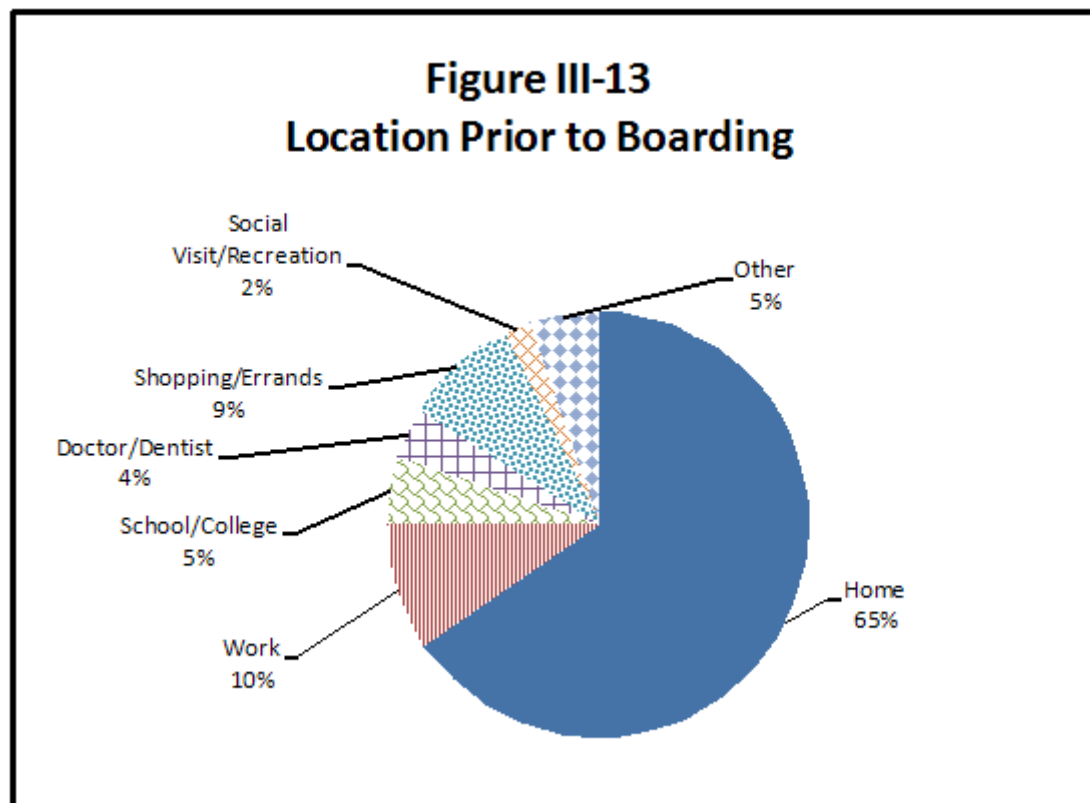


Coming From and Going To

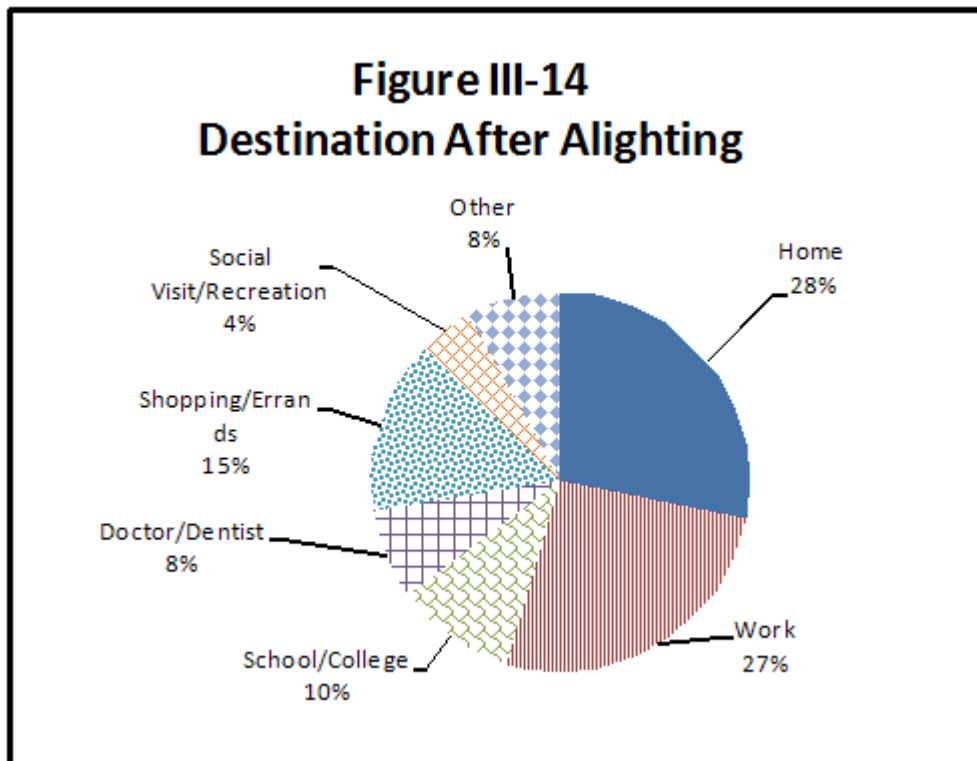
Several questions were asked of each respondent about where they were coming from and going to, as well as how they will both get to the bus and reach their final destination (i.e.; transfer, walk, bike). Patrons responded that the primary way they reached the bus they boarded was to walk (86 percent). As shown in Figure III-12, seven percent transferred to the bus they completed the survey on, and four percent drove themselves or biked.



As shown in Figure III-13, 65 percent responded that they came from home prior to reaching the bus. Ten percent reported they came from work, while an additional nine percent of respondents reported coming from shopping/personal errands. In total, only five percent reported that they came from school or college prior to boarding the bus.

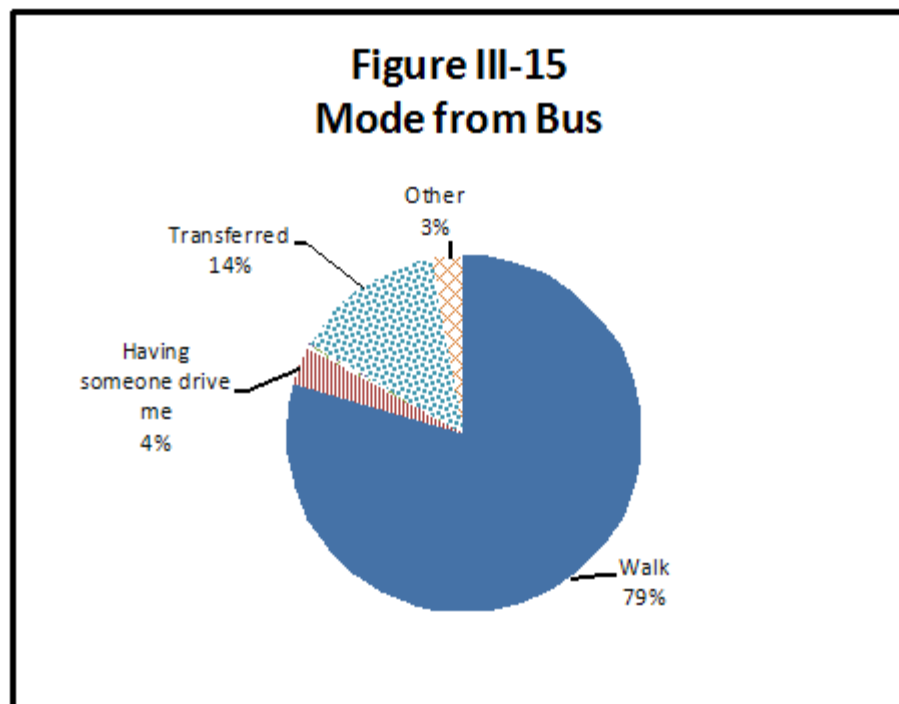


Determining a patron's final destination is helpful in developing service operating characteristics. Figure III-14 provides the responses for this question for the surveys. The majority of respondents reported going home (28 percent). Approximately 27 percent of the responses were from passengers who were going to work, while a small percentage (15 percent) were going shopping. An additional ten percent of respondents reported being on their way to school.



Finally, passengers were asked how they would travel to their final destination—walking, riding a bike, transferring to another bus, or other means.

In the recent survey, 76 percent reported that they would walk to their final destination, as shown in Figure III-15. Fourteen percent responded that they would be transferring to another bus to reach their final destination. Approximately four percent of respondents reported that they were going to have someone pick them up or ride their bike from the bus to their destination.



Blocks Walked To/From the Bus

Passengers were asked how many blocks they walked to get to the bus and the number of blocks they would have to walk to reach their final destination. Tables III-3 and III-4 show the percentage of respondents that walked to the bus and from the bus. Nearly 73 percent of respondents walked two blocks or less to reach the bus, while 81 percent walked two blocks or less once getting off the bus.

The average number of blocks walked by respondents to reach the bus was 2.5 blocks. Those coming from the bus had an average distance of 1.7 blocks to their final destination.

Table III-3 Blocks Walked To Bus		
Blocks Walked	Respondents	Percentage
0	29	9.5%
1	131	43.0%
2	63	20.7%
3	22	7.2%
4	20	6.6%
5	10	3.3%
6	6	2.0%
7	3	1.0%
8	7	2.3%
9	2	0.7%
10	5	1.6%
12	4	1.3%
20	2	0.7%
24	1	0.3%

Source: LSC Onboard Survey, 2009.

Table III-4 Blocks Walked From Bus		
Blocks Walked	Respondents	Percentage
0	47	18.6%
1	110	43.5%
2	48	19.0%
3	21	8.3%
4	12	4.7%
5	5	2.0%
6	1	0.4%
7	1	0.4%
8	3	1.2%
9	1	0.4%
10	2	0.8%
12	1	0.4%
15	1	0.4%

Source: LSC Onboard Survey, 2009.

Temporal Analysis

Several questions were asked of patrons regarding time spent waiting at a bus stop for a bus, as well as the average time spent on a bus for each particular trip they made.

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Table III-5 shows the range of bus wait times systemwide. The largest percentage of respondents (57 percent) reported waiting between five and ten minutes for their bus. Only 7.4 percent reported waiting longer than 15 minutes for their bus. This only indicates how long a patron perceived waiting for their bus at each stop.

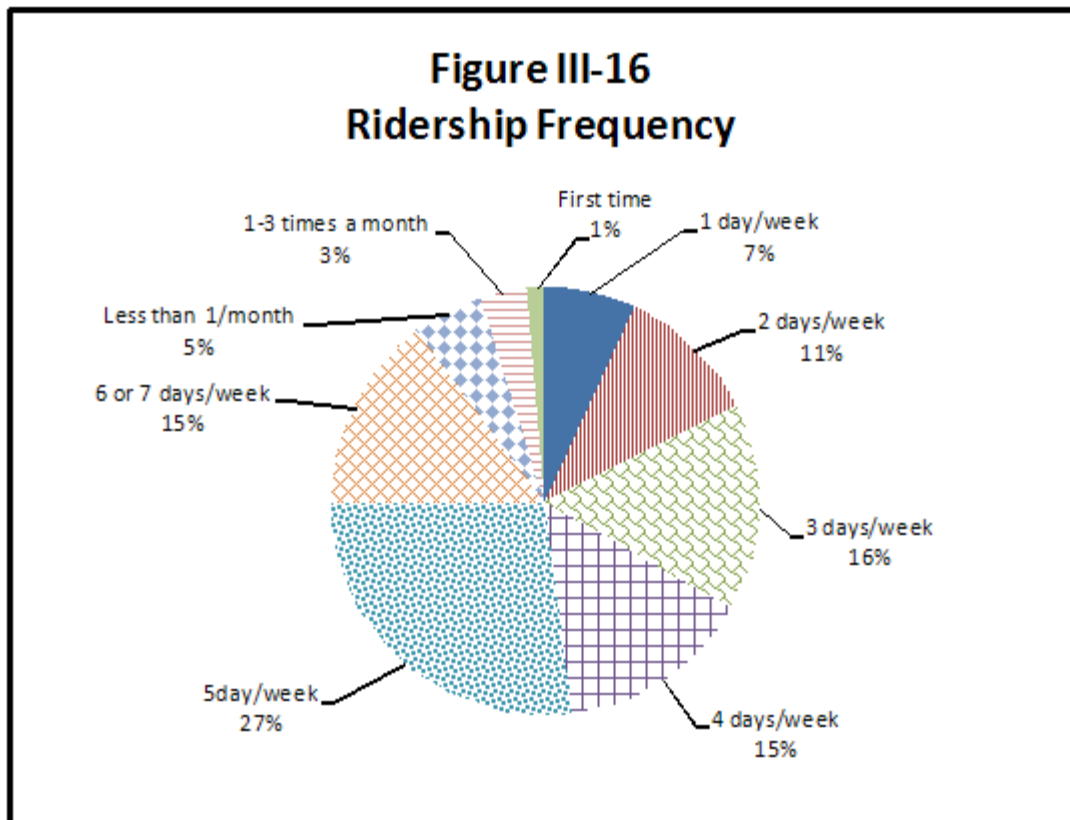
Respondents were also asked to indicate the length of time they spent on the bus for the particular portion of the trip for which they were being surveyed. The average time spent on the bus for the respondents was approximately 27 minutes. The times reported range from one minute to 120 minutes. The most frequent answers were 30 minutes and 10 minutes.

Table III-5 Bus Waiting Times		
Minutes Waited	Respondents	Percentage
1 to 4	110	26.1%
5 to 10	240	57.0%
11 to 15	40	9.5%
More than 15	31	7.4%

Source: LSC Onboard Survey, 2009.

Ridership Frequency

Passengers were asked how often they ride the bus during the typical week. Figure III-16 shows that approximately 27 percent of the passengers reported using KeyLine’s service five days per week. Sixteen percent reported riding three days weekly, while 15 percent reported using the service four and six days, respectively. This shows that the main riders of the system are frequent riders. Very few respondents reported using the system only a few times a month.



Perceptions about KeyLine Transit

Passengers were asked to rate the quality of service provided by KeyLine Transit. The responses were poor, fair, good, very good, and don't know. Each category was given a numerical value from one to four, and the average response was then calculated for each attribute. The middle point of responses would be 2.5, so an average score of 3.0 or higher would indicate positive perceptions for that particular attribute. The responses from the survey are shown in Table III-6. In the survey, the attribute having the highest score was "Fares" with a rating of 3.5. Following fares, the highest rated attributes are "Safety" and "Driver Courtesy" with ratings of 3.4.

The lowest rated attributes were "Schedules," "Saturday Service," "Bus Routes/ Areas Served," and "Service Frequency." Although these were the lowest rated attributes, they all scored a 3.0 or better. The rating of service attributes should relate to the goals for KeyLine Transit. For example, a standard for schedules should be established at 3.0 or something similar. Each service attribute should

have an established standard and be compared during each iteration of survey programs in the future.

Table III-6 Perceptions about KeyLine	
Attribute	Average Rating
Fares	3.5
Safety	3.4
Driver Courtesy	3.4
Overall Service Quality	3.3
Transfer Convenience	3.3
Condition of Buses	3.2
Transfer Stations	3.2
Comfort	3.2
Convenience	3.2
Website	3.2
Bus Routes/Area Served	3.1
Saturday Service	3.1
Service Frequency	3.1
Schedules	3.0
<i>Source: LSC Onboard Survey, 2009.</i>	

Additional Comments

Passengers were given the opportunity to include additional comments regarding KeyLine Transit service. The actual comments are included in Appendix B. Many of the comments were related to the extension of service, both in terms of geography and time. Other comments were generally related to bus conditions, information, schedules, web content, and stops. The appendix has the comments disaggregated by type, along with the percentage of comments that relate to that specific category.