



CHAPTER IV

Onboard Survey Results

INTRODUCTION

This chapter provides a detailed discussion of the survey effort as well as an analysis of data collected through onboard surveys. Information is provided about passenger demographics, trip characteristics, and perceptions of the quality of service. This survey was conducted on April 15, 2009. Data were collected for both the fixed-route and paratransit services.

FIXED-ROUTE SURVEY METHODOLOGY

A short survey instrument was developed in cooperation with Washington County Transit staff and is provided in Appendix B. The LSC Team contracted with a local employment agency to hire workers to complete the survey distribution and collection as well as count passengers boarding and alighting at each individual stop on all fixed routes. Surveys were conducted from approximately 5:00 a.m. until 9:00 p.m. Contracted temporary employees were trained on the appropriate method for distribution of questionnaires, and a review of survey questions was completed to give the workers insight on the survey questions so they would be prepared to field questions regarding the survey instrument. Workers were provided the appropriate materials—i.e., pencils, pens, clipboard, surveys, and count sheets—to complete the survey and count program.

FIXED-ROUTE SURVEY FINDINGS

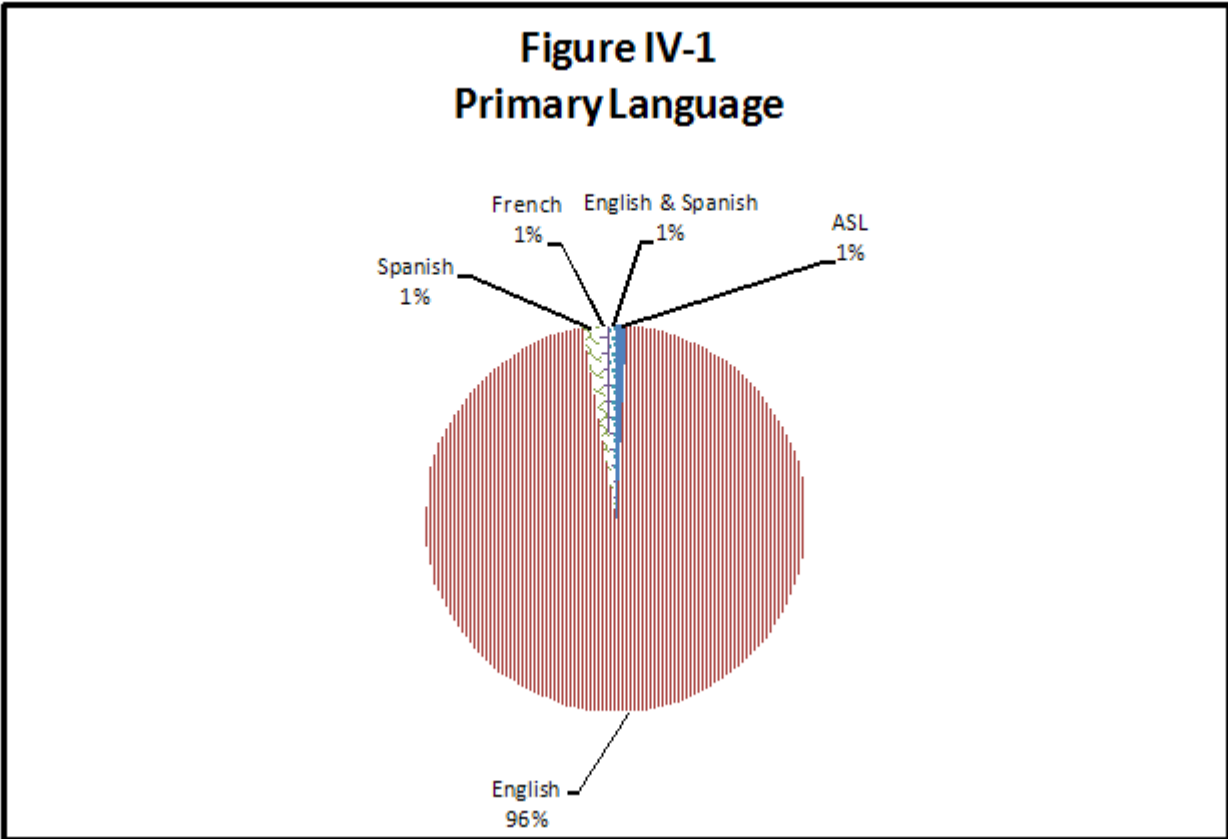
Responses from the usable questionnaires were entered into a database for analysis. A total of 164 usable surveys were returned. There was a total of 1,025 passengers counted boarding on this day, yielding a response rate of 16 percent. The survey concentrated on obtaining information on socioeconomic data, trip purpose, frequency of use, and fares. The error range is plus or minus 6.1 percent at a confidence level of 95 percent. Since all riders were asked to complete a survey, the boardings are equal to surveys distributed.

Demographics

There were a number of questions asked to determine demographic characteristics of Washington County Transit riders. Respondents were asked to complete trip information every time they boarded, but demographic information was collected only one time for every rider filling out the survey.

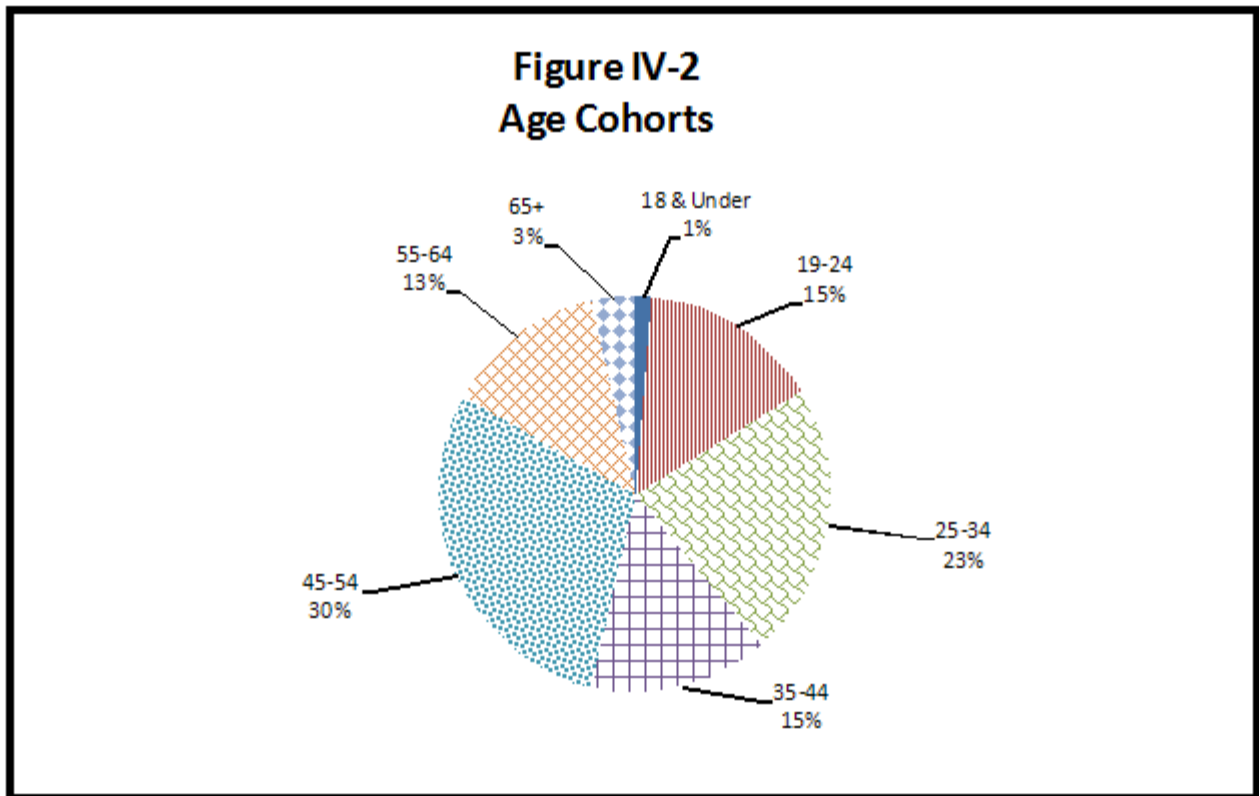
Primary Language

The vast majority of respondents (96 percent) reported that their primary language was English. Only a small percentage of people reported other languages, including Spanish, French, American Sign Language, and speaking both English and Spanish. Figure IV-1 shows these results.



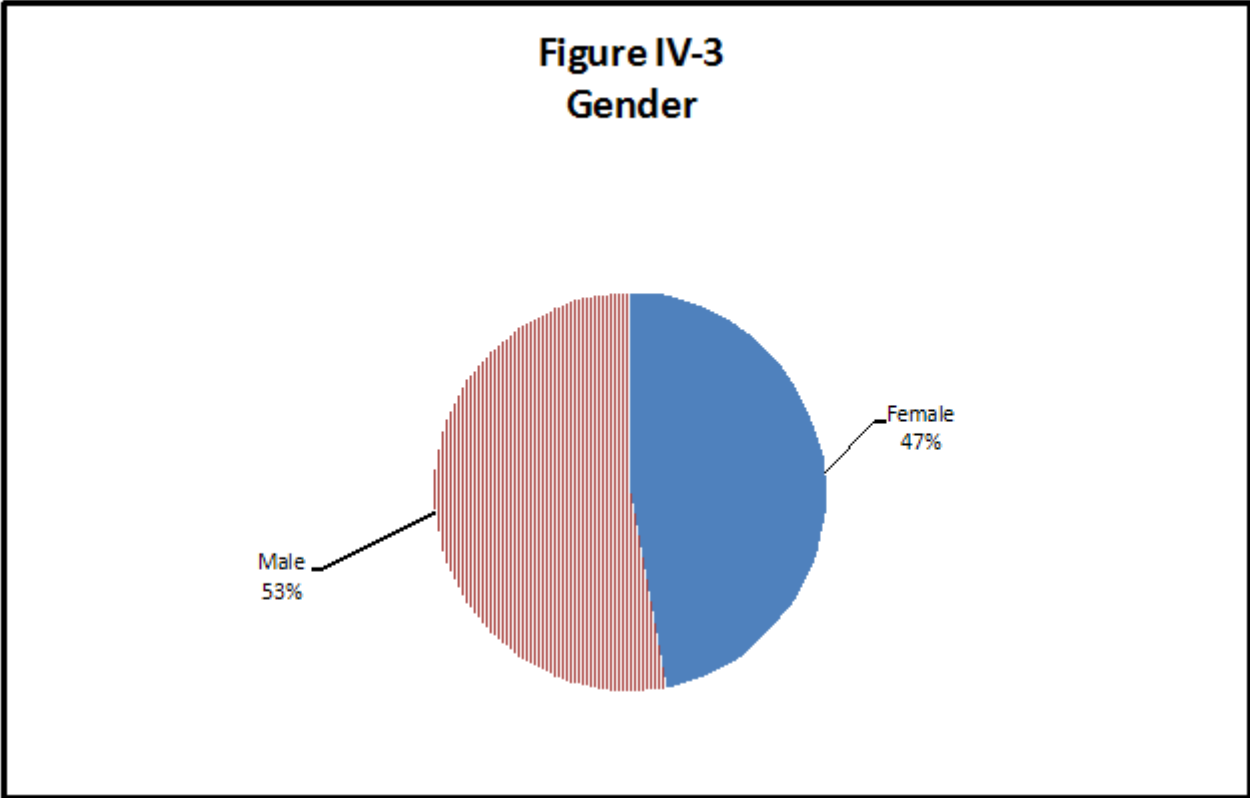
Age

The average age of respondents to the survey was 41 years old. The age cohorts of respondents can be seen in Figure IV-2. The most frequently reported answer was 49 years old (by 10 respondents). The cohort of individuals aged 45 to 54 was the most prominent, with 30 percent of respondents. In contrast, only one percent of respondents reported being age 18 or under and three percent of respondents reported being age 65 or older.



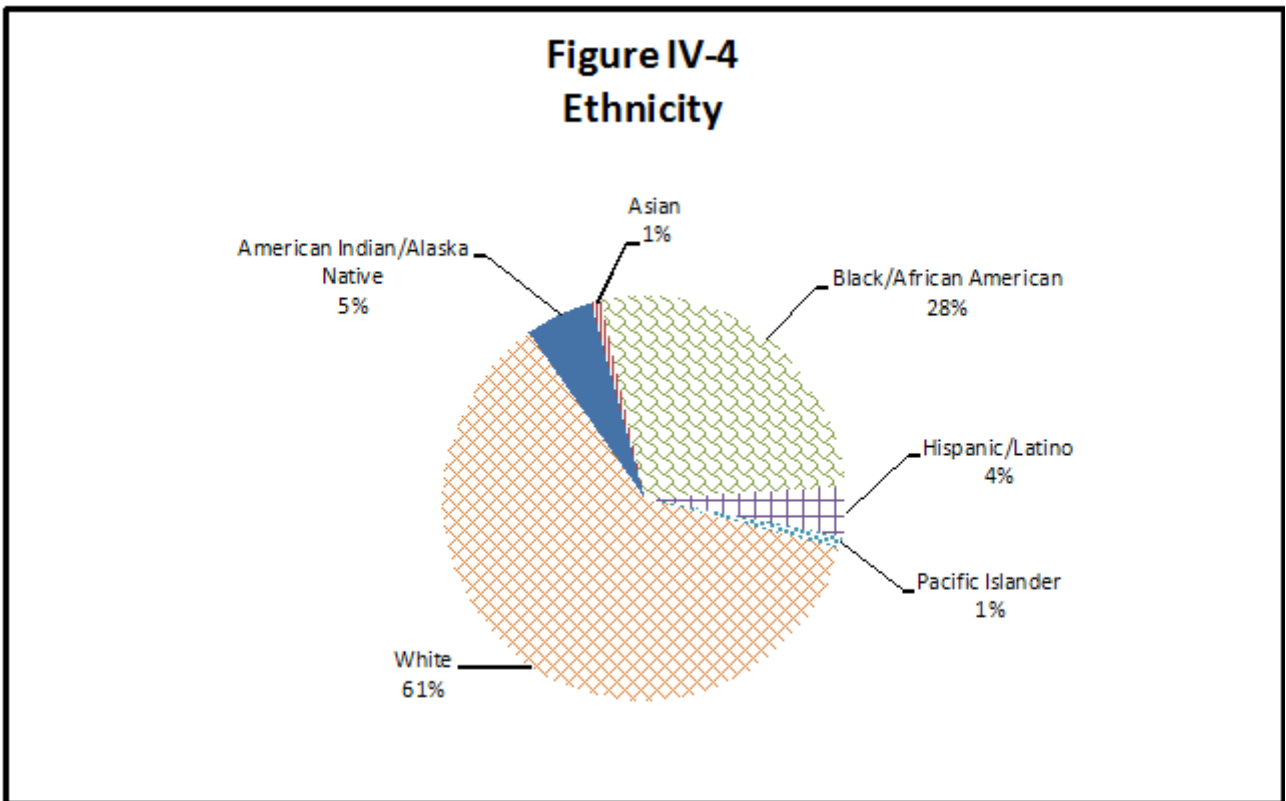
Gender

There were slightly more male respondents (53 percent) than female respondents. Figure IV-3 shows the breakdown of gender for the respondents.



Ethnicity

Ethnicity responses are shown in Figure IV-4. White passengers made up about 61 percent of the respondents. The next most frequent group was Black/African American, with 28 percent of the respondents. About five percent of respondents reported being American Indian/Alaskan Native, while Hispanic/Latino made up another four percent. The remaining responses came from Pacific Islander (one percent) and Asian (one percent).



Working Members in Household

Respondents were asked to report the number of persons, including themselves, over 15 years of age in their household. Table IV-1 shows the breakdown of responses. Figures IV-5 and IV-6 show the number and percentage of persons over 15 years of age in each household employed part-time or full-time, respectively. About 57 percent of respondents reported at least one member of the household employed part-time. About 20 percent of respondents reported zero members of the household employed full-time. Fifty-five percent reported one member of the household employed full-time. Twenty-three percent reported two members of the household employed full-time. One percent reported three or more members of the household employed full-time.

Table IV-1		
Number of Persons Over Age 15 in Household		
Number of Persons Over Age 15 in Household	Responses	Percentage
One	45	35.2%
Two	48	35.7%
Three	21	16.4%
Four	8	6.3%
Five	5	3.9%
Six or more	1	0.8%

Source: LSC Onboard Surveys, 2009.

Figure IV-5
Number of Persons Over 15 Employed Part-Time

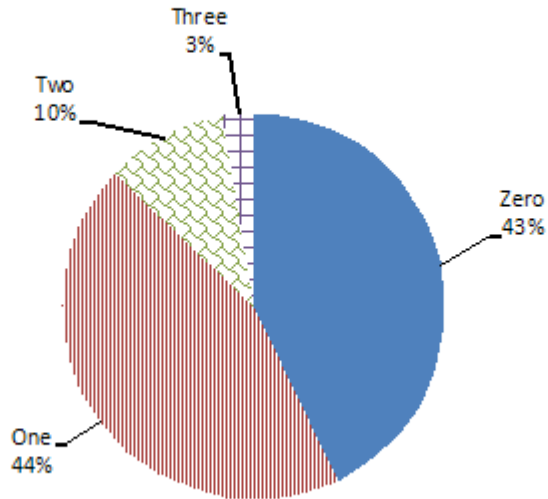
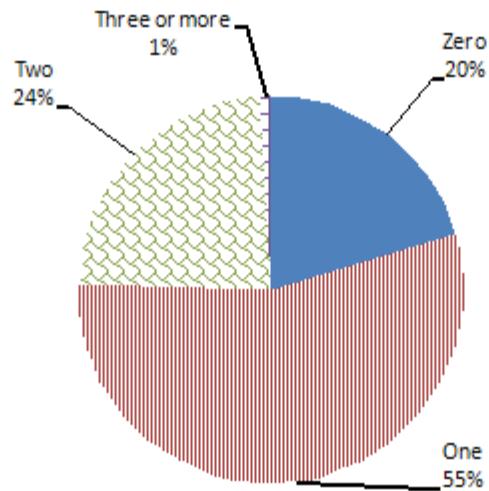
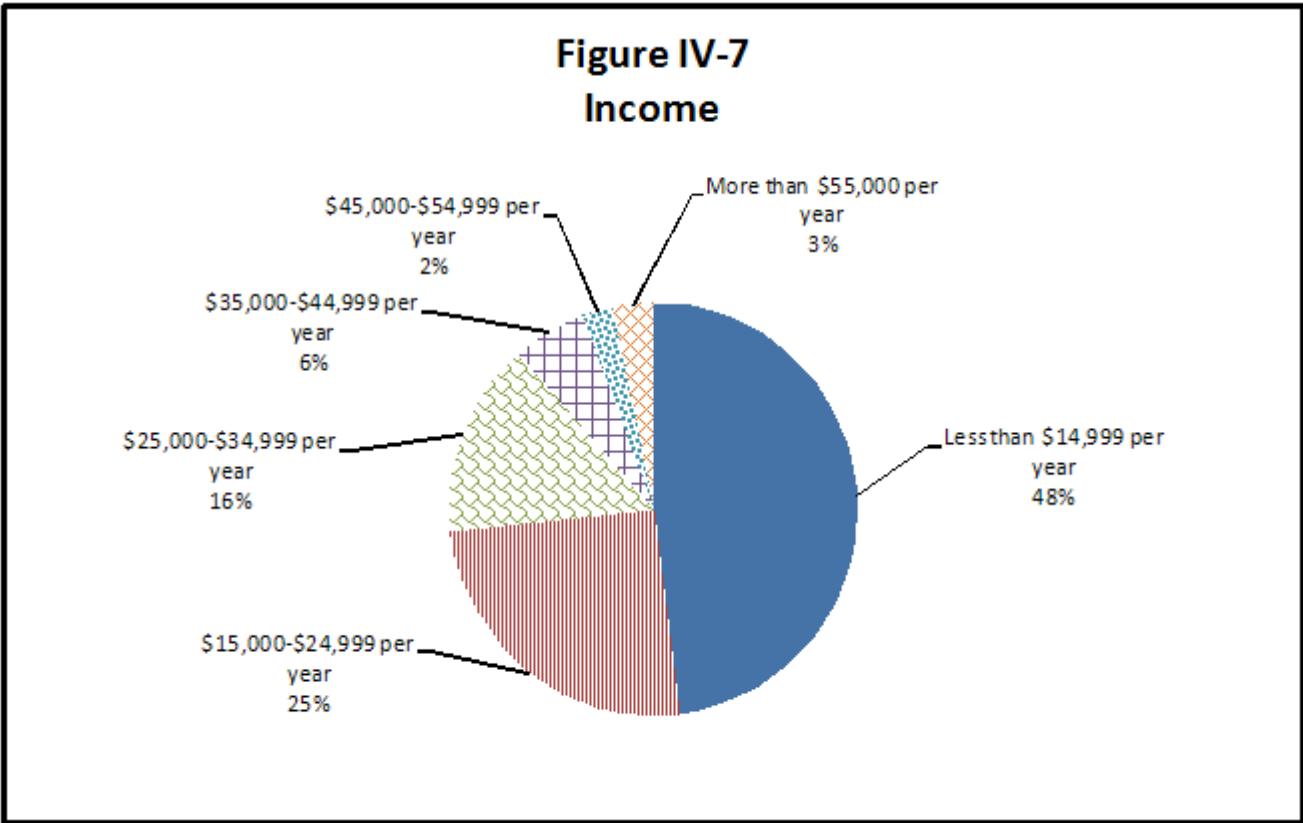


Figure IV-6
Number of Persons Over 15 Employed Full-Time



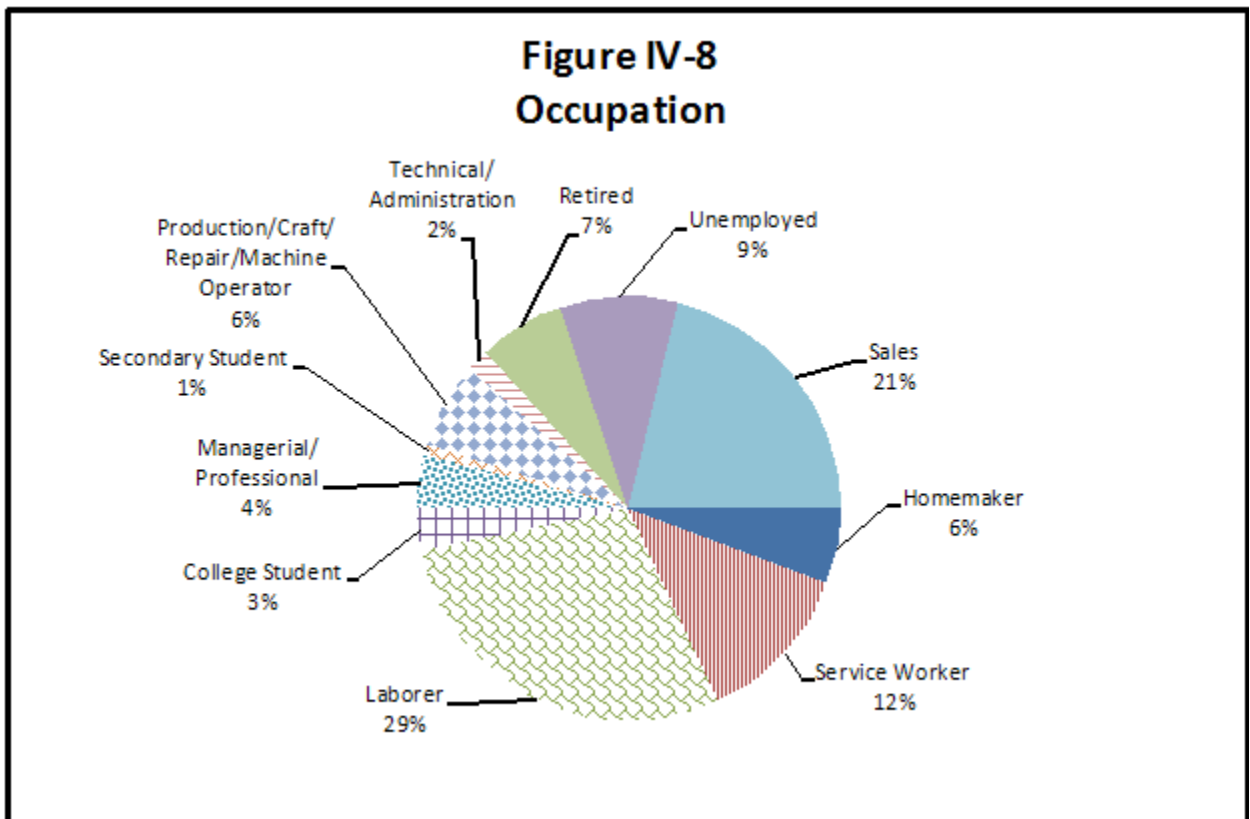
Annual Household Income

Income plays an important role in determining the transit ridership and needs of a given community. The annual household income for respondents is represented in Figure IV-7. Forty-eight percent of riders earn less than \$15,000 dollars annually. Nearly 41 percent of all respondents reported being within the range of \$15,000 to \$34,999. Households earning between \$35,000 to \$44,999 annually represent six percent of the respondents. Households earning over \$45,000 dollars annually represent five percent of the respondents.



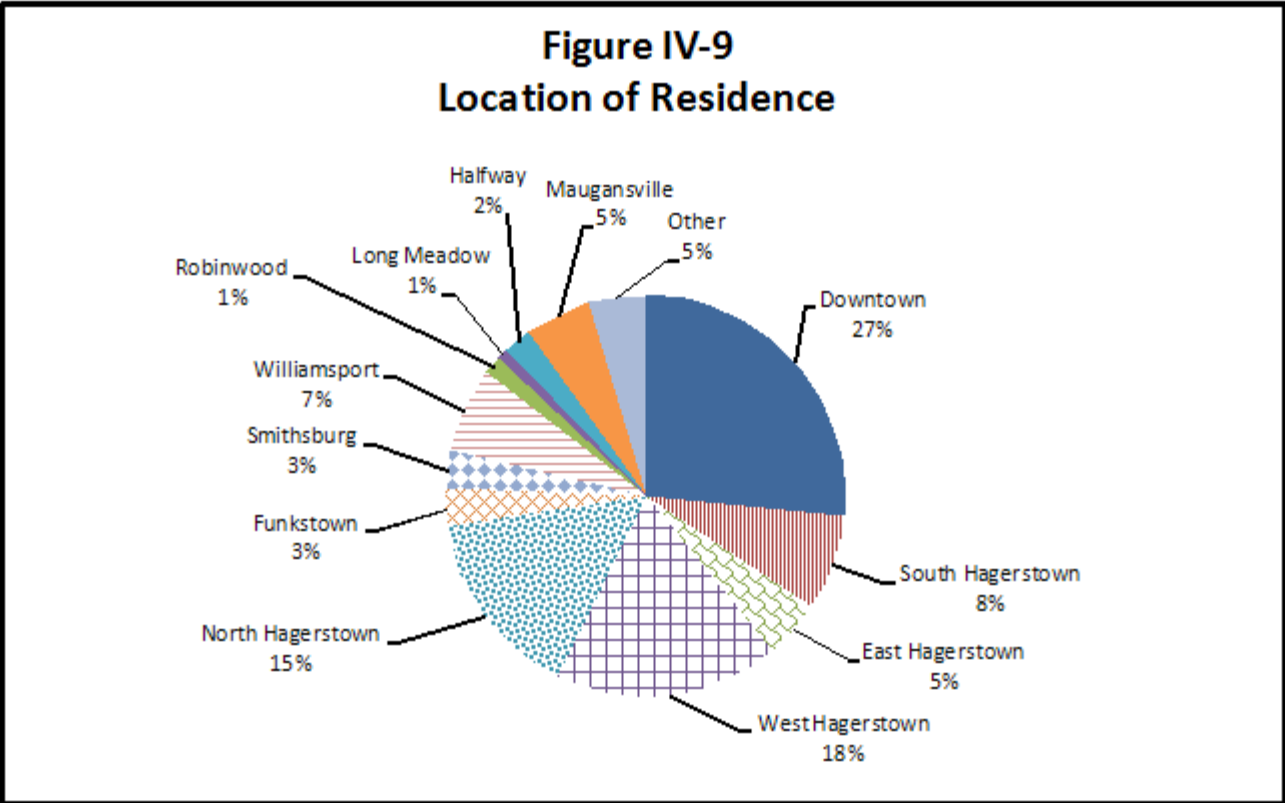
Occupation

Respondents were asked to state their occupation. Figure IV-8 shows the breakdown of the respondents' occupations. Twenty-nine percent are laborers, 21 percent are in sales, and 12 percent are service workers. Nine percent of respondents reported being unemployed. Seven percent of respondents reported being retired. About half of the respondents are either laborers or in sales. College and secondary students and technical/administration represent the lowest reported occupations.



Location of Residence

Respondents were asked where they live and the primary zip code of their residence. Downtown was the most frequent response reported, representing 27 percent of the respondents. West Hagerstown (18 percent), North Hagerstown (15 percent), and South Hagerstown (eight percent) were the next most reported locations. Robinwood (one percent) and Longmeadow (one percent) were the least reported locations. Figure IV-9 shows the distribution of where respondents reportedly live. The primary zip code for the majority of respondents (69 percent) was reported to be within the 21740 zip code.

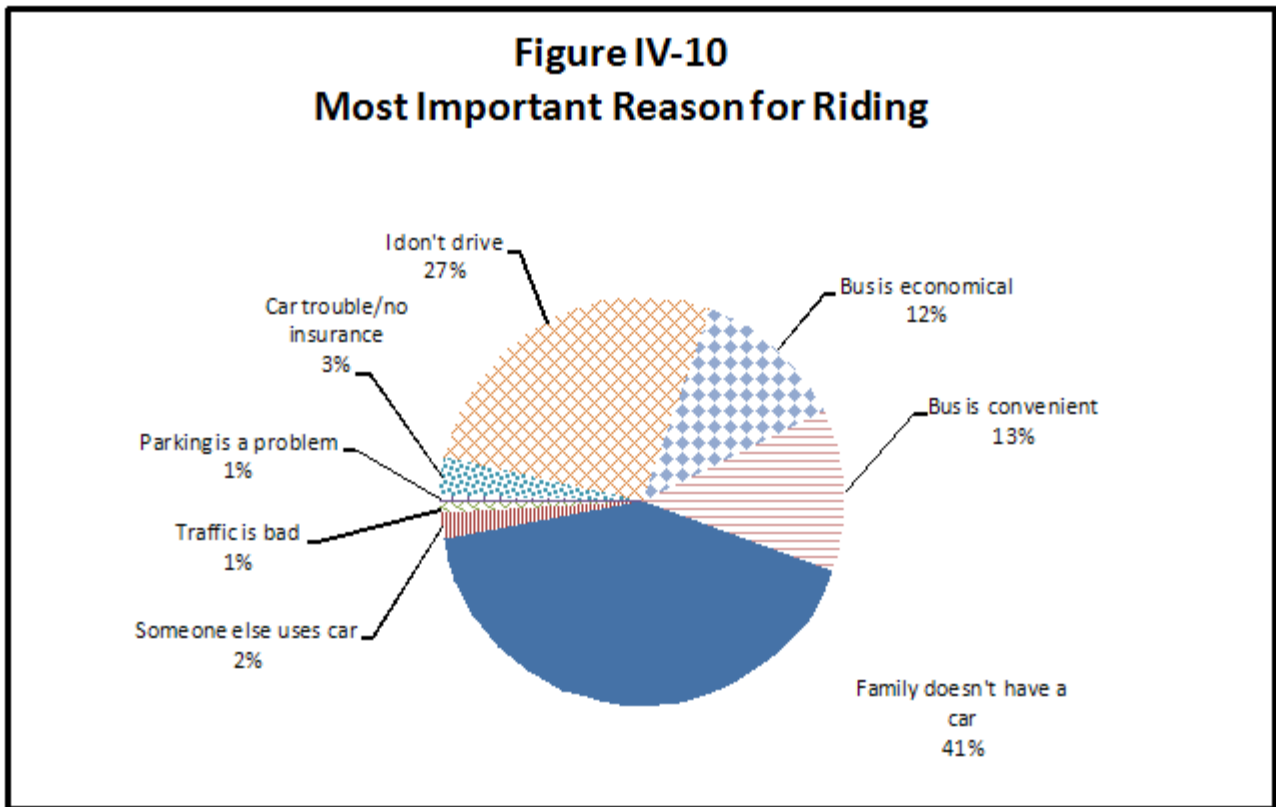


Trip Characteristics

The survey was primarily aimed at asking passengers to provide information about the individual trip they were making on Washington County Transit. Passengers were asked to provide this information each time they were on the bus, regardless if they had previously completed a questionnaire.

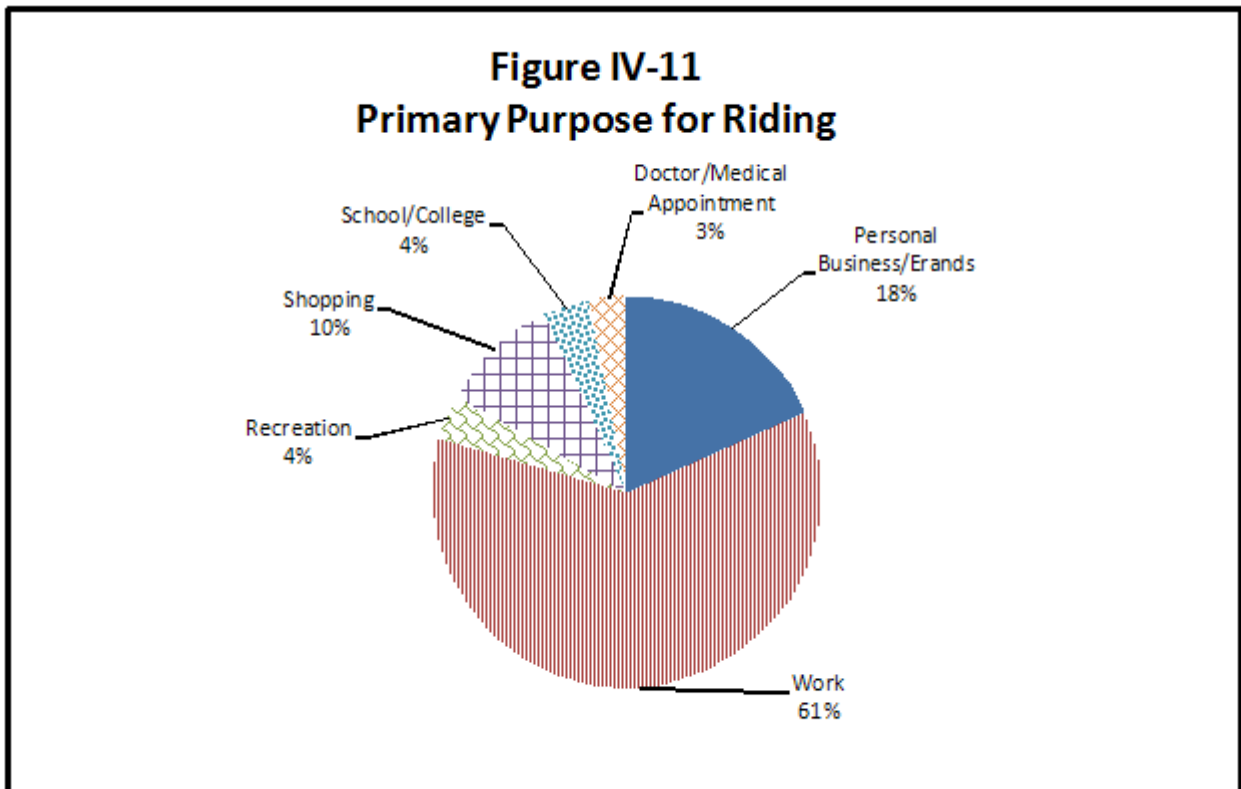
Reason for Riding

Passengers were asked the most important reason they ride the bus. As shown in Figure IV-10, the top reasons for riding the bus are passengers whose families do not have cars (41 percent), do not drive (27 percent), and passengers who feel the bus is convenient (13 percent). Twelve percent reported that the bus is an economical way to travel. Parking is a problem (one percent) and traffic is bad (one percent) were the lowest reported responses.



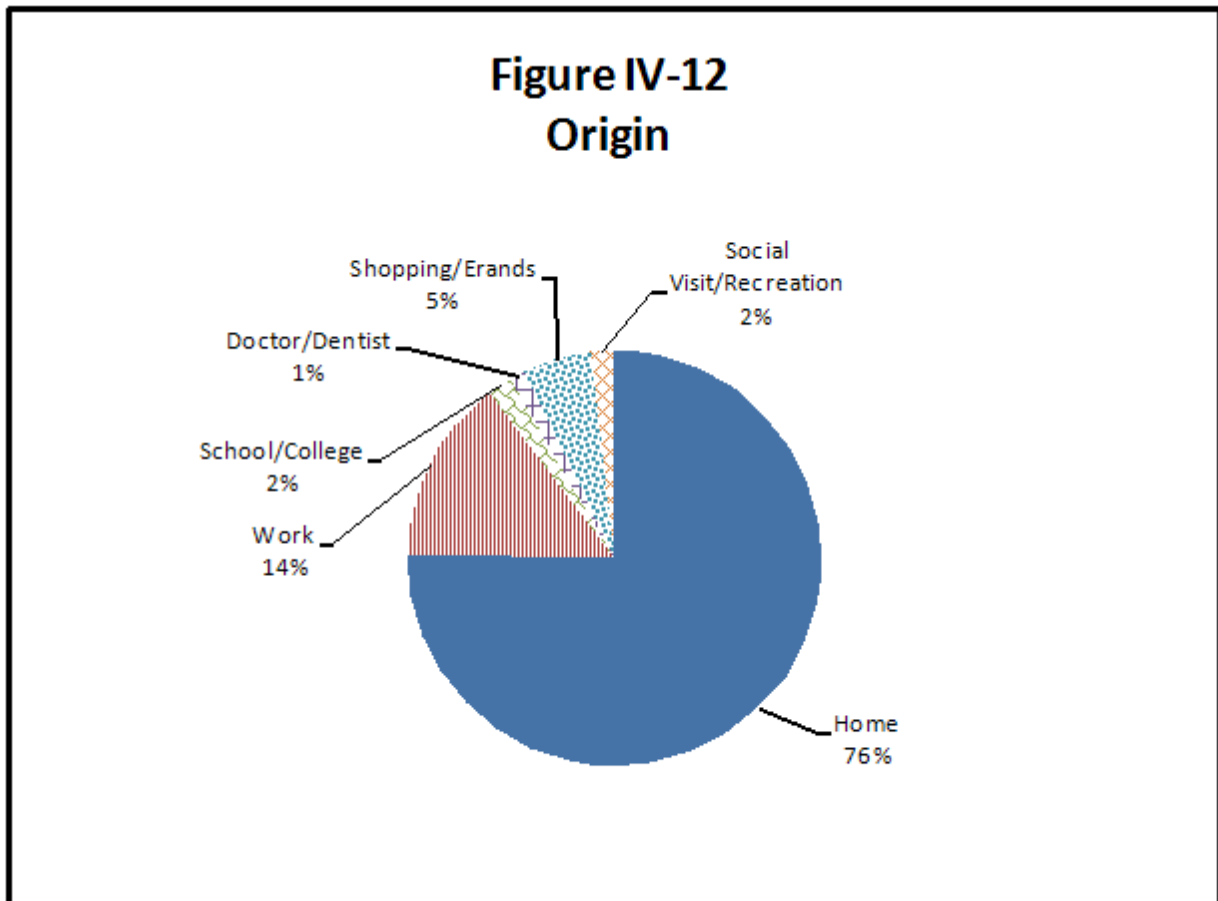
Primary Purpose for Riding

Passengers were asked for what one purpose they most often ride the bus. As shown in Figure IV-11, the majority of respondents (61 percent) ride the bus to get to work. Eighteen percent reported riding the bus to complete personal errands.

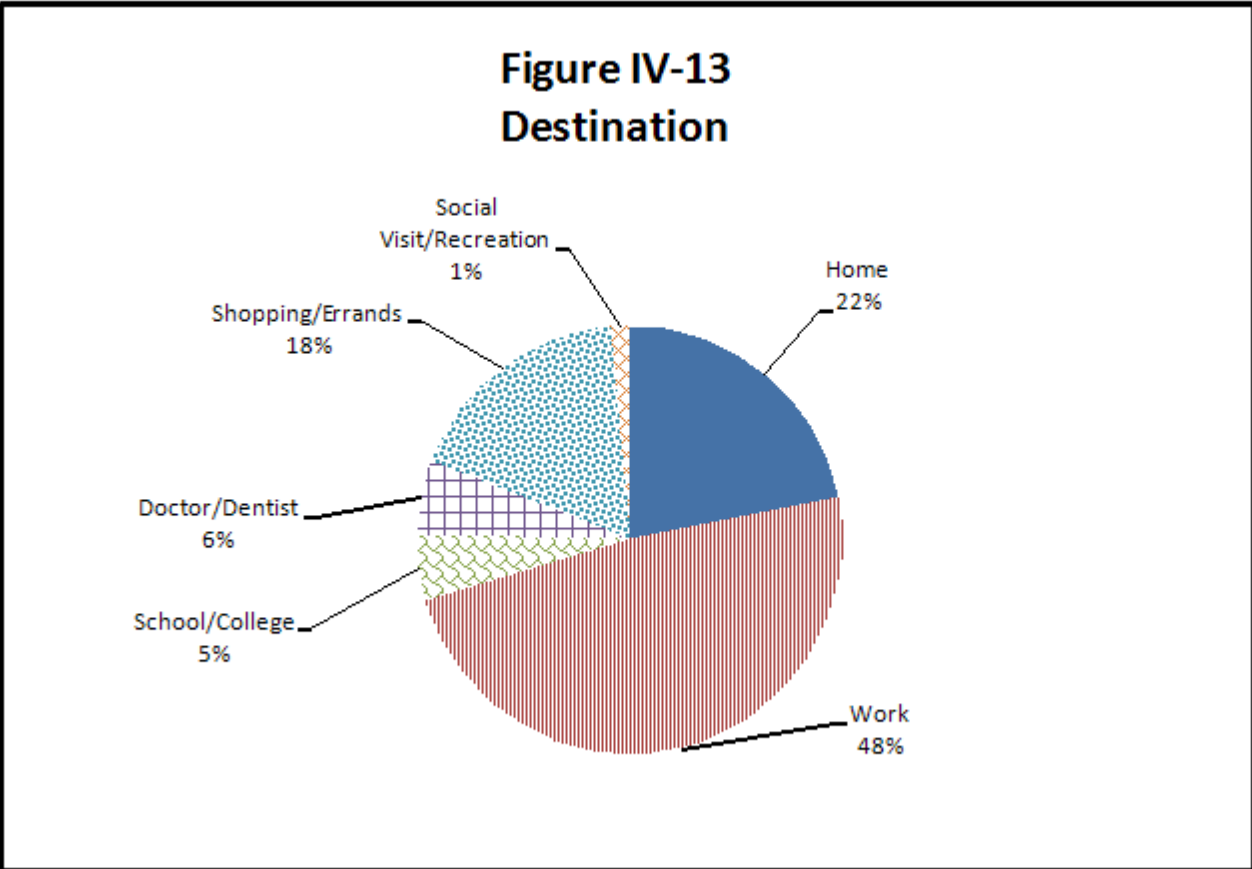


Coming From and Going To

Several questions were asked of each respondent about where they were coming from and going to. As shown in Figure IV-12, 76 percent responded that they came from home prior to reaching the bus. Fourteen percent reported they came from work.

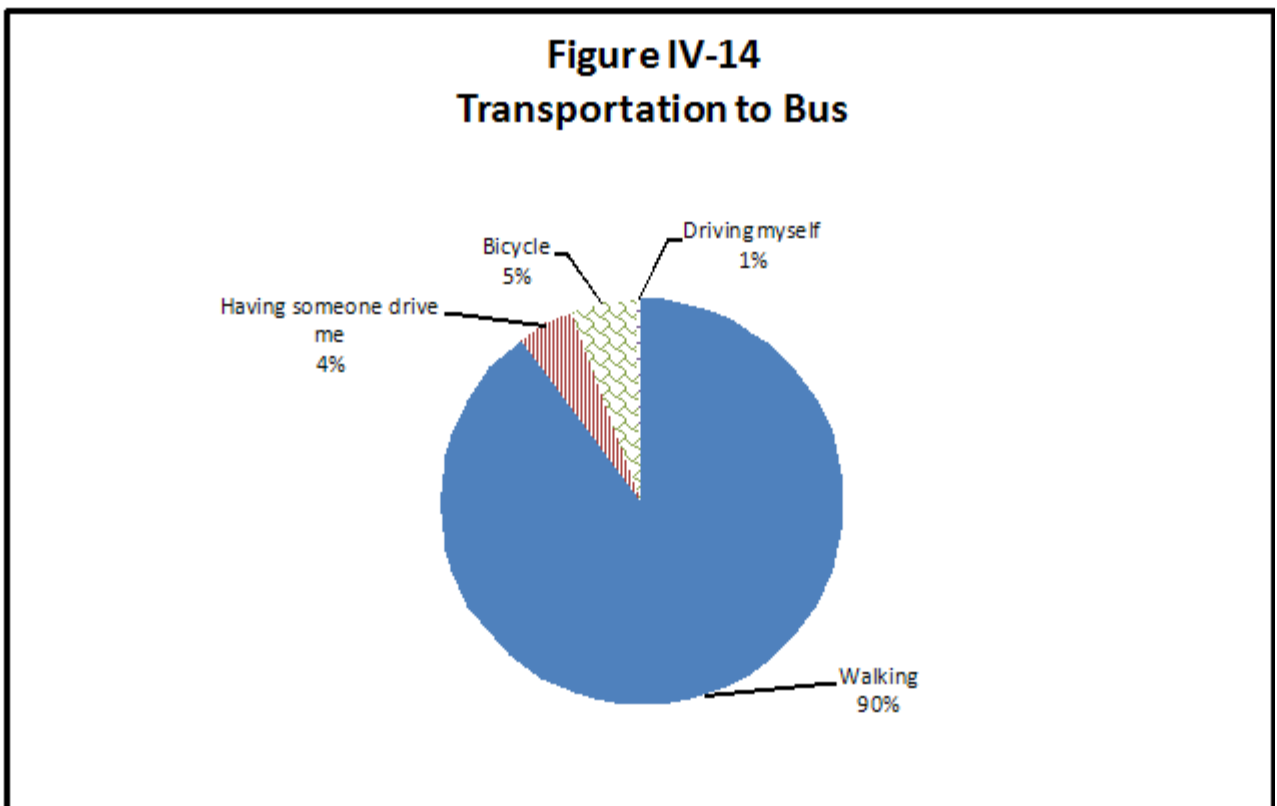


Determining a patron’s final destination is helpful in developing service operating characteristics. Figure IV-13 provides the responses for this question. The most popular response was that patrons were going to work (48 percent). Another 22 percent reported going home, while 18 percent reported going shopping/running errands.



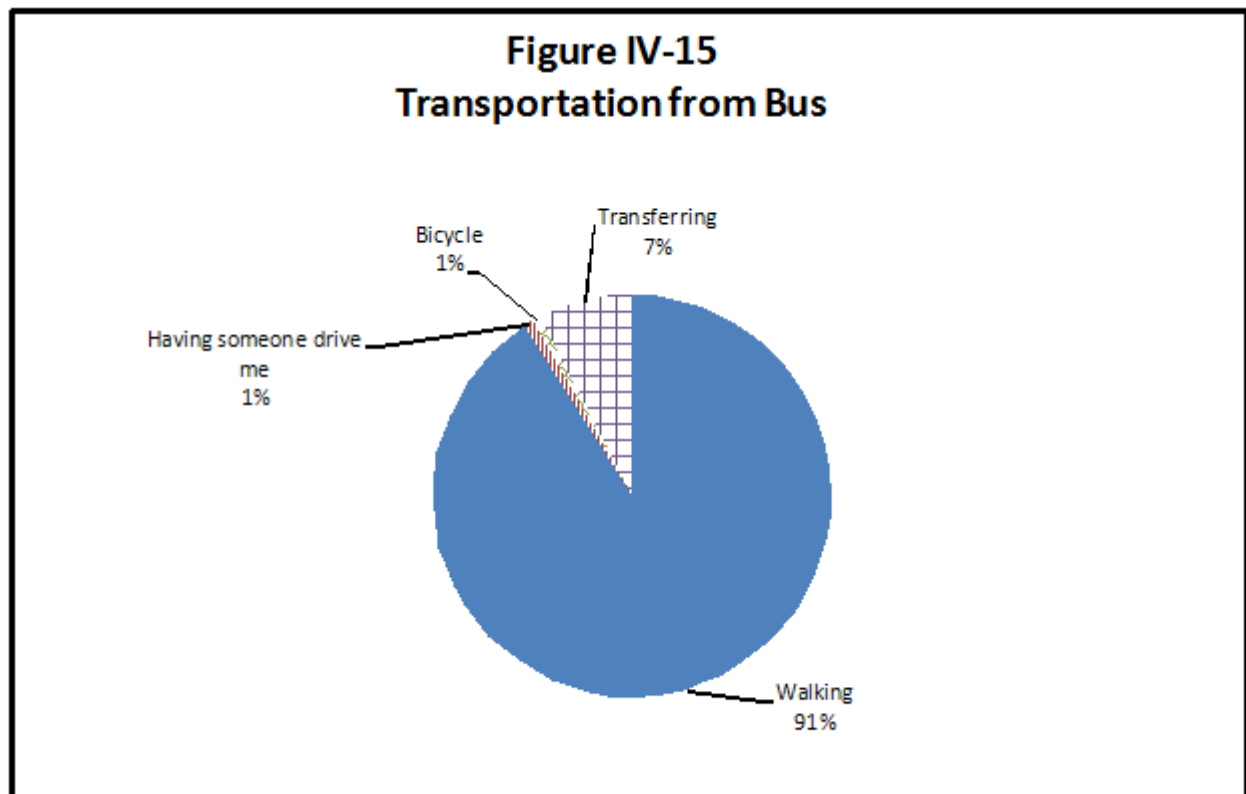
Individuals were also asked to report how they got to and from the bus stops or transfer center. The results of this question are presented in Figure IV-14. The majority (90 percent) of users walked to the bus that they were getting on. Another five percent of respondents rode their bicycle to the bus stop, while four percent of respondents had someone drive them to the bus stop. Driving myself (one percent) was the lowest reported response.

Respondents were also asked if they would ride their bike to the bus if each bus had a rack to carry their bike. Fifty-two percent responded that they would not ride their bike to the bus if it had racks to carry their bike.



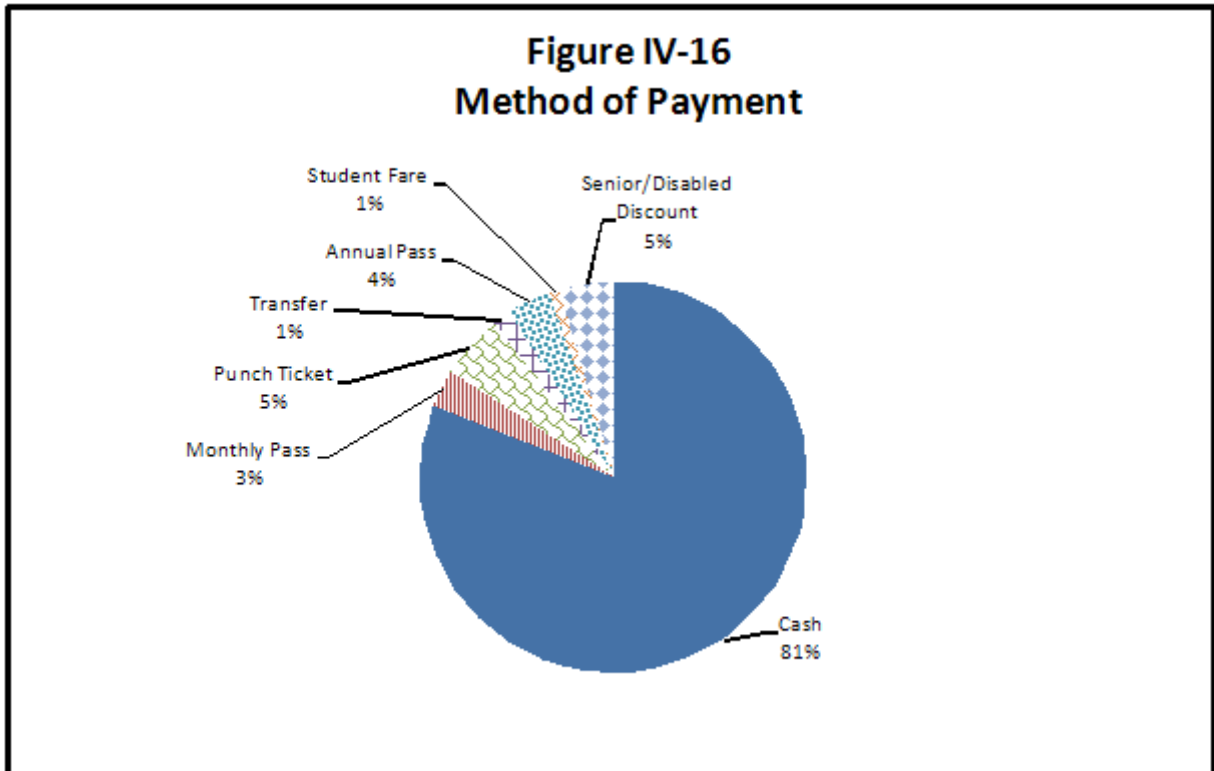
Onboard Survey Results

The results of those individuals who walked to or from the bus were fairly similar. The results of this question are shown in Figure IV-15. Around 91 percent of passengers walked from the bus stop to their final destination, while another seven percent transferred to another bus. An additional one percent of respondents biked and one percent had someone drive them to their final destination. These represent the lowest reported responses.



Method of Payment

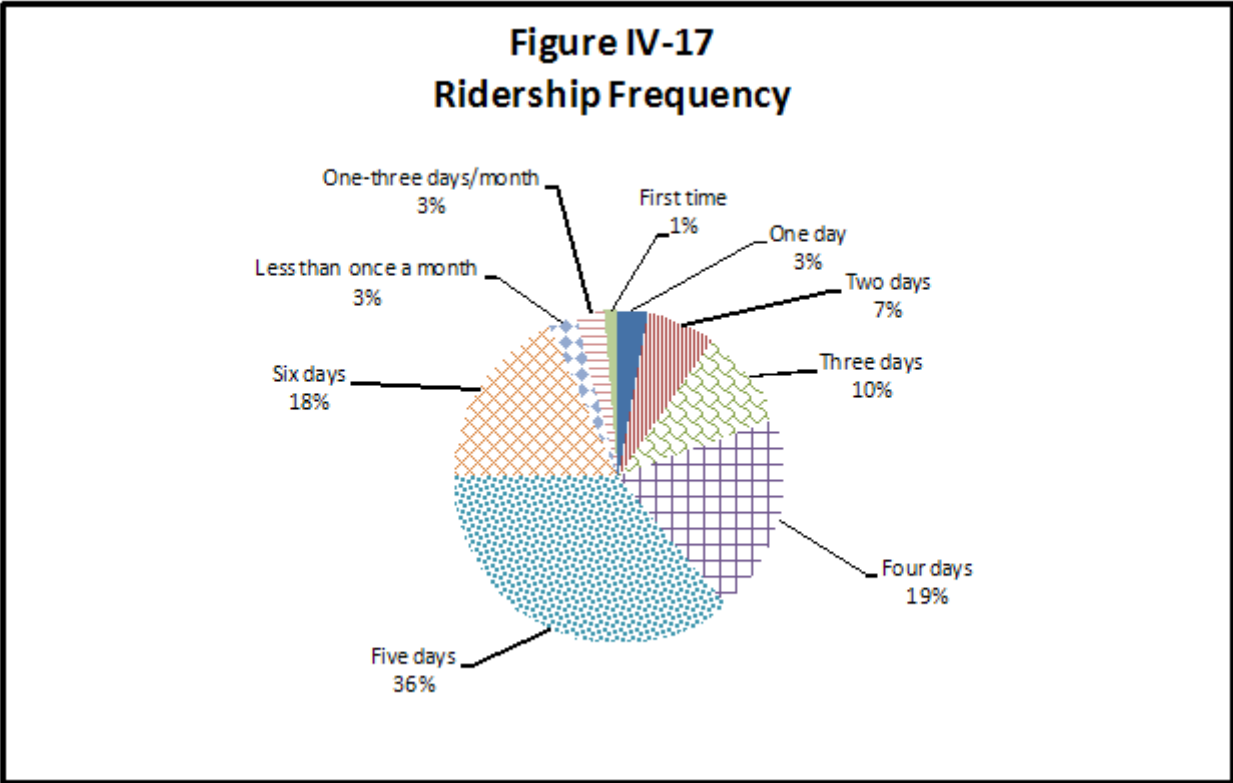
Respondents were asked what method of payment they used (cash, punch ticket, annual pass, etc.) to pay for their trip. Figure IV-16 shows that a vast majority (81 percent) of respondents pay with cash. The use of passes, punch tickets, and other discounted fares is fairly balanced at an average of around three percent.



Temporal Analysis

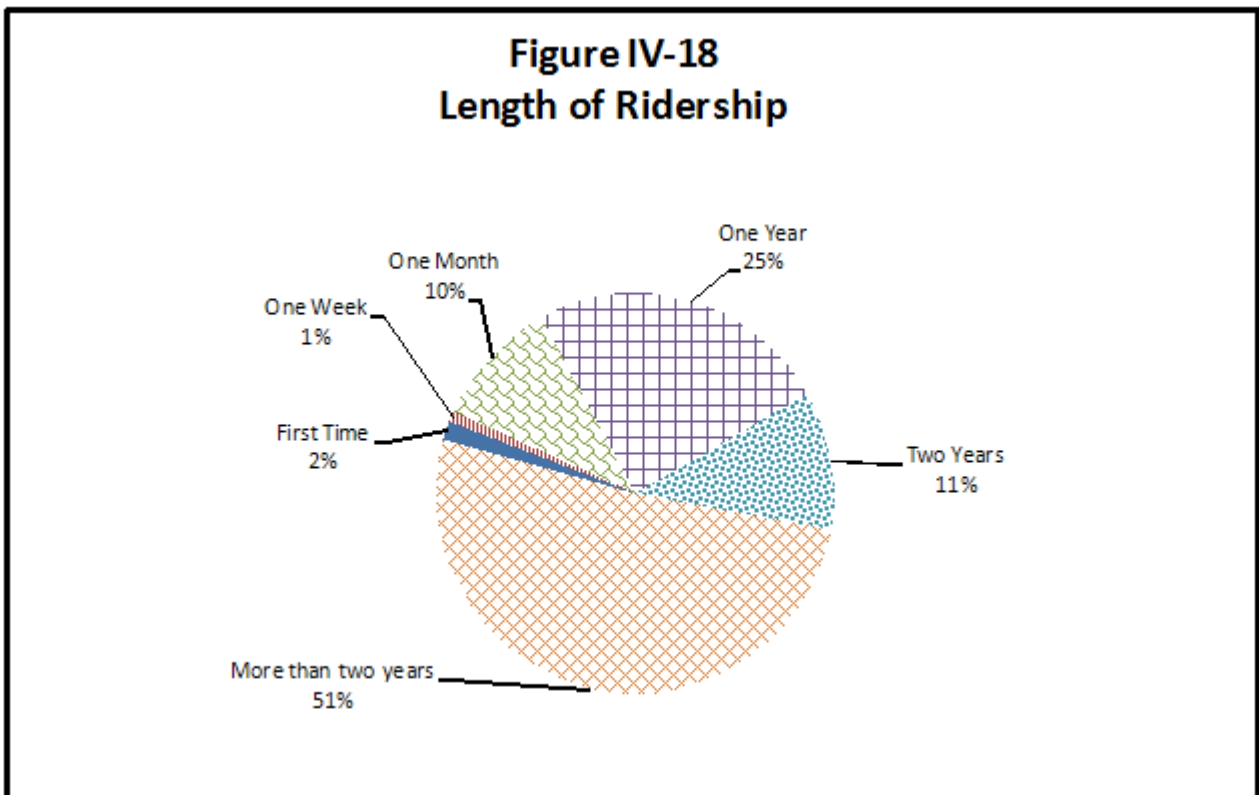
Ridership Frequency

Passengers were asked how often they ride the bus during the typical week. Figure IV-17 shows that approximately 18 percent of the passengers reported using the County Transit service all six days it operates. Thirty-six percent reported using the service five days per week. Thus, 54 percent of respondents reported using the service at least five days per week. Forty-six percent use the service four days or less per week.



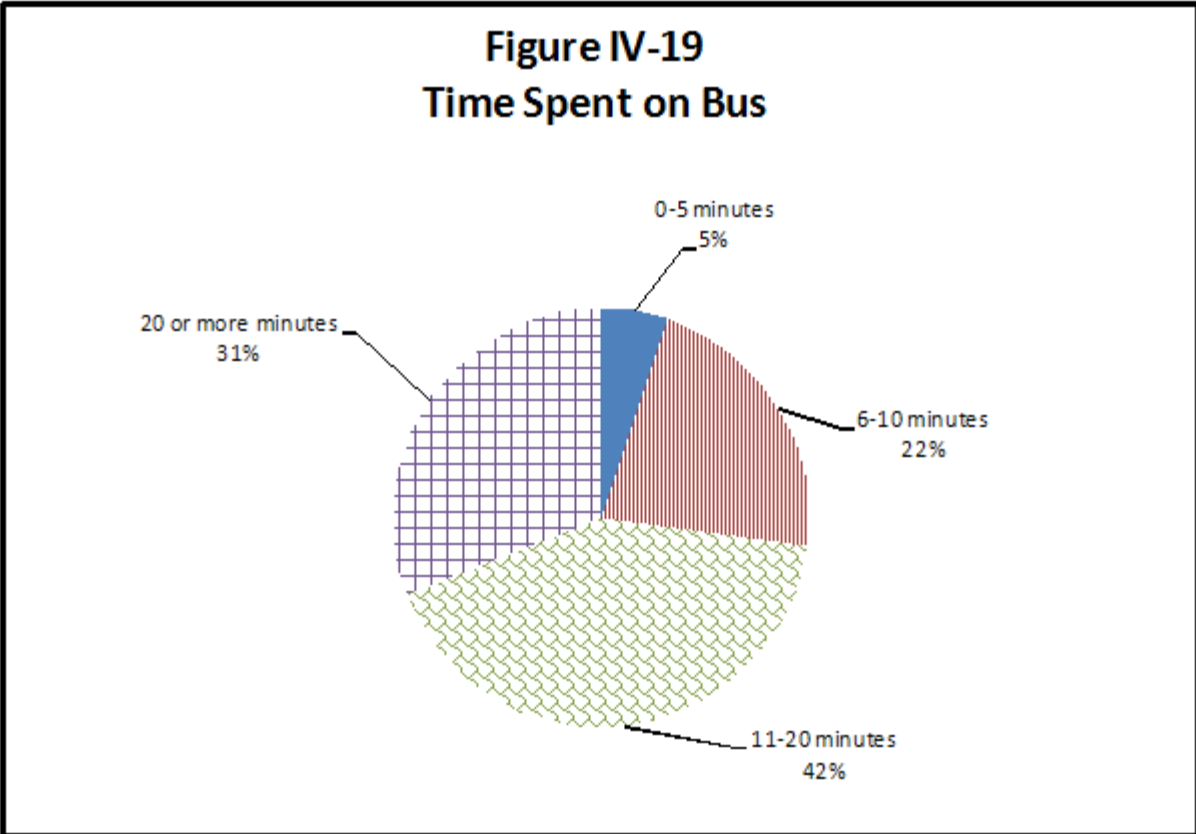
Length of Ridership

Passengers were also asked how long they had been a patron of the Washington County Transit. Figure IV-18 shows that 51 percent of respondents have been riding for more than two years. Eleven percent of respondents reported being a patron for two years, and 25 percent reported being a patron for one year. First time riders (two percent) and passengers reporting being a patron for one week (one percent) represent the lowest reported responses.



Average Time Spent on Bus

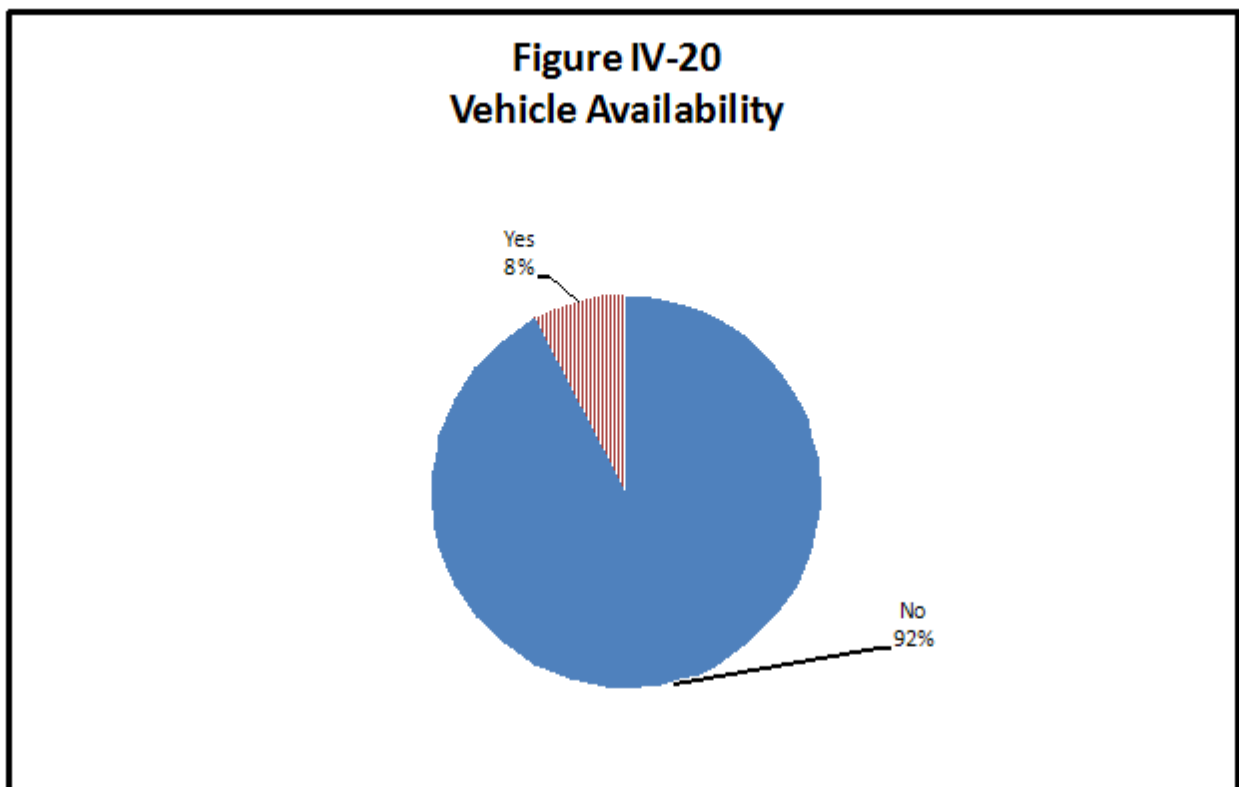
Respondents reported spending an average of 21 minutes on the bus for the trip segment when the survey was conducted. Figure IV-19 shows the amount of time respondents reported spending on the bus for the part of the trip during which the survey was completed. Twenty-seven percent of respondents reported spending 10 or fewer minutes on the bus. Forty-two percent of respondents reported spending 11 to 20 minutes on the bus. Of the respondents reporting that they spent more than 20 minutes on the bus, the majority said they spent a half an hour on the bus.



Vehicle Ownership and Licensed Driver

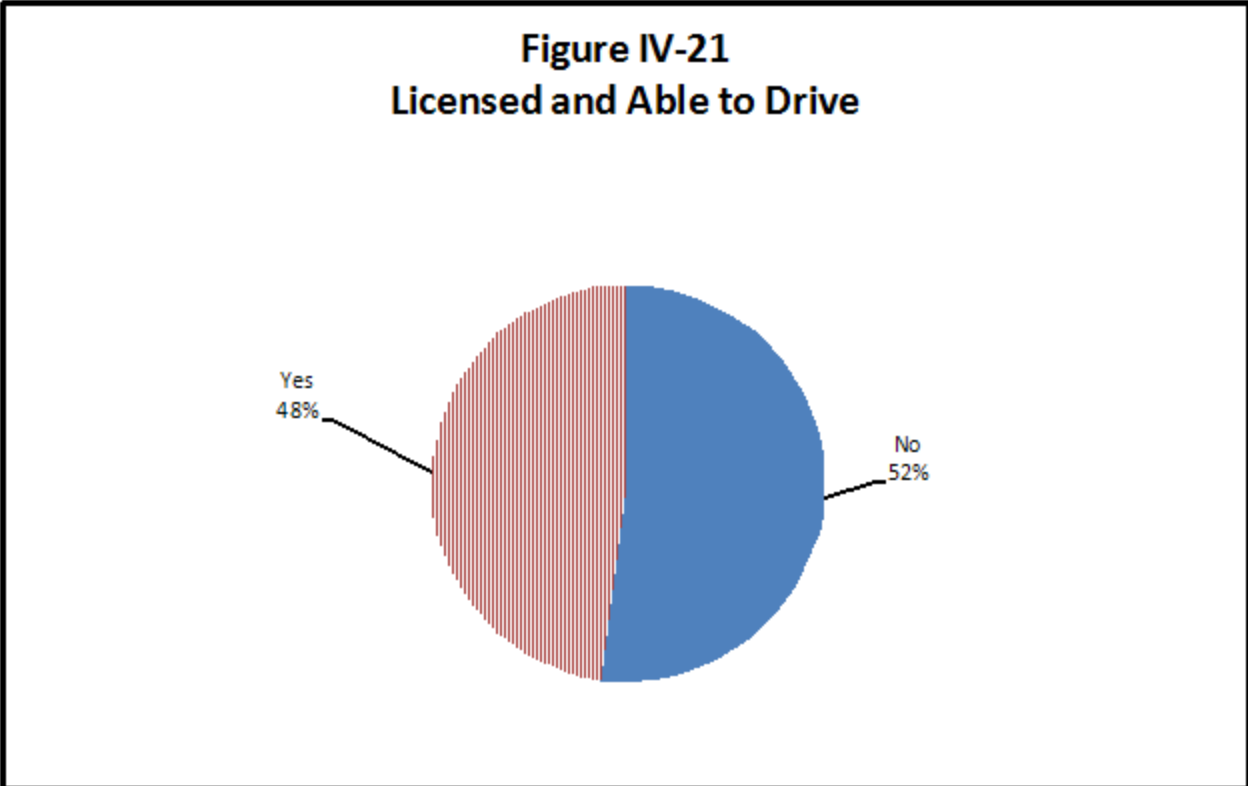
Data on vehicle ownership and licensed drivers were taken from unduplicated responses to ensure accurate results. Vehicle ownership for households and the ability to drive play key roles in the demand for public transportation. Lack of a private vehicle or the inability to drive influence people to use public transportation. This comparison provides an indication of the number of *choice riders* compared to those who are transit-dependent.

As shown in Figure IV-20, 92 percent of passengers do not have a vehicle available to make their trip. This percentage is an indication of truly transit-dependent riders.



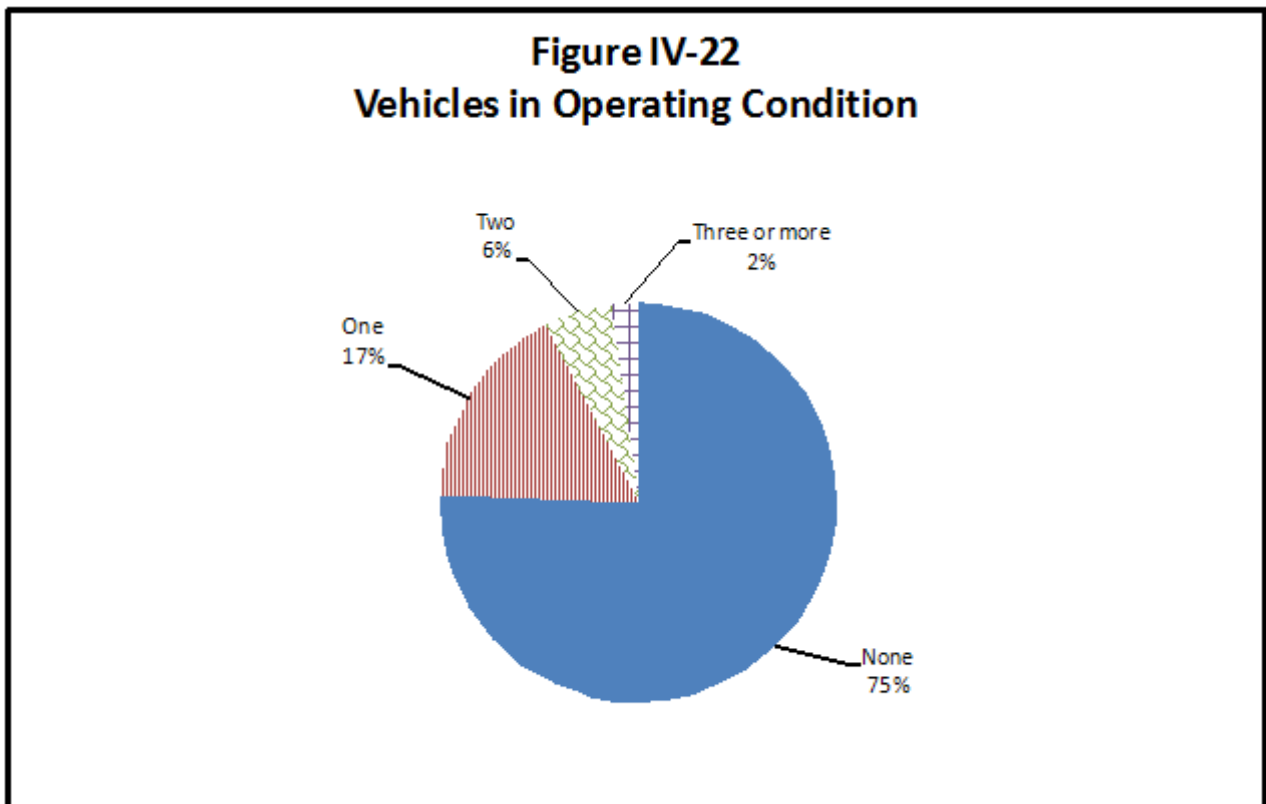
Onboard Survey Results

The survey also asked individuals to reveal if they had a driver’s license and have the ability to drive. Figure IV-21 shows that about 52 percent of respondents had no license or were not able to drive.



Performing cross-tabulation between those who do not have access to a car and those with no driver’s license indicates that 36 percent of the survey respondents do not have a car or a driver’s license.

Respondents were asked to indicate on the survey how many vehicles in operating condition their household had. The majority of respondents indicated that their household has no working vehicles (75 percent). Seventeen percent of respondents reported having one vehicle in working condition, and two percent of respondents reported having two working vehicles. An additional two percent of respondents reported having three or more working vehicles. Figure IV-22 shows this relationship graphically.



Transfers

Respondents were asked to indicate whether or not they needed to transfer to reach their final destination, and if so, to what route. Table IV-2 shows a matrix of the routes respondents most frequently transferred from and to. The most frequent transfers were from Valley Mall to Hopewell (four respondents) and Longmeadow to Valley Mall (three respondents). The Valley Mall route had the most respondents transferring both to and from the route.

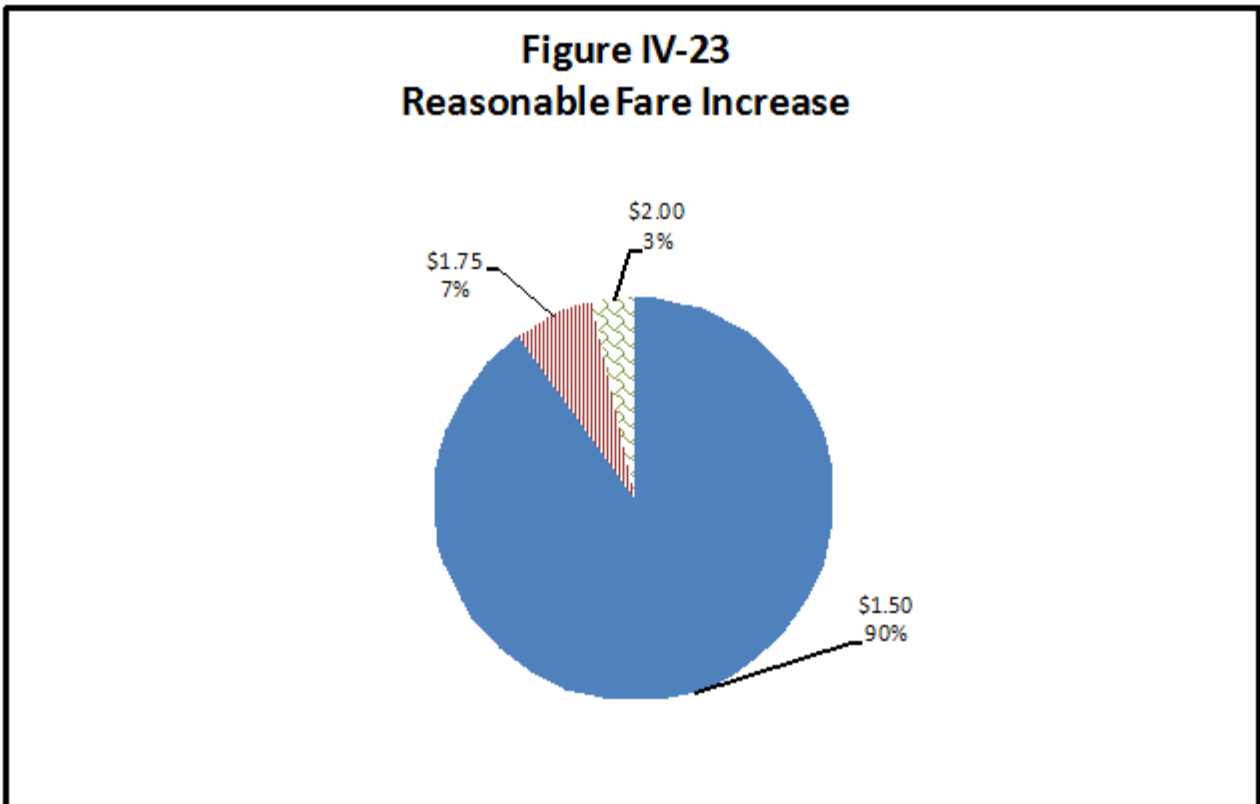
**Table IV-2
Transfer Matrix**

From/To	Valley Mall	Robinwood	Hopewell	West End	Williamsport	Longmeadow	Smithsburg	Maugansville	Funkstown	Total
Valley Mall			4		1		1	1	1	8
Robinwood					3					3
Hopewell Express	2	1		1			1			5
West End							1	2		3
Williamsport										0
Longmeadow	3				1		1	1		6
Smithsburg			1							1
Maugansville	2						1			3
Funkstown										0
Prime Outlets									1	1
Total	7	1	5	1	5	0	5	4	2	30

Source: LSC Onboard Surveys, 2009.

Willingness to Pay Increased Fare

Respondents were asked what they would be willing to pay for an increase in the fare due to the rising cost of gas. The majority of respondents (62 percent) reported that they would not be willing to pay a higher fare, with the remaining 38 percent saying that they would pay an increased fare. Respondents were then asked to indicate what a reasonable fare would be. Ninety percent of respondents indicated that \$1.50 is a reasonable fare. An additional seven percent said that \$1.75 was reasonable, while only three percent said that paying \$2.00 or greater was fair. The proportion of individuals willing to pay higher fares is shown in Figure IV-23.

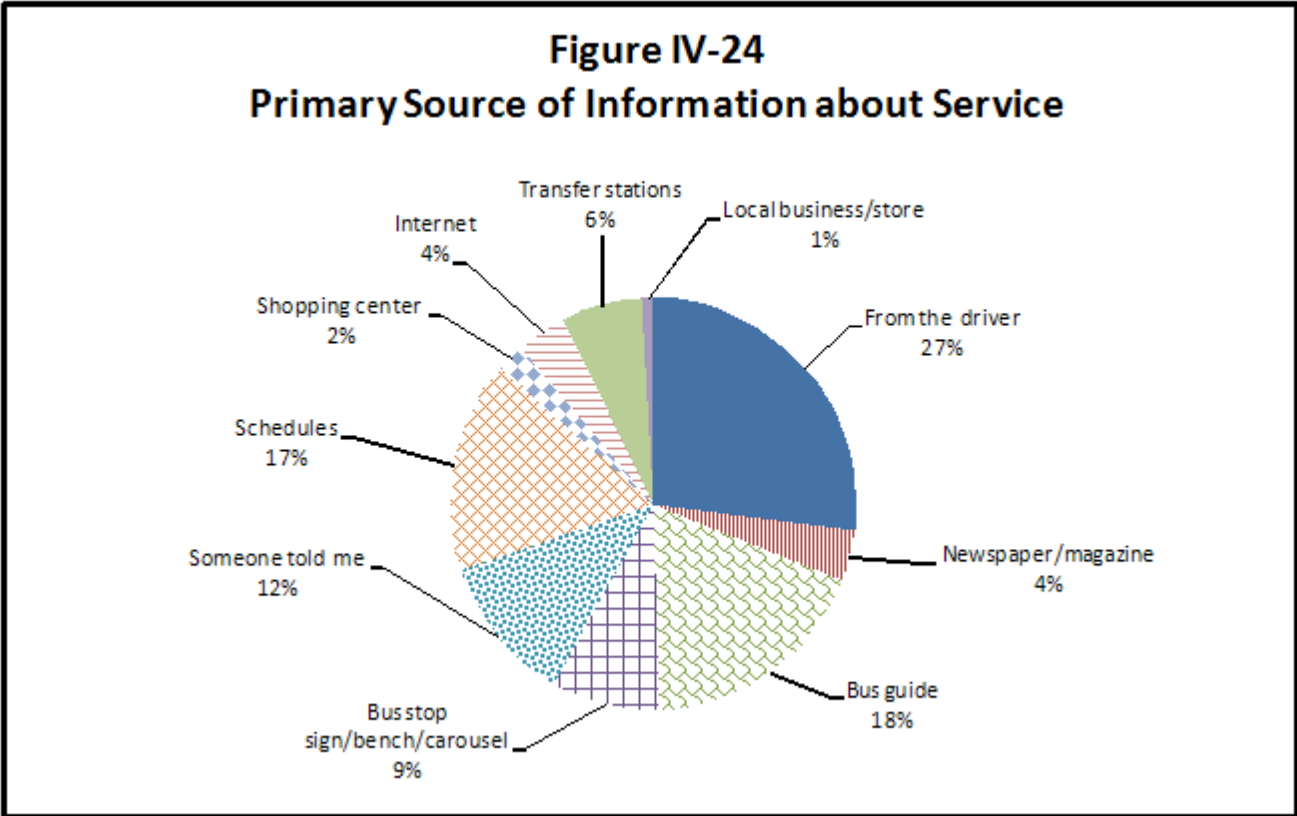


Ease of Use of Website

Respondents were asked if they found the Washington County Transit website easy to use. Sixty-six percent of respondents reported the website was easy to use.

Sources of Information about Washington County Transit

Respondents were asked where they get information about Washington County Transit. Figure IV-24 shows that most popular source of information is from the driver (27 percent). Bus guides (18 percent) and schedules (17 percent) ranked as the next highest sources of information. Local businesses (one percent) ranked as the least popular source of information.



Service Rating

Passengers were asked to rate their present bus service on a scale from “Poor” to “Very Good.” The topics cover a wide range of issues, including service frequency, bus drivers, and buses themselves. The maximum score for each category would be a 4.0, meaning that everyone believe this topic is rated as very good. A score of 2.5 could be considered average. The highest rated service is the friendliness of drivers, which got a rating of 3.6. The perceived safety of the service was ranked the next highest, with a rating of 3.5. Convenience of the service, the price of fares, the appearance of the website, and the overall quality of service all got

ratings of 3.4, respectively. The lowest rated attributes are the service frequency, schedules, Saturday service and transfer stations, which were rated at 3.2. Table IV-3 shows the rating for each of the attributes on the survey.

Table IV-3 Quality of Service	
Attribute	Rank
Driver courtesy	3.6
Safety	3.5
Convenience	3.4
Fares	3.4
Website	3.4
Overall service quality	3.4
Comfort	3.3
Condition of buses	3.3
Transfer convenience	3.3
Bus routes/area served	3.3
Service frequency	3.2
Schedules	3.2
Saturday service	3.2
Transfer stations	3.2
<i>Source: LSC Onboard Surveys, 2009.</i>	

Additional Comments

Passengers were asked to share any additional comments they have about the system at the end of the survey instrument. These comments have been categorized into their primary purpose. The full comments can be read in Appendix C. The majority of the comments were related to service considerations. Many of the respondents requested later service, service to locations more frequently, or Sunday service. Additionally, many of the comments were also about the size of the bus—most users thought that all routes should have larger buses. A few of the comments were positive, with respondents reporting that they were happy with the current service provided.

PARATRANSIT ANALYSIS AND FINDINGS

This section provides the analysis of data collected through the paratransit survey. Information is provided about passenger demographics, socioeconomic data, trip characteristics, and perceptions of the quality of service. This survey was conducted on April 15, 2009. The survey was conducted on one bus, and there were a total of nine respondents from which surveys were collected. This section provides summary information about the riders using Washington County Transit paratransit service.

Summary Information

The most frequently reported responses of the County Transit paratransit service survey were from persons who are about 60-65 years old, white (six respondents), retired (four respondents), making less than \$15,000 dollars annually (three respondents), and transit-dependent (no vehicle available - nine respondents and not licensed to drive - seven respondents). Paratransit riders reported living in many different suburbs of Hagerstown.

The primary purpose for riding the paratransit bus reported by respondents is to get from home to doctor or other medical appointments. Respondents reported using the paratransit service about three to five days per week. All of the respondents reported being a patron of paratransit service for at least one year.

Word-of-mouth is the most popular way paratransit riders reported hearing about the service. Seeing the paratransit service advertised at bus stop signs was another popular response.

The respondents ranked all aspects of the paratransit service from driver courtesy and condition of buses to the frequency of service and schedule reliability as “Good” (average of 3.2 points on a 4-point scale).