

2012

Sonoma County Transit

2012 Passenger Study

Draft
Survey Findings

Conducted by:
Redhill Group, Inc.
August 24, 2012

SonomaCountyTransit



redhillgroup
THE POWER OF INSIGHT

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Table of Contents

EXECUTIVE SUMMARY	1
METHODOLOGY	1
KEY FINDINGS	2
TRIP CHARACTERISTICS	3
FARE MEDIA.....	10
SONOMA COUNTY TRANSIT PERFORMANCE	12
TRANSPORTATION DEMOGRAPHICS.....	15
RIDER DEMOGRAPHICS.....	18

List of Figures

Figure 1: Is Home Your Origin or Destination?	3
Figure 2: What Was Your Trip Purpose?	4
Figure 3: How Did You Get From Your Home to Your First Boarding Point?.....	5
Figure 4: How Many Minutes Did It Take You to Walk From Your Home to Your First Boarding Point?	6
Figure 5: How Many Miles Is It From Your Home to First Boarding Point?	6
Figure 6: How Many Transfers Needed To Complete Your Trip?	7
Figure 7: How Did You Get From Your Last Stop to Non-Home Destination?	8
Figure 8: How Many Minutes Did You Walk to Your Non-Home Destination?	8
Figure 9: How Many Miles Was It From Your Last Stop to Your Non-Home Destination?	9
Figure 10: How Did You Pay For Your Bus Fare?.....	10
Figure 11: Was That a Full, Adult Fare or Discount Fare?	11
Figure 12: How Would You Rate Sonoma County Transit Overall?	12
Figure 13: How Can Sonoma County Transit Be Improved.....	13
Figure 14: If There Was No Bus, How Would You Have Made Your Trip?	14
Figure 15: How Often Do You Ride Sonoma County Transit	15
Figure 16: Do You Currently Have a Driver’s License?	16
Figure 17: Are You Currently Employed and/or a Student?.....	17
Figure 18: How Many People Are Employed in Your Household?	18

Figure 19: How Many Drivable Vehicles Are Available To Your Household? 18

Figure 20: What Is Your Age Category? 19

Figure 21: Are You Hispanic, Latino or of Spanish Origin? 20

Figure 22: What Is Your Race? 20

Figure 23: Do You Speak a Language Other than English at Home?..... 21

Figure 24: What Language Do You Speak at Home?..... 22

Figure 25: Do You Speak a Language Other Than Spanish at Home?..... 23

Figure 26: What is Your Total Household Income? 24

Figure 27: Gender 25

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Executive Summary

Methodology

Under contract to the MTC, Redhill Group conducted a survey of Sonoma County Transit riders to provide highly accurate trip information. The survey also included traditional demographics, languages spoken, fare media and selected attitudinal questions. The survey employed a new methodology that includes a brief, two-minute onboard survey that is limited to origin and destination-types and rider contact information. This much shorter initial survey format leads to significantly higher rider participation compared to traditional onboard surveys and minimizes non-response bias for short trips.

The short onboard survey is followed up by a telephone survey that incorporates real-time trip mapping. Replacing a detailed self-administered paper and pencil survey with a telephone survey minimizes literacy issues that often result in non-response bias. The real-time trip mapping component ensures that each component of a rider's complete trip is accurately captured including all trip segments, transfers, and logical access and egress information. Together, these enhancements in survey methodology produce a more accurate picture of true travel patterns, enabling more effective route and schedule planning.

The goal of the survey was to collect a representative sample of five percent of all boardings for riders 16 or older. Because the average number of boardings per one-way trip for Sonoma County Transit is 1.66 and most riders do round-trips, the average number of boardings per unique rider is approximately three per day, and accordingly the five percent boarding figure equates to 15 percent of all riders.

The five percent goal of average daily weekday boardings (4,427) translates into 212 completed surveys. To ensure adequate telephone surveys were completed, an average of 2.5 field surveys were collected for each anticipated phone survey. This produced a field survey target of 535 surveys.

Field surveying was conducted April 17th to 20th, Tuesday through Friday. Follow-up telephone surveying was between April 20th and May 30th. The final results for the surveying process included a total of 271 completed phone surveys and 1,019 field surveys.

An additional methodology change to provide more actionable reporting was to combine all home based trips, creating a new home-based trip purpose by reversing trips that were home-bound. This provides a clearer picture of outbound trips.

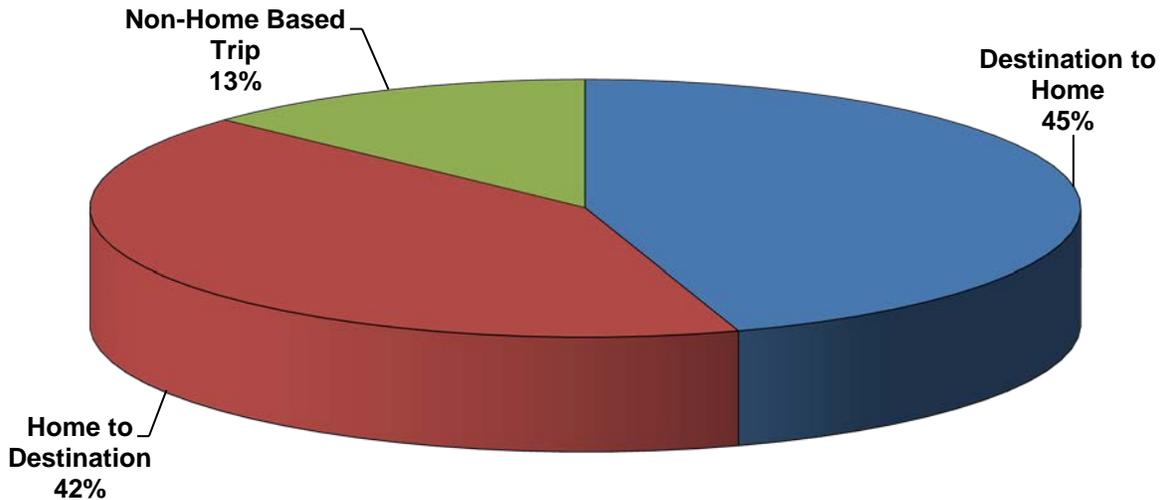
Key Findings

- The distribution of home-based trip purposes is highly diverse with work and business appointments accounting for 46 percent, and K-12 and college accounting for 25 percent. This is rounded out by 11 percent social/recreational, ten percent shopping, six percent medical/dental, and one percent “other”.
- The trip purpose distribution is in line with employment and school demographics with over a third of riders (36%) indicating that they work only, and 21 percent indicating that they are students only. Eighteen percent of riders are both employed and students, while 26 percent are neither employed nor students.
- The majority of riders’ (85%) access to transit is by walking. The remainder is rounded out by bicycling (7%), being dropped off (5%), driving alone (2%), and carpooling (1%). The average access walk time is 8.0 minutes. Riders’ egress modes are similar to their access modes and the average walk time is 6.2 minutes, with the shorter time likely reflecting higher density and frequency of bus stops at typical non-home trip destinations than in residential areas.
- Seventy-three percent of Sonoma County Transit riders complete their one-way trip riding one bus while a quarter (25%) require one transfer, and two percent transfer two or more times.
- Over half of riders (59%) use cash to pay their bus fare, while passes are the primary non-cash fare media at 35 percent (Monthly Pass 22%, 31-Day Pass 6%, Super-Pass 5%, 20-Ride Fastpass 2%). The remaining seven percent includes Paratransit Tickets (2%) and “other” (5%).
- Over half of riders (53%) pay full adult fares with the largest discount groups being students (21%), seniors (15%), and disabled riders (9%).
- The vast majority of riders provide positive ratings for Sonoma County Transit’s overall performance with 55 percent rating it “good” and 35 percent rating it “excellent.” This compares with only eight percent that provided a “fair” rating and two percent that said performance was “poor.”
- When asked how they would most like to see Sonoma County Transit service improved, the most popular improvement was more frequent bus service, cited by 35 percent of riders. The next two requested improvements were later evening service (25%) and buses being more consistently on time (22%). At a much lower level, earlier morning service and requiring fewer transfers were mentioned by eight and three percent respectively.
- If Sonoma County Transit was not available, 23 percent said they would not make the trip. Thirty-seven percent said they would have someone drive them, and ten percent said they would walk. Other options included bicycling (9%), driving alone (8%), taxi (5%), and carpooling/vanpooling (3%).
- The vast majority of riders are regular customers with 89 percent using the bus at least once a week. Over half of all riders (55%) use the bus five or more days a week.
- Over two-thirds of Sonoma County Transit trips are made by riders that are transit dependent as indicated by 70 percent not having a driver’s license, and 35 percent indicating that they do not have any drivable vehicles available to their household.

Trip Characteristics

Riders were surveyed during all parts of the day and in both directions on all routes. This produces a relatively balanced sample of “inbound” and “return” trips. The vast majority of these trips (87%) include home as either the trip origin or destination.

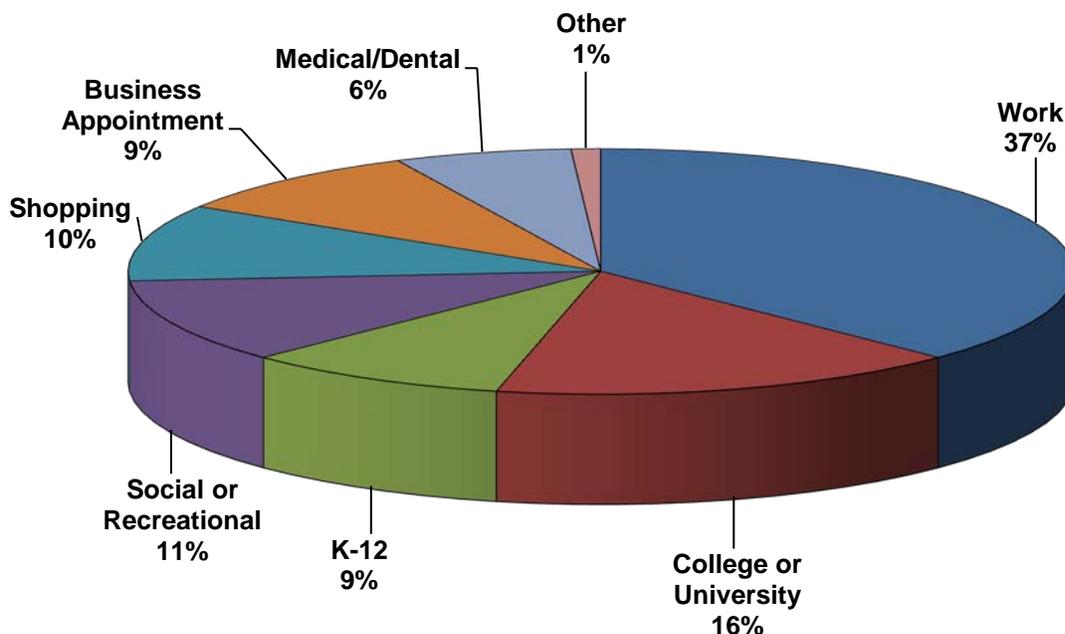
Figure 1: Is Home Your Origin or Destination?
n=271



In traditional onboard survey reporting, all origins are reported in aggregate regardless of trip direction. This results in the information about trip origins and access being a combination of home, work and other ultimate origin-types. As such it does not produce a clear and meaningful picture of the trip from home to the first transit boarding point, or of the final leg of the trip from the last alighting point to the ultimate destination.

To overcome this, a modified database has been created from the original that reverses all trips that are home-bound, converting the destination from home to the original non-home origin, and making home the new origin. This modified database provides a consistent picture of all outbound trips from home to the ultimate trip destination-type. The first section of the report provides reporting on this modified database to show a more meaningful and actionable picture of rider behavior.

Figure 2: What Was Your Trip Purpose?
n=236

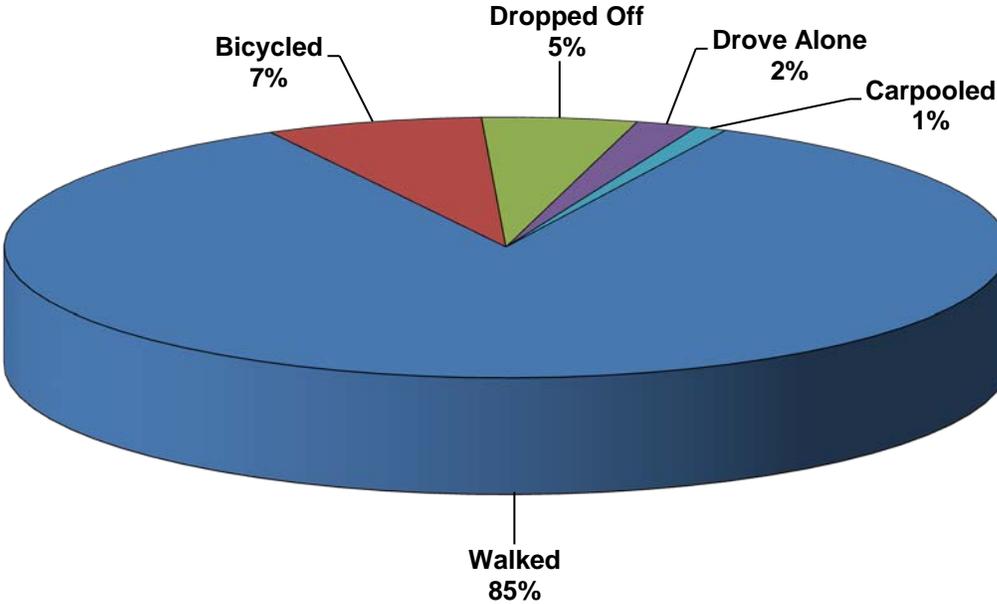


Although work (37%) and business appointments (9%) account for the largest proportion of trip-purpose destinations from home-based trips, the distribution of trip-purposes for Sonoma County Transit is highly diverse. School is the second largest destination with 16 percent of riders going to colleges or universities, and an additional nine percent going to K-12 schools for a total of 25 percent. This is in line with riders' reporting of work and school status with 53 percent indicating that they are currently employed and 39 percent saying they are students.

Social and recreational trips account for 11 percent, and shopping accounts for ten percent. Medical/dental trips are also a common destination at six percent. Only one percent of riders use the bus for other purposes.

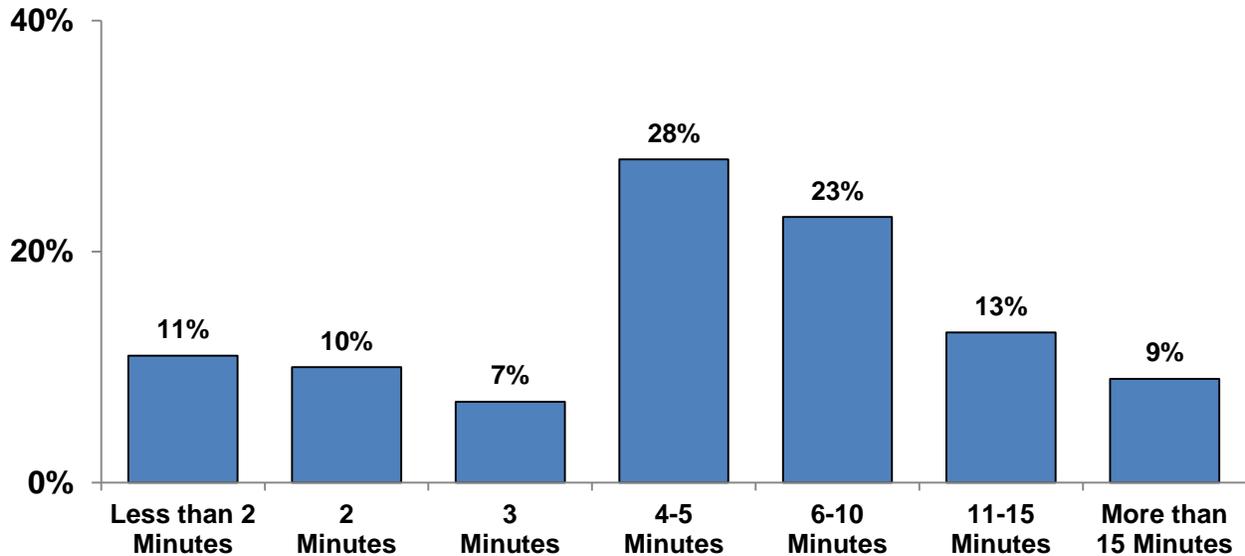
Since over two-thirds of all riders (70%) report that they do not currently have a driver's license, it appears that the Sonoma County Transit rider base is predominantly transit dependent, and accordingly the distribution of trip purposes reflects all of their daily travel needs.

Figure 3: How Did You Get From Your Home to Your First Boarding Point?
n=236



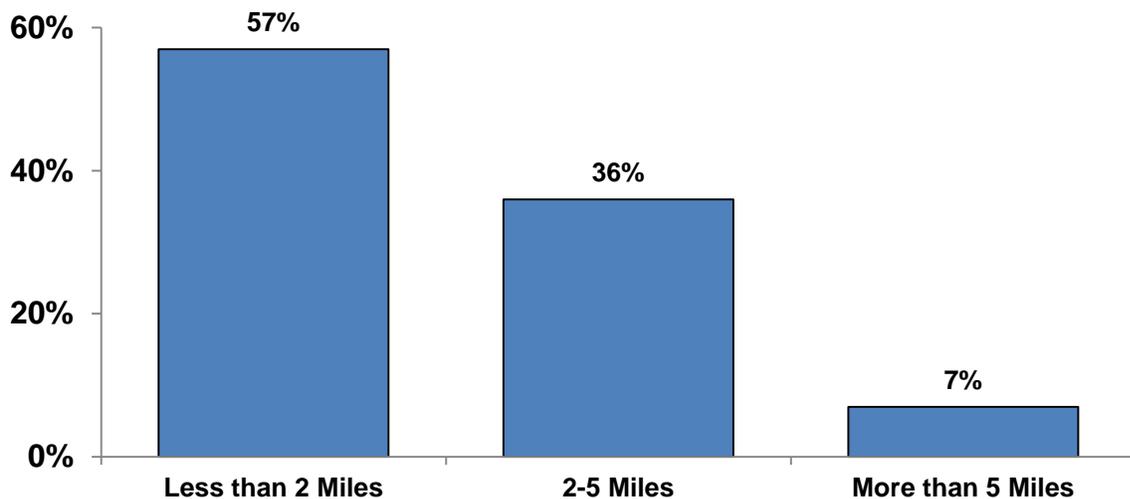
The majority (85%) of bus riders walk from home to their first boarding point. Seven percent of riders bicycle from home to the bus stop. The last eight percent is comprised of those who use another form of motorized vehicular transportation (Dropped Off 5%, Drove Alone 2%, or Carpooled 1%) to reach their first boarding point.

Figure 4: How Many Minutes Did It Take You to Walk From Your Home to Your First Boarding Point?
n = 204
(Walkers)



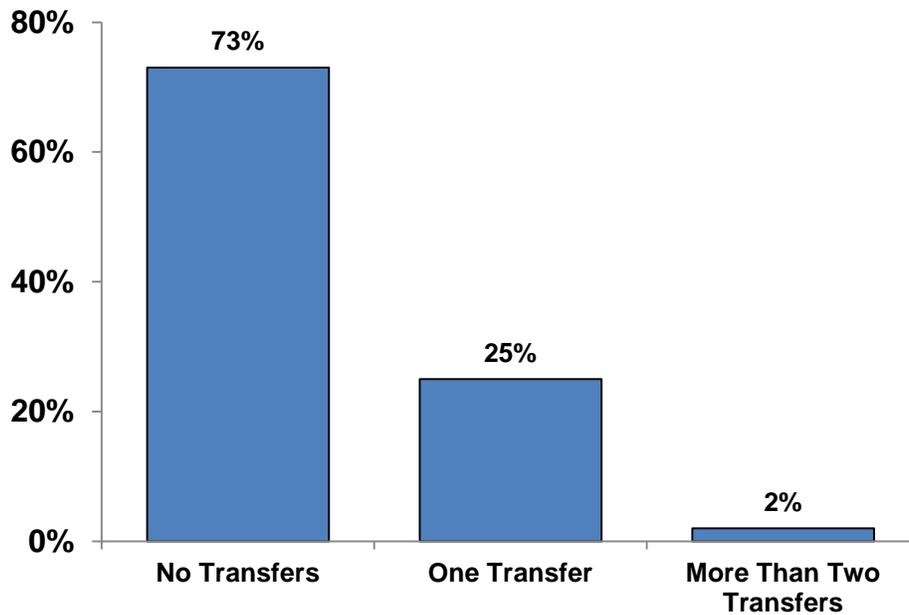
Of the riders who walk from their home to their first boarding point (85%), 28 percent walk four to five minutes. Twenty-three percent of riders have a walk time of six to ten minutes. An additional 13 percent walk 11 to 15 minutes and nine percent walk more than 15 minutes. At the other end of the spectrum 28 percent walk less than four minutes including 11 percent less than two minutes, 10 percent two minutes, and seven percent three minutes. The overall average walk time from home to the first boarding point is 8.0 minutes.

Figure 5: How Many Miles Is It From Your Home to First Boarding Point?
(Non-Walkers)
n=32



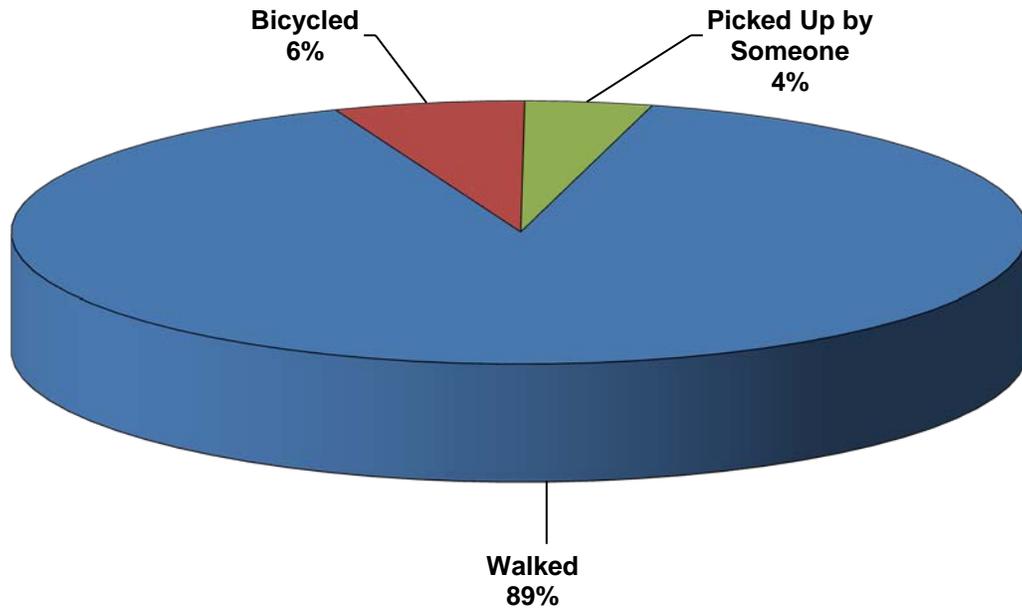
For the riders who do not walk from their home to their first boarding point (15%), 57 percent travel less than two miles. Thirty-six percent of these riders travel two to five miles, and only seven percent travel more than five miles from home to their first boarding point. The average distance traveled to the first boarding point for non-walkers is 2.1 miles.

Figure 6: How Many Transfers Needed To Complete Your Trip?
n=271



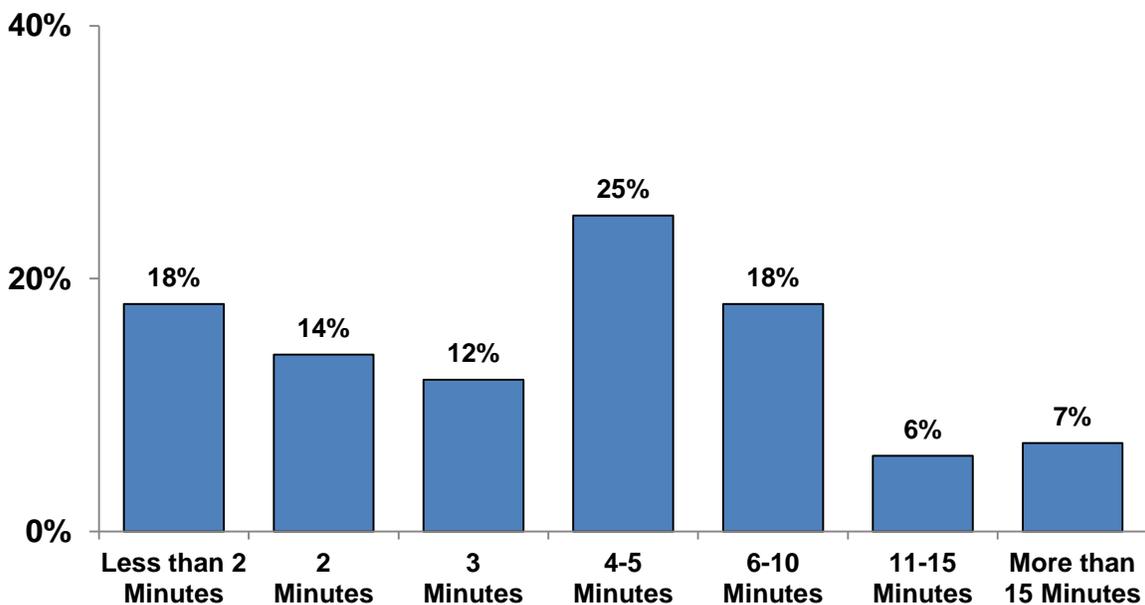
Nearly three-quarters of bus riders (73%) complete their bus trip with no transfers. At 25 percent, one quarter of riders require one transfer to finish their trip, and only two percent use two or more transfers. Together the average number of transit legs for each one-way trip is 1.3.

Figure 7: How Did You Get From Your Last Stop to Non-Home Destination?
n=236



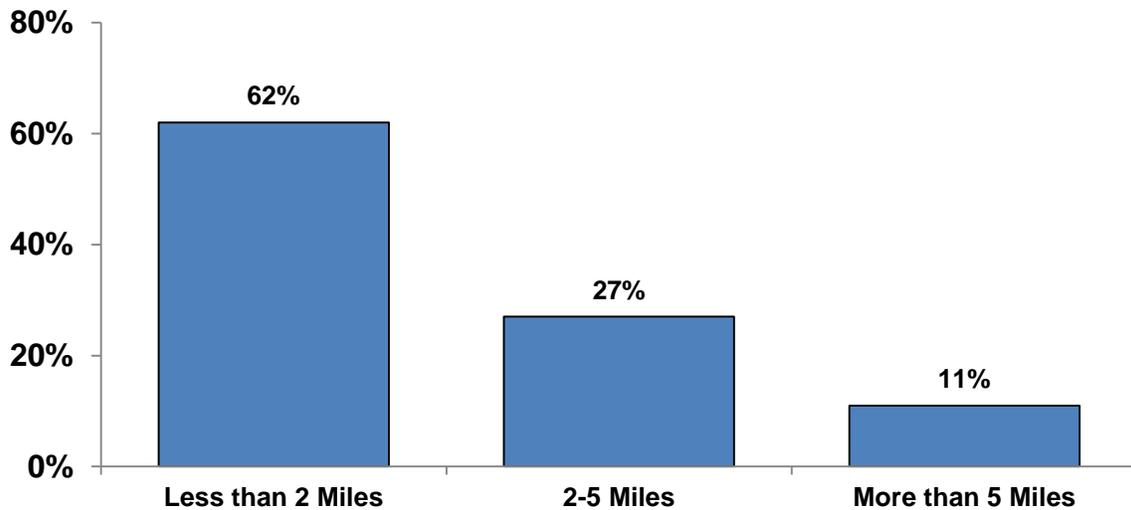
The vast majority (89%) of bus riders walk from their last stop to their non-home destination. Six percent bicycle and another four percent get picked up from their last stop to their non-home destination.

Figure 8: How Many Minutes Did You Walk to Your Non-Home Destination? (Walkers)
n=211



As with walking to their first transit boarding point, the most common walk time to the final destination point is four to five minutes at 25 percent. Eighteen percent walk six to ten minutes, and 13 percent walk more than ten minutes with six percent walking 11 to 15 minutes and seven percent walking more than 15 minutes. At the other end of the spectrum, a total of 44 percent walk less than four minutes with 18 percent walking less than two minutes, 14 percent walking two minutes, and 12 percent walking three minutes. The overall average walk time from riders' final alighting point to their non-home destination is 6.2 minutes. The 6.2 minute average walk time to their non-home destination is less than the 8.0 minute average walk time from home to their first boarding point. This likely reflects a higher density of destinations and bus stops at their non-home destination than in their residential home neighborhood.

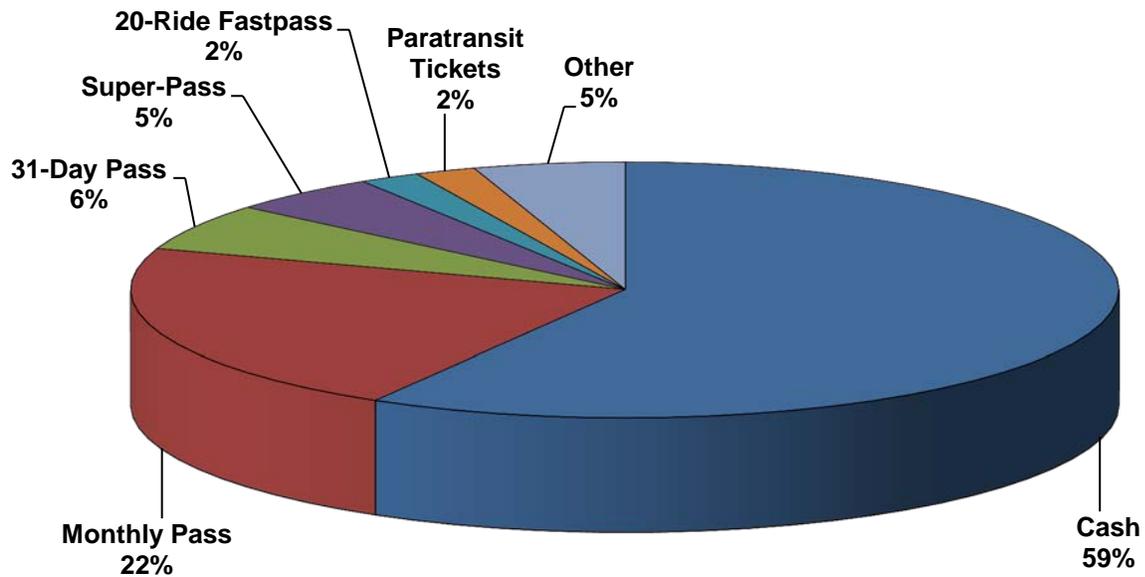
Figure 9: How Many Miles Was It From Your Last Stop to Your Non-Home Destination? (Non-Walkers) n=25



Of those riders who use a mode of transportation other than walking from their last stop, 62 percent travel less than two miles to their non-home destination. Twenty-seven percent of riders travel two to five miles and 11 percent travel more than five miles. The average distance traveled by non-walkers to their trip-purpose destination is 2.8 miles.

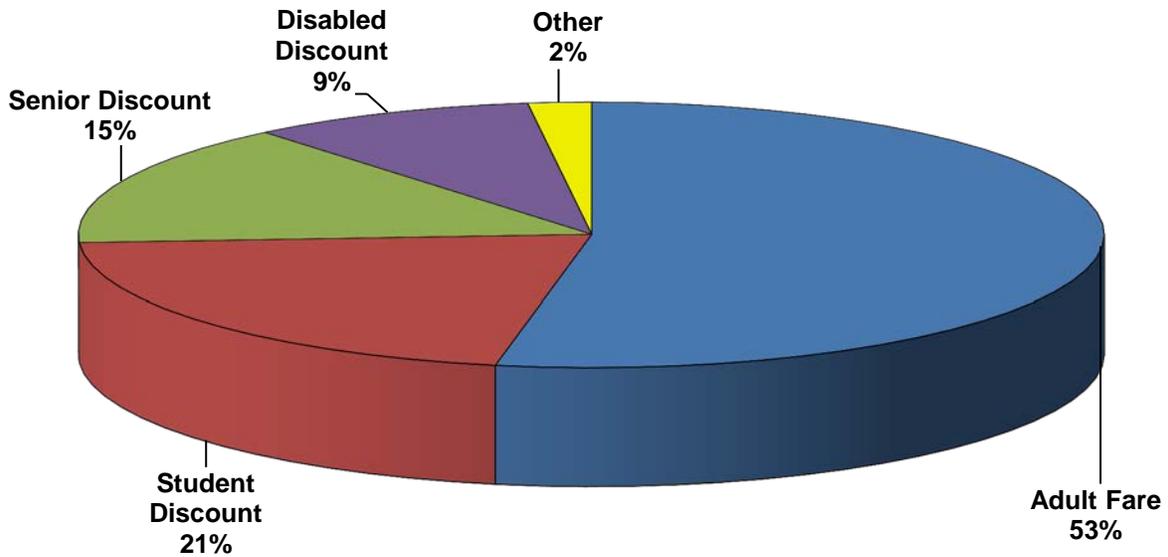
Fare Media

Figure 10: How Did You Pay For Your Bus Fare?
n=271



Cash is the predominant fare media for Sonoma County Transit at 59 percent. At a much lower level, 22 percent use a monthly-pass. The 31-Day Pass and Super Pass responses account for six and five percent of boardings respectively. Both Paratransit Tickets and 20-Ride Fastpasses each are used by two percent of the riders. Five percent of riders use some other form of payment for their fares.

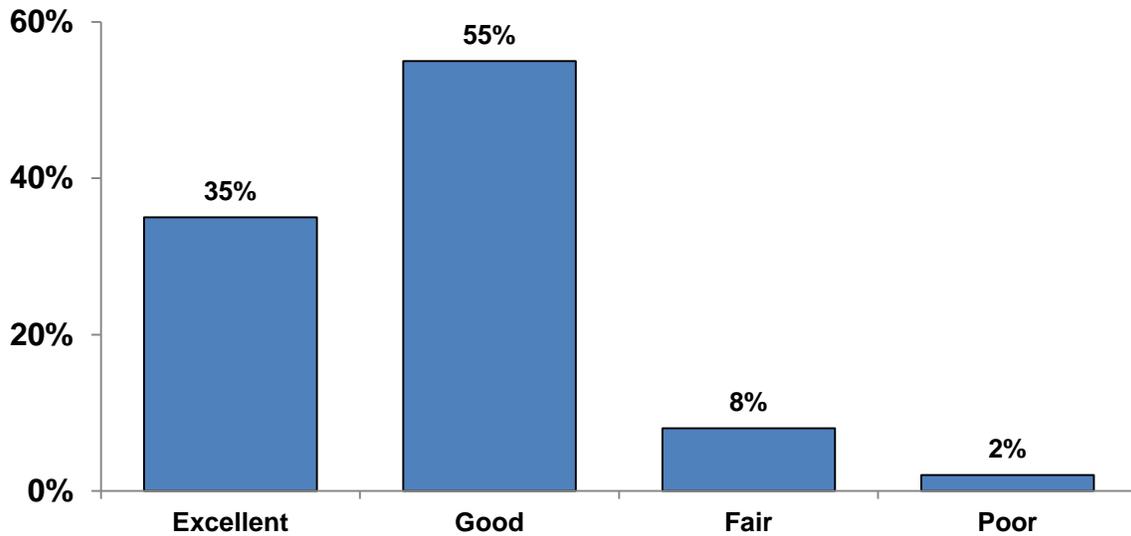
Figure 11: Was That a Full, Adult Fare or Discount Fare?
n=271



Slightly less than half of Sonoma County Transit riders receive some type of discount on their fare. At 53 percent a slight majority pay a full adult bus fare. For those receiving a discount, a student discount represents the highest percentage with 21 percent of riders taking advantage of this fare. A senior discount is used by 15 percent of all riders and 75 percent of riders 60 or older. Nine percent of riders receive a disabled discount.

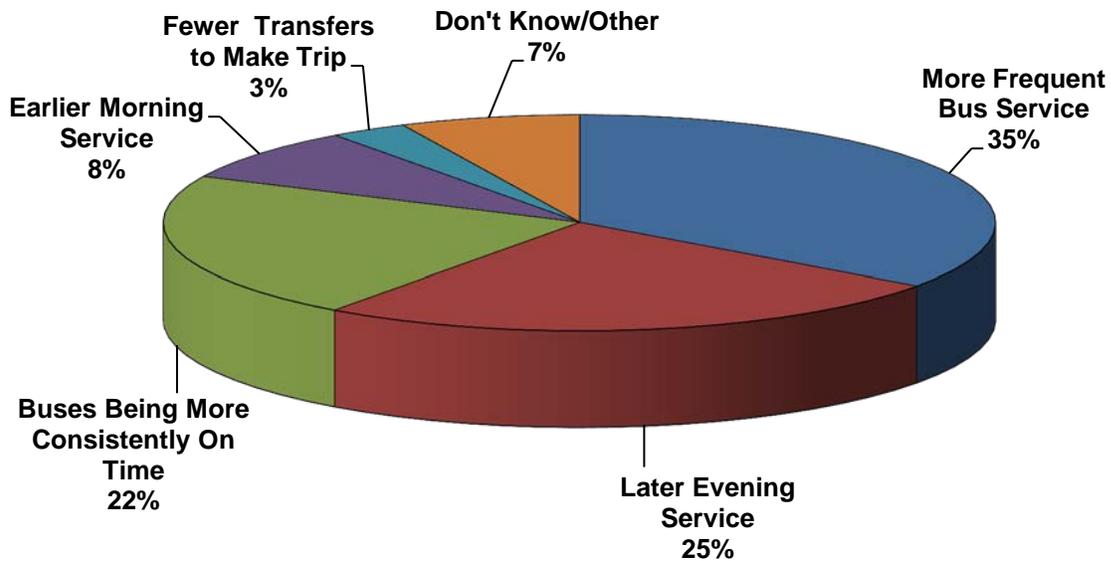
Sonoma County Transit Performance

Figure 12: How Would You Rate Sonoma County Transit Overall?
n = 271



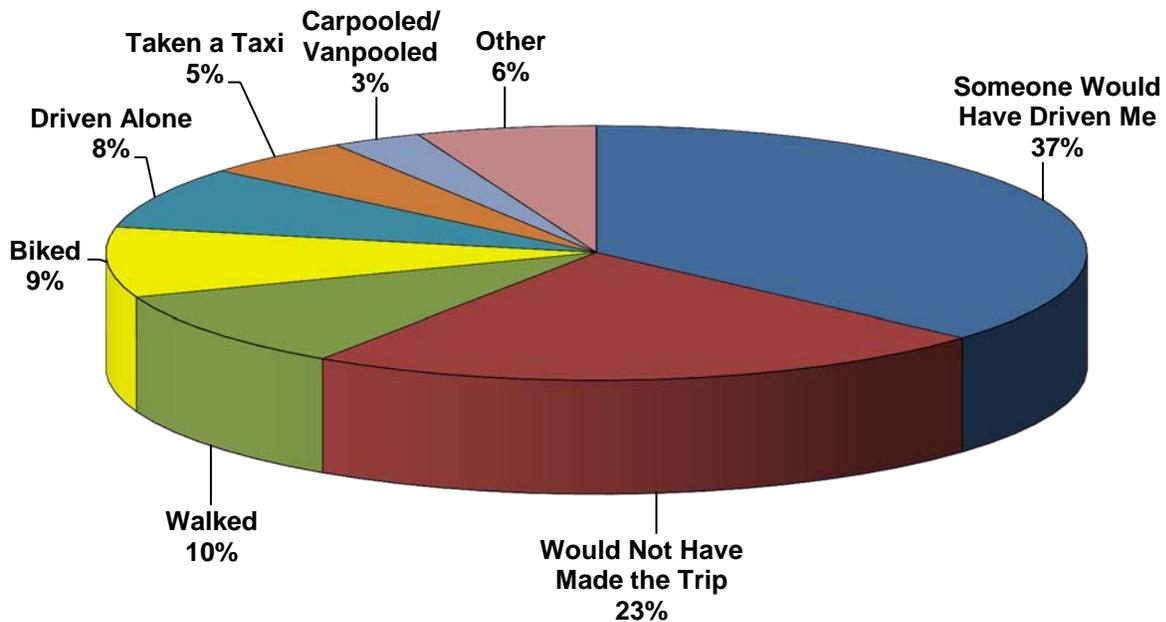
On a four-point scale from poor to excellent, the vast majority of riders (90%) have a positive opinion of the Sonoma County Transit Authority with 55 percent of the riders indicating their perception of Sonoma County Transit to be good and 35 percent indicating it is excellent. Eight percent of riders provide a fair rating, while only two percent of riders view Sonoma County Transit's performance as poor. Riders who use a senior or disabled discount are the most likely to give a rating of excellent.

Figure 13: How Can Sonoma County Transit Be Improved
n=271



Riders were asked to choose one of five possible improvements that could possibly be implemented by Sonoma County Transit. More frequent bus service is the most frequently requested improvement at 35 percent. However, later evening service and buses being more consistently on time also received votes from significant proportions of riders at 25 percent and 22 percent respectively. The least requested improvements are earlier morning service and fewer transfers to make their trip at eight and three percent respectively. Seven percent of riders primarily said that no improvement is needed. The only other specific request from at least one percent was for more weekend service.

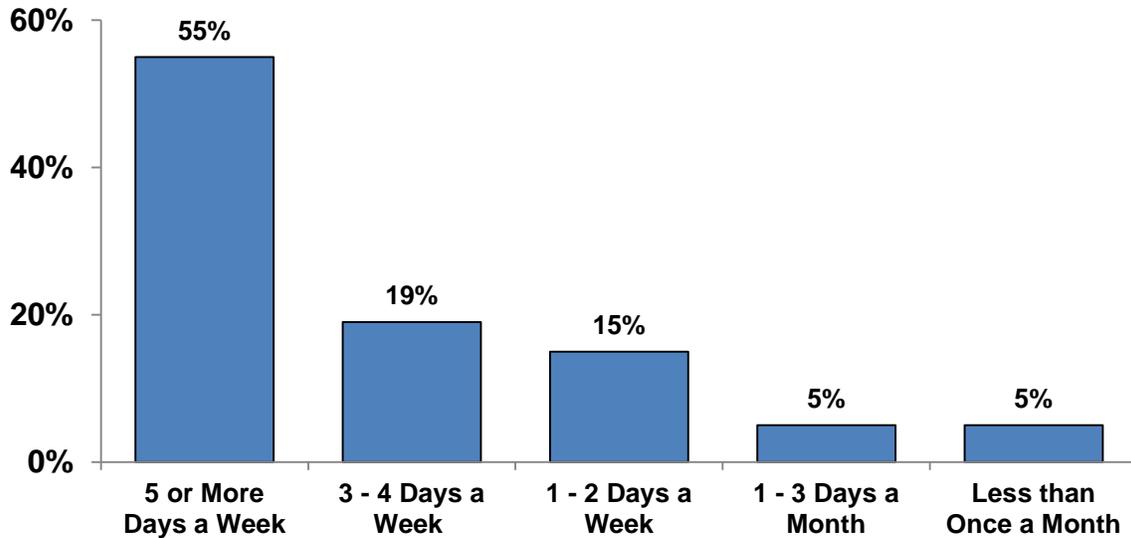
Figure 14: If There Was No Bus, How Would You Have Made Your Trip?
n = 271



If Sonoma County Transit service was not available, 23 percent of riders would not make a bus trip at all. Fifty-three percent of riders would use another form of motorized transportation, while 19 percent would either walk or bike. The most common alternate mode of transportation is being driven by someone at 37 percent. Six percent of riders would use a form of alternate transportation not shown above.

Transportation Demographics

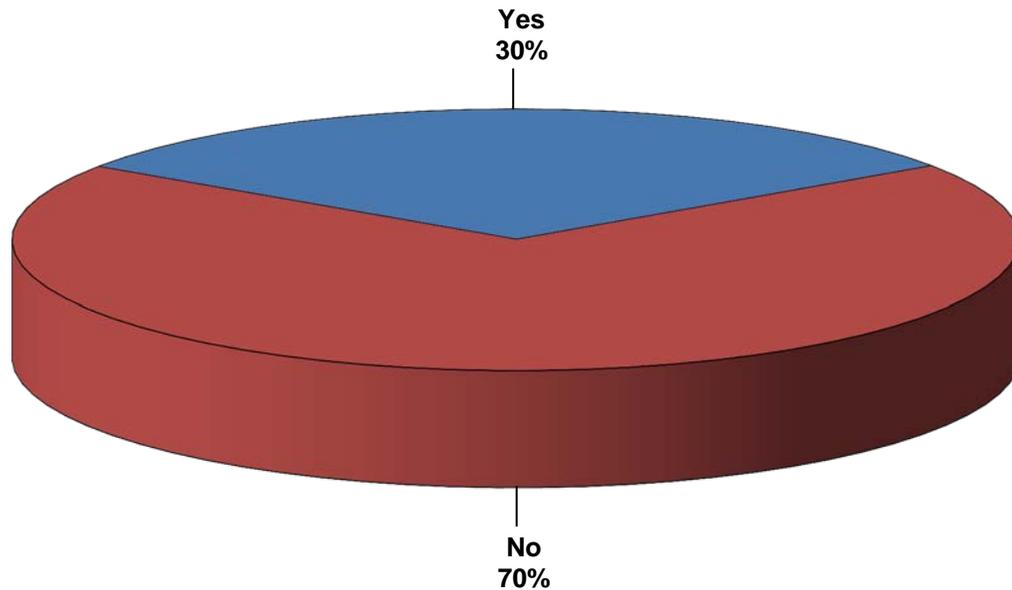
Figure 15: How Often Do You Ride Sonoma County Transit
n=271



Eighty-nine percent of all trips are made by riders that use the bus at least once a week. A majority of boardings (55%) are by riders that use the bus five or more days a week. Nineteen percent of riders use the bus three to four days a week. Fifteen percent of riders use the bus one to two days a week. The last ten percent is equally split between the riders who use Sonoma County Transit one to three days a month and those who ride the bus less than once a month.

Riders who are employed are more likely to ride the bus five or more days a week than those who are unemployed (64% versus 44% respectively). Also, as would be expected, riders that use a pass to pay their fare are more frequent riders than those that pay cash.

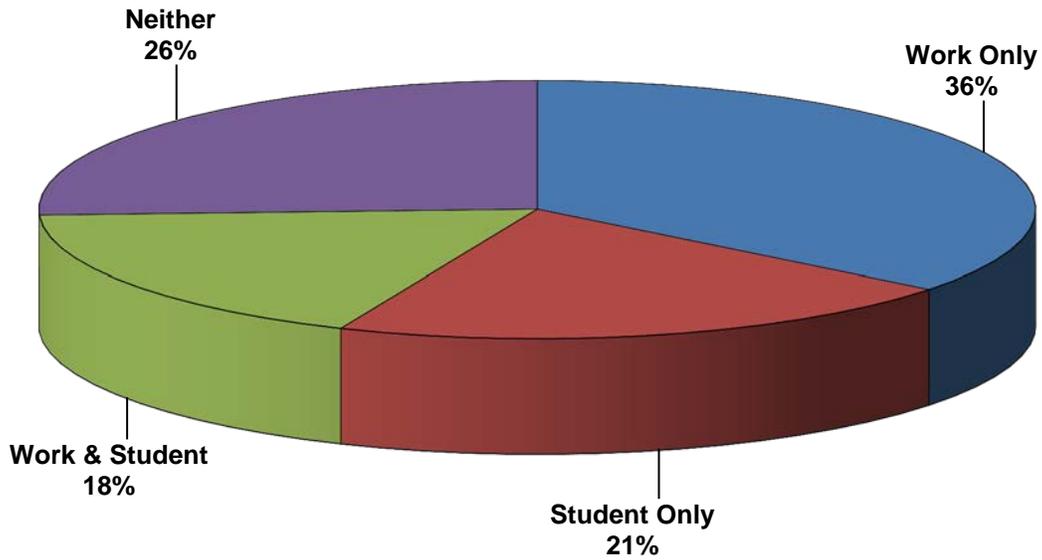
Figure 16: Do You Currently Have a Driver's License?
n=838



Seventy percent of Sonoma County Transit riders do not currently have a driver's license. Both males and females responded at this same ratio of 70 percent without licenses and 30 percent with licenses. Of those respondents under the age of 20, only ten percent have a driver's license. Of those whose household income is less than \$10,000, only nine percent have a driver's license.

The incidence of having a drivers' license tends to increase both with age and income. Incidence in the under \$10,000 income category is nine percent and for those under 20 is 10 percent. It increases to a high of 62 percent for those with household incomes of \$75,000 or higher and to 40 percent for those at least 50 years of age.

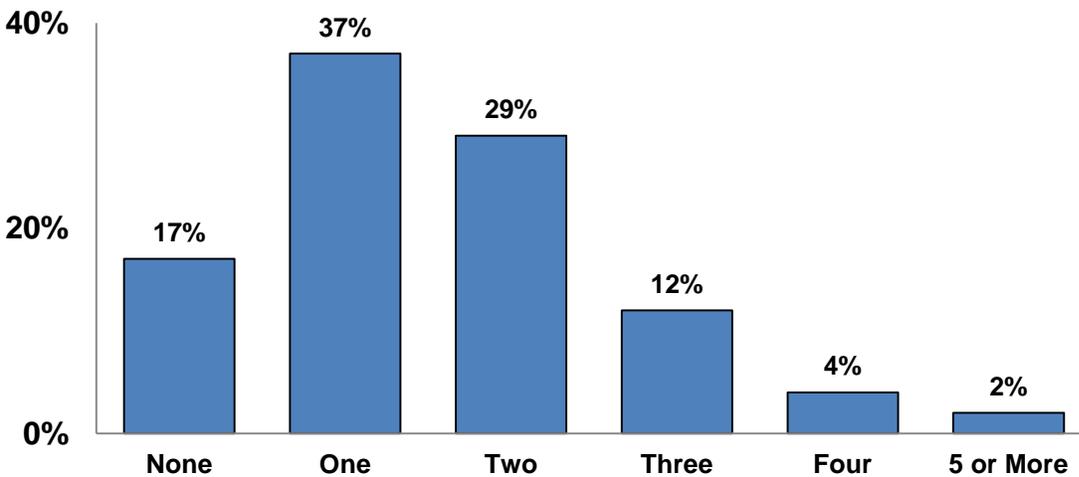
Figure 17: Are You Currently Employed and/or a Student?
n=271



Eighteen percent of riders are both employed and students. Over one third (36%) are only employed; while less than a quarter (21%) are only students. Just over a quarter (26%) of riders are neither employed nor a student.

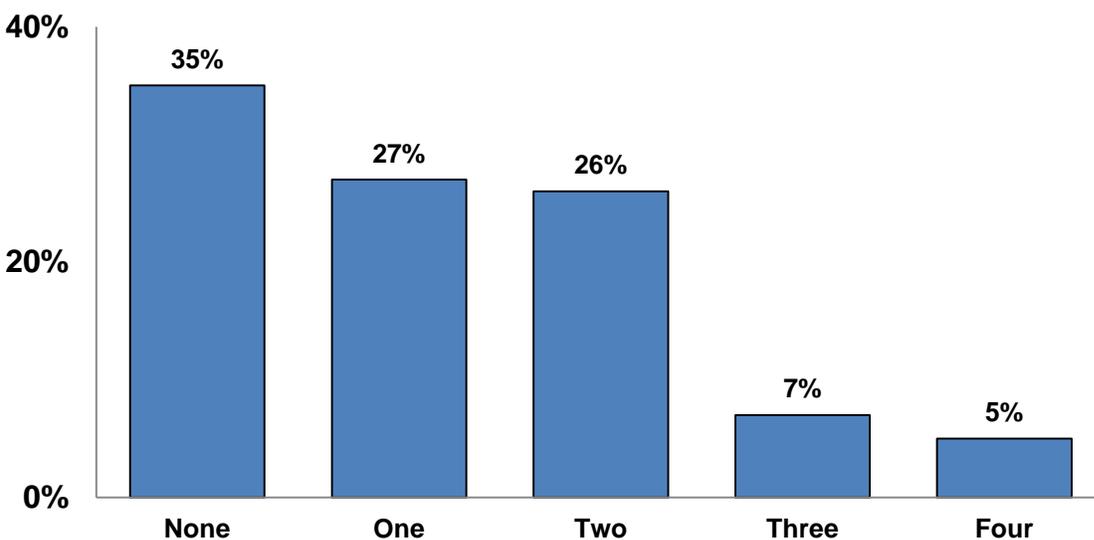
Rider Demographics

Figure 18: How Many People Are Employed in Your Household?
n=269



The majority of riders (83%) have at least one person who is employed either full-time or part-time in their household. Over a third of riders (37%) have one person who works and over a quarter (29%) of the riders' households have two people who are employed. Seventeen percent of riders do not have anyone in their household who is employed. Twelve percent have three people employed in their household, and six percent have four or more people employed in their household.

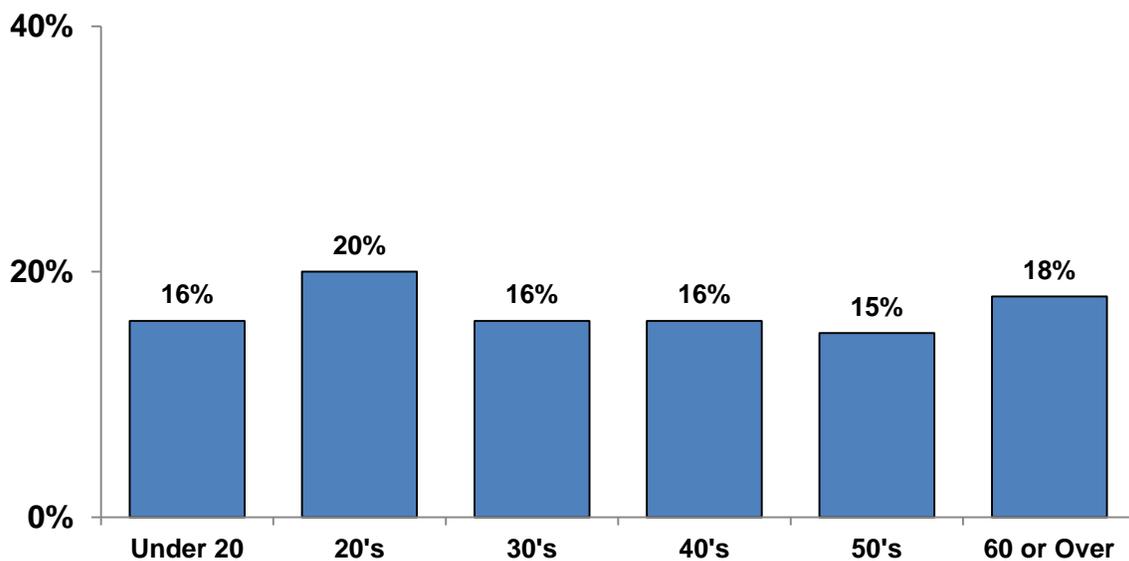
Figure 19: How Many Drivable Vehicles Are Available To Your Household?
n=270



A majority of Sonoma County Transit riders (65%) have at least one drivable vehicle, but over one third (35%) do not have any drivable vehicles. Over half of the riders (53%) have either one (27%) or two (26%) drivable vehicles available. Twelve percent of riders have three or more operating vehicles available to their household.

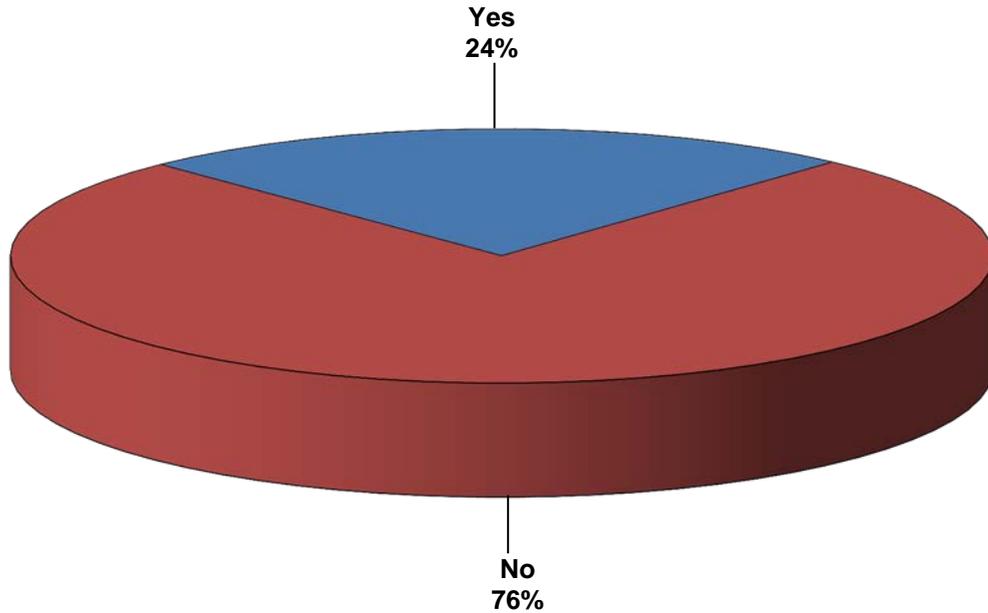
Vehicle availability is positively correlated to household income with vehicle availability starting at a low of 33 percent for those with incomes below \$10,000, and increasing consistently with income to a high of 100 percent for those with incomes above \$75,000. In line with correlation to income, employed riders are more likely to have a vehicle in the household than those that are unemployed. It is negatively correlated to rider age with vehicle availability for the youngest riders (under 20) at a high of 92 percent and then declining to 46 percent for riders that are 60 or older.

Figure 20: What Is Your Age Category?
n=270



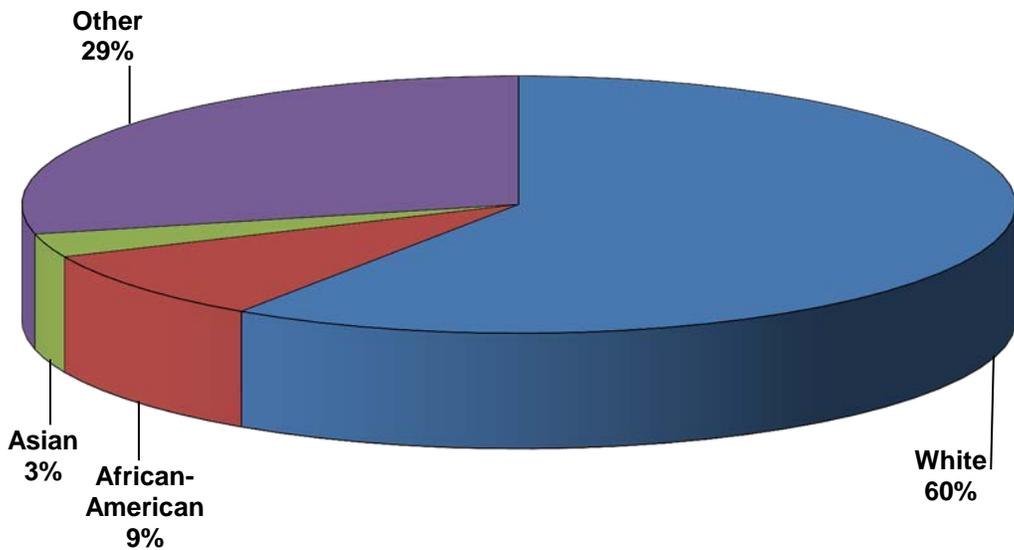
The age of riders is dispersed relatively evenly across the different age groups. Twenty percent of riders are in their 20's, and 18 percent are 60 or older. Other age groups are nearly even in distribution. The categories of under 20, 30's, and 40's each comprise 16 percent of Sonoma County Transit riders. Fifteen percent of riders are in their 50's.

Figure 21: Are You Hispanic, Latino or of Spanish Origin?
n=267



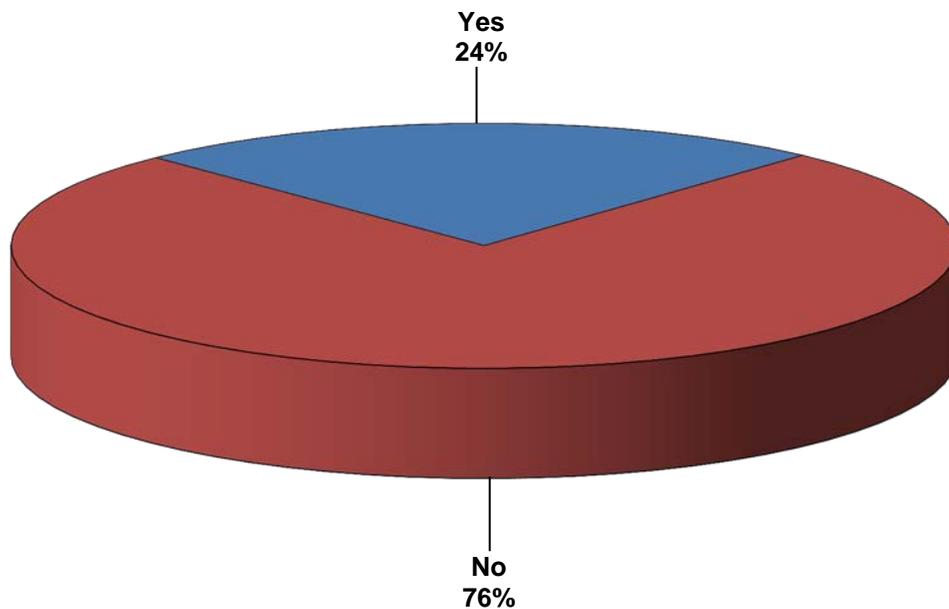
Approximately one quarter of riders (24%) are Hispanic or Latino while about three-quarters (76%) are not of Hispanic or Latino origin.

Figure 22: What Is Your Race?
n=271



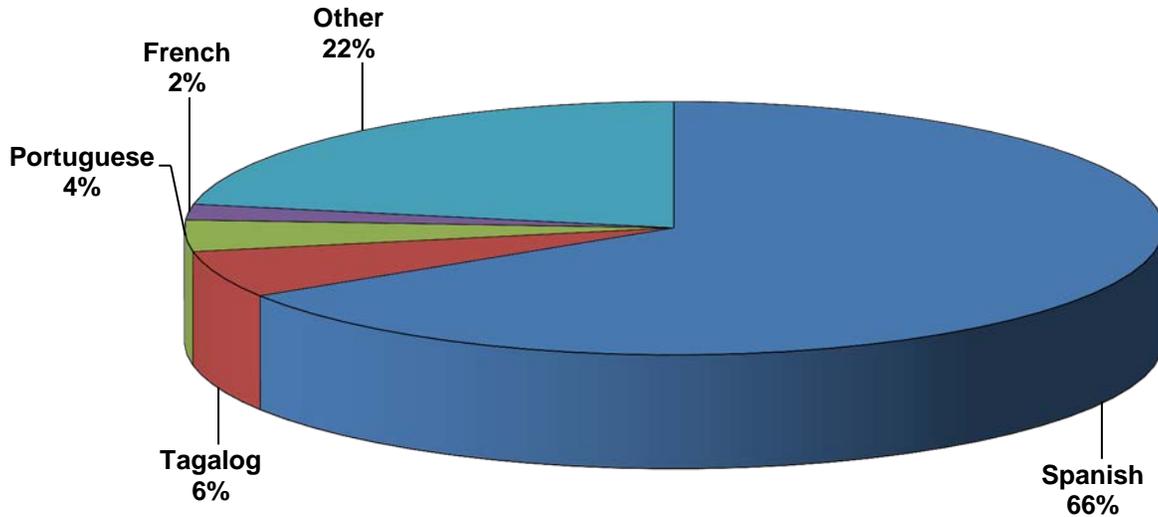
The majority of riders (60%) identify White as their race. This is followed by “other” 1 29 percent, where the most common “other” responses were Hispanic, Latino or Mexican. Nine percent responded African American and three percent Asian.

**Figure 23: Do You Speak a Language Other than English at Home?
(English Language Survey Respondents Only)
n = 262**



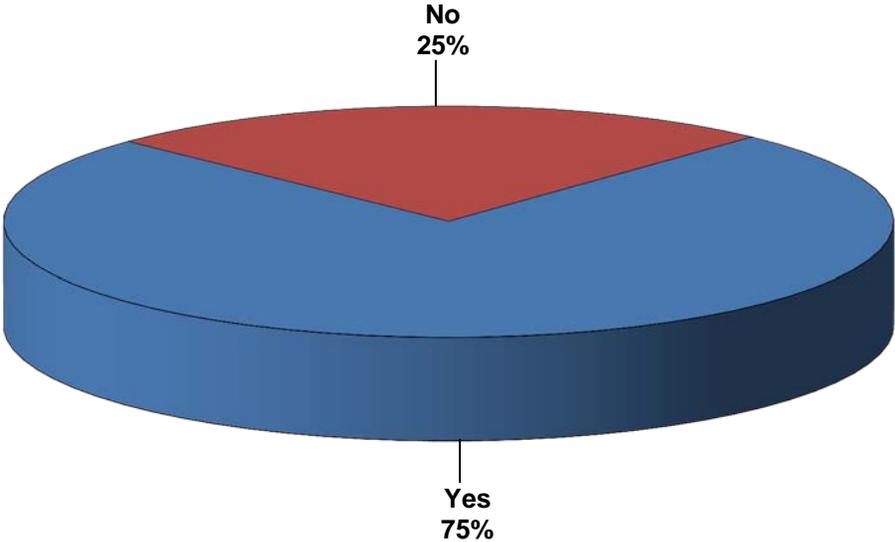
Approximately three-quarters (76%) of riders surveyed in English speak only English at home. Just under a quarter (24%) of the respondents speak a language other than English at home. Sixty-six of Hispanic riders that completed the survey in English speak another language at home compared to 12 percent for non-Hispanics.

**Figure 24: What Language Do You Speak at Home?
(English Language Survey Respondents Only)
n=62**



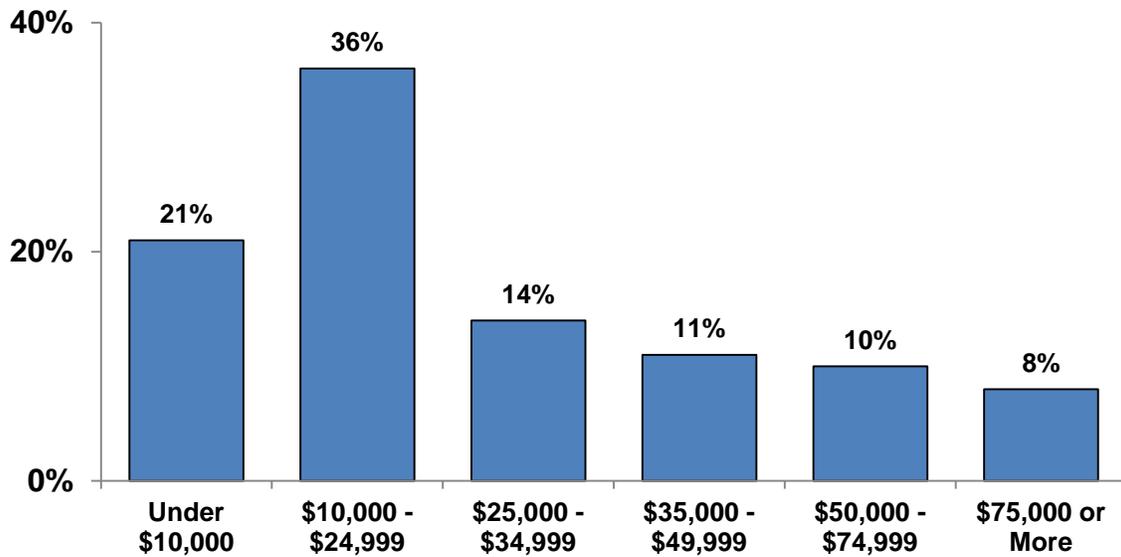
At 66 percent, Spanish is by far the most common language of riders who indicated that they spoke a language other than English at home. The second highest language spoken at home was “other” at 22 percent and includes such languages as Italian, Hindi, Arabian, and Swahili. The rest of the languages have a significant drop-off, Tagalog is spoken by six percent of riders that speak another language at home (1% of all riders). Portuguese is spoken by four percent of riders who speak another language, while French is only spoken by two percent.

**Figure 25: Do You Speak a Language Other Than Spanish at Home?
(Spanish Language Survey Respondents Only)
n=9**



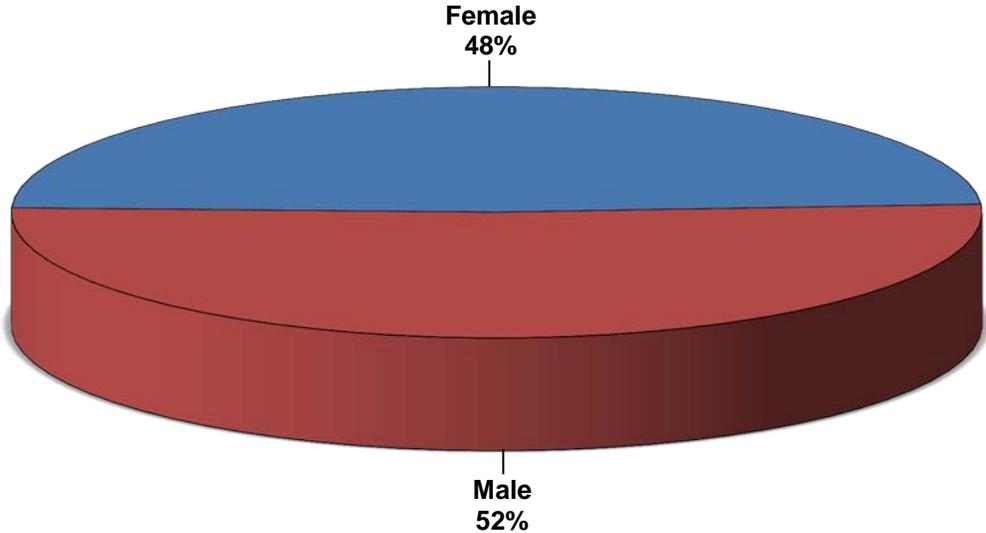
Three-quarters of bus riders (who completed the survey in Spanish) speak a language other than Spanish at home. All of these riders indicated the other language to be English.

Figure 26: What is Your Total Household Income?
n=242



The most prevalent household income of riders is \$10,000 to \$24,999 at 36 percent followed by under \$10,000 at 21 percent and \$25,000 to \$34,999 at 14 percent. The total household incomes for riders that were above \$35,000 were relatively evenly distributed among the remaining income groups with \$35,000 to \$49,999 at eleven percent, \$50,000 to \$74,999 at ten percent, and \$75,000 or more at eight percent.

Figure 27: Gender
n=271



The gender split among Sonoma County Transit riders is fairly even with 52 percent male riders and 48 percent female riders.