

2012

Petaluma Transit

2012 Passenger Study

Draft
Survey Findings

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



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Executive Summary

Methodology

Under contract to the MTC, Redhill Group conducted a survey of Petaluma 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 Petaluma Transit is 1.7 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 (1,066) translates into 53 completed surveys. This was then divided into targets in proportion to boardings for each route to ensure a representative sample. 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 1,33 surveys.

Field surveying was conducted on Monday, April 23rd. Follow-up telephone surveying was between April 26th and May 6th. The final results for the surveying process included a total of 58 completed phone surveys and 164 field surveys. All final survey targets by route and daypart were also achieved.

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

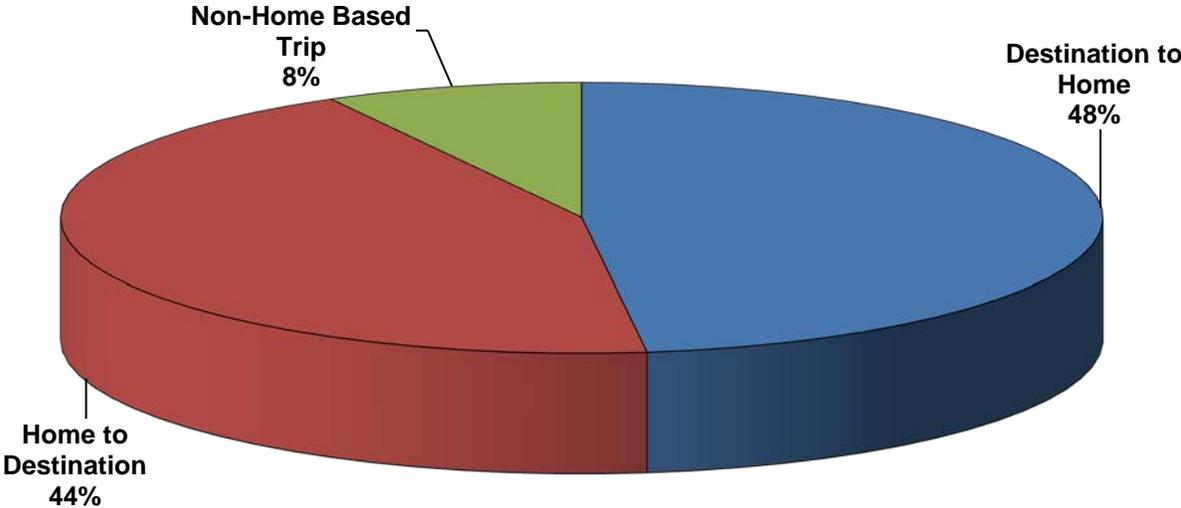
- The distribution of home-based trip purposes is highly diverse with work and business appointments accounting for 26 percent, and K-12 and college accounting for 31 percent. This is rounded out by 22 percent shopping, eight percent social/recreational, nine percent medical/dental, two percent dining/coffee, and one percent escorting others.
- The trip purpose distribution is in line with employment and school demographics with over a quarter (29%) of riders indicating that they work only, and 26 percent indicating that they are students only. Twelve percent of riders are both employed and students, and 33 percent are neither employed nor students.
- The relatively high incidence of non-work/school destinations reflects both the large proportion non-worker/non-students (33%), and relatively high transit dependency as measured by two-thirds of all riders (67%) not having a driver's license. As a result, many riders use Petaluma transit for all their travel needs.
- Nearly all (97%) of riders' access to transit is by walking while the remaining three percent bicycle. The average access walk time is 5.6 minutes. Riders' egress modes are similar to their access modes and the average walk time is 5.0 minutes.
- Forty-one percent of Petaluma Transit riders complete their one-way trip on one bus while 46 percent require one transfer, and 13 percent transfer two or more.
- Over half of riders (55%) use cash to pay their bus fare, while passes are the primary non-cash fare media at 28 percent (31-Day Pass 27%, 10-Ride Transit Pass 1%). Transfers account for 16 percent (Bus Transfer 11%, Bart Transfer 5%).
- A majority of riders (62%) pay full adult fares with the largest discount groups being students (22%), seniors (11%), and disabled riders (5%).
- The vast majority of riders provide positive ratings for Petaluma Transit's overall performance with 37 percent rating it "good" and 51 percent rating it "excellent." This compares with only 11 percent that provided a "fair" rating and one percent that said it was "poor."
- When asked how they would most like to see Petaluma Transit service improved, the most popular improvement was later evening service, cited by 40 percent. The next requested improvement was being more consistently on time at 28 percent. At a much lower level, more frequent service, requiring fewer transfers, and earlier morning service were mentioned by 13, 10, and seven percent respectively.
- The vast majority of riders are regular customers, 94 percent use the bus at least once a week. Over half of all riders (53%) use the bus five or more days a week.
- Two-thirds of Petaluma Transit trips are made by riders that are transit dependent as indicated by 67 percent not having a driver's license, and 35 percent indicating that they do not have any drivable vehicles available to their household.
- To find information about Petaluma Transit, 42 percent of riders use a search engine, 23 percent contact the City, and 13 percent use a phone book. The remaining 23 percent use the Argus Courier, La Voz, Petaluma 360, or an "other" source.

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 (92%) include home as either the trip origin or destination.

Figure 1: Is Home Your Origin or Destination?

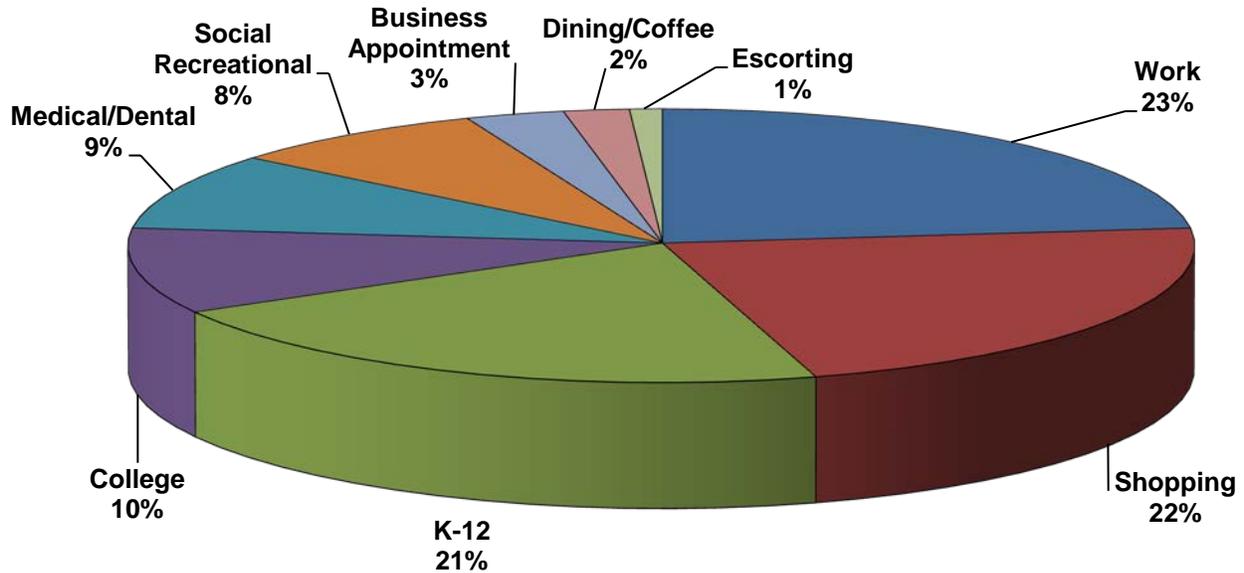
n=58



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=58

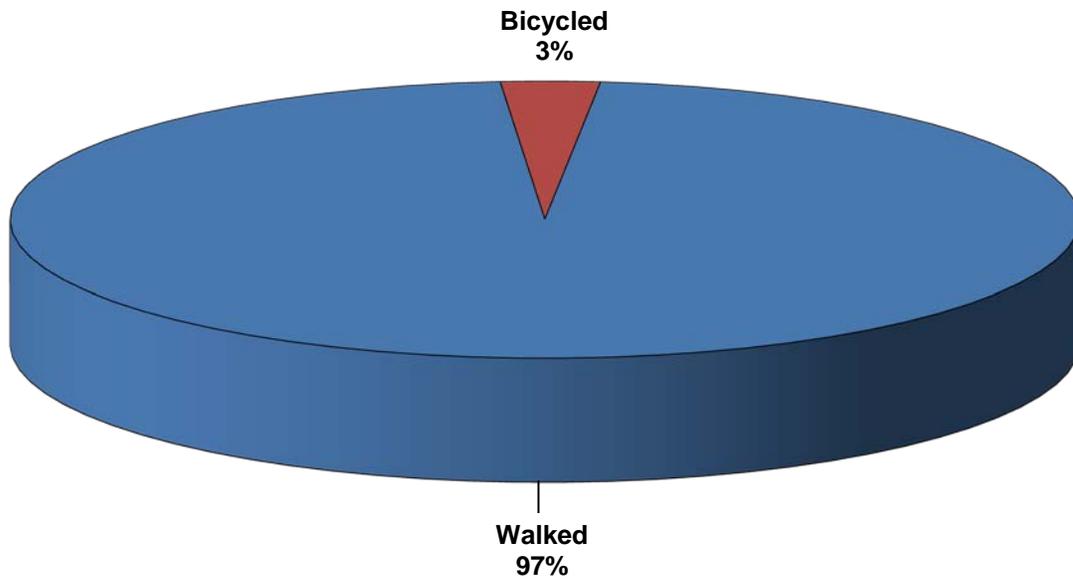


The distribution of destination types is highly diverse for home-based trips. At 31 percent, school is the largest trip destination with 21 percent of riders going to K-12 schools and an additional ten percent going to colleges or universities. This is in line with 38 percent of riders reporting that they are students.

Work and business appointments account for 23 percent and three percent respectively. This is lower than riders' reporting of work status with 41 percent indicating that they are currently employed. This likely reflects the relatively high transit dependency rate (67% do not currently have a drivers' license), and that these riders use Petaluma Transit for all their travel needs.

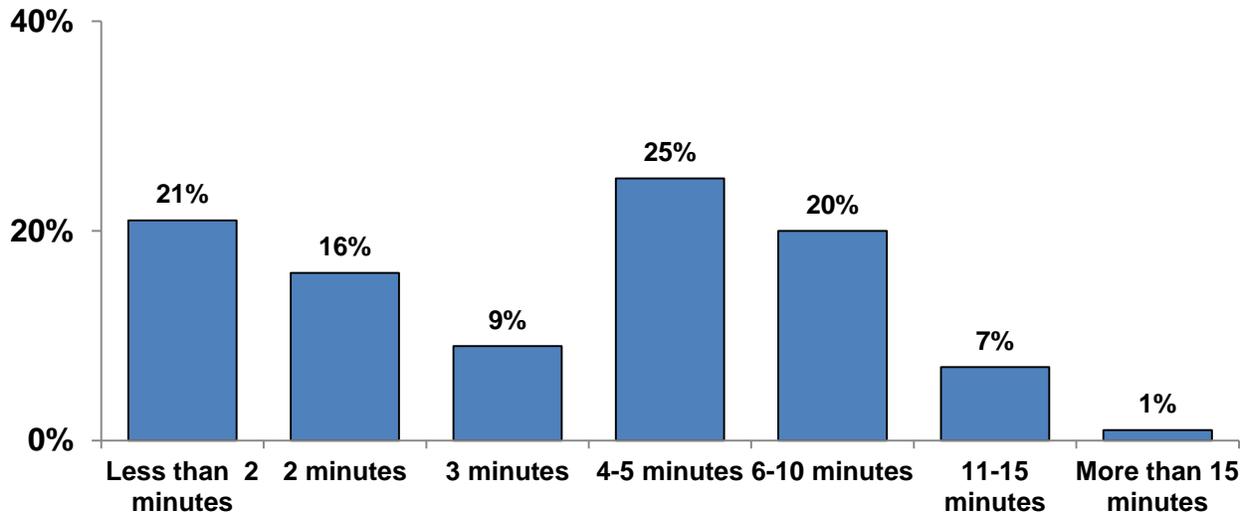
Shopping trips account for 22 percent, and social and recreational accounts for eight percent. Medical/dental trips are also a common destination at nine percent. Additional responses are less significant and include dining/coffee (2%) and escorting others (1%).

Figure 3: How Did You Get From Your Home to Your First Boarding Point?
n=54



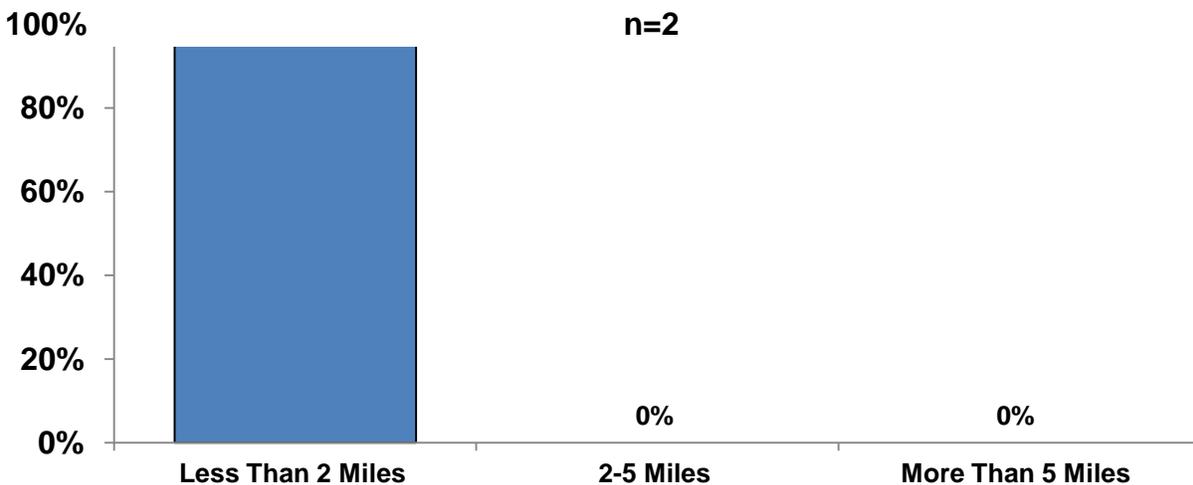
Nearly all of Petaluma Transit riders (97%) walk to their first transit boarding point. The remaining three percent bicycle.

**Figure 4: How Many Minutes Did It Take You to Walk From Your Home to Your First Boarding Point?
(Walkers)
n=52**



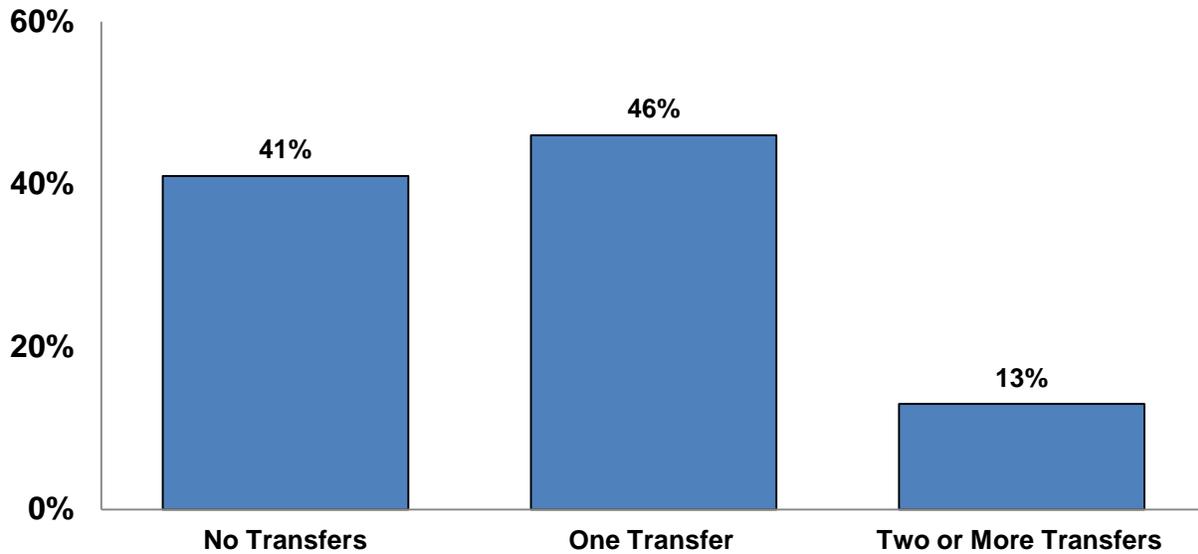
Among the riders who walk from home to their first boarding point the most common time at 30 percent is four to five minutes. This is followed by 19 percent that have a walk time of six to ten minutes. There are 11 percent that have walk times in excess of 10 minutes, and a larger proportion of riders walk three or fewer minutes at 41 percent. The overall average walk time from home to the first boarding point is 5.6 minutes.

**Figure 5: How Many Miles Is It From Your Home to First Boarding Point?
(Non-Walkers)
n=2**



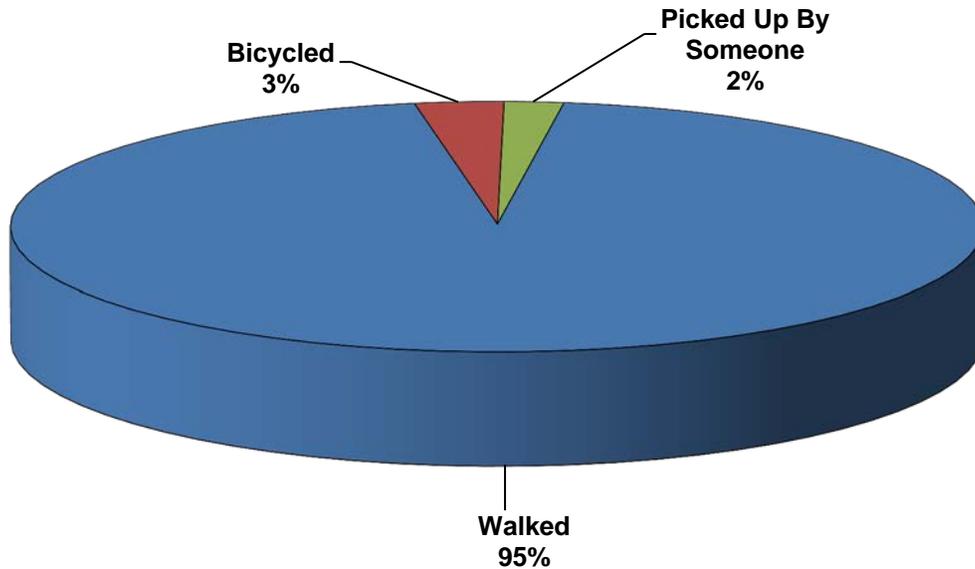
Both of the surveyed riders that do not walk from home to their first boarding point travel a distance of less than two miles. The average distance traveled to the first boarding point for non-walkers is 0.5 miles.

Figure 6: How Many Transfers Needed To Complete Your Trip?
n=58



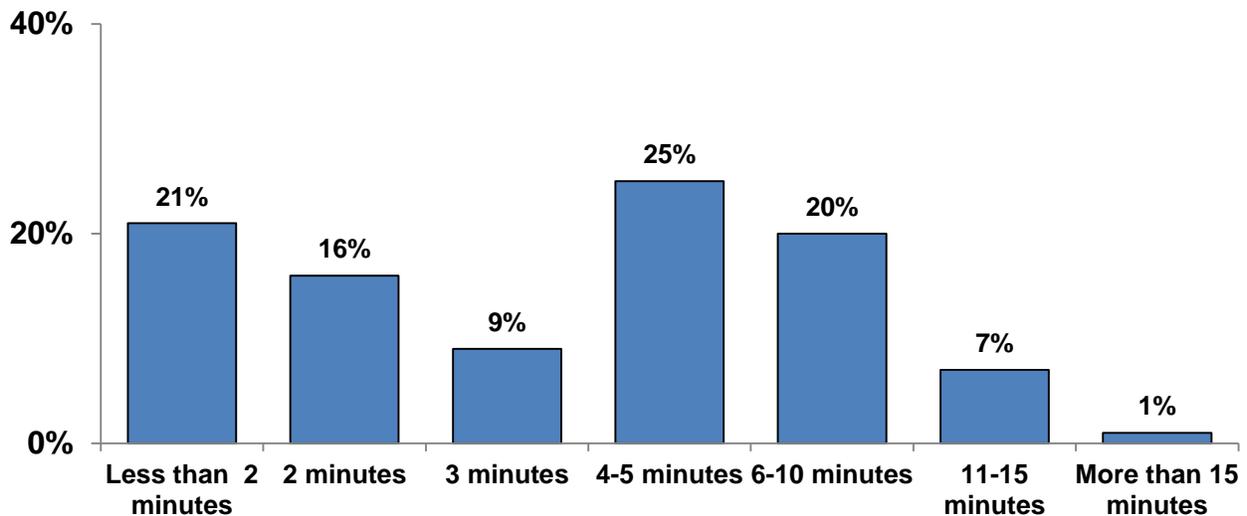
Forty-one percent of bus riders complete their bus trip with no transfers. Forty-six percent of riders make one transfer to finish their one-way trip, and 13 percent of all trips require two or more transfers. On average, each one-way trip requires 1.7 bus boardings.

Figure 7: How Did You Get From Your Last Stop to Non-Home Destination?
n=54



Almost all bus riders (95%) also walk from their last stop to their non-home destination. As at the home end of their trip, three percent of riders bicycle, but in addition, two percent are picked up by someone.

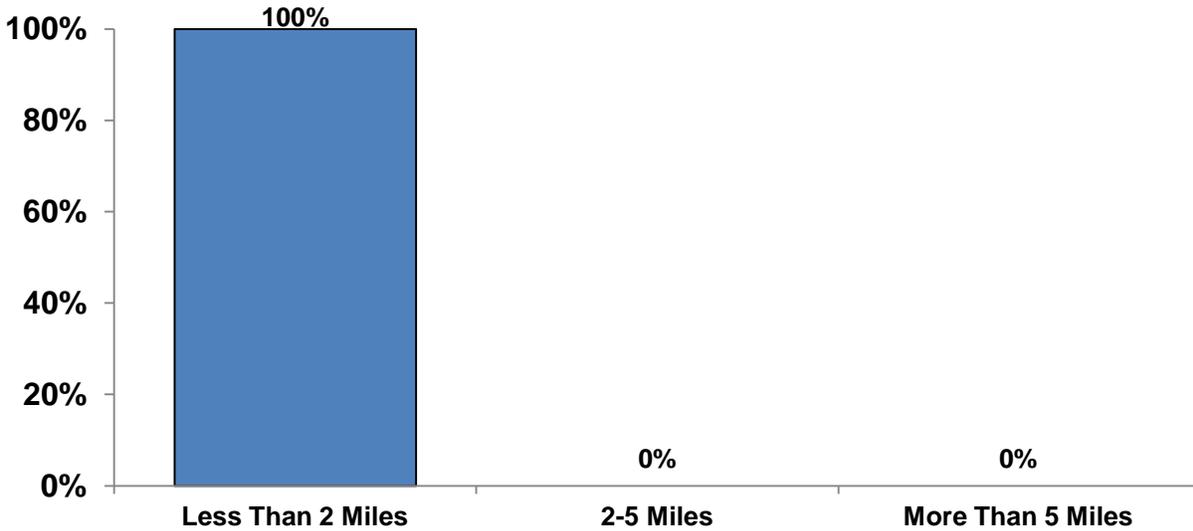
Figure 8: How Many Minutes Did You Walk to Your Non-Home Destination? (Walkers)
n=51



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. Twenty percent walk 6-10 minutes, and only eight percent walk more than 10 minutes. Conversely, a total of 46 percent walk less than four minutes. The overall average

walk time from the final alighting point to the final destination is 5.0 minutes.

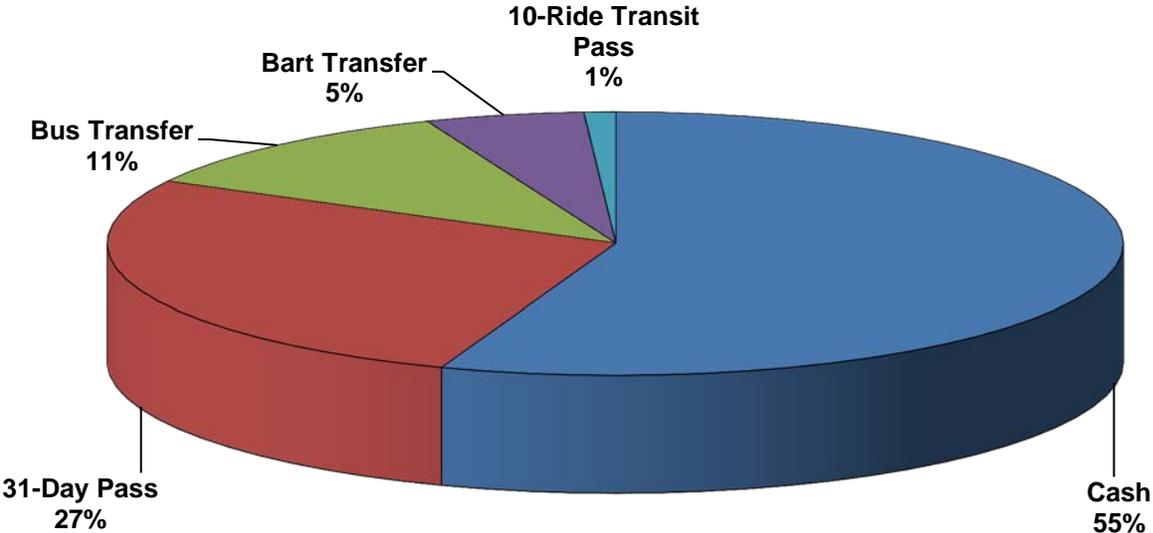
Figure 9: How Many Miles Was It From Your Last Stop to Your Non-Home? (Non-Walkers) n=3



All of the riders who use a mode of transportation other than walking from their last stop travel less than two miles to their non-home destination. The average distance traveled to the non-home destination for non-walkers is 0.7 miles.

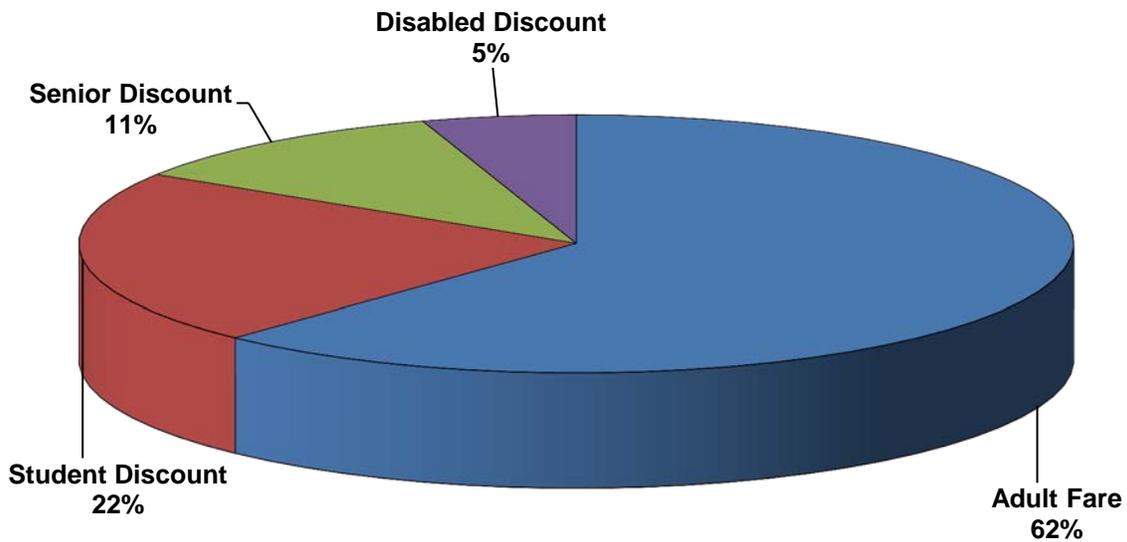
Fare Media

Figure 10: How Did You Pay For Your Bus Fare?
n=58



Cash is the fare media for more than half of all boardings at 55 percent. The second most frequently used fare media is a 31-Day Pass at 27 percent. Sixteen percent of riders use either a Bus transfer (11%) or Bart transfer (5%). Only one percent of riders use a 10-Ride Transit Pass.

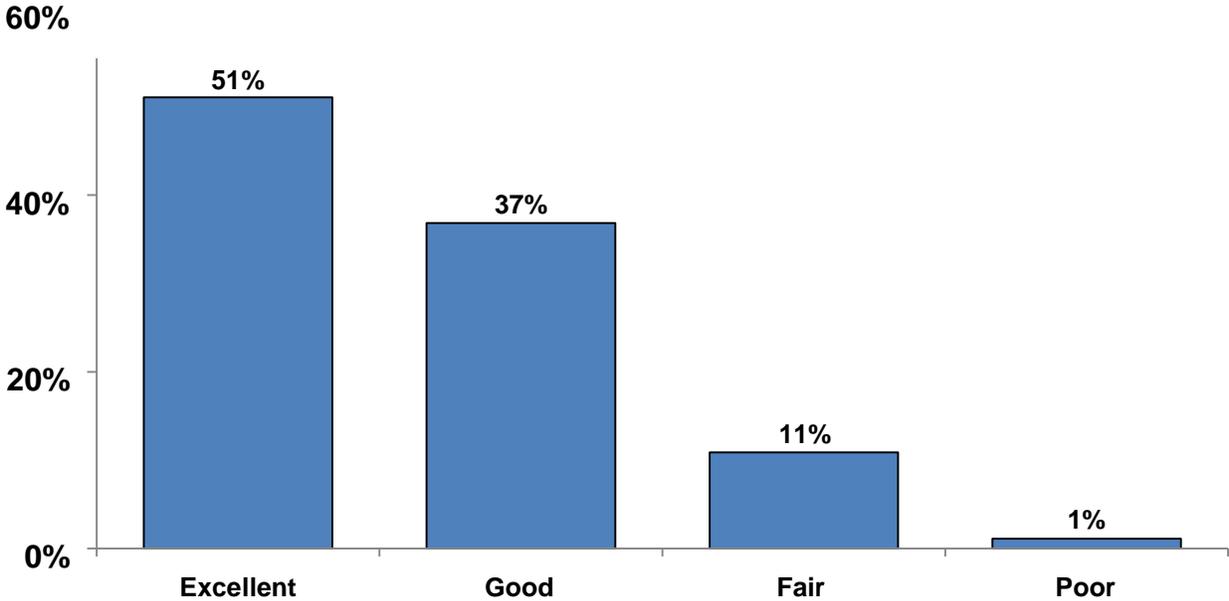
**Figure 11: Was That a Full Adult Fare or Discount Fare?
n=58**



Sixty-two percent of riders do not receive a discount and pay a full adult fare. Among the discounted fares, a student discount accounts for the highest percentage comprising 22 percent of riders. Eleven percent of riders use a senior discount and five percent use a disabled discount.

Petaluma Transit Performance

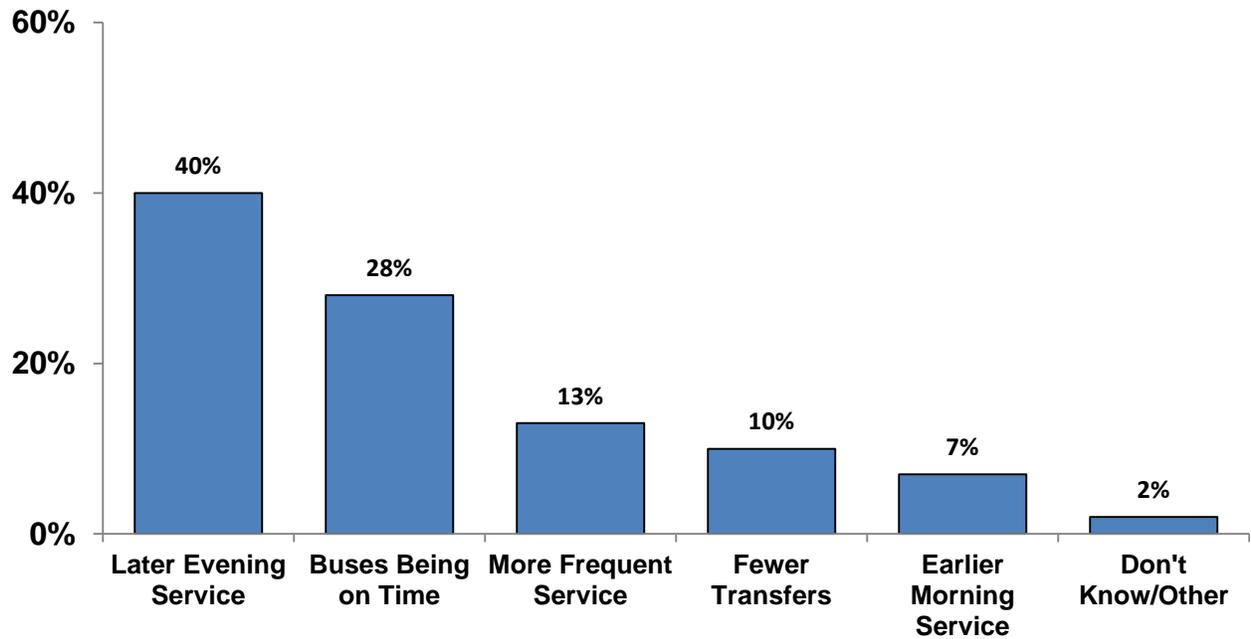
**Figure 12: How Would You Rate Petaluma Transit Overall?
n=58**



On a four-point scale from poor to excellent, most riders (88%) have a positive opinion of Petaluma Transit with 37 percent of the riders indicating their perception of Petaluma Transit to be good and 51 percent indicating their perception of Petaluma Transit to be excellent. Eleven percent of riders rate Petaluma Transit as fair, and only one percent of riders view Petaluma Transit’s overall performance as poor.

All of the riders who receive a senior discount have a positive perception of Petaluma Transit. Students and those that are not employed are also more likely than their counterparts to give a rating of excellent at 64 percent and 59 percent respectively versus 43 percent for non-students and 41 percent for employed riders.

Figure 13: How Can Petaluma Transit Be Improved?
n=58

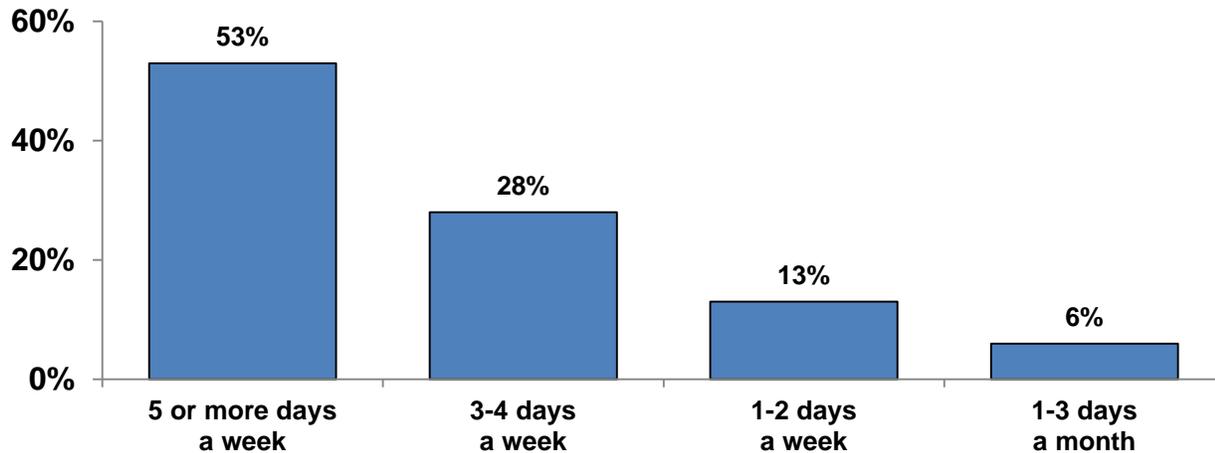


Riders were asked to choose one of five possible specific improvements that could possibly be implemented by Petaluma Transit. Later evening service is the most commonly requested improvement at 40 percent. The demand for later evening service is relatively consistent across the demographic breakouts with the exception of younger males who are more likely to want this as it was selected by 51 percent of men and 57 percent of riders under 30.

Buses being more consistently on time and more frequent bus service received 28 percent and 13 percent of the responses respectively. The least requested improvements are fewer transfers to make their trip and earlier morning service at ten and seven percent respectively. Two percent of riders do not think that Petaluma Transit needs to make any improvements.

Transportation Demographics

Figure 14: How Often Do You Ride Petaluma Transit?
n=58

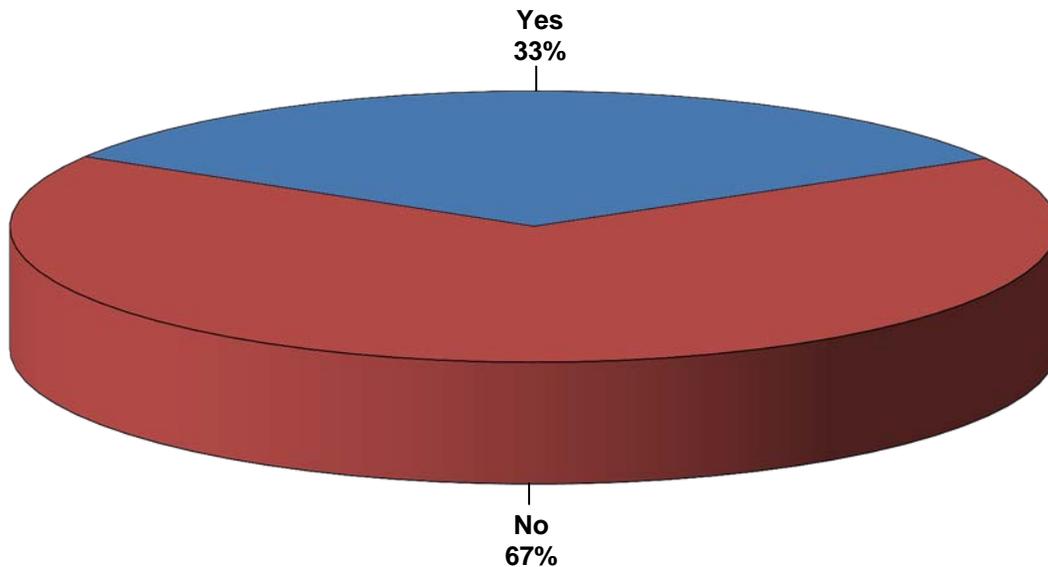


Ninety-four percent of riders use the bus at least once a week. Over half of all trips (53%) are made by riders that use the bus five or more days a week. Twenty-eight percent of trips are by riders that ride three to four days a week and thirteen percent are by riders that use the bus one to two days a week. Six percent of trips are made by patrons that ride one to three days a month.

Riders who are students are more likely to ride the bus five or more days a week than those who are not students (66% versus 46% respectively). At 34 percent, riders that have a driver's license are less likely to ride the bus five or more days a week than those without a license (63%). Finally, as would be expected, riders that use a pass to pay their fare are more frequent riders than those that pay cash.

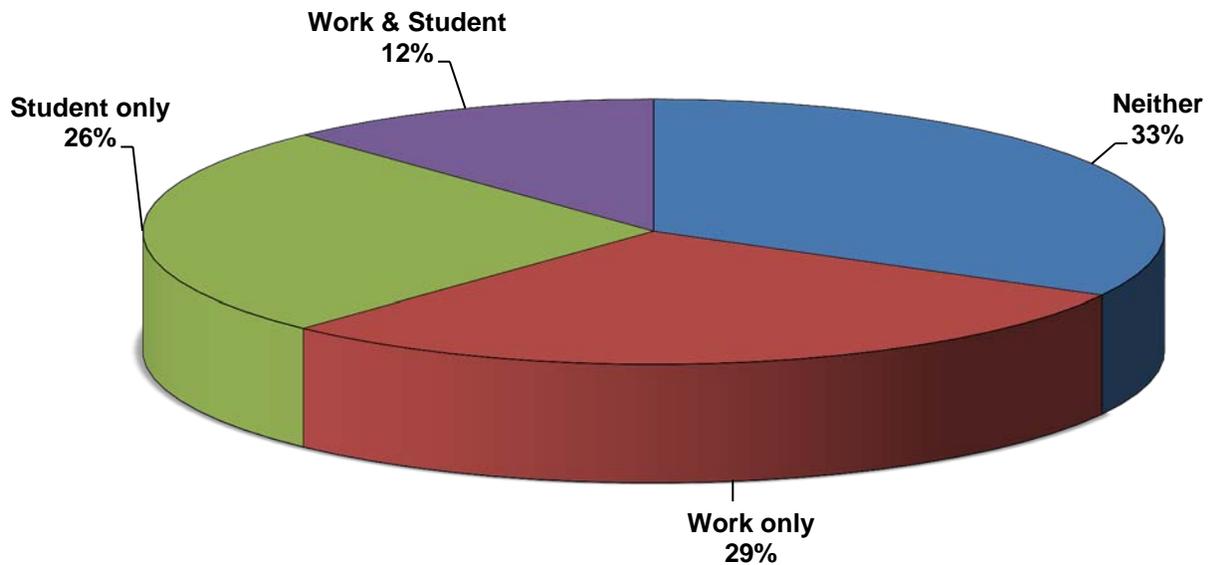
Figure 15: Do You Currently Have a Driver's License?

n=58



Two-thirds of Petaluma Transit trips (67%) are made by riders that do not currently have a driver's license. At 46 percent, men are more likely than women (21%) to have their driver's license. Hispanic riders are also less likely to have a driver's license at 17 percent compared to 42 percent for non-Hispanic riders. Unemployed riders are also less likely to have a driver's license at 20 percent than those that are employed at 52 percent.

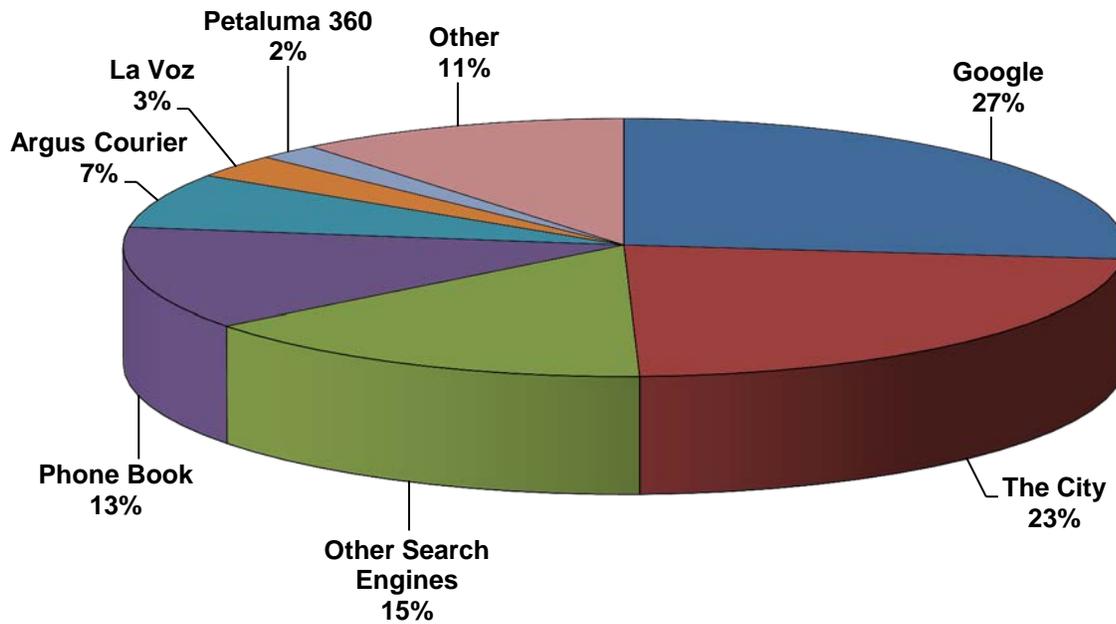
Figure 16: Are You Currently Employed and/or a Student?
n=58



Petaluma Transit has a diverse group of riders with 29 percent that only work, 26 percent that are only students, and an additional 12 percent that are both workers and students. In addition, a full third of riders (33%) are neither employed or students.

As might be expected, riders 50 years or older are the most likely to neither work or be a student at 62 percent. Females are also more likely to neither work nor be a student at 46 percent compared to 20 percent of males.

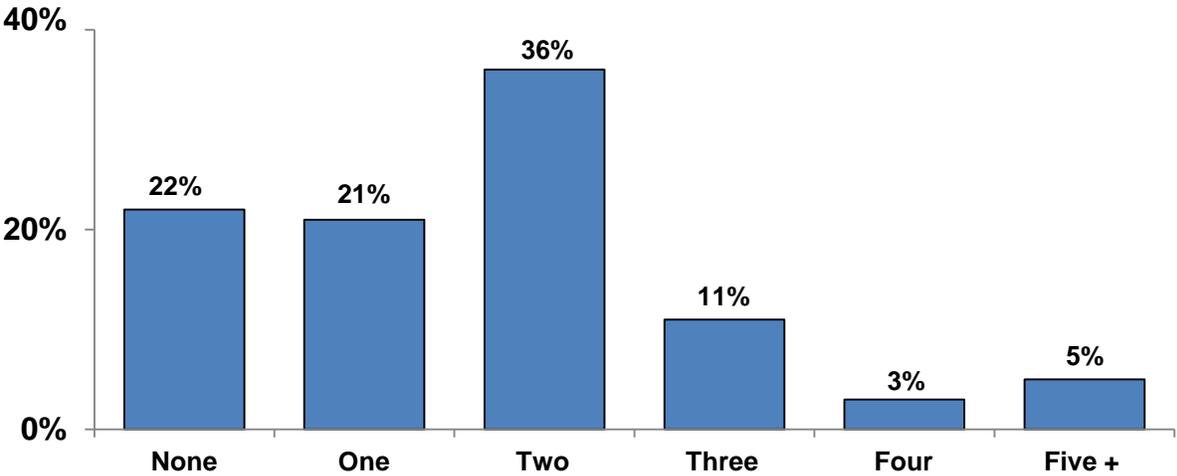
Figure 17: What is Your Source of Transit Information?
n=58



Forty-two percent of riders use a search engine to find information about Petaluma Transit with Google being the primary source at 27 percent, and all other websites combining for 15 percent. Twenty-three percent contact the City for information, and 13 percent use a phone book. In addition, 12 percent of riders use newspapers including the Argus Courier (7%), La Voz (3%), and the Petaluma 360 (2%). The remaining 11 percent use some other source of information to find information about Petaluma Transit.

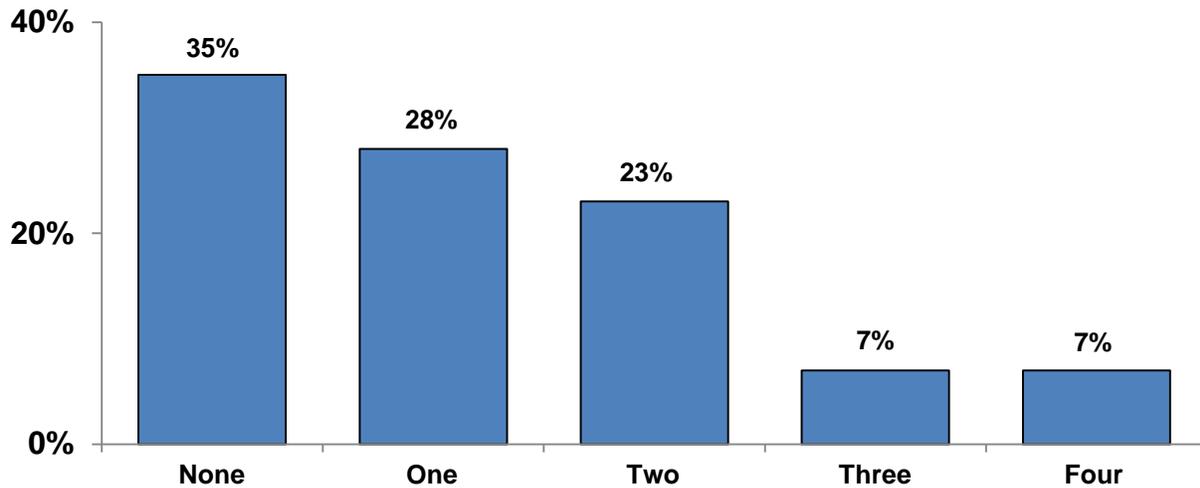
Rider Demographics

Figure 18: How Many People Are Employed in Your Household?
n=56



Over three-quarters of riders (77%) have at least one person in their household that is employed. This breaks down into 21 percent of riders that have one person who works either full-time or part-time, 36 percent that have two people who are employed, and 11 percent have three people employed in their household. Only eight percent have four or more employed people in their household. Slightly less than a quarter of riders (22%) do not have anyone in their household who is employed.

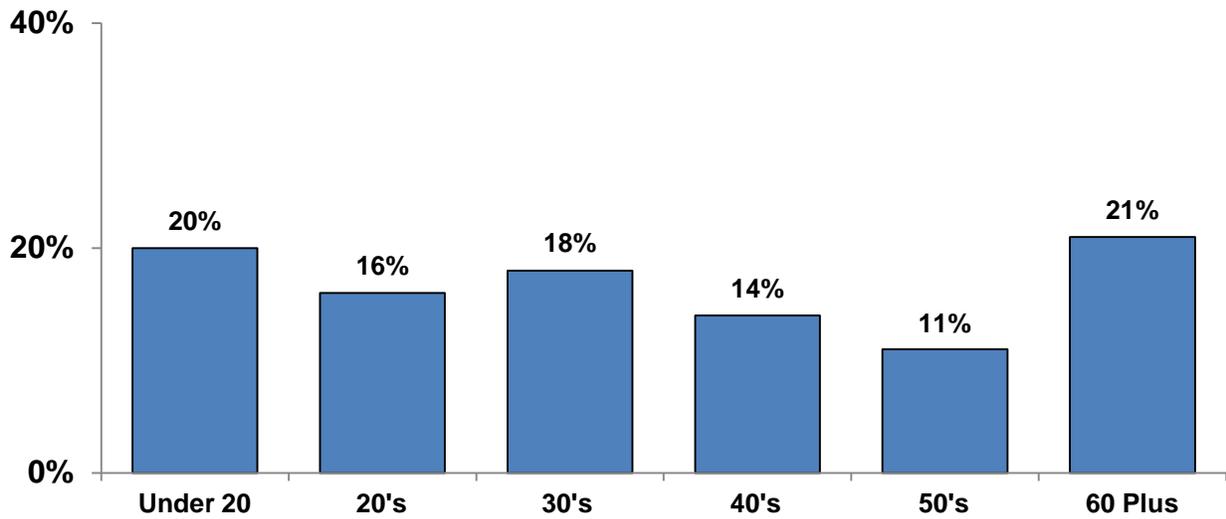
Figure 19: How Many Drivable Vehicles Are Available To Your Household?
n=57



At 35 percent, over a third of Petaluma transit riders do not have any drivable vehicles in their household indicating a relatively high level of transit dependency. Among the households that do have a vehicle available, over half have either one (28%) or two (23%) drivable vehicles. The remaining fourteen percent is equally split among riders who have either three or four operating vehicles available to their household at seven percent each. No riders indicate that they have five or more drivable vehicles available.

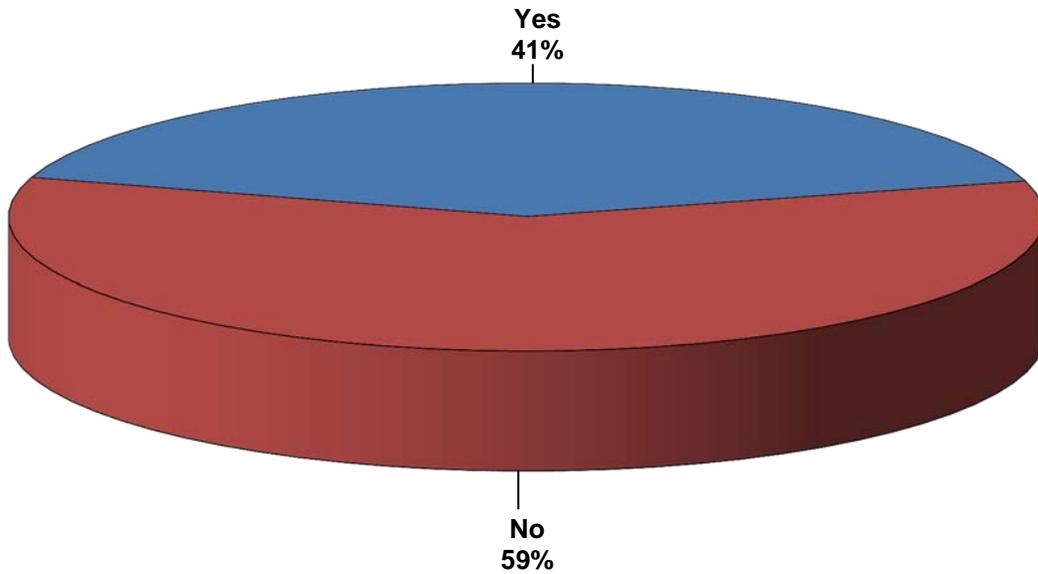
The availability of a vehicle in the household is positively correlated with total household income. Those with total household incomes below \$10,000 have a low vehicle availability of 11 percent, compared to 83 percent for those with incomes above \$50,000. It is negatively correlated to rider age with vehicle availability for the youngest riders (under 20) at a high of 82 percent and then declining to 16 percent for riders 60 years of age or older. Hispanic riders are more likely to have a vehicle in the household at 91 percent compared to 46 percent for Non-Hispanic riders.

Figure 20: What Is Your Age Category?
n=56



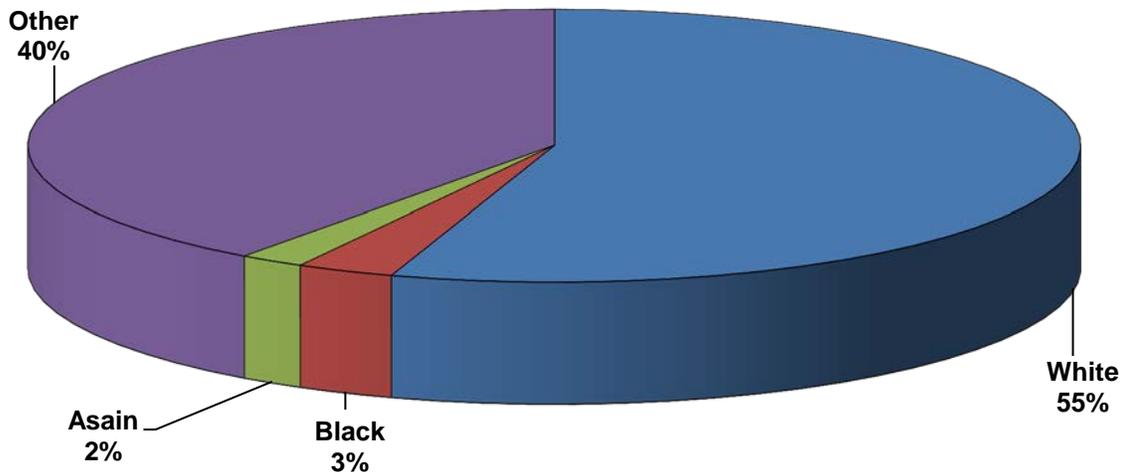
The age of riders is distributed relatively evenly across the different age categories with no group accounting for less than 10 percent or more than 25 percent. The two largest age groups of Petaluma Transit riders are seniors 60 or older at 21 percent, and at the other end of the spectrum, teens under 20 at 20 percent. The remainder breaks out to 16 percent in their 20's, 18 percent in their 30's, 14 percent in their 40's and 11 percent in their 50's.

Figure 21: Are You Hispanic, Latino or of Spanish Origin?
n=57



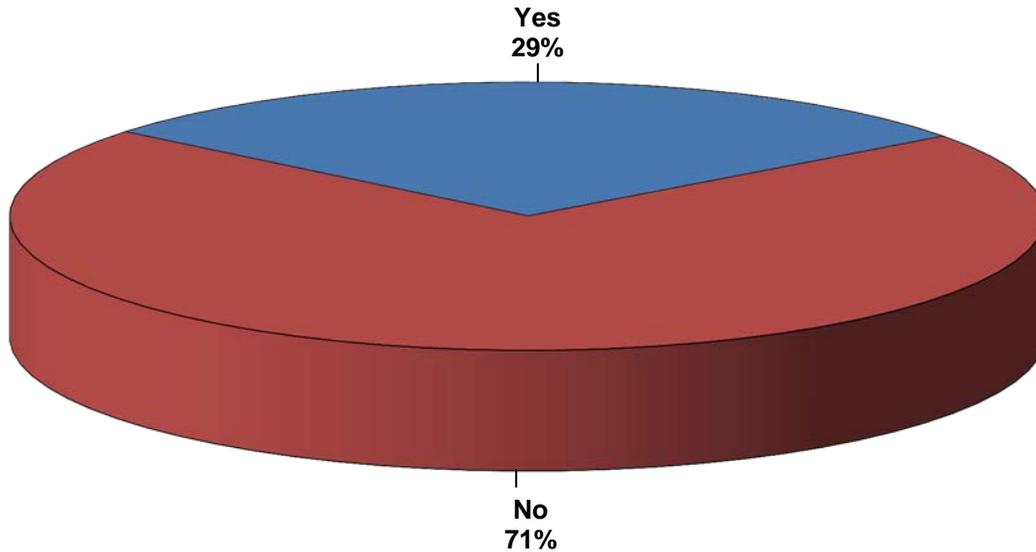
The proportion of surveyed riders that are Hispanic or Latino is greater than a third of all riders at 41 percent. Fifty-nine percent are not of Hispanic or Latino origin.

Figure 22: What Is Your Race?
n=58



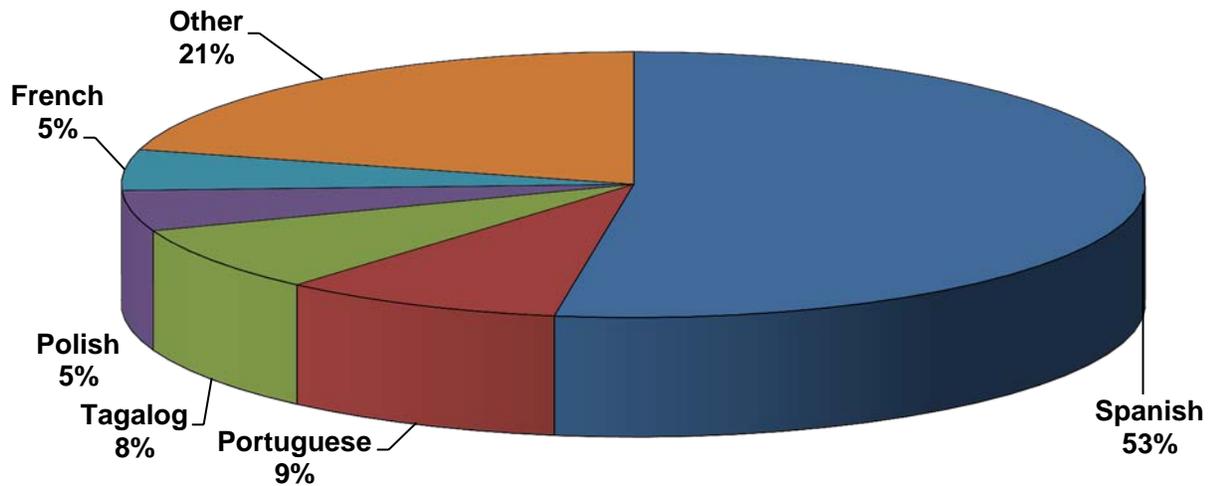
At 55 percent over half of Petaluma Transit riders identify their race as White, with only three percent saying Black and two percent Asian. A large proportion (40%) also identified themselves as “other”, the most common “other” response were Hispanic, Latino, and Mexican.

**Figure 23: Do You Speak a Language Other than English at Home?
(English Language Survey Respondents Only)
n=47**



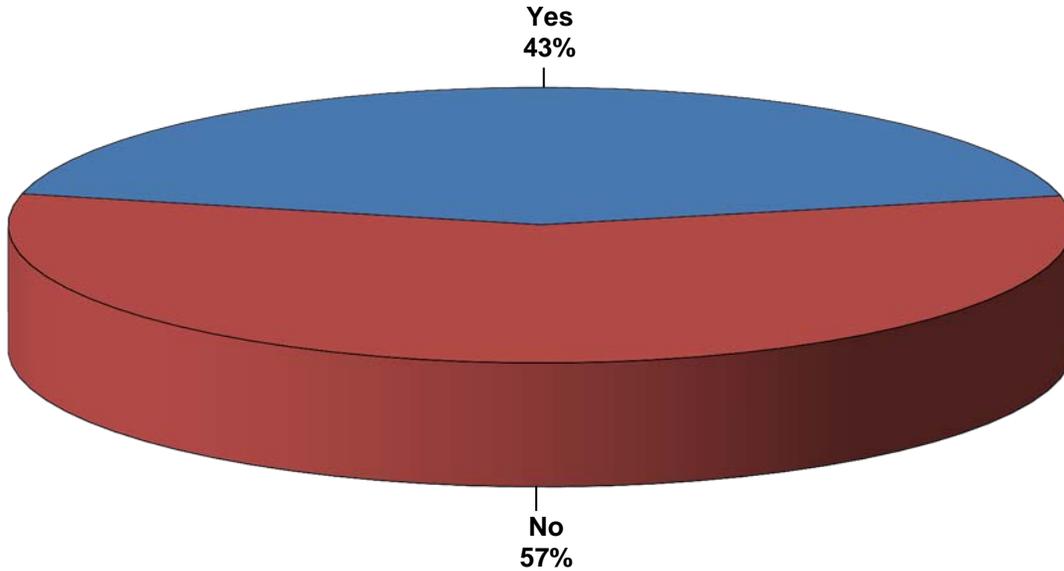
Of those riders who completed the survey in English, 29 percent speak a language other than English at home. Seventy percent of Hispanic riders speak a language other than English at home.

**Figure 24: What Language Do You Speak at Home?
(English Language Survey Respondents Only)
n=14**



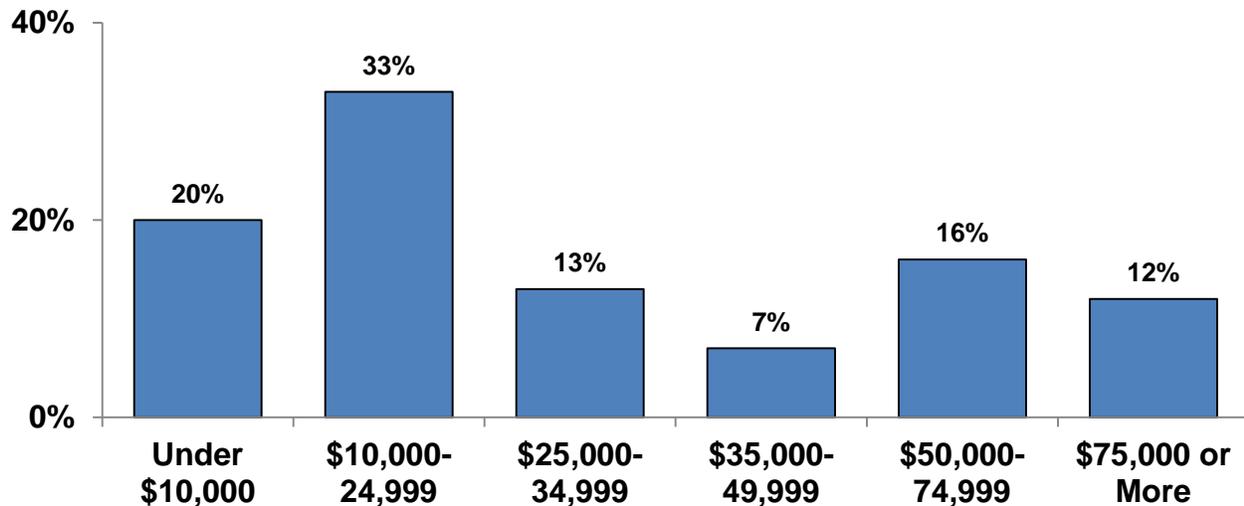
At 53 percent, Spanish is spoken by over half of riders who indicate that they speak a language other than English at home. The second highest language spoken at home is Portuguese at nine percent, followed by Tagalog at eight percent. Five percent of riders speak Polish, and another five percent speak French. In addition to English, 21 percent of riders speak a language not listed above. Other languages indicated by this 21 percent include Hindi, Fijian, and Italian.

**Figure 25: Do You Speak a Language Other Than Spanish at Home?
(Spanish Language Survey Respondents Only)
n=11**



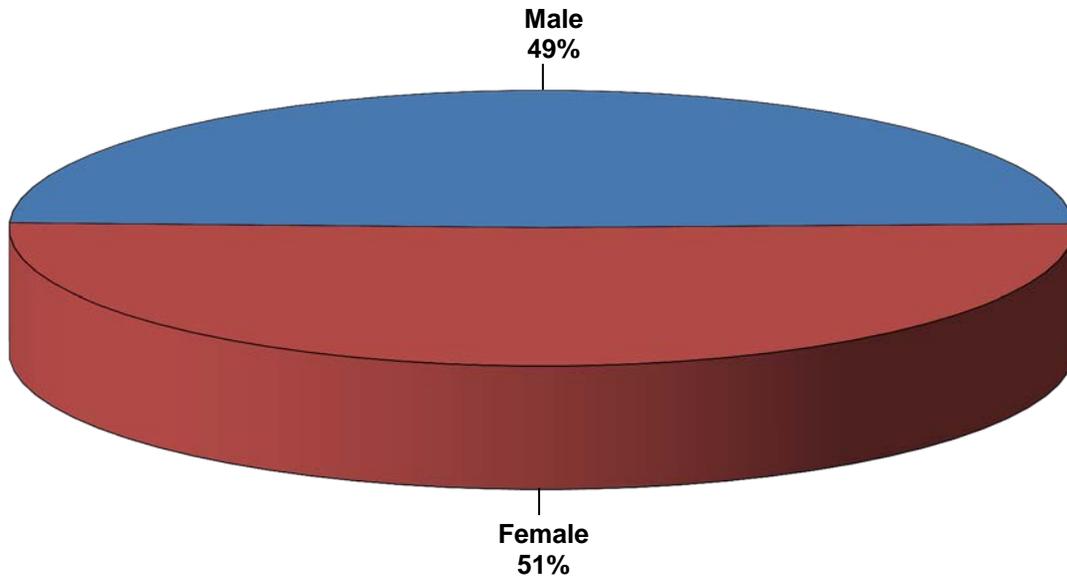
Forty-three percent of bus riders who completed the survey in Spanish speak a language other than Spanish at home. All of these riders indicated they speak English at home.

Figure 26: What is Your Total Household Income?
n=48



The most prevalent household income of riders is \$10,000 to \$24,999 at 33 percent followed by under \$10,000 at 20 percent. The total household incomes for riders were relatively evenly distributed among the remaining income groups. Total household incomes of \$25,000 to \$34,999 and \$35,000 to \$49,999 comprise 13 percent and seven percent of riders respectively. Sixteen percent of riders have a total household income of \$50,000 to \$74,999 and 12 percent of riders' households make \$75,000 or more. Just under two-thirds (64%) of riders' total household incomes are under \$35,000, while just over a third (36%) are over \$35,000.

Figure 27: Gender
n=58



The gender split between men and women is essentially equal with 51 percent female riders and 49 percent male riders.