SamTrans

2013 Passenger Study

Draft

Survey Findings Report

Conducted by:

Redhill Group

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samTrans

redhillgroup

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EXECUTIVE SUMMARY

METHODOLOGY

Under contract to the MTC, Redhill Group conducted a survey of SamTrans riders to provide accurate trip information to support planning initiatives. The survey included traditional demographics, languages spoken, fare media and selected attitudinal questions. The survey employs a 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 also 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 is to collect a representative sample of five percent of all boardings for riders 16 or older. The average number of boardings per one-way trip for SamTrans is 1.5. In addition, almost all riders do round-trips and some riders make multiple outbound trips from home. Given this the average number of boardings per unique rider is conservatively estimated at three per day. Accordingly the five percent boarding figure equates to 15 percent of all riders.

The sampling plan for weekday riders was established at 2,498 which is 5.7 percent of average daily weekday boardings. The actual number of weekday surveys completed was 2,651. Weekday survey quotas were established by line, by direction and daypart (Early AM 5:00 to 5:59AM; AM Peak 6:00 to 9:59 AM; Midday 10:00 AM to 2:59 PM; PM Peak 3:00 to 6:59 PM; and Night 7:00 - 9:00 PM). Where the individual combination of line, direction and daypart produced fewer than 100 boardings, cells were combined with the most logical contiguous daypart to produce a survey target of at least five respondents.

Field surveying was conducted between April 27th and June 6th, 2013. Follow-up telephone surveying was between May 2nd and June 27th 2013. Final results for the surveying process included a total of 2,651 weekday and 325 weekend phone surveys, and 6,802 weekday and 1,073 weekend field surveys.

An additional methodology change was implemented to provide more actionable reporting by combining 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

WEEKDAY

- The distribution of home-based trip purposes is diverse with work and business appointments accounting for 50 percent, and K-12 and college accounting for 16 percent. This is rounded out by 12 percent shopping, 10 percent social/recreational, five percent medical/dental, and four percent maintenance.

- The trip purpose distribution is in line with employment and school demographics. At 66 percent, two-thirds of riders indicate that they work (53% work only, and 13% work and attend school), and 30 percent indicate that they are students (17% students only and 13% both students and workers). Seventeen percent of riders are neither employed nor students.

- The vast majority of riders' (95%) access transit from home by walking while the remaining five percent either drive alone (1%), are dropped off (1%), carpool (1%), or bicycle (1%).[1] The average access walk time is 6.7 minutes and 63 percent walk five minutes or less. For the five percent of riders that do not walk to their first stop the average distance from home to their first transit stop is 4.2 miles.

- Riders' egress mode is essentially the same as access with walking at 96 percent. The remaining three percent is distributed between carpooling[2] (1%), being picked up (1%) and bicycling (1%). The average walk time from a rider's last transit stop to their destination is 5.8 minutes, slightly less than the access walk time, which likely reflects a slightly higher density at typical non-home trip destinations than in residential areas.

- For those that bicycle or use motorized transportation from their last transit stop to their destination the average distance traveled is 4.3 miles.

- Over half of SamTrans riders (58%) complete their one-way trip riding one bus. One third (33%) make one transfer and less than a tenth (9%) require two or more transfers[3].

- Cash (bills and coins), at 40 percent, is the most common form of fare payment, followed by a monthly pass on a Clipper Card (35%). Cash on a Clipper Card is used by 10 percent, and 15 percent use "Other" means of payment. "Other" fare payments include an aggregate of "Monthly Pass" (5%), "Token" (4%), "Day Pass" (2%), Pass/Free Ride (2%),and "Interagency" (1%).

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[1] Percentages do not add up to 100% due to rounding.

[2] The carpool category includes vanpools and non-public shuttles such as pick-up vans for medical facilities, employers or schools. Public shuttles are accounted for as a trip transfer.

[3] Note: this includes transfers to BART, MUNI, Caltrain,Santa Clara VTA, and other agencies reflecting riders' full transit trip. The average number of transfers within the SamTrans system will be slightly less.

- A majority of riders (74%) pay full adult fare. This is followed by youth fare (10%), senior fare (9%), and disability fare (6%).

- An overwhelming majority (94%) of weekday SamTrans riders would recommend SamTrans service to their friends and family. Only six percent would not recommend the service.

- Over half (54%) of weekday riders use “Printed Timetables.” The second most common means of information is through the SamTrans’ website (41%). “SamTrans Customer Service” accounts for 10 percent, and other individual schedule information access options are used by no more than five percent of ridership.

- Ten percent of all riders use either the 511 website, 511 phone system, or 511 mobile apps. Among this group 53 percent (5% of all riders) use the 511 real-time service to get the next bus arrival time.

- Over half of SamTrans trips are made by riders that are transit dependent as indicated by 62 percent of riders saying they do not have a driver’s license. Further, 28 percent have no drivable vehicles in their household.

- Over half (55%) of SamTrans riders speak a language other than English at home. The primary non-English languages spoken at home as a percentage of all riders are Spanish (29%, 12,791 boardings, 4,264 riders), Tagalog (14% 6,175 boardings, 2,058 riders), Cantonese Chinese (3%, 1,323 boardings 441 riders), Mandarin Chinese (2% 882 boardings, 294 riders), Hindi (1%, 441 boardings, 147 riders) and (French (1%, 441 boardings, 147 riders).

WEEKEND

Key differences in findings for weekend riders compared to weekday riders are as follows:

- Weekend riders are slightly more likely to be transit dependent than weekday riders as measured by having no drivable vehicles in the household (39% weekend vs. 28% weekday), and by having a driver’s license (36% weekend vs. 38% weekday).

- They are also less likely to be students (21% weekend vs. 30% weekday).

- Weekend riders are more likely to have a household income below $35,000 (66%) than weekday riders (57%).

- As might be expected, the trip purpose for weekend riders is much lower for work and school than for weekday riders (41% work and 1% school vs. 49% and 16% respectively), and higher for social/recreation (28% vs. 10%) and shopping (25% vs. 12%).

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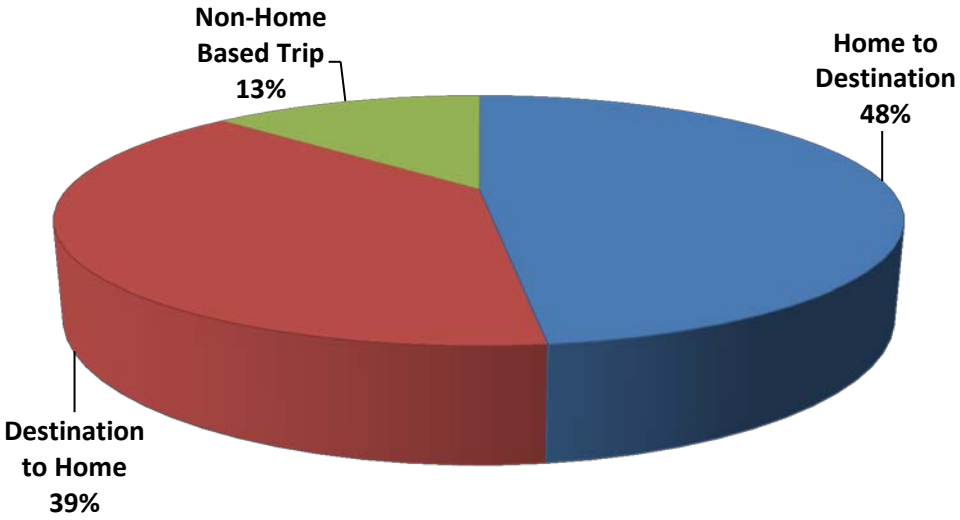
SAMTRANS WEEKDAY RIDERSHIP

WEEKDAY TRIP CHARACTERISTICS

SamTrans weekday riders were surveyed on 37 weekday routes, traveling in both route directions. A total of 2,651 Computer-assisted telephone interviewing (CATI) surveys were completed for riders on trips between 5:00 AM to 9:00 PM. Of all SamTrans riders' trips, 87% have origins or destinations that are their "Home," leaving a remainder of 13% of riders traveling between two non-home locations.

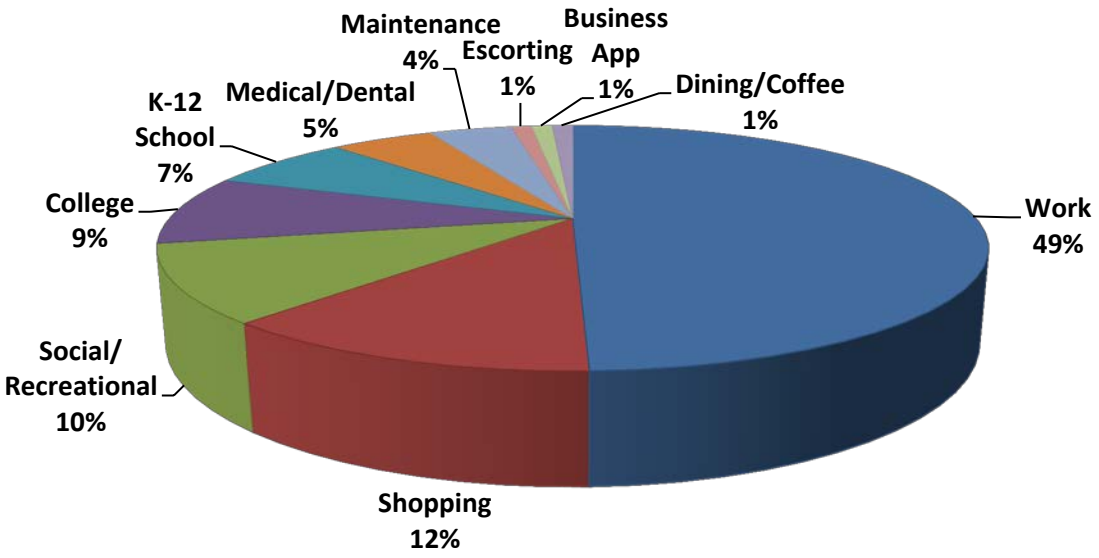
Figure 1: Is Home Your Origin or Destination?
n=2,651



In traditional onboard survey reporting, all origins are reported collectively regardless of the trip's direction or purpose. This results in the information about trip origins and public transit access being a combination of home, work, and other starting locations. This methodology does not produce a clear and meaningful representation of riders' trips from home to the first transit point, or of the final leg of the trip from the last alighting point to the ultimate destination.

To create a more meaningful representation of riders' public transit interaction, survey results are presented from a modified database of trips in relation to riders' homes. This approach creates a consistent picture of boarding accessibility from riders' ultimate origin, as well as the relationship between their last alighting point to their final destination to create a more meaningful and actionable picture of rider behavior.

Figure 2: What Is Your Home-Based Trip Purpose?
n=2,315



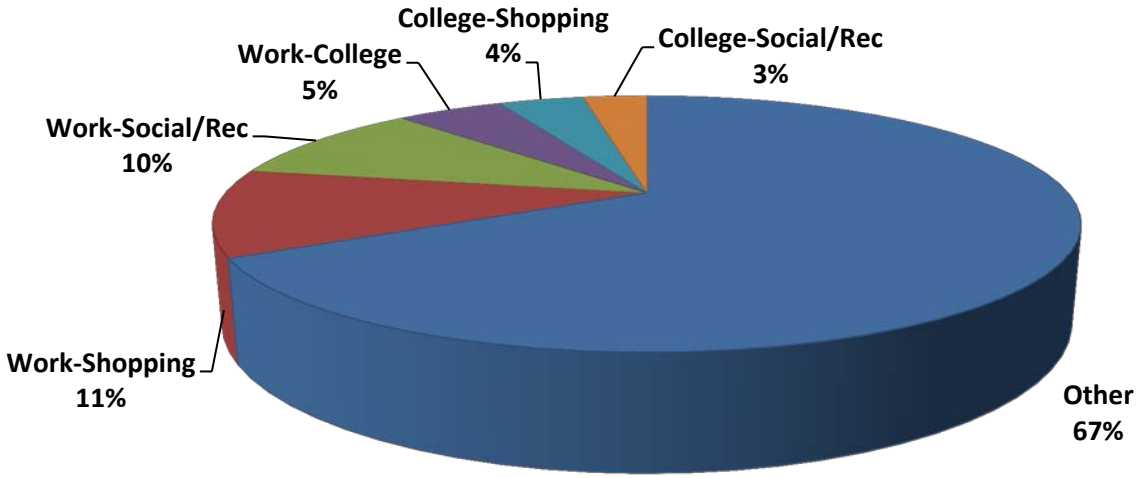
Weekday SamTrans riders' most common home-based trip purpose is work-related, which accounts for 50 percent of ridership. This is a combination of 49% traveling to "Work," and one percent ridership traveling to a "Business Appointment." This is consistent with the percentage of employed riders at 66 percent.

School based trips are the second most common trip purpose accounting for 16 percent of rider trips. "College/University" bound riders account for nine percent and "K-12" school destinations account for seven percent[3]. This is also in line with the 30 percent of weekday riders who identified themselves as students.

Although work and school account for the largest proportion of trips, SamTrans riders' trip purposes are highly diverse with non-work and non-school purposes accounting for one-third of all home-based trips. "Shopping" destinations account for 12 percent of trips, "Social/Recreational" trips represent 10 percent, and "Medical/Dental" trips account for five percent. "Maintenance" which covers items such as dry-cleaning, auto repair, etc. accounts for four percent of travel. "Escorting Others" (children, handicapped) and "Dining/Coffee" each comprise one percent of ridership.[4]

[4] Percentages do not add up to 100% due to rounding.

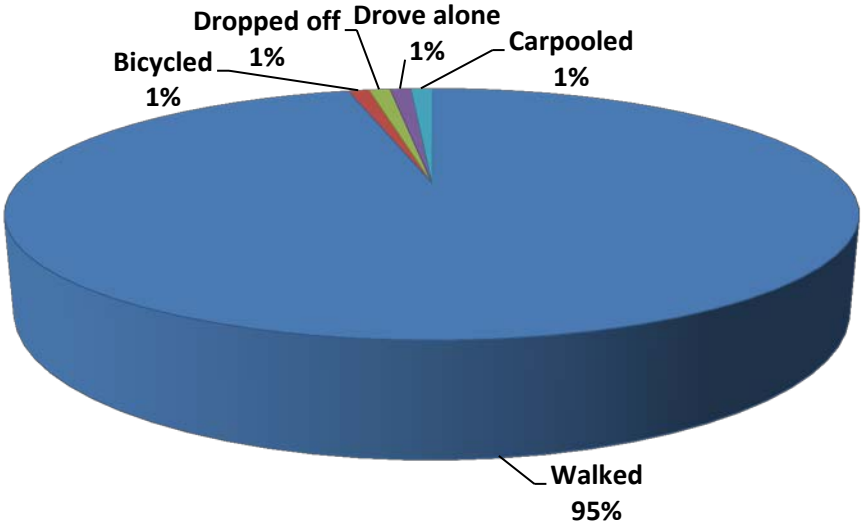
Figure 3: What Is Your Non-Home Based Trip Purpose?
n=336



Thirteen percent of weekday trips neither start nor end at home. Since there is no anchor to the trip such as home, there are numerous possible origin-destination combinations, most of which account for less than three percent of all responses. The five top categories that accounted for at least three percent of non-home based trips have work or college at one end of the trip.

The most common non-home based trips are riders with “Work” at one end of the trip and headed to or from “Shopping” (11%), “Social/Recreational” (10%), and “College” (5%). At a lower level, non-home based trips with “College” at one end of the trip more commonly go to or from “Shopping” (4%), and “Social/Recreational” (3%). All other permutations of non-home based trips which did not have a distinguished category are grouped into “Other”, and account for 67 percent.

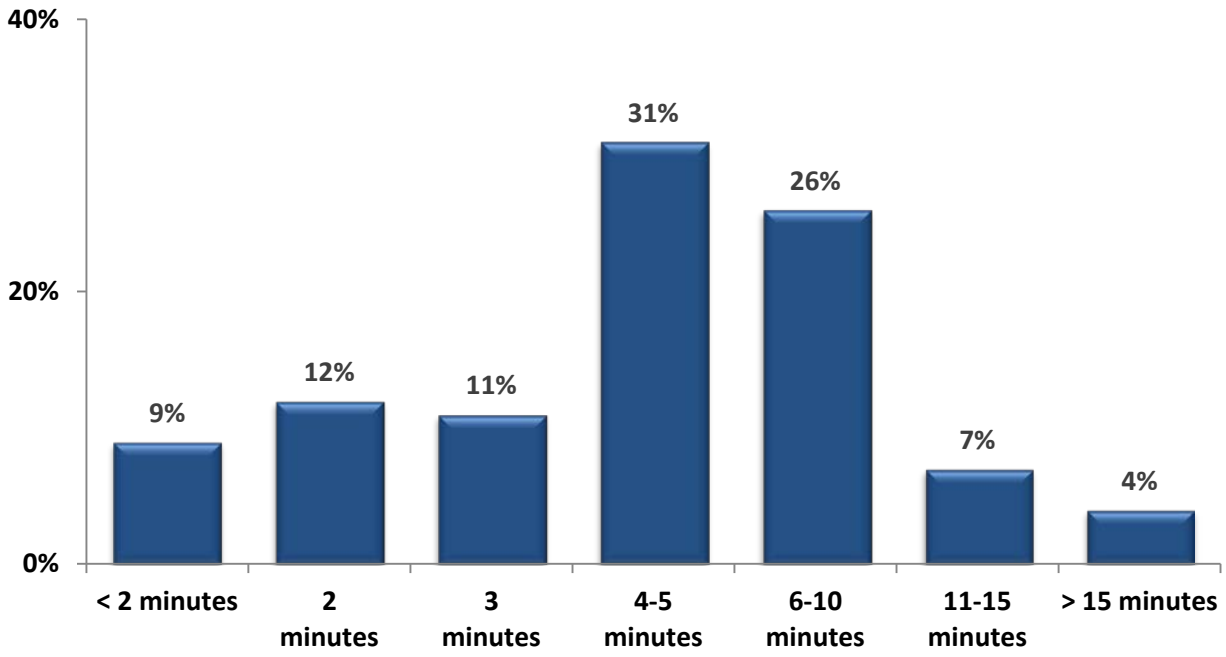
Figure 4: How Do You Get From Your Home to Your First Boarding Point? n=2,315



The vast majority of weekday riders (95%) "Walk" from their home to their first transit boarding point. Vehicular modes account for four percent of the trips with one percent each for "Bicycling," "Driving Alone," "Carpooling[5]," and being "Dropped Off." [6]

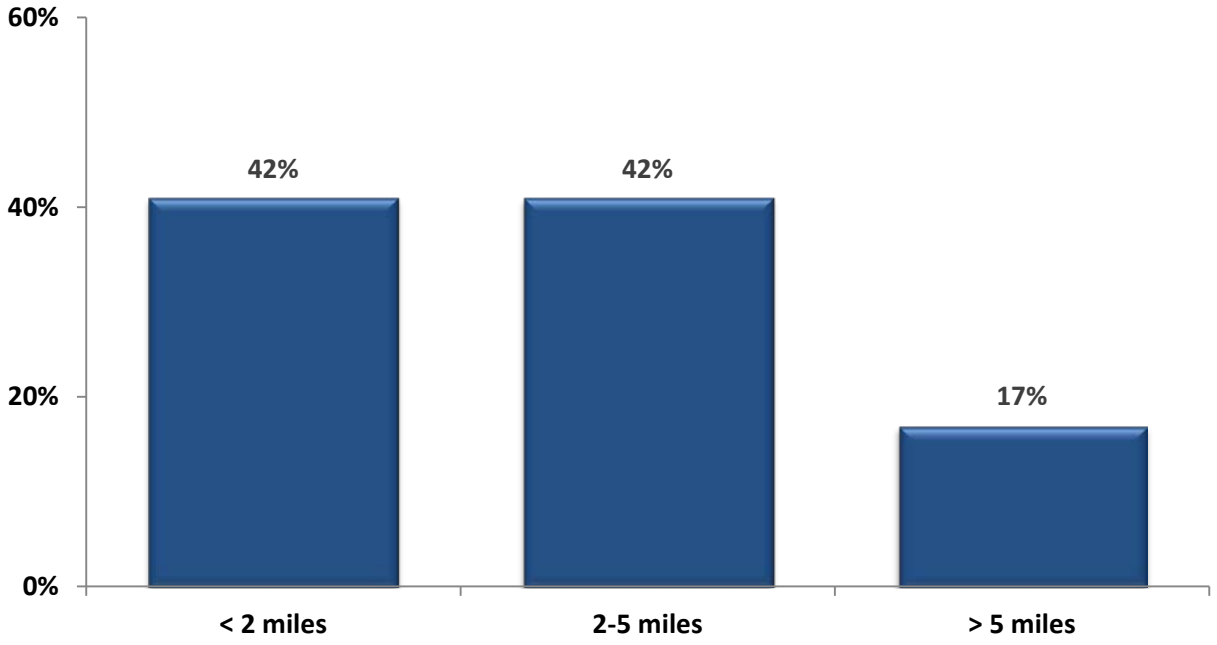
[5] The carpool category includes vanpools and non-public shuttles such as pick-up vans for medical facilities, employers or schools. Public shuttles are accounted for as a trip transfer.
[6] Percentages do not add up to 100% due to rounding.

Figure 5: How Many Minutes Is Your Walk From Home to Your First Boarding Point?
n=2,205



For the 95 percent of weekday trips made by riders who “Walk” from home to their first boarding point, 63 percent have a walk time of five or fewer minutes, and almost one-third (32%) have a walk time of three or fewer minutes. Approximately one-quarter (26%) walk between six and 10 minutes, and 11 percent walk in excess of 10 minutes to reach their first boarding point. The overall average walk time from home to the first boarding point is 6.7 minutes.

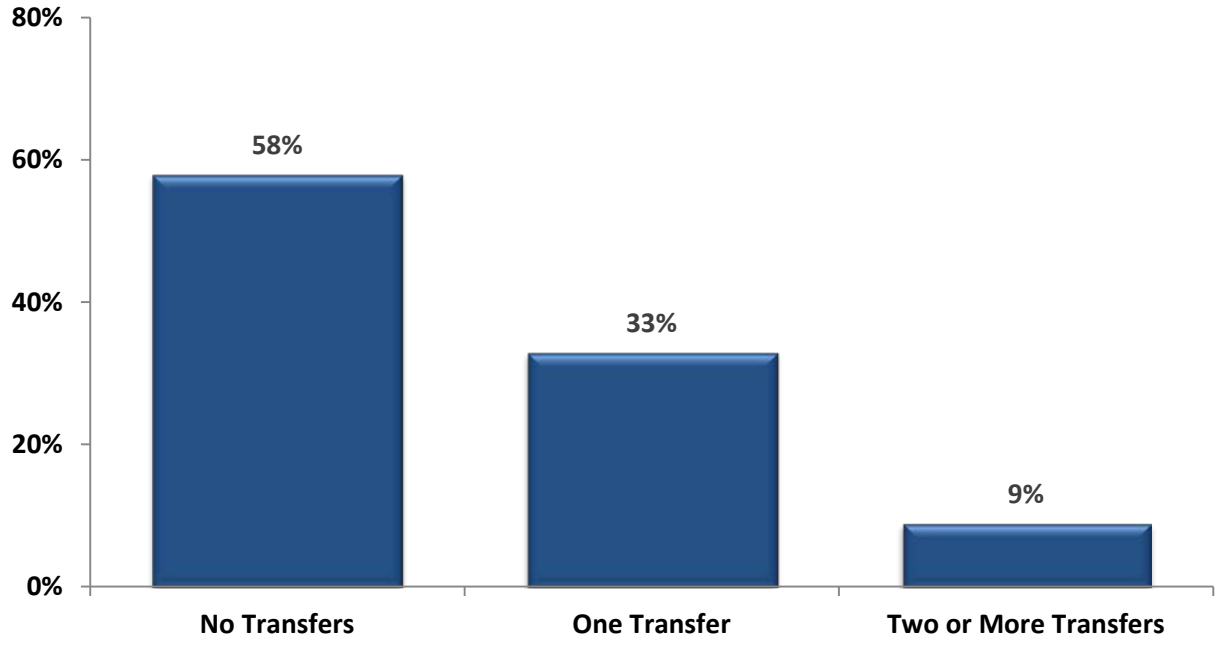
Figure 6: How Many Miles Is It From Your Home to Your First Boarding Point? (Non-Walkers Only) n=111



Among the four percent of weekday riders who access their first boarding by a mode other than walking, a vast majority travel less than five miles (84%). This is split evenly between riders traveling less than two miles (42%), and those traveling two to five miles (42%). Seventeen percent of non-walkers who reach their first boarding point travel over five miles.[7] The average distance traveled from home to the first boarding point is 4.2 miles.

[7] Percentages do not add up to 100% due to rounding.

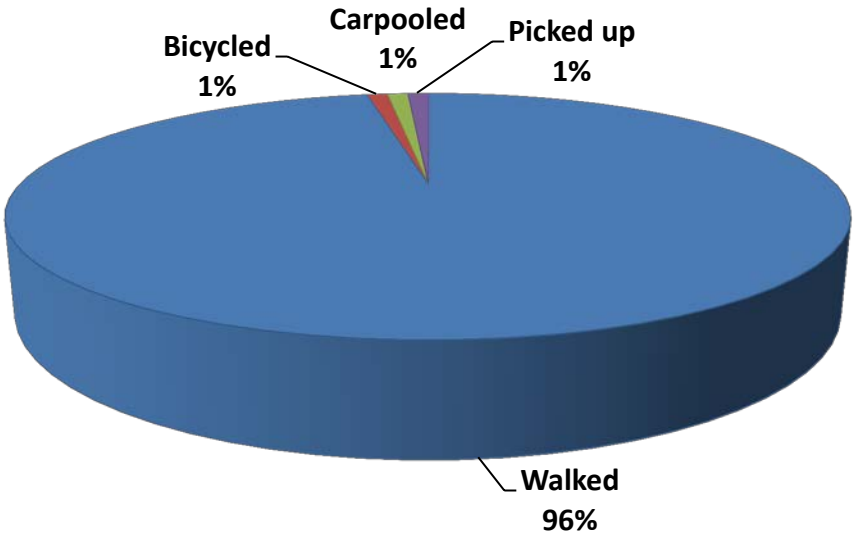
Figure 7: How Many Transfers Are Needed To Complete Your Trip? n=2,651



A majority of weekday SamTrans riders complete their trip with no transfers (58%). One third (33%) of riders make only one transfer to complete their trip and nine percent of riders use two or more transfers to reach their destination. The average number of transfers is 0.53 which equates to 1.53[8] trip segments. Transfers are approximately evenly split between "within system" transfers and "between system" transfers.

[8] It should be noted that all transfers including out of system transfers are counted in this statistic, so the average number of SamTrans buses used to complete a one-way trip will be lower.

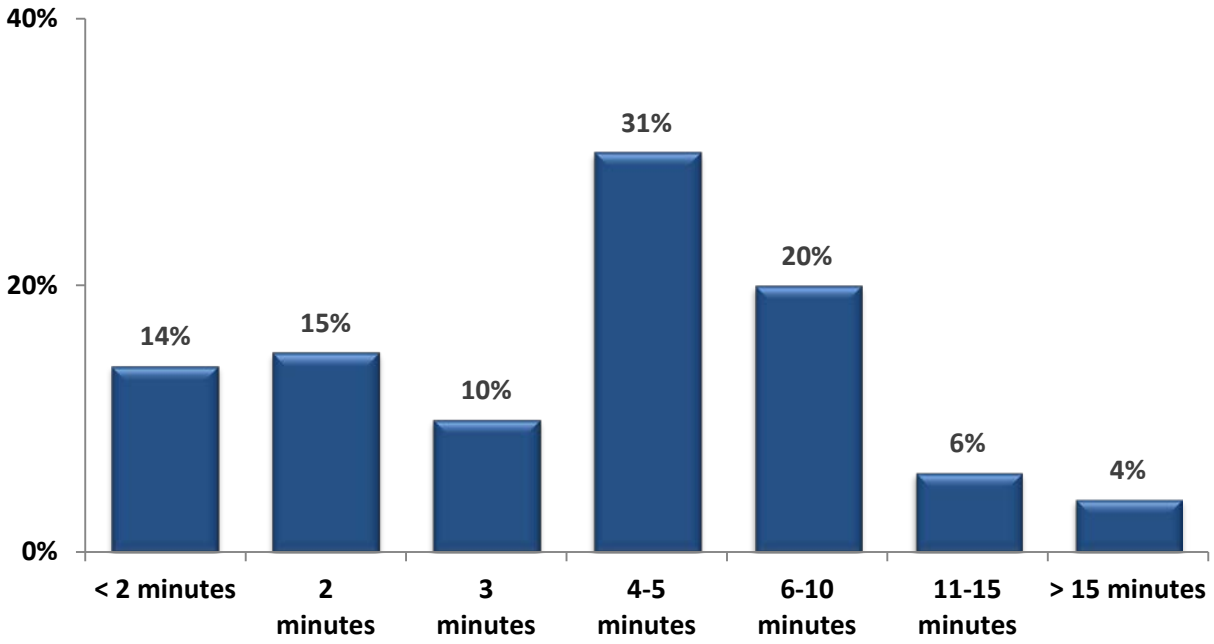
Figure 8: How Do You Get From Your Last Stop to Your Non-Home Destination?
n=2,315



Similar to the mode distribution from home to the first boarding point, almost all riders "Walk" (96%) from their last stop to their non-home destination. Riders using all other vehicular egress modes each account for one percent of ridership and include those who use "Bicycle," "Carpool[9]," and are "Picked Up."[10]

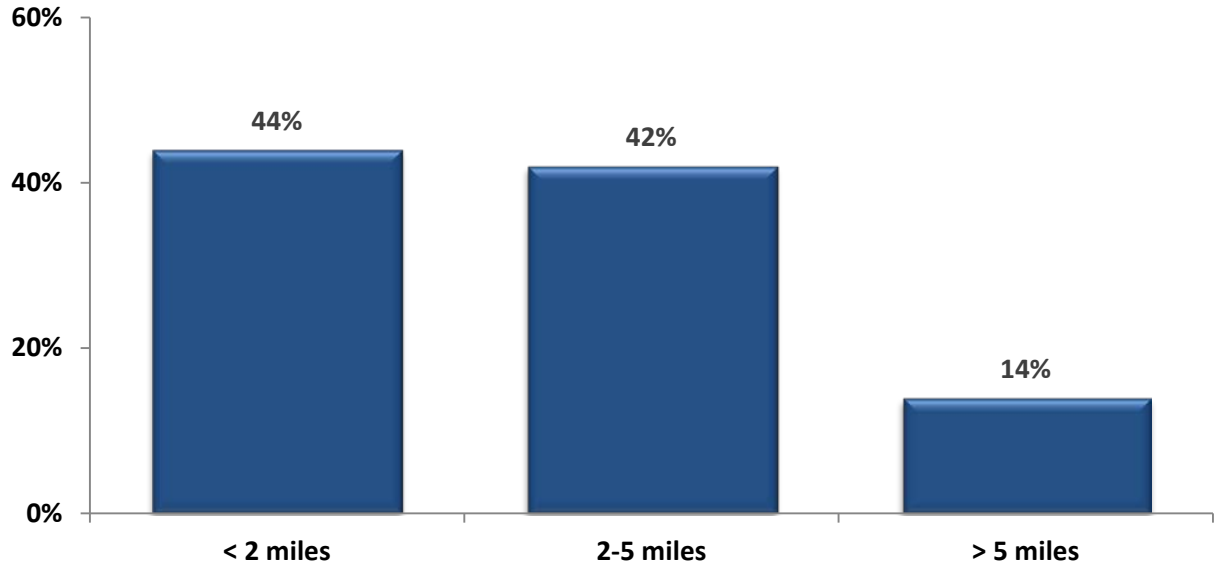
[9] The carpool category includes vanpools and non-public shuttles such as pick-up vans for medical facilities, employers or schools. Public shuttles are accounted for as a trip transfer.
[10] Percentages do not add up to 100% due to rounding.

Figure 9: How Many Minutes Is Your Walk from Your Last Stop to Your Non-Home Destination?
n=2,221



The 96 percent of riders who walk to their non-home destination from their last transit stop are most likely to have a walk time of four to five minutes (31%), or six to 10 minutes (20%). Thirty-nine percent of riders walk three minutes or less to reach their non-home destination. Twenty percent walk six to 10 minutes and 10 percent walk more than 10 minutes. The overall average walk time for riders reaching their destination from their last alighting point is 5.8 minutes. This is slightly less than the average 6.7 minutes from home to their first boarding point, likely reflecting a slightly higher density at typical non-home trip destinations than in residential areas.

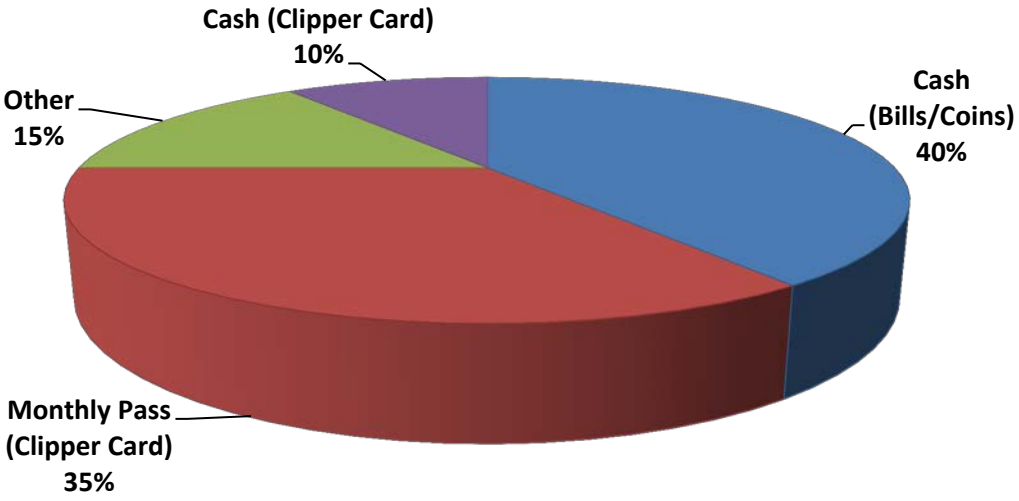
Figure 10: How Many Miles Is It From Your Last Stop to Your Non-Home Destination? (Non-Walkers) n=94



For the small percentage of riders that do not walk from their last alighting point, 44 percent travel less than two miles to reach their final destination. An additional 42 percent travel between two and five miles, and the remaining 14 percent travel more than five miles to reach their non-home destination. The average distance traveled by non-walkers to their non-home destination is 4.3 miles.

WEEKDAY FARE MEDIA

Figure 11: How Do You Pay For Your Bus Fare?
n=2,651



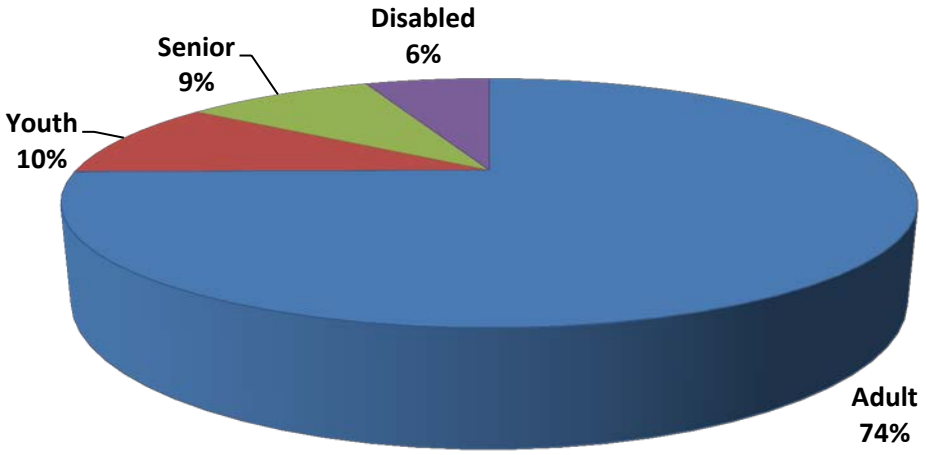
Weekday SamTrans riders most commonly pay their bus fare using Cash (Bills/Coins, 40%) or with a Monthly Pass (on a Clipper Card, 35%). Riders who put Cash on a Clipper Card account for 10 percent of ridership, while those using "Other" means of payment comprise 15 percent of ridership. "Other" fare payments include an aggregate of Monthly Pass (5%), Token (4%), Day Pass (2%), Pass/Free Ride (2%), and Interagency Transfers (1%).[11] At 45 percent, riders who use any form of the Clipper Card account for almost half of all payment types.

Riders that say they are Hispanic are more likely to pay cash (47%) than non-Hispanics (36%). This is consistent with survey language where 48 percent of respondents completing the survey in Spanish use cash compared to 39 percent for respondents completing the survey in English, Chinese or Tagalog.

Riders that only use one bus to make their trip are also more likely to pay in cash (45%) than those who make transfers (34%). And those who make transfers are more likely to use a Clipper Card for both cash and monthly passes (52%) than those that only take one bus (40%).

[11] Percentages do not add up to 15% due to rounding.

Figure 12: What Type of Fare Do You Pay?
n=2,651



Nearly three-quarters (74%) of SamTrans weekday riders pay a full "Adult" fare. Discounted fare types account for approximately one-quarter of riders and include those who pay a "Youth" (10%), "Senior" (9%), or "Disabled" (6%) fare type.[12]

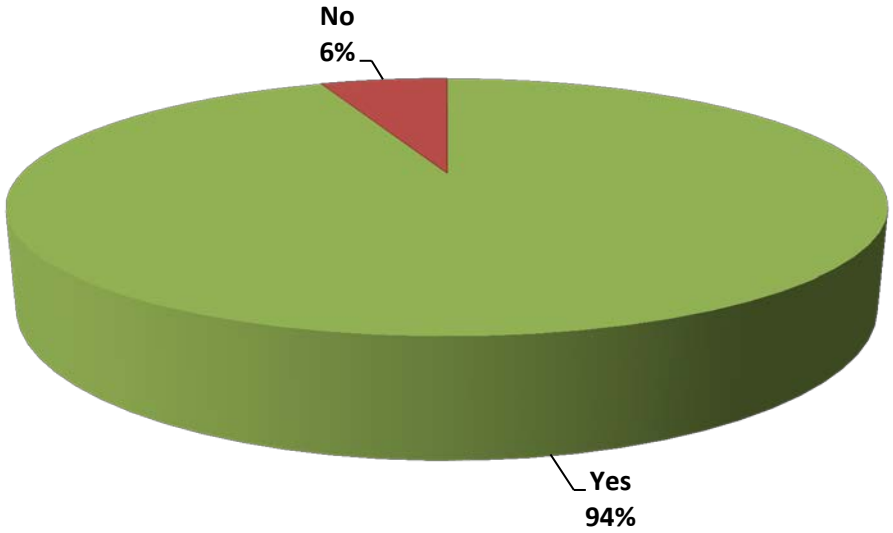
As would be expected, riders under 20 and 60 or older are the least likely to pay a full adult fare. For riders under 20, only 43 percent pay a full adult fare and the remaining 57 percent pay a youth fare. For riders 60 or older, only 34 percent pay an adult fare while 57 percent pay a senior fare and nine percent receive a disability discount. In a similar vein, students who tend to be under 20 are less likely than older riders to pay full adult fares (64%) and more likely to pay a youth fare (32%). Riders under 20 and 60 or older are also less likely to be employed. Hence riders that are employed are significantly more likely to pay a full adult fare at 86 percent compared to 49 percent for those that are unemployed.

Use of cash fares tends to rise moderately with income from 69 percent for those with income under $10,000 to 81 percent for those with an income of $75,000 or more. Conversely, the percentage for riders receiving a disability discount declines moderately with income starting at 12 percent in the lowest income category and declining steadily to one percent for those with an income of $75,000 or more.

Riders that identify themselves as Hispanic are slightly more likely to pay full adult fares at 78 percent compared to 71 percent for non-Hispanics. Those that speak Spanish at home are also more likely to pay adult fares at 79 percent, and 90 percent of respondents that completed the survey in Spanish paid an adult fare.

[12] Percentages do not add up to 100% due to rounding.

Figure 13: Would You Recommend SamTrans Service to Your Friends and Family?
n=2,651

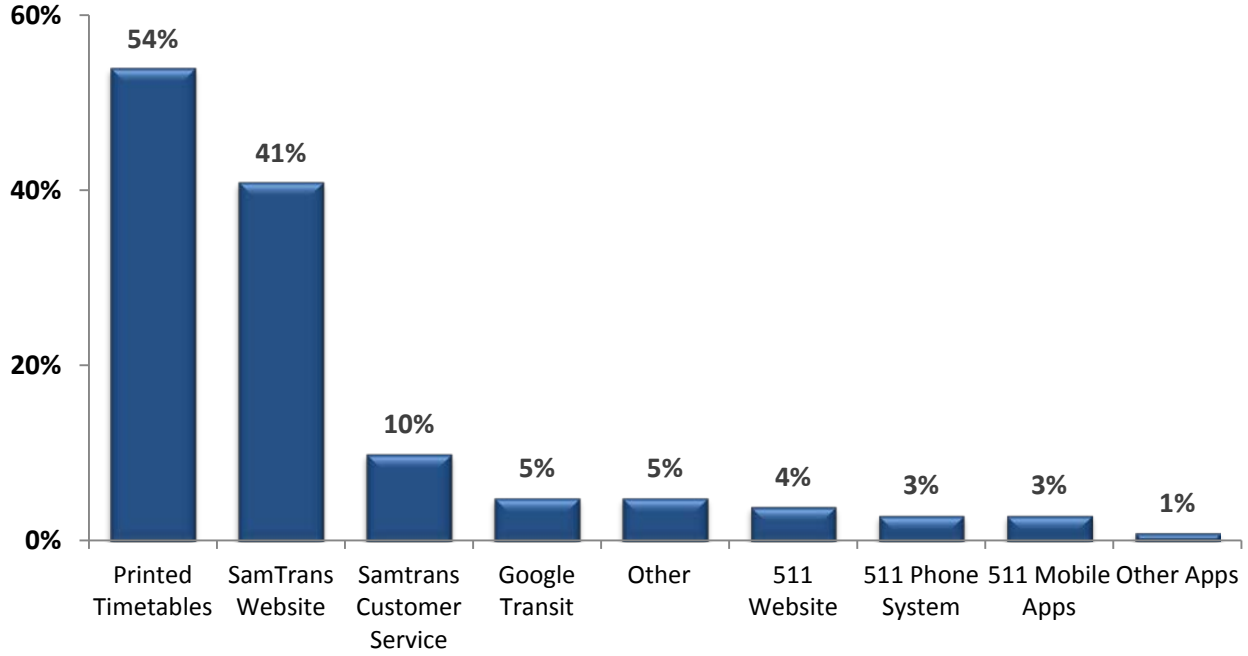


An overwhelming majority (94%) of weekday SamTrans riders would recommend SamTrans service to their friends and family. Only six percent would not recommend the service.

The willingness to recommend SamTrans is almost universal with similarly high scores for almost every demographic category. The only two modest exceptions are riders that have to make two or more transfers and riders that speak Mandarin or Cantonese. Ten percent of those who have to make at least two transfers are unwilling to recommend SamTrans compared to five percent for all other riders. Ten percent of those who speak Mandarin or Cantonese at home are also unwilling to recommend SamTrans, and this increases to 22 percent for those who completed the survey in Chinese.

WEEKDAY SAMTRANS INFORMATION SOURCES

Figure 14: When You Plan a Trip,
How Do You Normally Access SamTrans Schedule Information?
(Multiple Response)
n=2,651



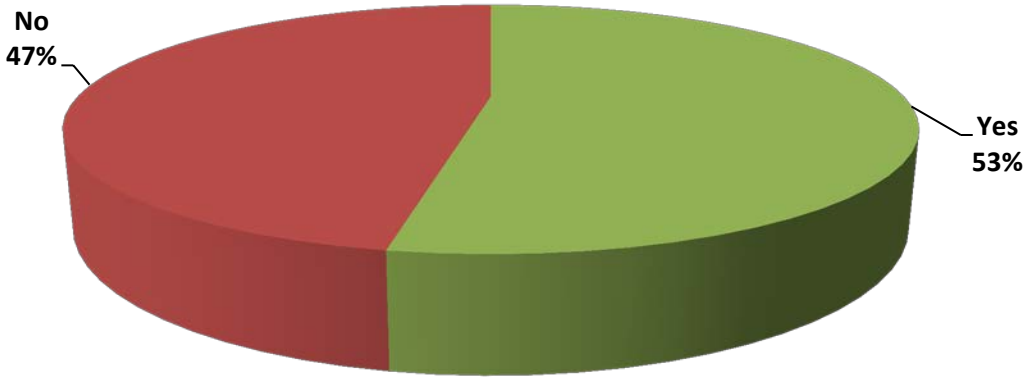
Among the diverse options to access SamTrans schedule information, printed timetables are the most popular at 54 percent. The second most common source of information is through the SamTrans website (41%). SamTrans Customer Service accounts for 10 percent, the combined 511 service of website, phone system, and mobile apps also accounts for 10 percent, and Google Transit accounts for five percent.

The use of printed timetables is directly related with rider age: starting at a minimum of 29 percent of riders under 20, increasing to 52 percent for riders in their 30's, 71 percent of riders in their 50's, and reaching a maximum of 79 percent for riders 60 and older.

In contrast with printed timetables, the use of the SamTrans website is inversely related with rider age starting at a maximum of 62 percent of riders under 20, and decreasing consistently with each age category to a minimum of 15 percent for riders 60 and older.

The use of the SamTrans website is also positively correlated to household income starting at a minimum of 26 percent for riders with household incomes of less than $10,000, increasing with each income category to a high of 62 percent for riders with a household income of $75,000 or more. SamTrans' Website is also highly preferred by riders who are students (60%), and whose trip purpose is college (69%).

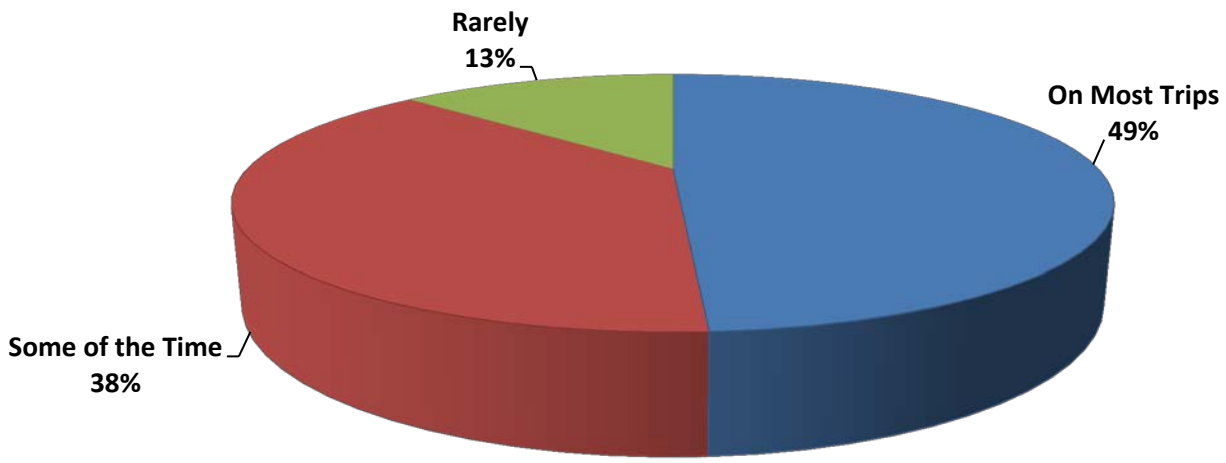
Figure 15: Do You Use 511 Real-Time Information to Get the Next Bus Time?
(Only Riders That Use Some Type of 511 Information)
n=257



A majority of riders (53%) who plan their trip using either the 511 website, 511 phone system, and/or 511 mobile apps use the 511 Real-Time service to get the next arriving bus time. Since 10 percent of all riders use some form of 511 information, the 53 percent of riders that use 511 Real-Time Information translates into five percent of all riders.

Use of real-time arrival information is correlated to the number of buses needed to make a trip, starting at 49 percent for those using only one bus, increasing to 55 percent for those requiring one transfer, and to 61 percent for riders requiring two or more transfers.

Figure 16: How Often Do You Use 511 Real-Time Information?
(Riders Who Use 511 Real-Time Information)
n=135



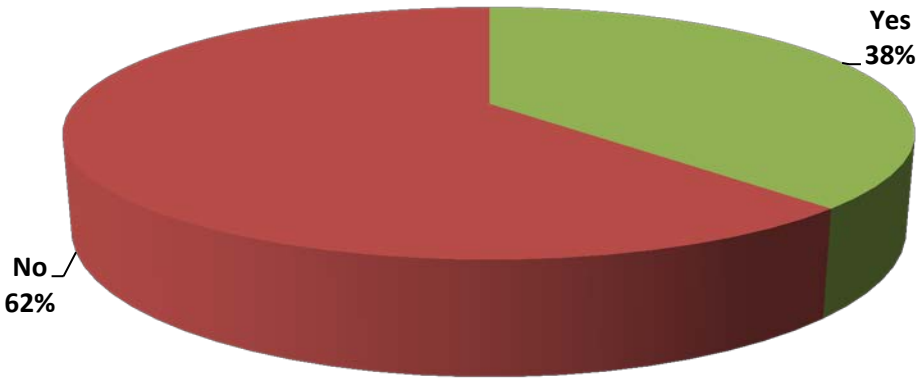
One-half of riders (49%) who use 511 Real-Time Information use it on most trips. Thirty-eight percent use it some of the time, and 13 percent use it rarely .

Similar to use of real-time bus arrival information, the frequency of use increases with the number of buses needed to complete a one-way trip.

Frequency of use is also correlated to age with 68 percent of those under 20 using it on most trips, this then declines with each age group to a low of 41 percent for those 60 and older. Related to this, students (61%) are more likely than non-students (40%) to use real-time information on most trips.

WEEKDAY TRANSPORTATION DEMOGRAPHICS

Figure 17: Do You Currently Have a Drivers' License?
n=2,651

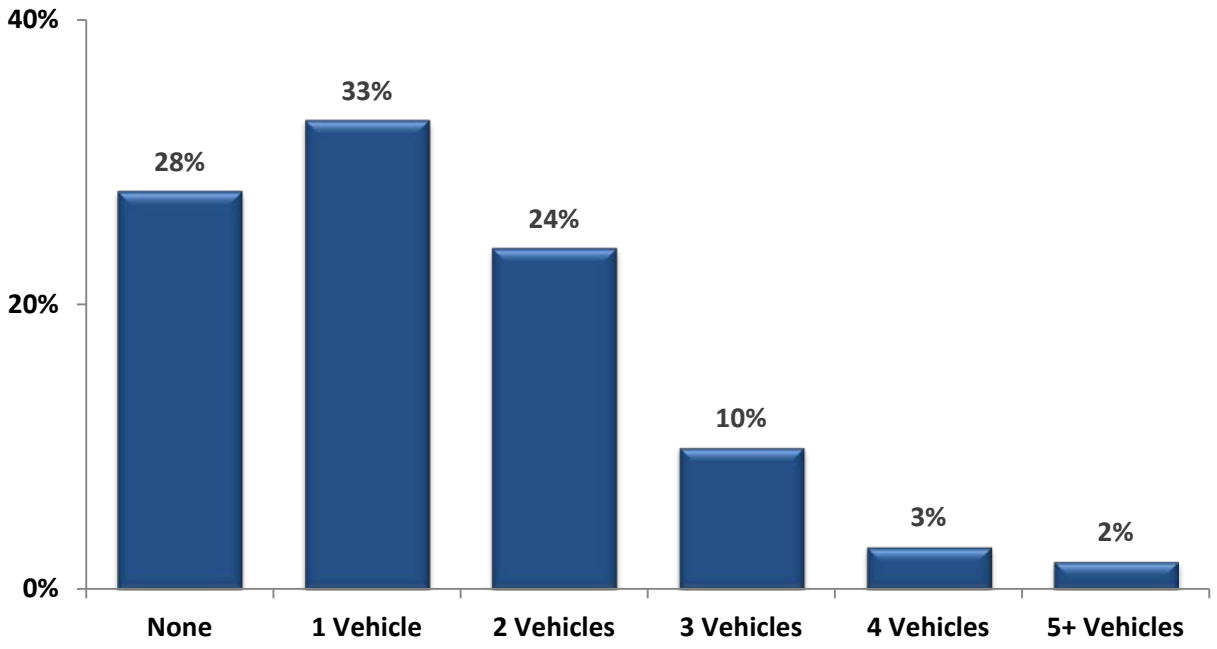


A majority of weekday SamTrans riders (62%) do not currently have a driver's license, and thus are transit dependent. Thirty-eight percent of riders currently have a driver's license. Men are slightly more likely to have a driver's license (41%) than women (35%), and as would be expected, riders under 20 years of age are least likely to have a license at 13 percent. Riders that are employed are also more likely to have a driver's license at 42 percent compared to 29 percent for those that unemployed.

Having a driver's license is positively correlated to income level starting at a low of 29 percent for riders with household income under $25,000 and increasing with each income category to 66 percent for those with household incomes of $75,000 or more.

Riders who identify themselves as Hispanic (24%) are less likely to have a drivers' license than non-Hispanics (46%). This differential increases for those who speak Spanish at home (22%), and for those who completed the survey in Spanish (9%).

Figure 18: How Many Drivable Vehicles Are Available To Your Household? n=2,636



At 72 percent, weekday riders are more likely to have a drivable vehicle available to their household than they are to have a driver's license. The largest proportion of riders (33%), have one drivable vehicle in their household. With each increase in the number of vehicles, the percentage of riders declines from the previous category (2 vehicles-24%, 3-10%, 4-3%, and 5 or more-2%).

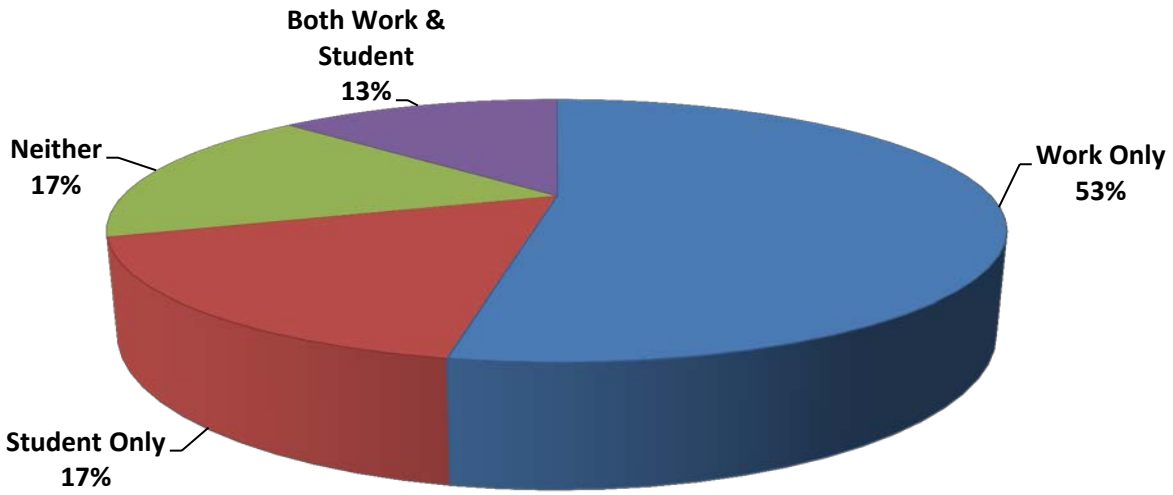
Vehicle availability increases with household income starting at a low of 53 percent for households with less than $10,000 income and increasing with each income category to 93 percent for households with an income of $75,000 or more. Student riders are more likely than non-student riders to have a drivable vehicle available to their household (84% vs. 68%, respectively).

Hispanic riders are more likely (75%) to have a drivable vehicle available to their household than riders that are Non-Hispanic (70%). This is in line with a higher average number of workers in Hispanic households.

The overall average number of drivable vehicles per household is 1.3

WEEKDAY RIDER DEMOGRAPHICS

Figure 19: Are You Currently Employed and/or a Student?
n=2,651



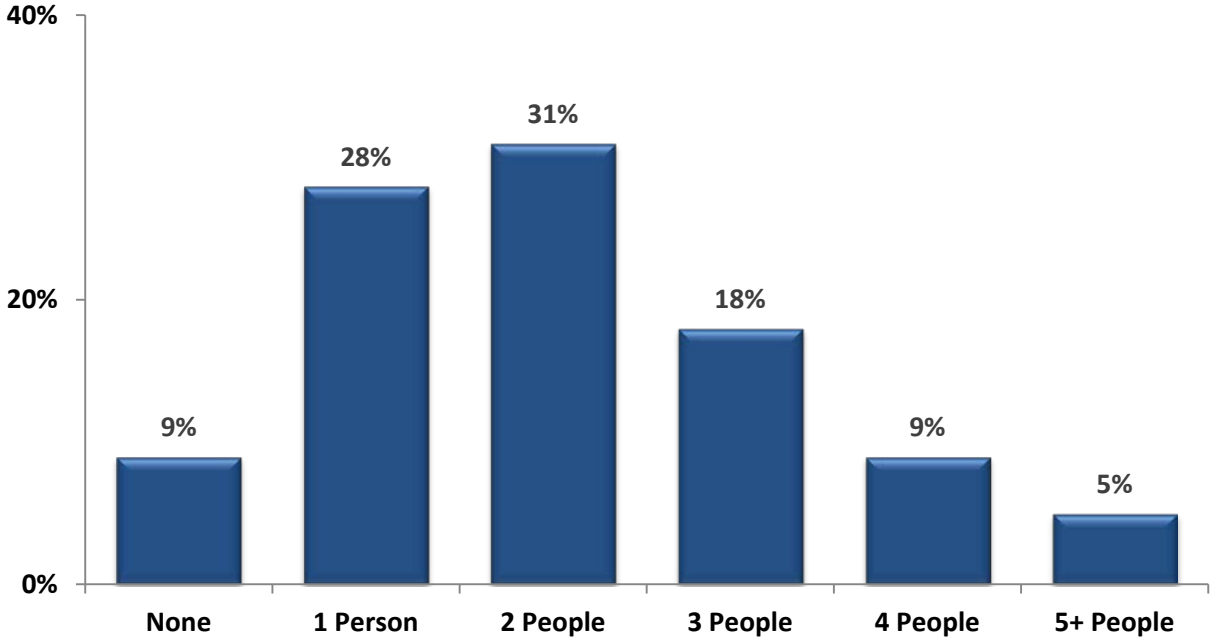
Eighty-three percent of SamTrans weekday riders are either employed, students, or both. Riders who only work comprise the largest proportion, accounting for 53 percent of ridership. Seventeen percent of SamTrans riders are students only, and 13 percent are both employed and a student. Seventeen percent of weekday riders are not employed and are not students.

As would be expected riders under 20 years old are by far most likely to be students only at 62%, and also most likely to be both student and work (29%). This drops to 17 percent and 25% respectively for riders in their 20's and then to single digits for all other age categories.

Also as expected, the percentage that only works increases with each income level category starting at 40 percent for those with less than $10,000 income and increasing consistently to 65 percent for those with an income of $75,000 or more. Conversely, the proportion of riders that neither work nor are students declines from a high of 33 percent for those with a household income of under $10,000 to a low of seven percent for those with incomes of $75,000 or more.

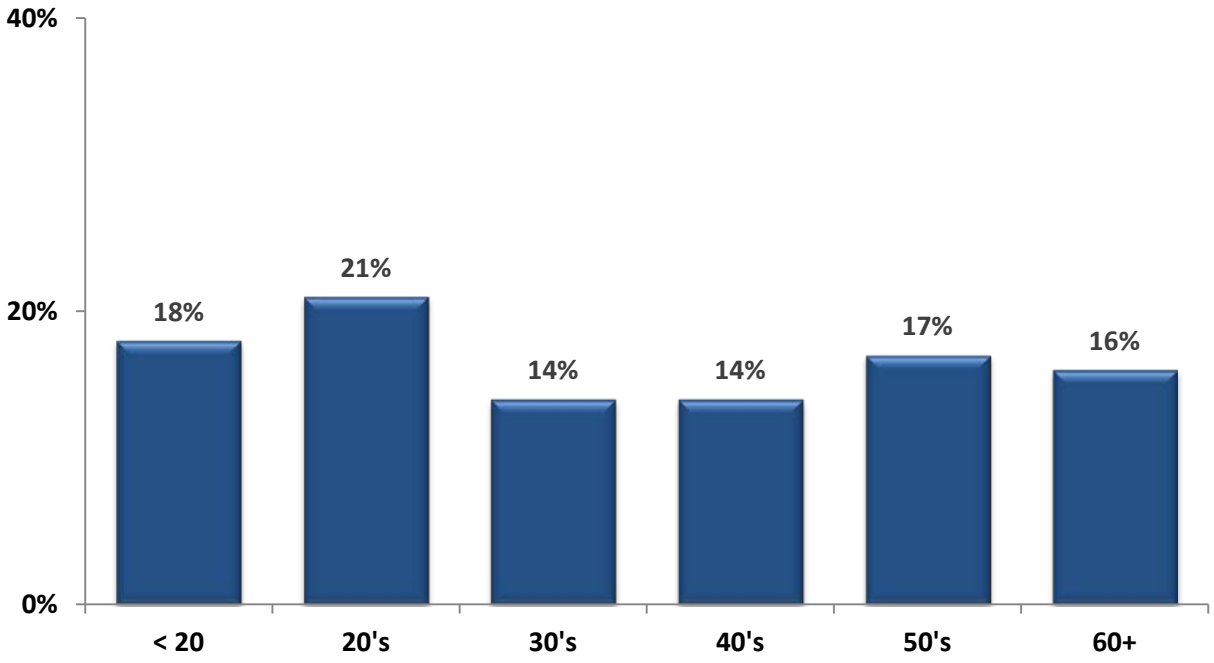
Finally, women (55%) are slightly more likely than men (51%) to only work.

Figure 20: How Many People Are Employed in Your Household?
n=2,631



The vast majority of riders have at least one person employed in their household (91%). Twenty-eight percent of weekday riders have one person in their household that works either full or part-time, 31 percent have two employed people in the household, and 18 percent have three employed people in the household. Fourteen percent of riders come from households with four or more workers and nine percent have no workers in the household. The average number of employed persons per household is 2.1.

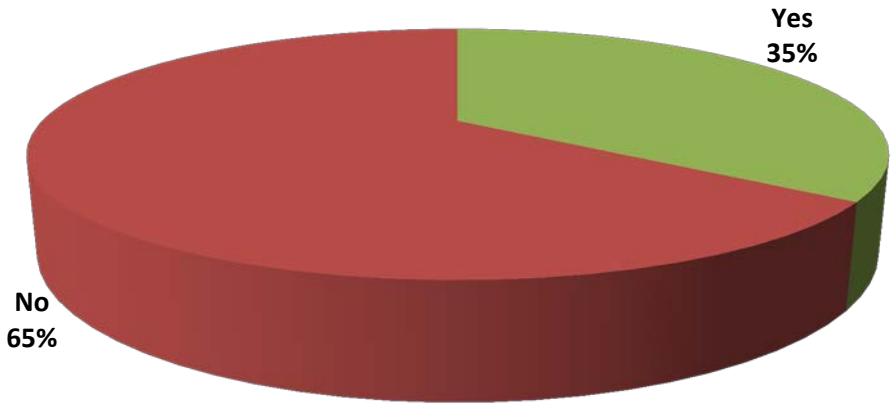
Figure 21: What Is Your Age Category?
n=2,570



The age distribution of SamTrans riders is relatively flat with each age category accounting for between 14 and 21 percent of all riders. Ridership is slightly higher for the young and old with 39 percent of riders being under 30, and 33 percent being 50 or older. The remaining 28 percent are in their 30's and 40's.

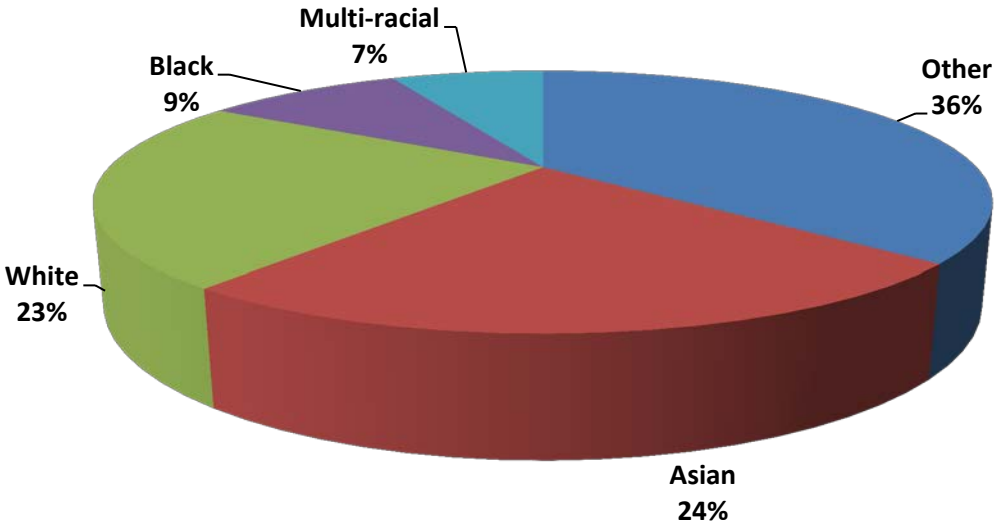
Hispanic riders tend to be younger than non-Hispanic riders. There are higher percentages of Hispanic riders for the age categories of under 20, in their 20's and in their 30's, and lower percentages of Hispanics for all age categories 50 or older.

Figure 22: Are You Hispanic, Latino or of Spanish Origin?
n=2,611



Thirty-five percent of riders self-identified as Hispanic, Latino/a, or of Spanish origin.

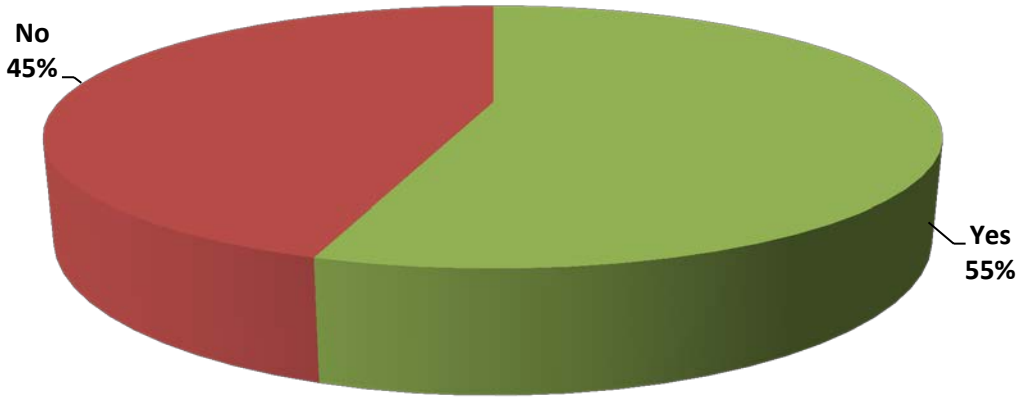
Figure 23: Which of the Following Do You Identify With?
n=2,594



Weekday SamTrans riders were asked to select the United States Census race category with which they identify. The largest proportion of SamTrans riders who selected a discrete listed category indicate they are Asian (24%), which is proportionally followed by riders who identify as White (23%) and Black (9%). Seven percent of riders identify as more than one race. Over one-third (36%) of riders select “Other."[13] Most of this group identify as “Hispanic,” “Latino/a” or “Mexican.”

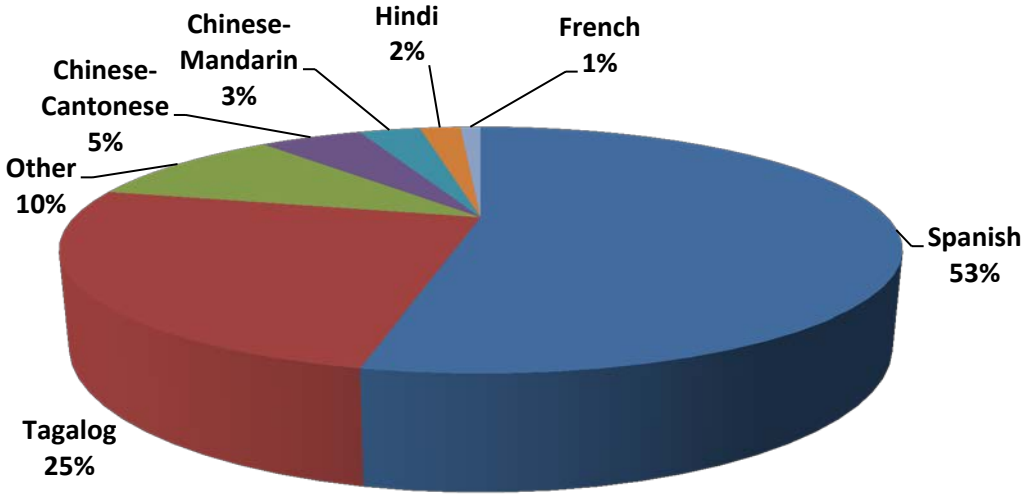
[13] Percentages do not add up to 100% due to rounding.

Figure 24: Do You Speak a Language Other Than English at Home? n=2,651



Roughly half (55%) of SamTrans riders speak another language other than English at home. Eighty percent of riders who identify as Hispanic speak a language other than English at home. Riders who identify as Asian and “Other” also are highly likely to speak another language at home (80% and 82%, respectively).

Figure 25: What Language Other Than English Do You Speak at Home? (Only Respondents Who Speak a Language Other Than English at Home) n=1,468



Spanish is spoken by the majority (53%) of riders who speak a language other than English at home. The second most common discrete language spoken at home is Tagalog (25%), followed by Cantonese Chinese (5%), Mandarin Chinese (3%), Hindi (2%) and French (1%). There are also 10 percent of riders that speak other languages not listed above.[14] The most common "Other" responses include Vietnamese, Russian, Arabic, German, and Japanese.

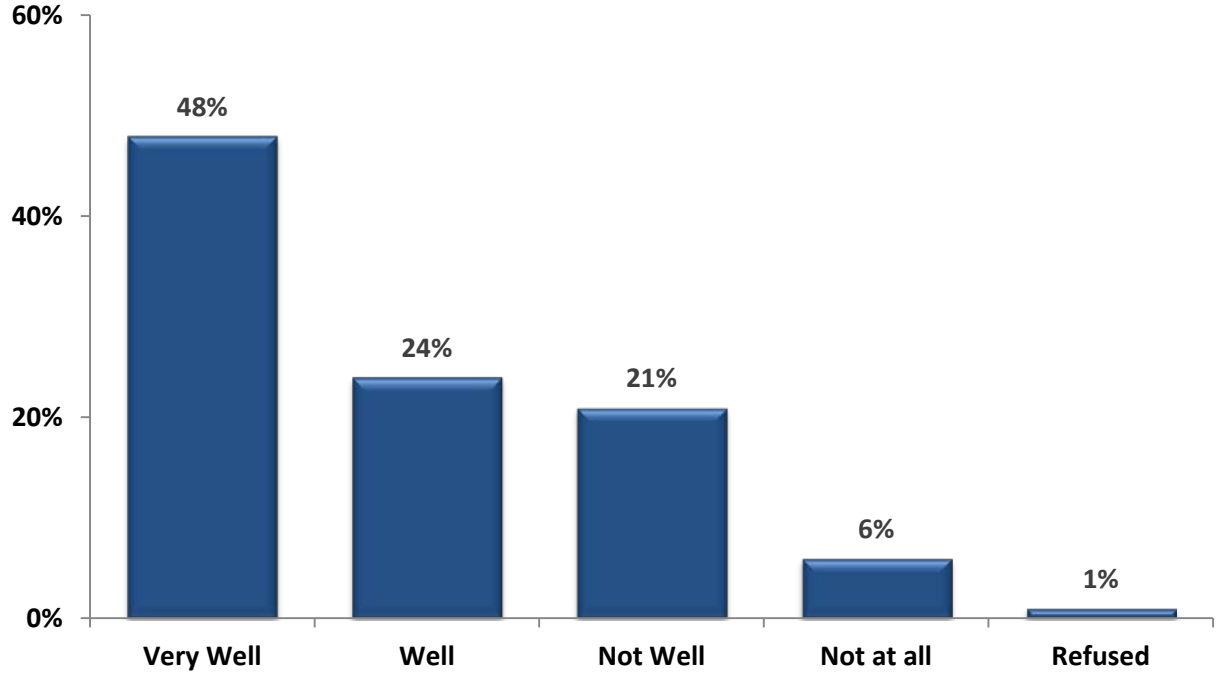
Figure 25 shows the languages spoken at home if something other than English is spoken at home. It is useful to convert these language percentages to the percentage of all boardings that speak another language at home. It is important to note that almost all riders make round trips from home to some location and then returning. The average number of vehicles used in a one-way trip is also 1.5 vehicles. Given a relatively high level of transit dependency based on the ridership majority (62%) with no drivers' license, it is likely that many riders make more than one round-trip per day, going out more than once a day for shopping, recreation, etc. A best conservative estimate of the number of boardings per day for the average rider is 3.0 (1.5 vehicles per one-way trip times two for round-trips). This means that the actual number of unique riders is approximately one-third of total boardings.

Accordingly, we will present the results three ways, as a percentage of all boardings, the actual number of boardings, and the number of unique riders, estimated by dividing the number of boardings by 3.0. The percentages, boardings, and estimated unique riders that speak languages other than English at home are: Spanish (29%, 12,791 boardings, 4,264

[14] Percentages do not add up to 100% due to rounding.

riders), Tagalog (14% 6,175 boardings, 2,058 riders), Cantonese Chinese (3%, 1,323 boardings 441 riders), Mandarin Chinese (2% 882 boardings, 294 riders), Hindi (1%, 441 boardings, 147 riders), and (French (1%, 441 boardings, 147 riders).

Figure 26: How Well Would You Say You Speak English?
(Riders That Speak a Language Other Than English at Home)
n=1,468

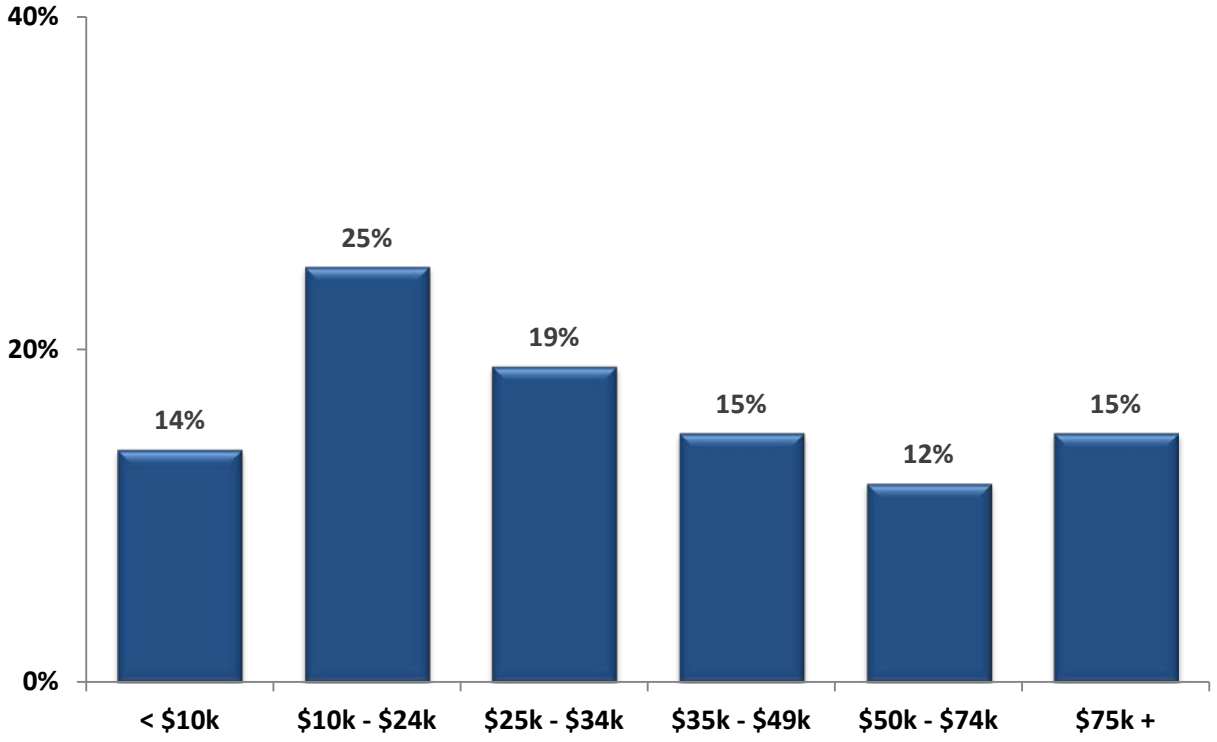


Of the SamTrans riders who speak a language other than English at home, 48 percent indicate that they speak English "Very Well," 24 percent indicate that they speak it "Well," and only 21 percent indicate that they speak it "Not Well," or they do not speak English at all (6%).

Forty-six percent of the riders who speak Spanish at home indicate that they speak English "Very Well." This percentage is similar for those who speak Cantonese at home (43%), and those who speak Tagalog at home (44%).

Those who speak Mandarin Chinese at home are less likely to speak English "Very Well" (27%), but those who speak languages other than Spanish, Chinese, and Tagalog are more likely to speak English "Very Well" (66%).

Figure 27: What is Your Total Household Income?
n=2,138

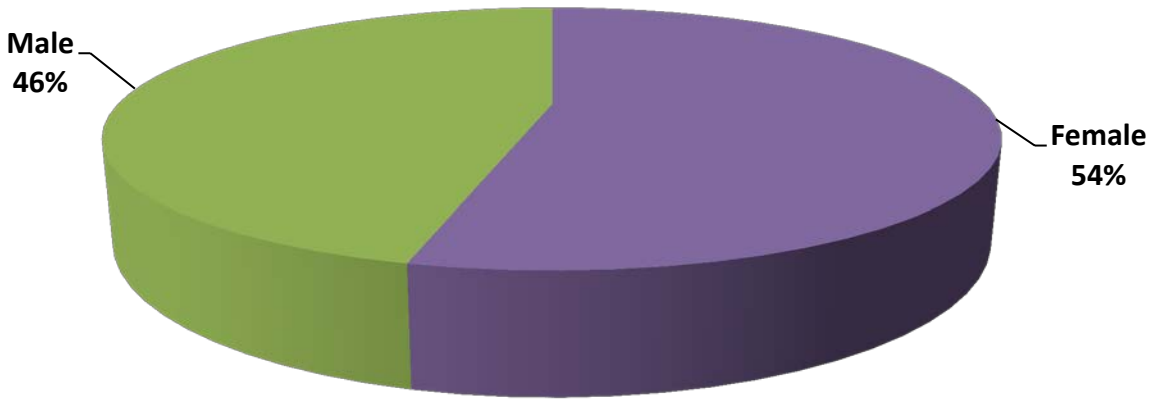


Household incomes of weekday riders making under $35,000 account for 57 percent of ridership, while those making $35,000 and over are 43 percent of ridership.[15] This breaks down into 14 percent under $10,000, 25 percent $10,000 to $24,999, 19 percent $25,000 to $34,999, 15 percent $35,000 to $49,999, 12 percent $50,000 to $74,999, and 15 percent for those at $75,000 or higher.

The proportion of riders with incomes below $35,000 is higher for Hispanics (69%), African Americans (63%), and anyone who completed the survey in a language other than English (84%). The proportion of riders with incomes under $35,000 is also higher for riders without a driver's license (67%) than those with a license (44%) and for those who are unemployed (65%) than employed riders (54%).

[15] Percentages under and over $35,000 are slightly different than the sum of the individual categories due to rounding.

Figure 28: Gender
n=2,651



SamTrans weekday ridership has a slightly higher proportion of female riders (54%) than male riders (46%).

SAMTRANS WEEKEND RIDERSHIP

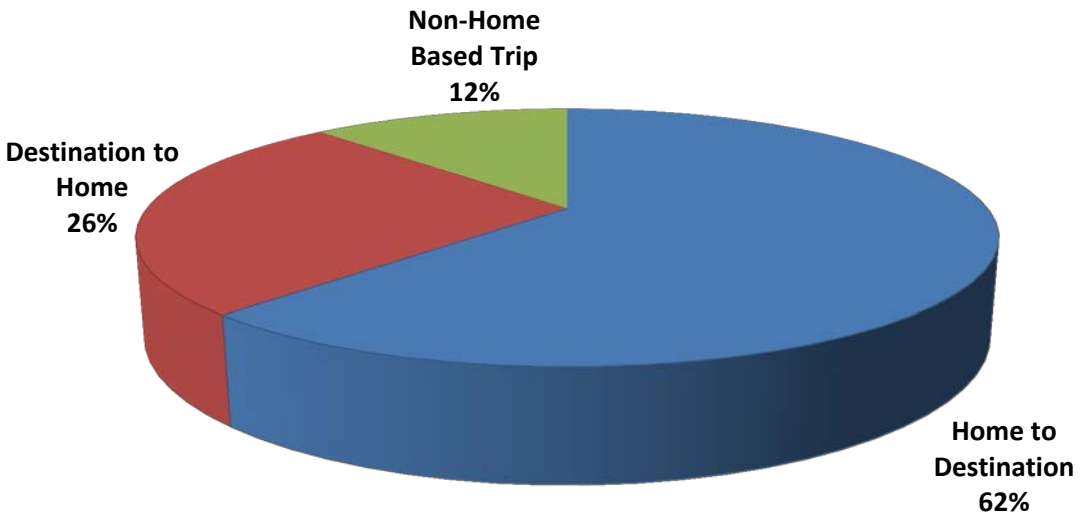
SamTrans riders were surveyed on 13 of 23 weekend routes. These routes were selected to be most representative of overall SamTrans weekend ridership based on high ridership levels and distribution across SamTrans' full service area. The 13 surveyed routes account for 93 percent of total weekend boardings.

A total of 325 surveys were completed for riders traveling between the hours of 6:00 AM and 7:00 PM, exceeding the target of 300. Because the total targeted sample size for completed weekend surveys was 300, there were no directional or daypart quotas. However, the surveys were distributed closely in proportion to the distribution of Saturday and Sunday boardings.

WEEKEND TRIP CHARACTERISTICS

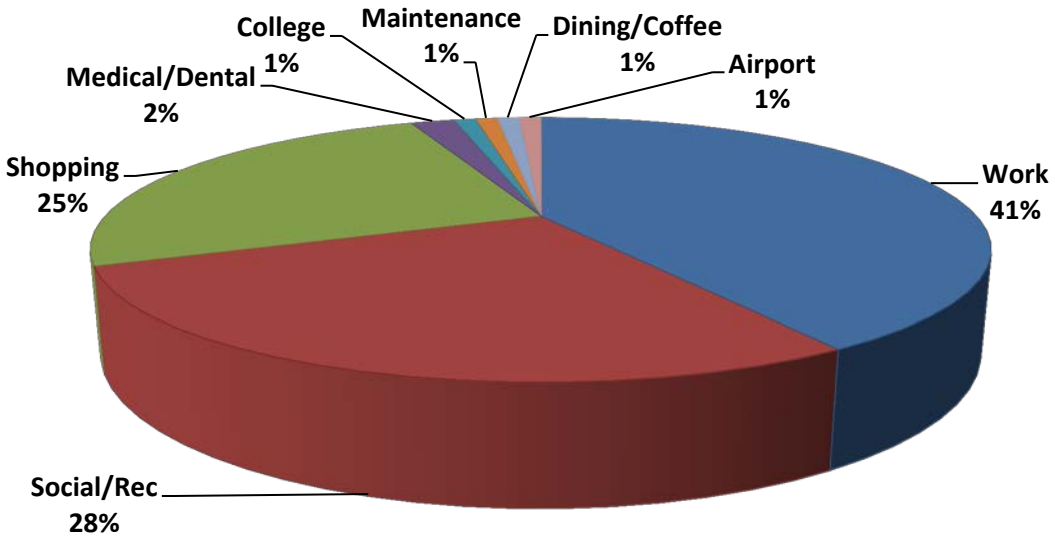
Similar to weekday ridership survey data, the vast majority of trips (88%) include "Home" as either the origin or the destination of their transit trip with the remaining 12 percent being trips that are neither coming from or going to home.

Figure 29: Weekend – Is Home Your Origin or Destination?
n=325



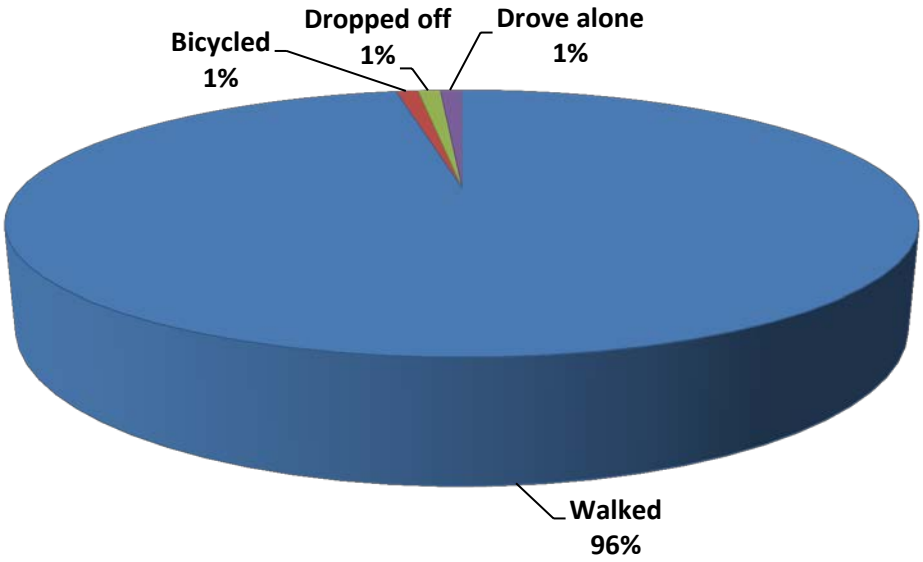
In the same fashion as the SamTrans weekday ridership sample, all surveys are initially collected regardless of trip direction or purpose which produces a database that is a combination of trips both from home and to home. To create a more meaningful representation of riders' public transit interaction, survey results are presented from a modified database of trips in relation to rider's homes. This approach creates a clearer picture of first boarding point accessibility to riders' ultimate origin as well as the relationship between their last alighting point to their final destination. This approach provides a consistent picture of all outbound trips to create a more meaningful and actionable picture of rider behavior.

Figure 30: Weekend – What Is Your Home-Based Trip Purpose?
n=287



Using this home-based database, weekend riders' trips are predominantly directed to "Work," at 41 percent. However, "Social/Recreational" trips are much more common on the weekend at 28 percent compared to 10 percent on weekdays. "Shopping" is the third most common weekend destination and accounts for one quarter (25%) of ridership, twice as high as the 12 percent weekday number. This is followed by "Medical/Dental" at two percent, and all other destinations, including "College," "Maintenance," "Dining/Coffee," and "Airport" (passenger) accounting for one percent each.

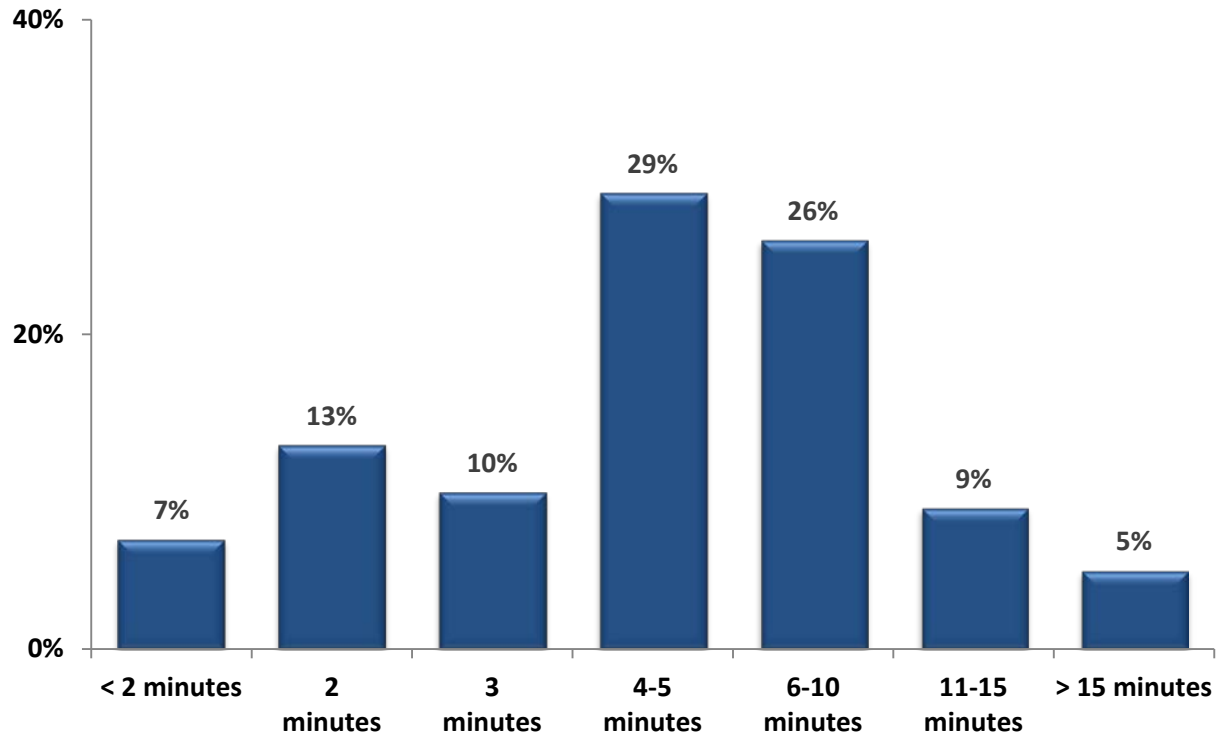
Figure 31: Weekend – How Do You Get From Your Home to Your First Boarding Point?
n=287



The distribution of access mode from home to the first boarding point is virtually the same for weekdays and weekends. During 96 percent of weekend trips, riders walk to their boarding point compared to 95 percent during the week. All other access modes including "Bicycled," "Dropped Off," and "Drove Alone" are one percent each[16], and are comparable to weekdays only with "Carpooling" not occurring on the weekend.

[16] Percentages do not add up to 100% due to rounding.

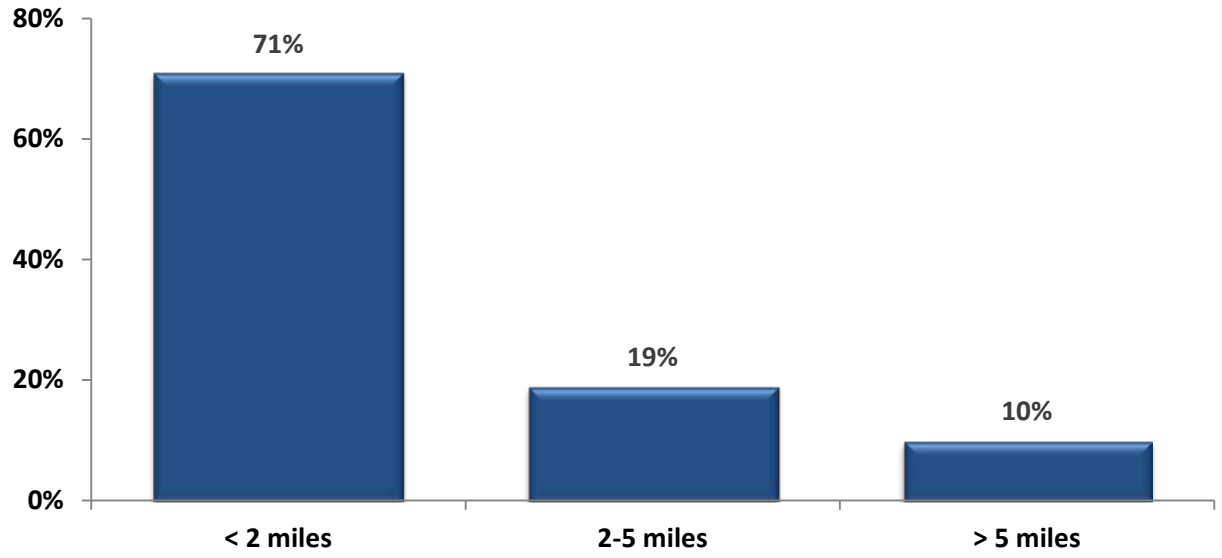
Figure 32: Weekend – How Many Minutes Is Your Walk From Home to Your First Boarding Point? n=276



For the 96 percent of weekend trips made by riders that walk from home to their first boarding point, 59 percent walk five or fewer minutes. Within this group, slightly less than a third (30%) say they walk three or fewer minutes.[17] Both of these percentages are similar to weekday ridership. All other time categories are also consistent with weekday trips with each category having no more than a two percent difference. The overall average walk time from home to the first boarding point for weekend trips is 7.2 minutes which is slightly higher than 6.7 minutes for weekday trips.

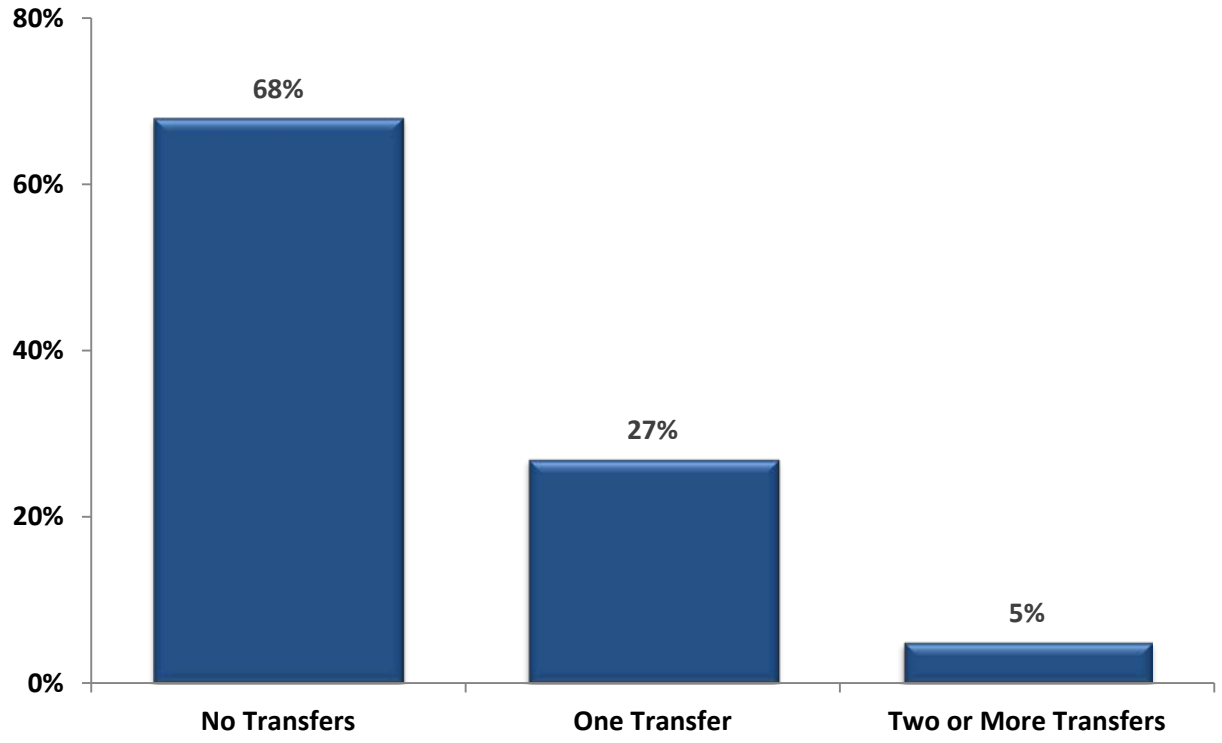
[17] Percentages do not add up to 100% due to rounding.

Figure 33: Weekend – How Many Miles Is It From Your Home to Your First Boarding Point? (Non-Walkers Only) n=11



Given the small sample size for weekend riders who use an access mode other than walking (3% or 11 surveys), the data should be considered accordingly. Within this group the largest proportion (71%) travel a distance of less than two miles between home and the first transit boarding point. The average distance traveled from home to the first boarding point for weekend non-walkers is 3.1 miles, which is over a mile less than the average for weekday data.

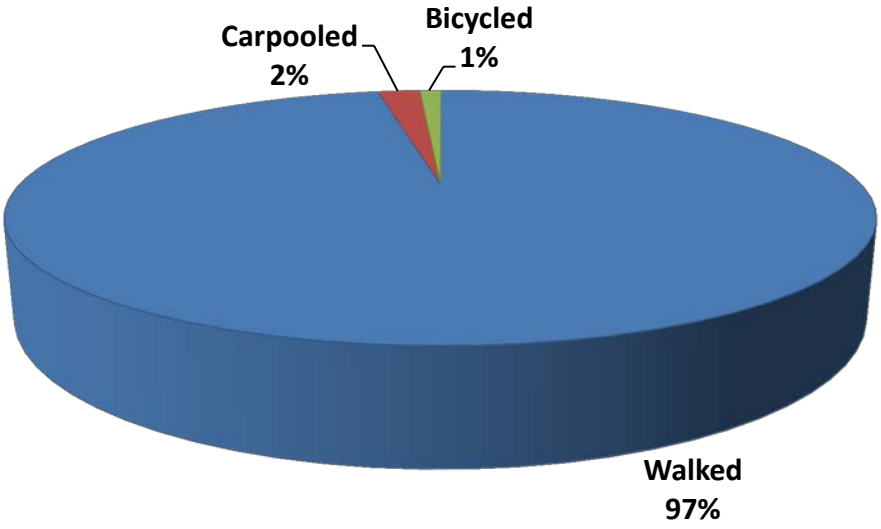
Figure 34: Weekend – How Many Transfers Are Needed To Complete Your Trip? n=325



The majority of weekend riders (68%) complete their transit trip riding one bus. This is higher than the 58 percent of weekday riders that complete their trip with one bus. Just over one-quarter weekend riders (27%) complete their trip with one transfer, which is slightly less than the 33 percent for weekday trips. Five percent of weekend riders require two or more transfers. The average number of transfers is 0.4 which equates to 1.4[18] trip segments.

[18] It should be noted that all transfers including out of system transfers are counted in this statistic, so the average number of SamTrans buses used to complete a one-way trip will be lower.

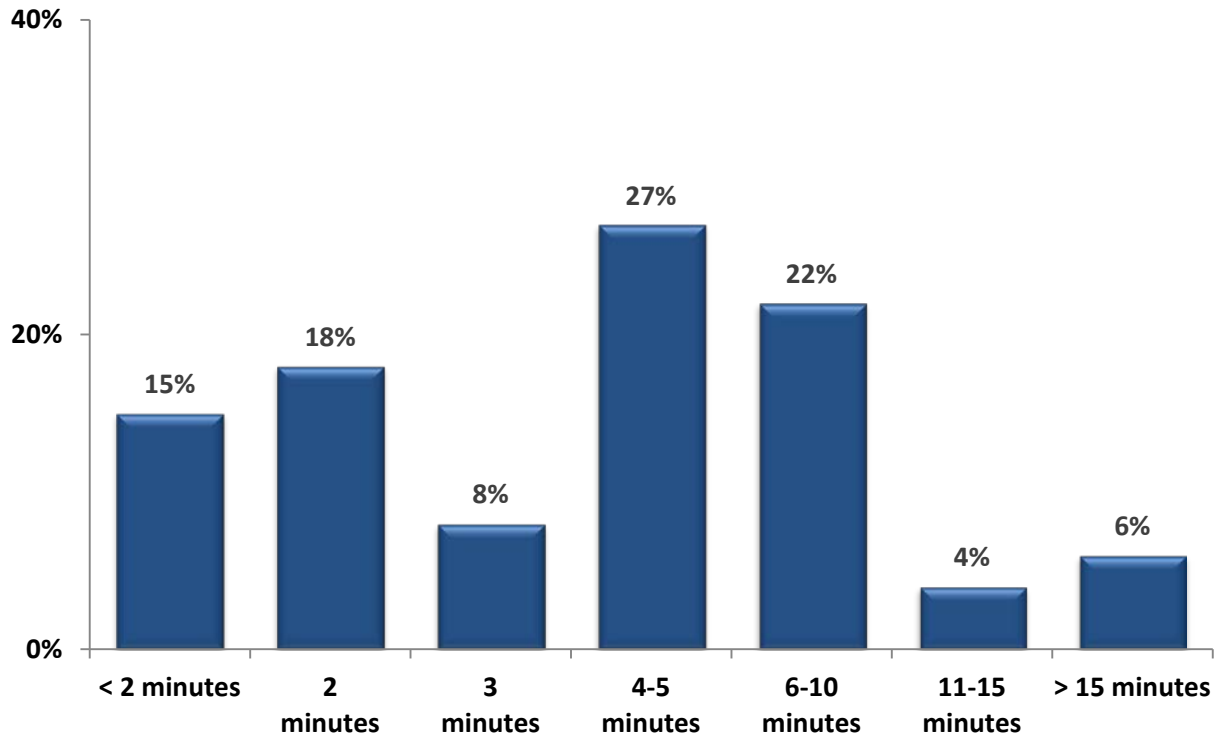
Figure 35: Weekend – How Do You Get From Your Last Stop Your Non-Home Destination?
n=287



Virtually all weekend home-based riders (97%) walk to reach their non-home destination from their last transit stop. This is similar to the 96 percent of weekday riders. Two percent of riders reach their destination by carpooling[19], and another one percent ride a bicycle to reach their destination.

[19] The carpool category includes vanpools and non-public shuttles such as pick-up vans for medical facilities, employers or schools. Public shuttles are accounted for as a trip transfer.

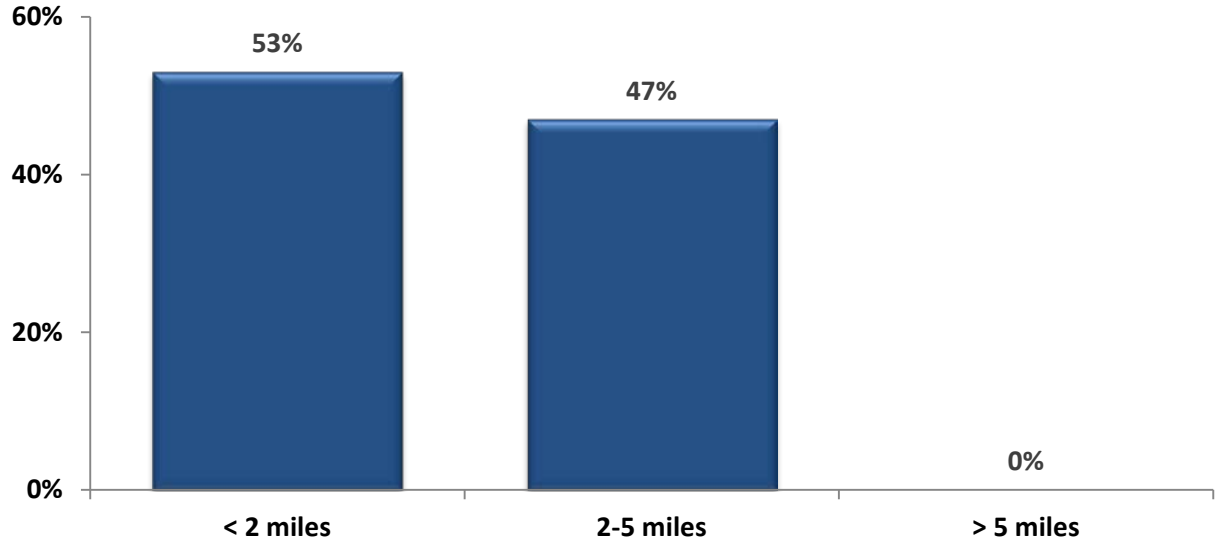
Figure 36: Weekend – How Many Minutes Is Your Walk From Your Last Stop to Your Non-Home Destination? n=277



The overall average walk time is 6.1 minutes, similar to the weekday average of 5.8 minutes. The average walk time to the final non-home destination of 6.1 minutes is somewhat lower than the 7.2 minutes to reach the first stop from home. This likely reflects the slightly higher density at typical non-home trip destinations than in residential areas.

Approximately two-thirds (68%) of weekend riders who walk to their non-home destination from their last transit stop have a walk time of five minutes or less, comparable to the weekday percentage of 70 percent. The remaining third (32%) walk six or more minutes with 10 percent walking more than 10 minutes.

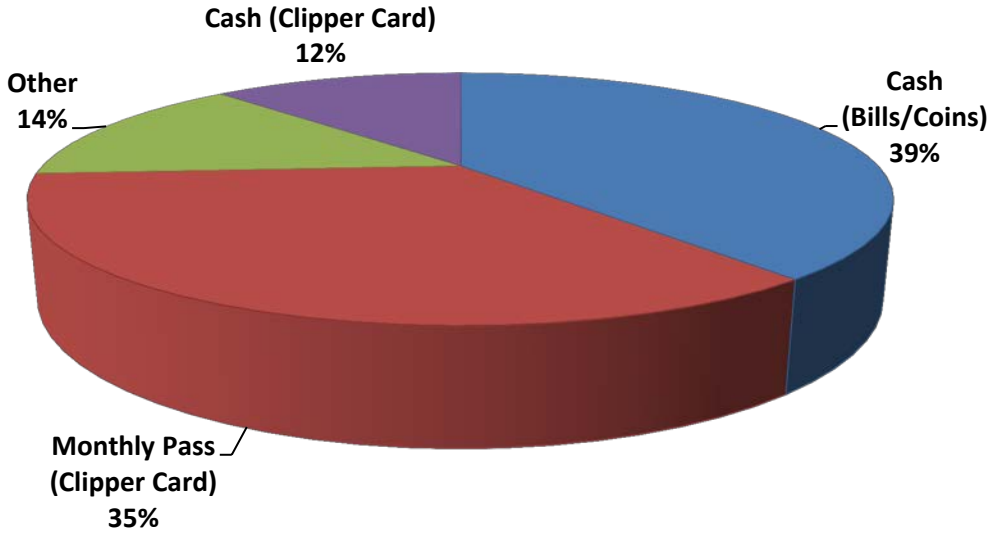
Figure 37: Weekend – How Many Miles Is It From Your Last Stop to Your Non-Home Destination? (Non-Walkers) n=10



Given the small sample size for weekend riders who use an egress mode other than walking (3%, 10 surveys), the data should be considered accordingly. Roughly half (53%) of weekend riders travel less than two miles to reach their destination, and 47 percent travel two to five miles after their last transit stop to reach their non-home destination. The average distance travelled is 1.4 miles.

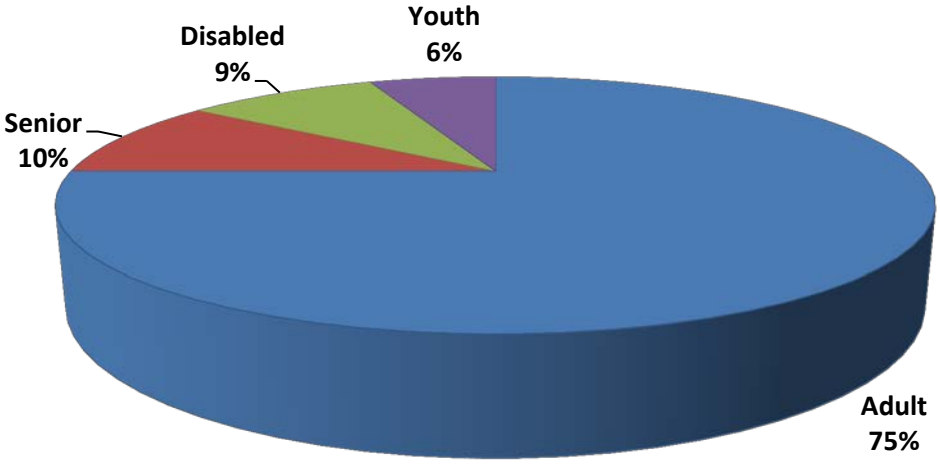
WEEKEND FARE MEDIA

Figure 38: Weekend – How Do You Pay For Your Bus Fare?
Q397/919
n=324



Almost identical to weekday rider payment types, weekend riders most commonly pay their bus fare using cash in bills and coins (39% weekend, 40% weekday) or a monthly pass on a Clipper Card (35% weekend, 35% weekday). Weekend riders who use cash on a Clipper Card account for 12 percent of ridership, similar to the 10 percent for weekday riders. "Other" fare payments include an aggregate of monthly pass (4%), day pass (2%), token (4%), and pass/free ride" (4%).

Figure 39: Weekend – What Type of Fare Do You Pay?
n=325



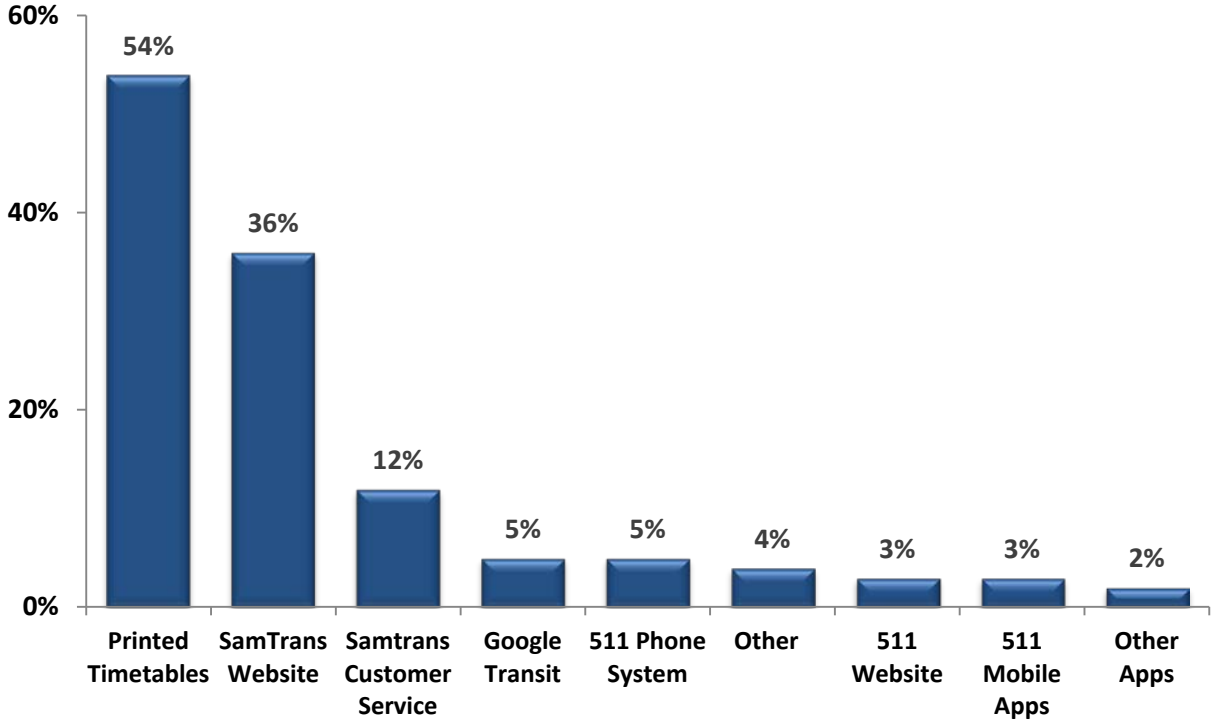
Three-quarters of SamTrans weekend riders (75%) pay the full “Adult” fare price. A discounted fare type is paid by one-quarter (25%) of weekend riders, including those who paid a “Senior” (10%), “Disabled” (9%), or “Youth” (6%) fare. The distribution of weekend fare types is almost exactly the same as the weekday sample, with only the adult fare type having a one percent difference.

Figure 40: Weekend - Would You Recommend SamTrans Service to Your Friends and Family?
n=325

Weekend SamTrans riders overwhelmingly (93%) would recommend SamTrans' services to their friends and family. Only seven percent would not recommend SamTrans service. This is similar to the 94 percent of SamTrans weekday riders who would recommend SamTrans' services to their friends and family.

WEEKEND SAMTRANS INFORMATION SOURCES

Figure 41: Weekend - When You Plan a Trip, How Do You Normally Access SamTrans Schedule Information? (Multiple Response) n=325

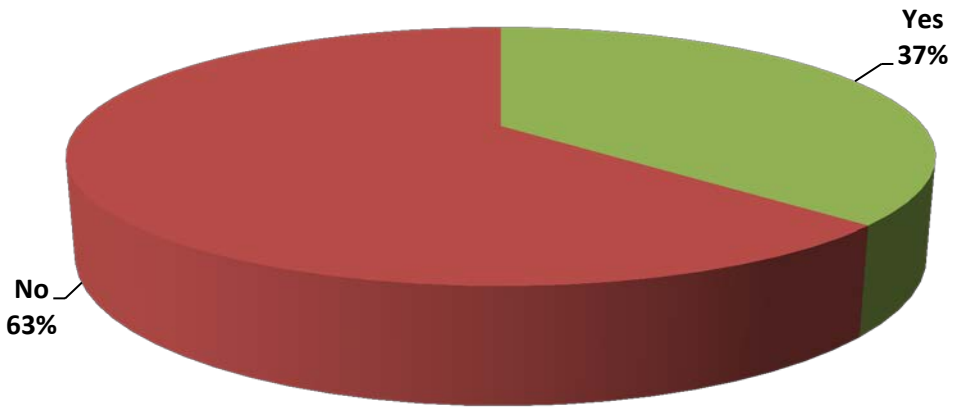


The overall distribution of SamTrans schedule information access is similar for weekday and weekend riders. Over half (54%) of weekend SamTrans ridership use “printed timetables” to access route schedule information, which is the same as the weekday sample. The “SamTrans website” is the second most common information source at 36 percent, five percent less than for weekday riders. All other schedule information access options each comprise no more than 12 percent of ridership. Route schedule access through websites (not SamTrans) includes Google Transit and the “511 Website” which account for five percent and three percent, respectively. Schedule information via telephone accounts for 17 percent of ridership, and includes “SamTrans Customer Service” (12%) and the “511 Phone System” (5%). Mobile apps are used by five percent of ridership and include “511 Mobile Apps” (3%) and “Other Apps” (2%). Four percent of riders use “Other” means to access schedule information access.

The use of printed timetables is directly related with rider age: starting at a minimum of 27 percent of riders under 20, increasing to 56 percent for riders in their 30’s, and reaching a maximum of 83 percent for riders 60 and older.

The SamTrans website is more likely to be used to plan a trip by riders who are under the age of 20 (68%), are students (62%), or live in households with income of $75,000 or more (65%).

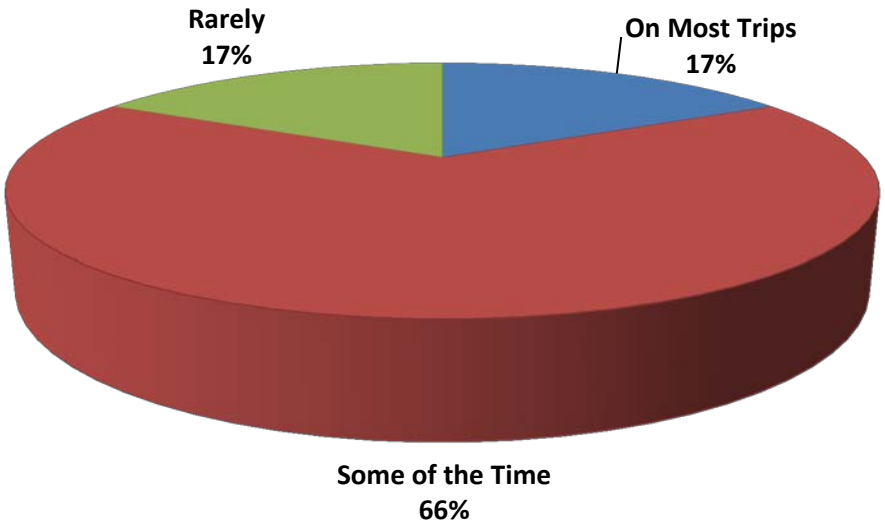
Figure 42: Weekend - Do You Use 511 Real-Time Information to Get the Next Bus Time?
n=34



Given the small sample size for weekend riders who use 511 services, the following data should be considered accordingly. Slightly more than a third (37%) of these riders use 511 Real-Time information for updates on the next expected bus. This is lower than the 53 percent of weekday riders.

Since only 11 percent of all riders use some type of 511 source, the 37 percent that use real-time next bus information equates to four percent of all riders.

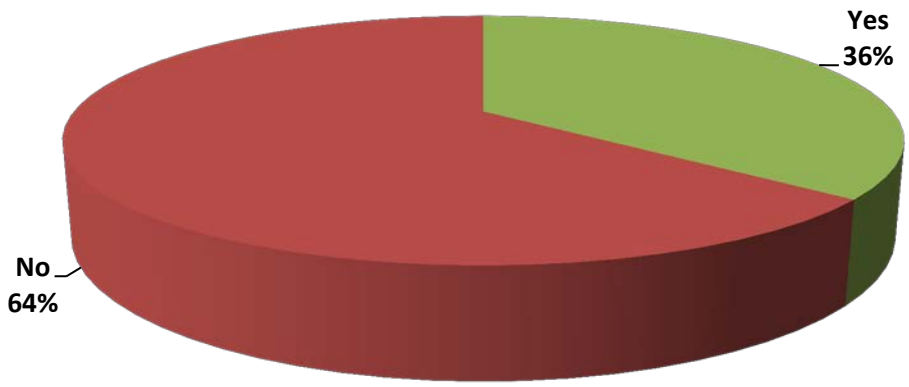
Figure 43: Weekend – How Often Do You Use 511 Real-Time Information? (Riders Who Use 511 Real-Time Information) n=12



Given the small sample size for weekend riders who use 511 Real-Time Information, the data should be considered accordingly. Seventeen percent of weekend riders use the service “On Most Trips”, while two thirds of riders (66%) say they use it “Some of the Time” and 17 percent say they use the 511 Real-Time information “Rarely.”

WEEKEND TRANSPORTATION DEMOGRAPHICS

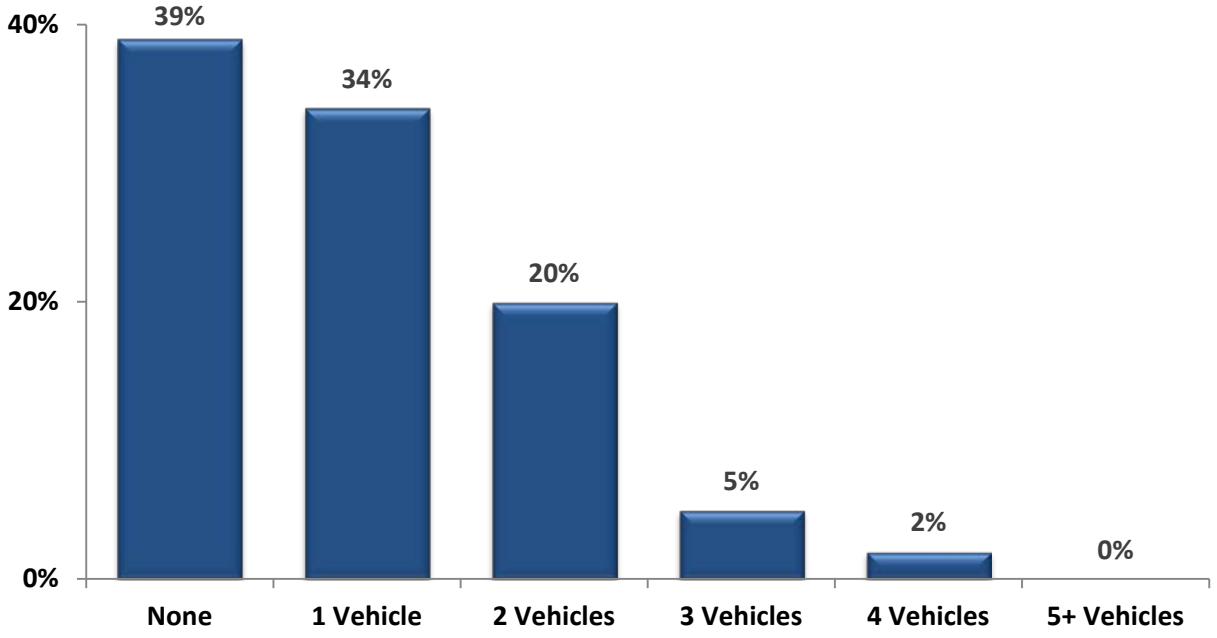
Figure 44: Weekend - Do You Currently Have a Driver's License?
Q403
n=325



Similar to weekday ridership (38%), 36 percent of weekend riders currently possess a license, and 64 percent do not.

Weekend riders who self-identify as Hispanic (76%), and are students (74%) are the most likely to not have a driver's license.

Figure 45: Weekend - How Many Drivable Vehicles Are Available To Your Household? n=324



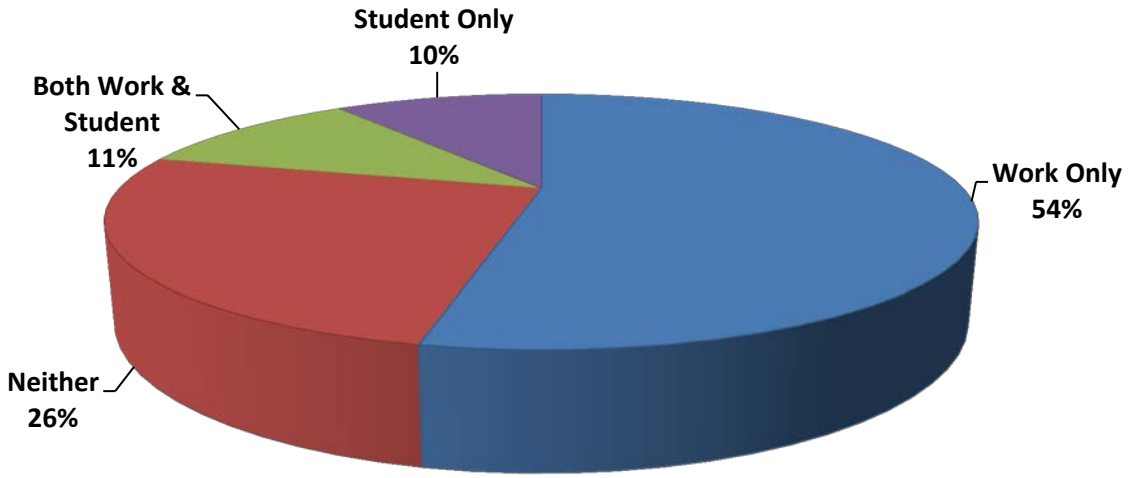
At 39 percent, weekend riders are more likely than weekday riders (28%) to have no drivable vehicles available to their household. Vehicle availability starts at 34 percent with one vehicle, then drops to 20 percent that have two, five percent that have three vehicles, and two percent that have four.

The lack of household vehicles access decreases with household income. Over half (59%) of riders with household income of $10,000 or less have no drivable vehicles available, decreasing to 12 percent for households with incomes of $50,000 or more.

The overall average number of drivable vehicles per household is 1.0 for Weekend riders, which is slightly lower than average for Weekday riders at 1.3

WEEKEND RIDER DEMOGRAPHICS

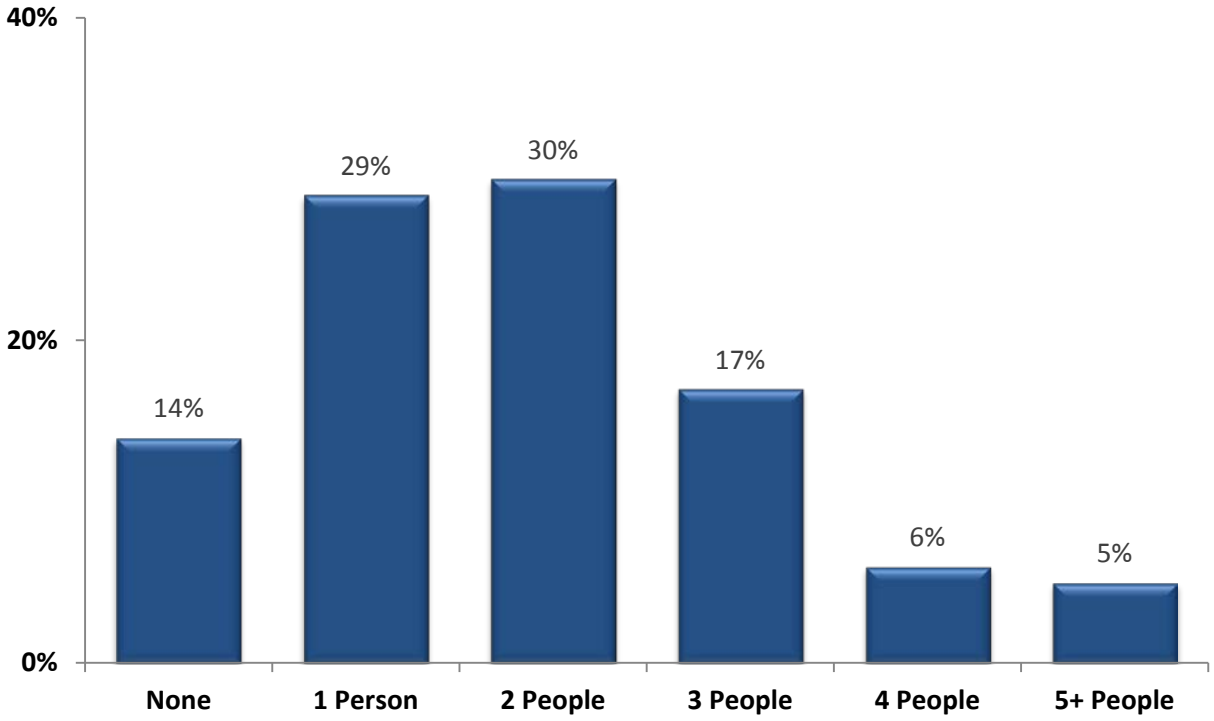
Figure 46: Weekend - Are You Currently Employed and/or a Student? n=325



The proportion of riders who are solely employed (54%) is essentially the same as weekday riders (53%). However, weekend riders' second most common category is riders that are neither employed nor students which is higher than the 17 percent for weekdays. Eleven percent are both workers and students and 10 percent are only students.[20]

[20] Percentages do not add up to 100% due to rounding.

Figure 47: Weekend - How Many People Are Employed in Your Household? n=322

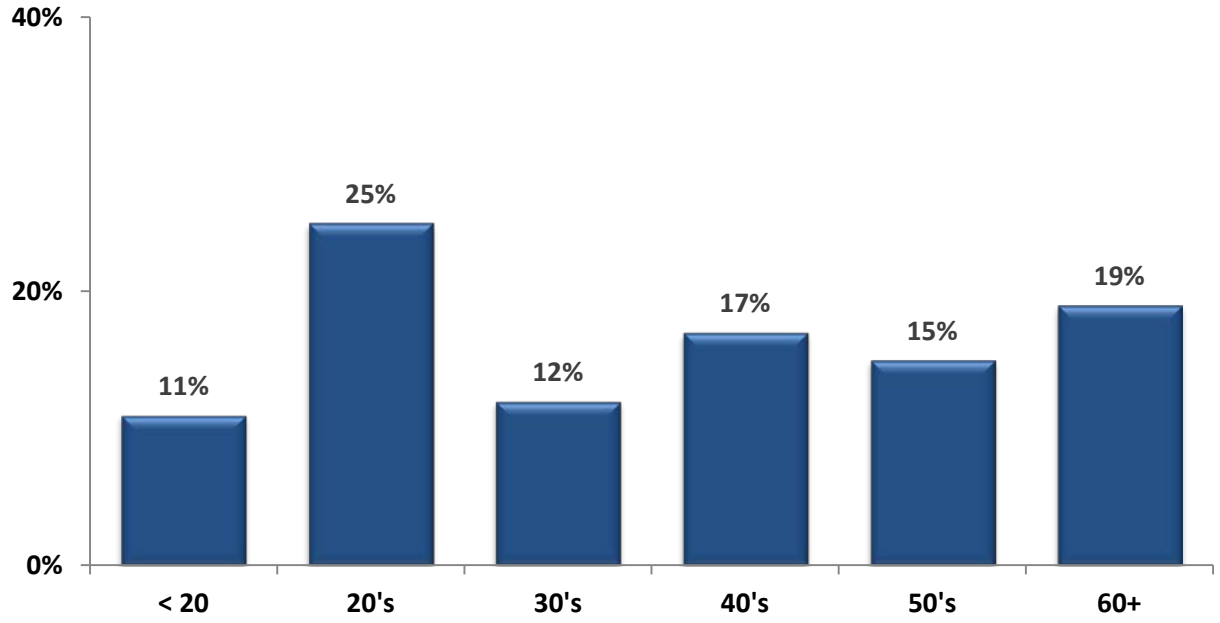


Weekend riders are more likely to represent a household where no one is employed (14%) than weekday riders (9%). Twenty-nine percent of weekend riders have one worker in the household, 30 percent of riders have two workers in their household, and 17 percent have three workers in their household. Eleven percent of weekend riders have four or more workers in their household.[21] The average number of employed persons per household is 1.9, which essentially matches the weekday average of 2.1.

Non-Hispanic riders are more likely (19%) than Hispanic riders (5%) to not have anybody employed in the household. This rate of 19 percent is also significantly higher than weekday Non-Hispanic riders (11%).

[21] Percentages do not add up to 100% due to rounding.

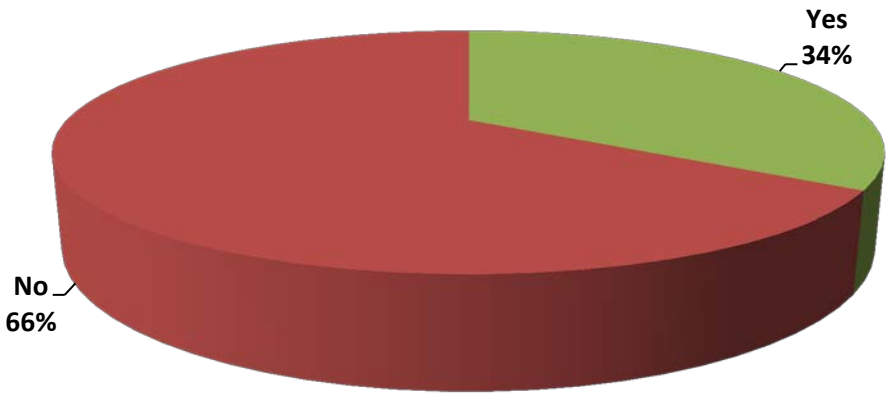
Figure 48: Weekend - What Is Your Age Category?
n=316



There is a lower percentage of riders under 20 on the weekend at 11 percent compared to 18 percent on weekdays.[22] All other age categories are within four percent of the weekday values.

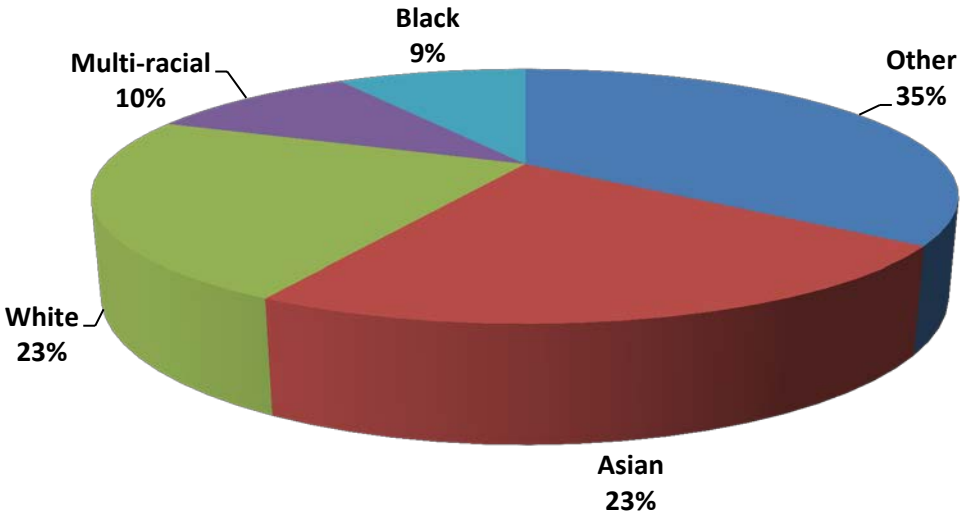
[22] Percentages do not add up to 100% due to rounding.

Figure 49: Weekend - Are You Hispanic, Latino or of Spanish Origin?
n=321



The proportion of Hispanic riders on the weekend is essentially the same at 34 percent as it is on the weekdays (35%).

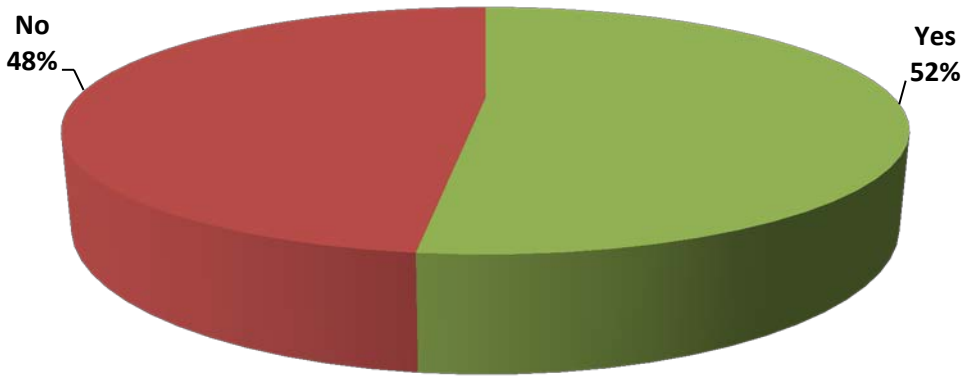
Figure 50: Weekend - Which of the Following do You Identify With?
n=315



Weekend riders were asked to identify which Census race category that they identify with. Similar to weekday responses, 23 percent of weekend SamTrans riders identify their race as Asian, while another 23 percent self-identify as White. Ten percent identify as Multi-Racial, and nine percent identify as Black. Over one-third (35%) of riders identify

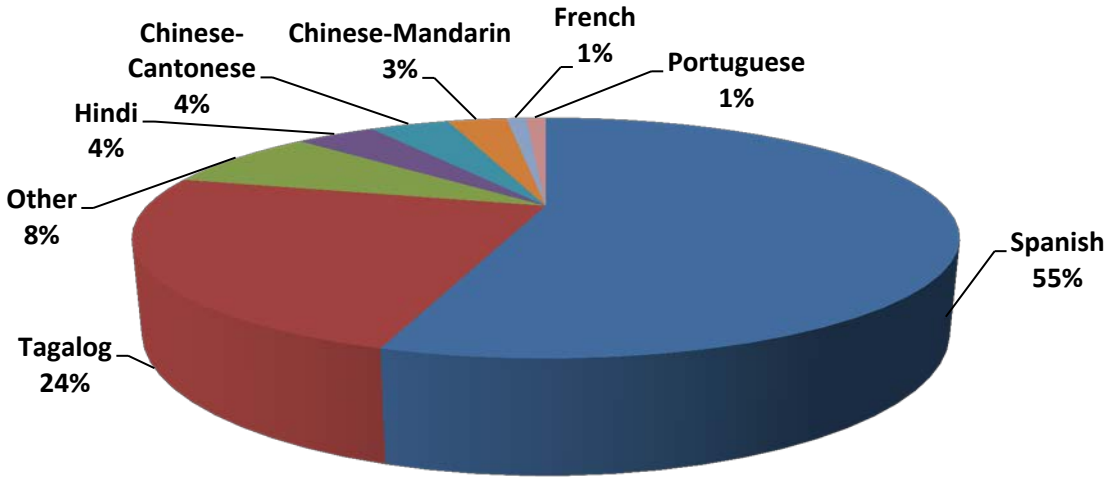
themselves as “Other,” with the most common self-identification as "Hispanic," "Latino" or "Mexican." This is virtually the same as weekdays.

Figure 51: Weekend - Do You Speak a Language Other Than English at Home? n=325



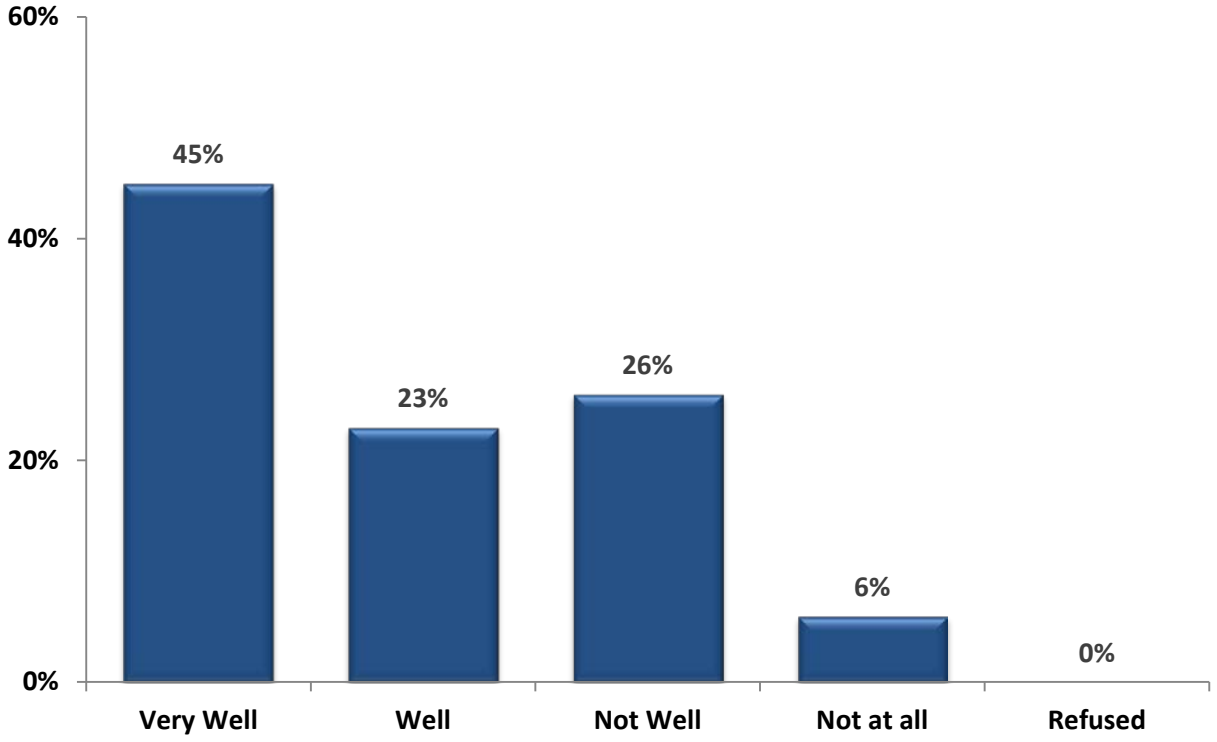
Similarly to weekday ridership (55%), roughly half (52%) of SamTrans weekend riders speak another language at home.

Figure 52: Weekend - What Language Other Than English Do You Speak at Home? (Only Respondents Who Speak a Language Other Than English at Home) (Multiple Responses) n=176



Spanish is spoken by the majority (55%) of riders who speak a language other than English at home. The second most common language spoken at home is Tagalog (24%), followed by Hindi (4%), Cantonese Chinese (4%), and Mandarin Chinese (3%). Non-English languages spoken at home that comprise less than three percent of riders that speak a language other than English at home include French (1%) and Portuguese (1%). There are also eight percent that speak “Other” languages not listed above.

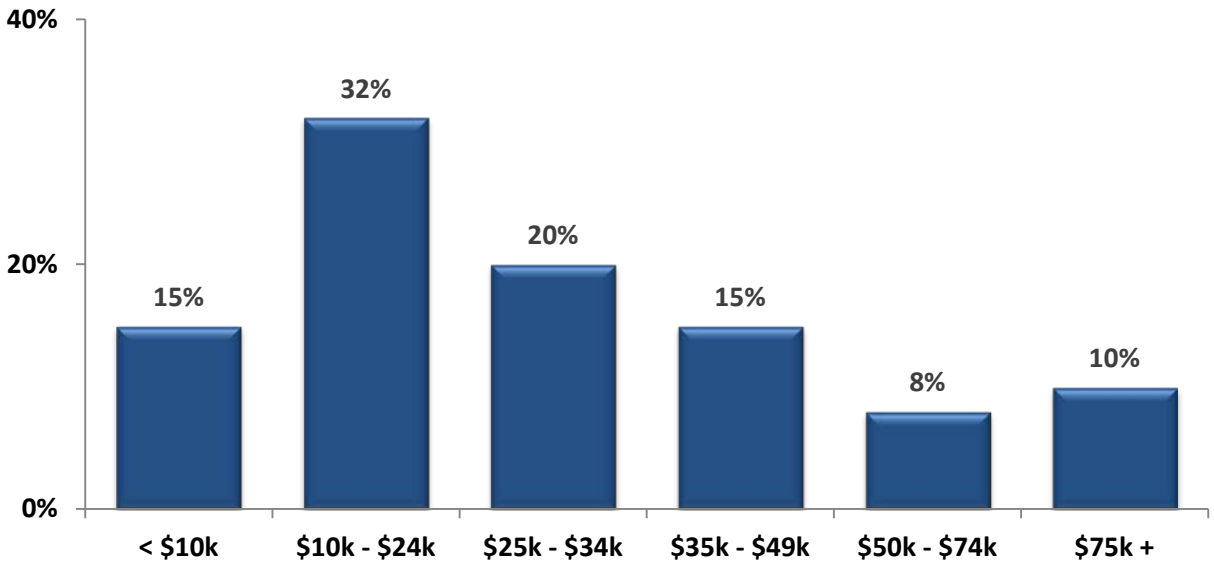
Figure 53: Weekend - How Well Would You Say You Speak English?
n=171



Of the SamTrans Weekend riders who speak a language other than English at home,45 percent indicate that they speak English “Very Well,” 23 percent indicate that they speak it “Well,” 26 percent indicate that they speak it “Not Well,” and six percent indicate that they do not speak English at all.

Forty-eight percent of weekend riders who speak Spanish at home, 20 percent who speak Mandarin, 17 percent who speak Cantonese, and 14 percent who speak Tagalog, classified their English fluency as “Not Well” or “Not at All.”

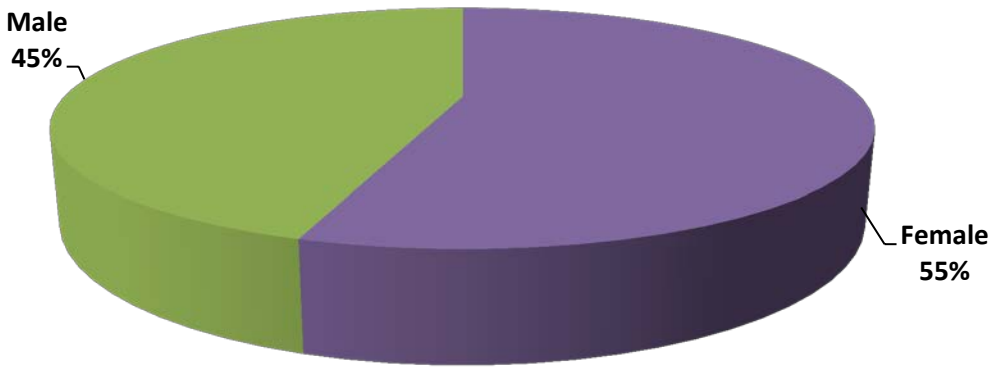
Figure 54: Weekend - What is Your Total Household Income?
n=256



Weekend riders show lower levels of annual household income than the weekday sample with a split of 66 percent under $35,000 and 34 percent $35,000 or higher[23] vs. 57 and 43 percent respectively for weekday riders. Slightly less than one-half (47%) of weekend riders live in households that are below or just above the federal poverty line for a family of four[24]($23,550 per year). Similar to the weekday sample, the largest proportion of riders has an annual household income of $10,000-$24,999 (32%), followed by annual household income of $25,000 to $34,999 (20%). All other income categories have a lower percentage of riders as follows, under $10,000 (15%), $35,000 to $49,999 (15%), $50,000 to $74,999 (8%), and $75,000 or more (10%).

[23] Percentages under and over $35,000 are slightly different than the sum of the individual categories due to rounding.
[24] 2013 HHS Poverty Guidelines (aspe.hhs.gov)

Figure 55: Weekend – Gender
n=325



Nearly identical to SamTrans weekday ridership, weekend riders are composed of 55 percent of females and 45 percent of male.