

CENTRAL CONTRA COSTA TRANSIT AUTHORITY

2015 FIXED-ROUTE TRANSIT ONBOARD SURVEY

DRAFT REPORT

APRIL 2015



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Section 1

Overview and Methodology

Project Overview

In Spring 2015, the Central Contra Costa Transit Authority (County Connection) engaged Moore & Associates, Inc. to conduct an onboard survey of its fixed-route customers. The survey codified customer travel behavior, assessed customer satisfaction regarding a variety of County Connection service attributes, provided valuable insight into current as well as future/potential marketing activities, and compiled a variety of rider demographic data to support the agency's federal Title VI reporting.

A comprehensive survey of County Connection riders has not been undertaken since 2007. Since that time there have been many changes to the local and regional transportation landscape, significant development in the regional and national economies, and a variety of changes regarding the County Connection's approach to service delivery.

Quality market research, conducted on a regular basis, provides valuable insight into program/service strengths and weaknesses. Given external influences such as changing gas prices and evolving employment patterns, quality market research will support the Authority's overall mission. Sound planning decisions can often be problematic absent the availability of quality, current market data.

Project Management

A key component of our project management was the use of Basecamp, an online platform which allowed us to share documents and results with CCCTA staff as well as document discussions among the project team. As-needed telephone conferences between CCCTA staff and our project team were held during the project initiation, survey development, and data collection aspects of the engagement.

Survey Development

Our project team created a specific survey instrument for the County Connection fixed-route service. The survey instrument was posted to Basecamp for CCCTA review and approval. Upon approval, it was translated into Spanish. A separate, simpler survey instrument was created for use on the school tripper routes.

Sampling Plan

We utilized a stratified random-sampling methodology to collect data that accurately represented all rider types on County Connection fixed-route service. A formal sampling target was calculated for each route reflective of actual ridership data provided by CCCTA.

Our sampling plan was weighted such that the overall sampling target ensured a confidence level of 95 percent and a +/- 5 percent margin of error. Weekday and weekend sampling targets, as well as the actual samples, are shown in Exhibit 1.1. Data collection resulted in a total valid data sample five percent larger than the initial sampling target.



2015 Fixed-Route Transit Onboard Survey

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Exhibit 1.1 Sampling by Route¹

Weekday Route	Sampling Target	Actual Sample
1	46	65
2	12	13
4	92	121
5	44	48
6	50	56
7	37	44
9	50	56
10	450	499
11	46	59
14	75	81
15	50	107
16	52	56
17	44	44
18	49	54
19	36	43
20	472	496
21	72	91
25	27	32
28	45	50
35	49	71
36	42	46
91X	12	12
92X	42	49
93X	42	4
95X	37	16
96X	75	78
97X	31	34
98X	48	51
627	22	24
649	2	2
Total	2151	2402

Weekday Route	Sampling Target	Actual Sample
601	34	32
602	36	32
603	18	21
605	31	21
606	47	15
608	11	12
609	5	7
610	10	11
611	27	29
612	18	20
613	28	20
614	24	15
615	20	15
616	19	21
619	24	30
622	12	20
623	18	20
625	18	19
626	13	14
635	7	17
636	22	20
Total	442	411

Weekend Route	Sampling Target	Actual Sample
4	65	81
6	35	70
301	25	30
310	48	59
311	43	51
314	51	63
315	24	38
316	46	54
320	42	47
321	43	47
Total	422	540

¹ Note: Approximately 175 of the school tripper surveys were subsequently deemed invalid. See page 4 for discussion.



Survey Administration

Staffing/Recruitment

Moore & Associates contracted with a local temporary staffing firm to recruit surveyor candidates. Our goal was to recruit individuals with a professional appearance and demeanor as well as the skills necessary to conduct the survey. While the staffing firm conducted a background check and ensured each recruit was legally eligible to work in the United States, our criteria for selection included the following:

- Fluency in English (written and oral),
- Fluency in Spanish (preferred),
- Ability to read and understand a bus schedule,
- “Common sense” problem solving capabilities,
- Ability to conform with appearance standards (“business casual” dress code – black or khaki pants, polo or collared shirt, and comfortable shoes),
- No facial tattoos or extensive visible piercings,
- The physical ability to board and ride the bus unassisted,
- Punctuality (ability to arrive 15 minutes before the start of the shift),
- Availability of reliable transportation (including public transit, bicycle, or ride from friend/family), and
- Possession of a cell phone for communication with field supervisory personnel.

All surveyors were screened and then trained by our project team. Training included an overview of the project, discussion of surveyor performance expectations, familiarization with the County Connection system and survey instruments, onboard etiquette, protocol for conducting the survey, and a review of individual assignments. Moore & Associates trained more surveyors than we anticipated needing in order to have trained back-up personnel immediately available should a surveyor fail to report or be dismissed.

Unacceptable behavior – which included making or receiving calls from persons other than the Moore & Associates’ field supervisors, listening to music on an iPod or phone, causing any type of disruption onboard the vehicle, use of profanity, failure to comply with appearance standards, and tardiness – was communicated to all recruits as cause for immediate dismissal.

Recruitment and training of surveyors was completed on Tuesday, March 24, 2015, prior to survey pre-test fielding. Training took place at the Labor Ready office on Clayton Rd. Twelve surveyors were trained as part of this engagement. Each surveyor was assigned to a specific field supervisor for the duration of the engagement.

Data Collection

Data collection was accomplished using an onboard intercept methodology. All survey questionnaires were printed on 100-pound stock to eliminate the need for clipboards. Survey instruments were printed double-sided, with English on one side and Spanish on the other.

Surveyors were easily identified by an identification badge worn on a lanyard around the neck as well as a reflective vest. Prior to boarding the assigned vehicle, each surveyor was provided with a surveyor bag

containing survey forms, sharpened pencils, a system map, a route-specific map and schedule, and an individual surveyor “paddle.” Each surveyor was also provided with the cell phone contact information for his/her assigned field supervisor, who conducted spot-checks of surveyor performance and maintaining a presence in the service area throughout the entire data collection period as a quality control measure.

Surveyors offered the bilingual (English/Spanish) survey to all customers boarding the vehicle while also making themselves available to answer questions regarding the survey. Respondents were instructed to return the completed instrument to the surveyor or leave it on their seat for retrieval by our surveyor. At the conclusion of each day’s surveying, all collected surveys, identification badges, and reflective vests were returned to the assigned field supervisor.

Our field supervisors completed an in-field pretest of the approved survey instruments on March 24, 2015. A pretest sample of 161 valid responses was achieved. No significant issues were identified. Therefore, the pretest responses were incorporated into the total sample.

Moore & Associates successfully managed the fielding of a transit rider survey using an onboard intercept methodology from March 24 through March 28, 2015. The data collection covered all County Connection fixed-routes. A total sample of 3,353 (2,942 fixed-route surveys and 411² school tripper surveys) was collected against a sample target of 3,015. Ultimately 3,178 were deemed valid, exceeding the target by more than five percent.

Data Processing

Data Entry

All survey data was entered into an Excel spreadsheet using trained data entry personnel. Moore & Associates’ staff monitored the entire data entry process, reviewing data entry work on a daily basis while also conducting spot-checks throughout each day.

Data Cleaning

Data cleaning was undertaken by trained personnel following completion of data entry. This process addressed differing data formatting that resulted in identical responses being sorted as different. The cleaned data was then imported into a Statistical Package for the Social Sciences (SPSS) database for further analysis. Following data cleaning, simple frequencies were compiled and posted to Basecamp for CCCTA review.

Analytical Methods

The SPSS database allowed our project team to compile simple frequencies as well as data cross-tabulations within each dataset. Cross-tabulations allow comparisons between survey responses that can provide additional insight into customer profiles, travel patterns, perceptions of service, and demographics.

² Note: While 411 surveys were collected onboard the school tripper routes, only 236 were subsequently deemed valid as many of the student respondents provided nonsense responses or drew pictures on the survey forms.

Section 2

Analysis and Key Findings

Profile Rider

By analyzing the simple frequencies associated with the 2015 Onboard Survey we can compile a profile of the “typical” County Connection rider. This “typical” rider reflects rider responses from across the entire County Connection fixed-route network (excluding school tripper service), and therefore may not be reflective of riders on a specific or individual route.

The profile County Connection rider resides in Concord and is between the ages of 19 and 35. Gender is not specific given the even split noted between surveyed riders. The rider identifies as white and speaks English very well. Employed full-time, the profile rider resides in a household of no more than two persons, with an annual household income of less than \$35,000.

Our profile rider patronizes County Connection at least four days per week, most commonly using the service to travel between home and work. While the rider may be a licensed driver, he/she has limited access to a personal vehicle. Despite his/her frequent use of County Connection (which occasionally includes a connection with BART), our profile rider relies chiefly on cash as the method of fare payment. Given the frequent weekly ridership, this person would be a good candidate for purchase of the Clipper card (which would enhance the travel experience by eliminating the need for exact fare as well as provide modest per-ride savings).

While it is likely the profile rider either owns or has access to a smartphone, he/she still most commonly obtains County Connection service information via traditional channels: printed brochure, at the bus stop, and via the agency’s website.

While lack or limited access to a personal vehicle is the likely motivator for utilizing County Connection, it is quite likely that the proximity of a bus stop to the profile rider’s common origin and destination points is also a factor. While “more frequent service” is the preferred service improvement, it is unclear if the introduction of this improvement would result in an increase in actual patronage given the profile rider is already riding County Connection at least four days per week. (Note: The full survey data revealed that 66.8 percent of surveyed riders rated “service frequency” good or excellent.)

The following analysis examines each survey question on a more in-depth basis, offering data cross-tabulations where appropriate to drill down further. Simple frequency data tables, along with the survey instruments, are included in the Appendix.

Question 1: What route are you telling us about today?

See Section 1 for a breakdown of data collection by route.



Question 2: Where did you begin your trip today?

Respondents were asked to indicate the city, neighborhood, or landmark where they began their trip. The top ten most common origin locations are presented below. BART stations make up three of the top ten locations.

Exhibit 2.1 Top Origin Locations

Origin Location	Frequency
Concord	254
BART – Concord	196
BART – Walnut Creek	155
Diablo Valley College	122
Clayton Rd	119
Martinez	110
San Ramon	76
Walnut Creek	72
BART – Pittsburg	44
San Francisco	43

Question 3: Where will you end your trip today?

Respondents were asked to indicate the city, neighborhood, or landmark where they would end their trip. The top ten most common destination locations are presented below.

Exhibit 2.2 Top Destination Locations

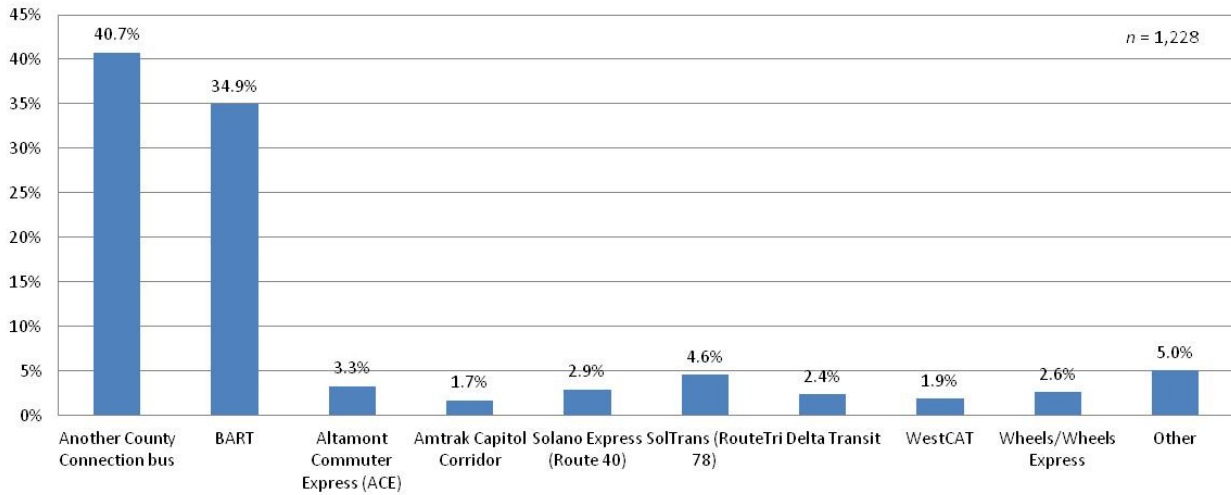
Destination Location	Frequency
BART – Concord	222
Concord	213
Diablo Valley College	134
Walnut Creek	114
BART – Walnut Creek	112
Sun Valley Mall	80
Clayton Rd	78
Pleasant Hill	67
Martinez	66
San Ramon	62

Question 4: Does this trip include a transfer?

Fifty-one percent of respondents indicated making a transfer as part of the surveyed trip. Of those responding affirmatively, 1,228 indicated where they transferred to/from. Of the ten connection response options (including “other”), only two garnered more than five percent: “another County Connection bus” (40.7 percent) and “BART” (34.9 percent).



Exhibit 2.3 Incidence of Transfers

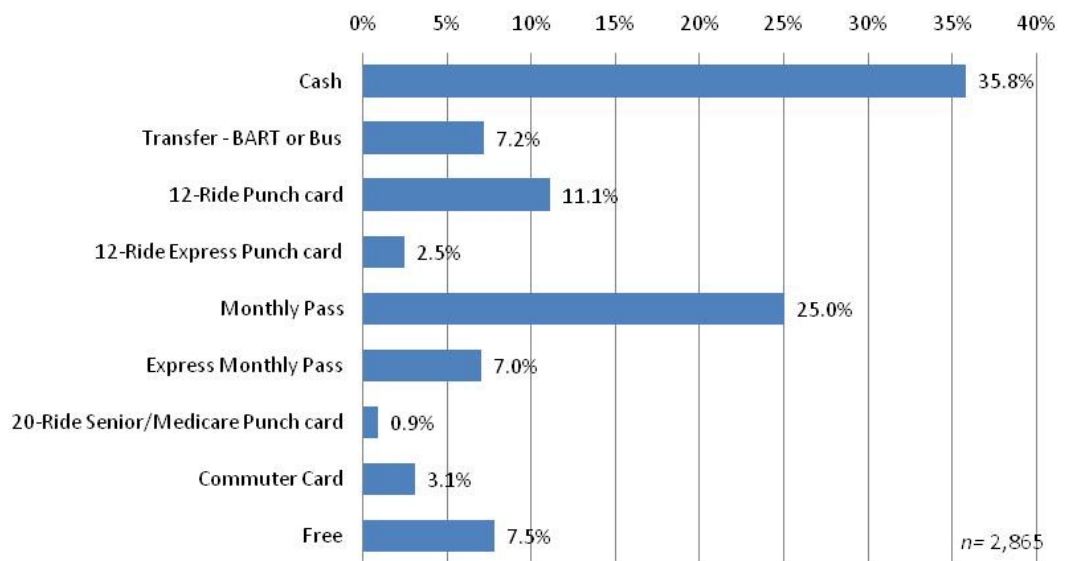


Question 5: How did you pay for your fare?

Nearly thirty-six percent of respondents indicated “cash” as the method of payment for the surveyed trip. “Cash” was by far the most common means of fare payment.

Including “cash,” nine response options were provided. “Monthly pass” was selected by 25 percent of respondents while “12-ride punch card” was cited by 11.1 percent. The other numerically significant option was “free” (7.5 percent). The “commuter card” (3.0 percent) and “12-ride express punch card” (2.4 percent) garnered only modest reporting during the survey period.

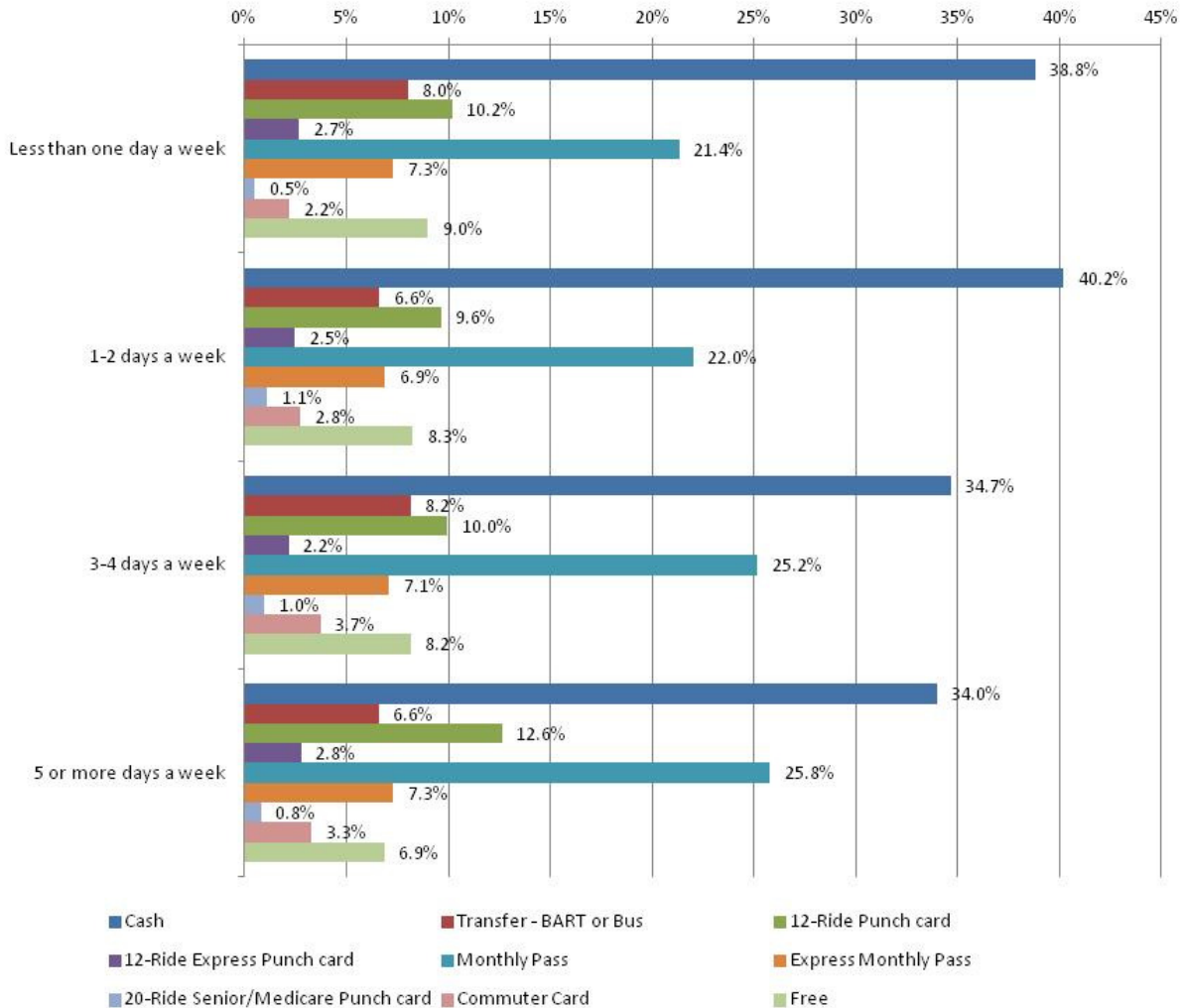
Exhibit 2.4 Method of Payment



Cross-tabulation: Fare Media Used (Question 5) vs. Frequency of Use (Question 12)

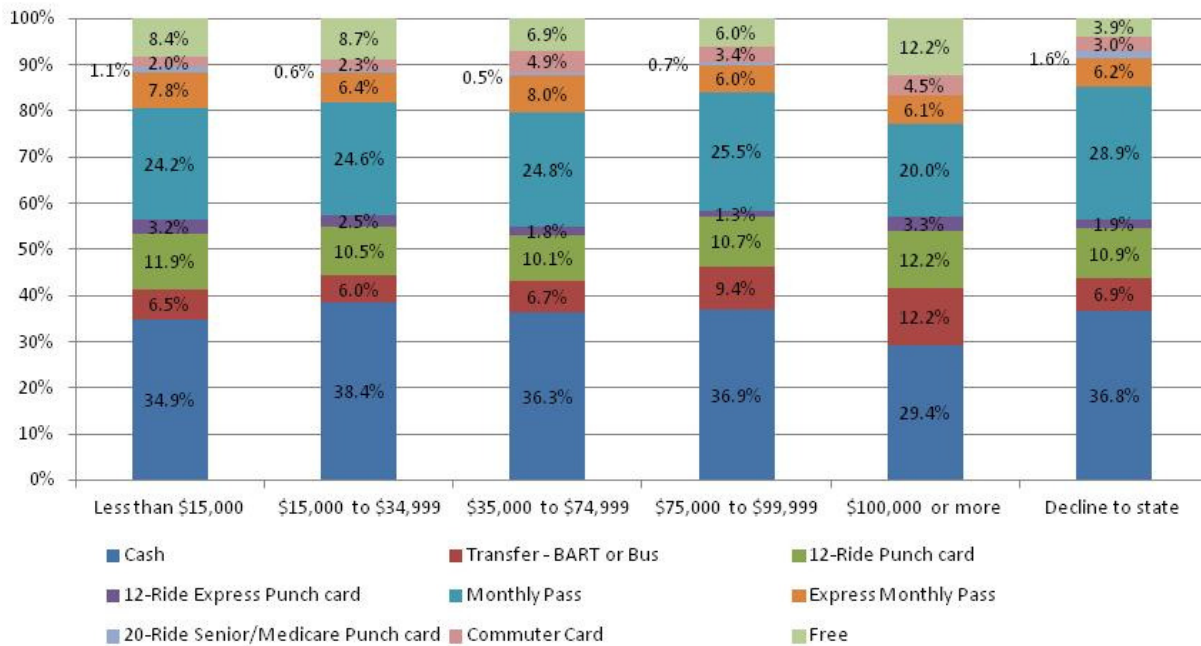
Exhibit 2.5 shows the relationship between “fare type” and “ridership frequency.” While “cash fare” was common across all fare response options, it was most common among persons riding no more than two days per week. With that said, the data suggest little variation between method of fare payment and frequency of use, though the use of the monthly pass does increase proportionally with the number of days per week the respondents rides.

Exhibit 2.5 Method of Payment vs. Frequency of Use



Of note is the relationship between “fare type” and “annual household income.” There was little difference between higher and lower income levels with respect to cash, transfer, and monthly pass use. Interestingly, those who cited an income of \$100,000 or more were most likely to indicate riding free or using a transfer. Use of “free” fare is discussed further under Question 10.

Exhibit 2.6 Method of Payment vs. Household Income

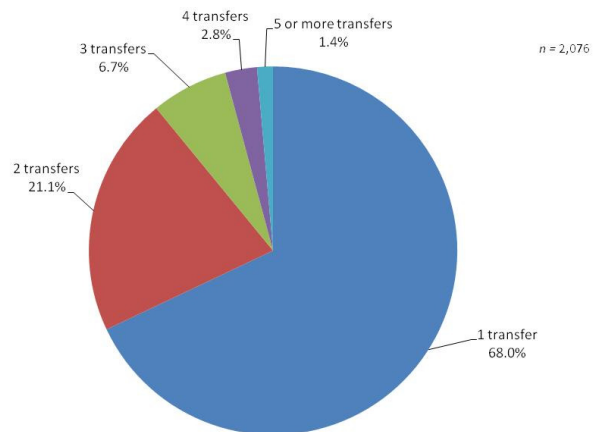


Question 6: How many transfers are required to complete your trip?

Approximately 70 percent of survey respondents cited the need to make a transfer (both on-line and/or off-line) in order to complete the surveyed trip. The most common response indicated “one transfer” (48 percent), with an additional 21 percent requiring “two transfers.”

As noted in Question 4, the greatest transfer activity was between County Connection buses (e.g., on-line), followed by transfers to/from BART (off-line).

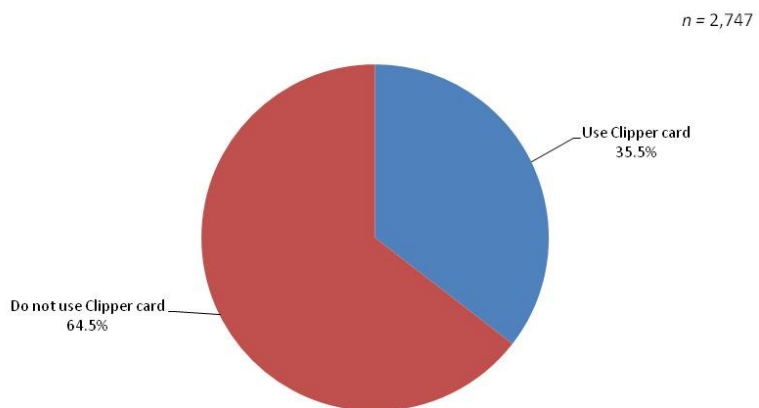
Exhibit 2.7 Transfer Usage



Question 7: Do you currently use the Clipper card?

The County Connection plans to introduce the regional Clipper card in Fall 2015. Question 7 asked County Connection riders whether or not they currently use the Clipper card (as part of their use of other Bay Area public transportation services). Nearly 36 percent responded positively. This suggests two things regarding the likely impact of the Clipper card on County Connection ridership. First, County Connection riders who have used the Clipper card on other Bay Area transit services will welcome its acceptance on the County Connection. Second, given ease of use and general popularity which the card has experienced, it is likely the Clipper card will supplant other forms of (historic) County Connection non-cash fare media (e.g., monthly pass and 12-ride punch card). Assuming this “fare use” evolution occurs, it will benefit the County Connection through stream-lined fare collection processes and supporting costs.

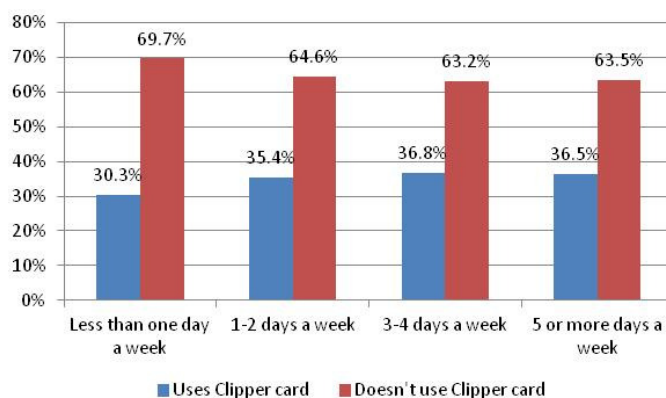
Exhibit 2.8 Current Clipper Card Usage



Cross-tabulation: Clipper Card Usage (Question 7) vs. Frequency of Use (Question 12)

The results of Exhibit X suggest great potential for County Connection when it introduces the Clipper card in late 2015. At least 60 percent of respondents in each of the four “frequency of use” categories report no current use of the Clipper card. Our market research in other communities reveals that use of non-cash (stored fare) media generally results in increased transit usage (and brand loyalty).

Exhibit 2.9 Current Clipper Card Usage vs. Frequency of Use



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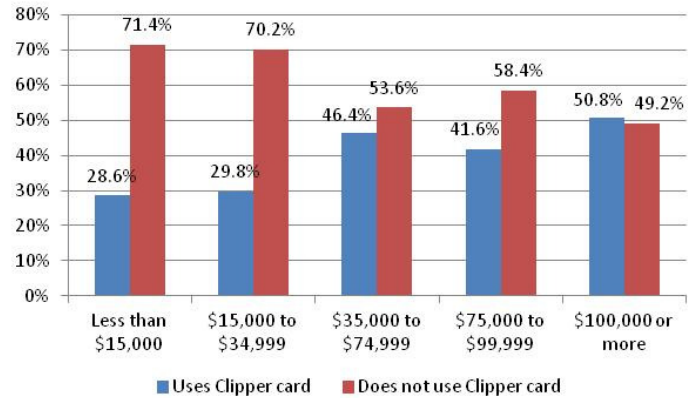
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Cross-tabulation: Clipper Card Usage (Question 7) vs. Household Income (Question 17)

The results of the cross-tabulation between “Clipper card usage” and “household income” is ironic as we would expect that persons with higher household incomes would exhibit greater use of this non-cash (stored fare) transit media. We believe this to be the case given transit market research conducted in other communities along with the fact that the rider needs to be able (to afford) making a higher fare deposit on the card.

Exhibit 2.10 Current Clipper Card Usage vs. Household Income

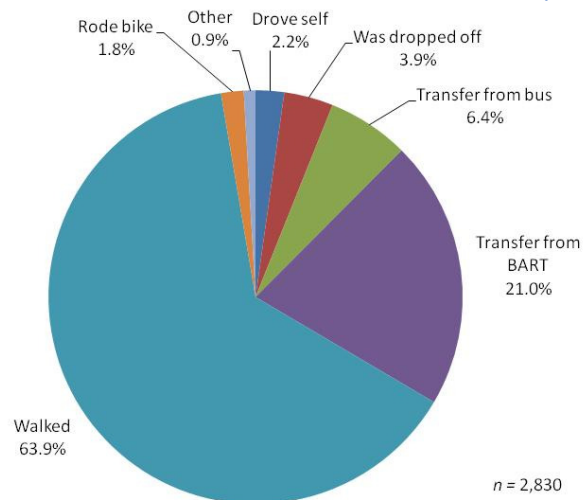


The most important take-away from this analysis is the great potential which County Connection will possess once it introduces the Clipper card in Fall 2015.

Question 8: How did you get to the bus stop for this trip?

Survey participants were provided with seven response options including “other.” “Walked” was the most popular response (63.9 percent), followed by “transferred from BART” (21 percent). “Transferred from bus” (presumably a County Connection bus) ranked third (6.4 percent).

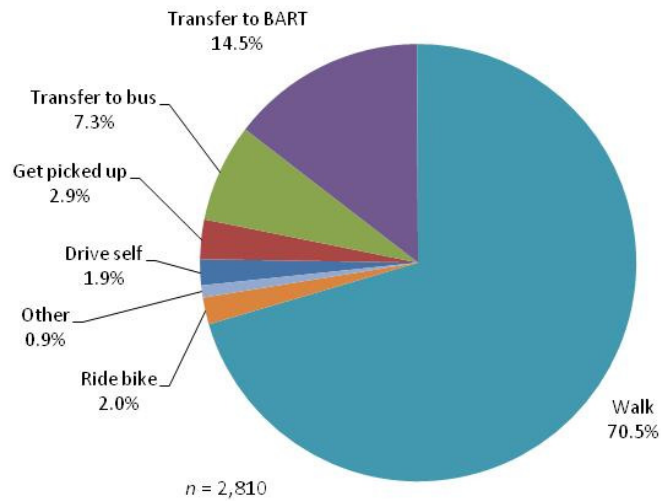
Exhibit 2.11 Method of Bus Stop Access



Question 9: How will you travel to your destination once you get off this bus?

Several response options including “other” were provided. “Walking” was the most common response (70.5 percent) followed by “transfer to BART” (14.5 percent). “Transfer to another bus” (presumably a County Connection bus) ranked third (7.3 percent).

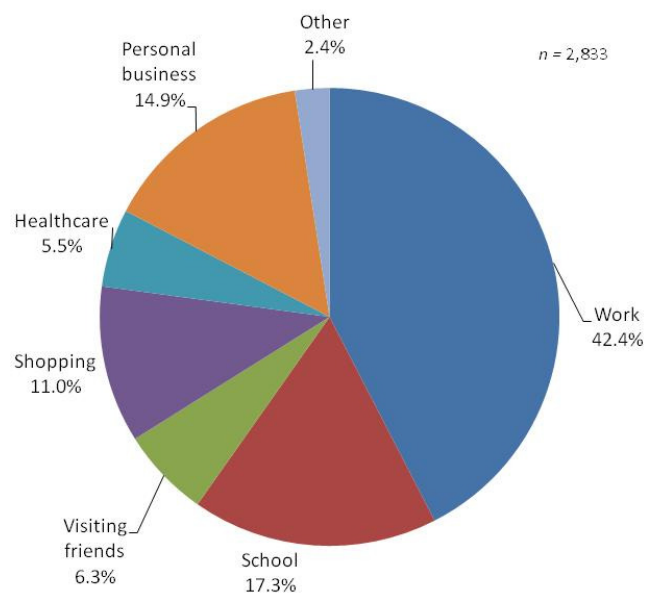
Exhibit 2.12 Method of Destination Access



Question 10: What is the primary purpose of this trip?

Three responses stood out (in terms of number): “work” (42.4 percent), “school” (17.3 percent), and “personal business” (unspecified) (14.9 percent).

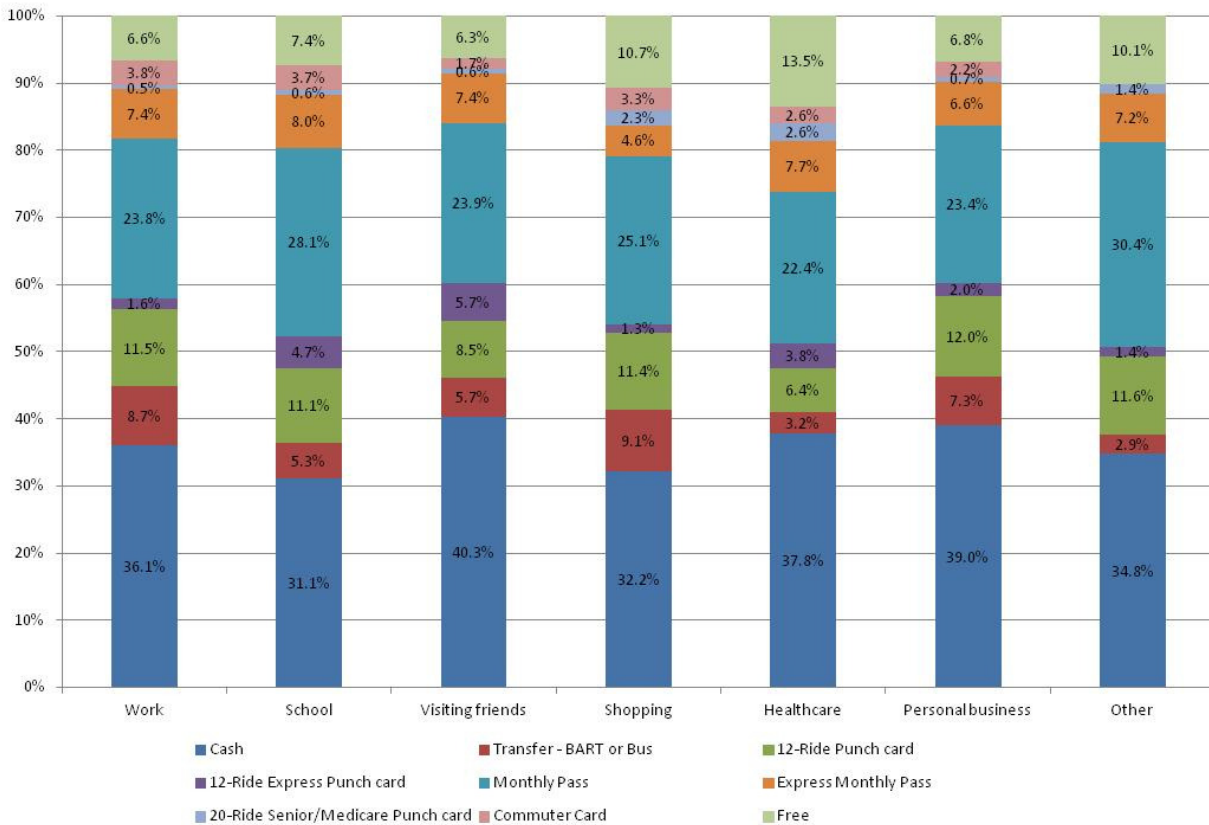
Exhibit 2.13 Trip Purpose



Cross-tabulation: Fare Media Used (Question 5) vs. Trip Purpose (Question 10)

Those citing “work” and “school” as their trip purpose are the most common customers, and their method of fare payment appears similar – cash, followed by the monthly pass and 12-Ride punch card. Cash and monthly pass were the top two fare media for all groups.

Exhibit 2.14 Fare Media Used vs. Trip Purpose



By looking at these two questions another way, we can assess the top trip purpose by each fare payment method. Given work is the most popular trip purpose overall, it is not surprising that it is also the top trip purpose for the majority of fare categories. The one exception is the 12-ride express punch card, for which school is the most frequently cited trip purpose.

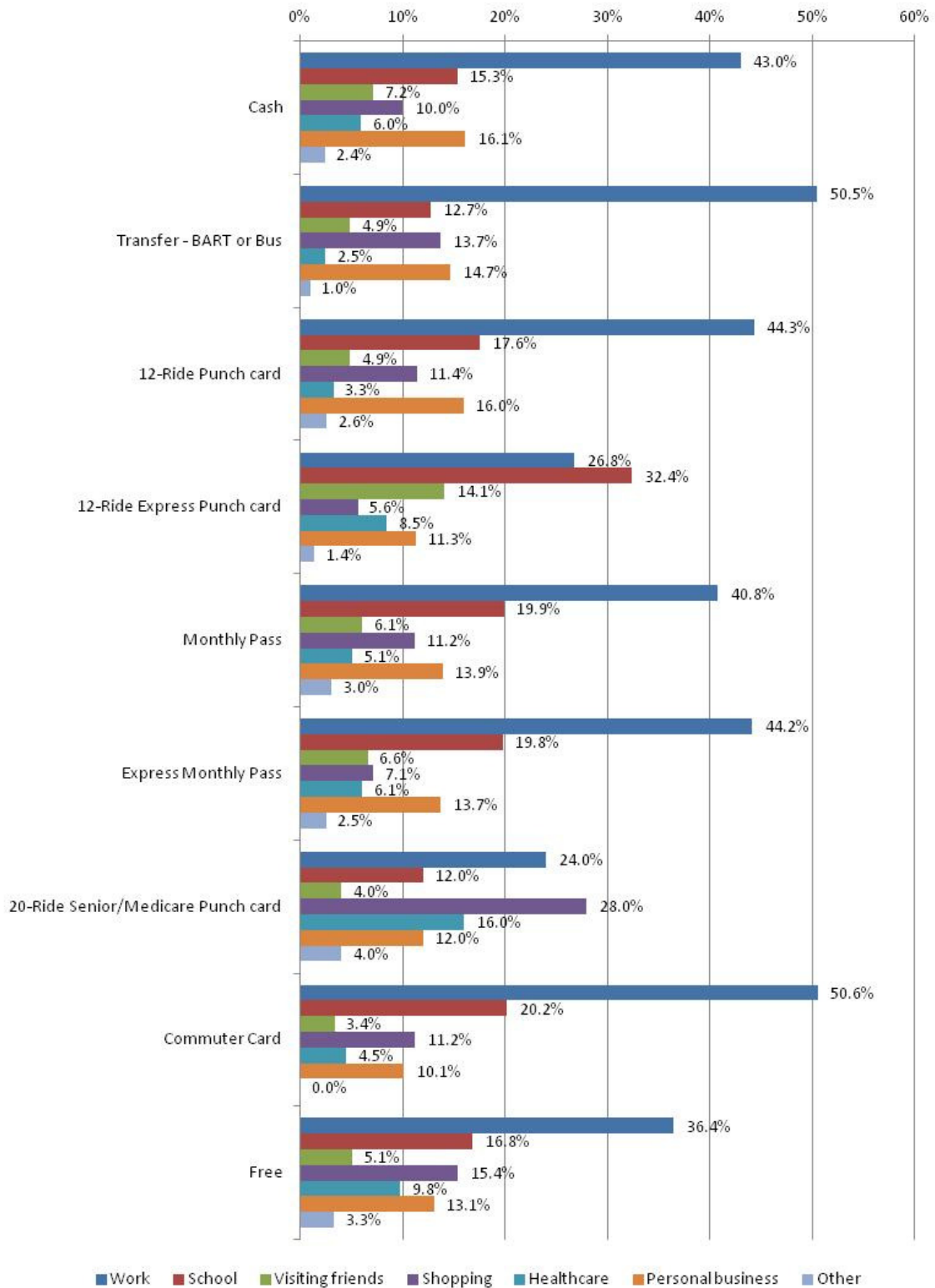
A notable observation is the incidence of “free” work trips. While additional details are not available to confirm this, it may be that many “free” riders use an employer-subsidized fare to travel to and from work. While this would be free to the rider, it would not necessarily be considered a free fare given it was paid by the employer. We believe this may explain the frequency of work trips being categorized as free. This may also explain the incidence of free rides among individuals in the highest income category (as noted in Question 5).

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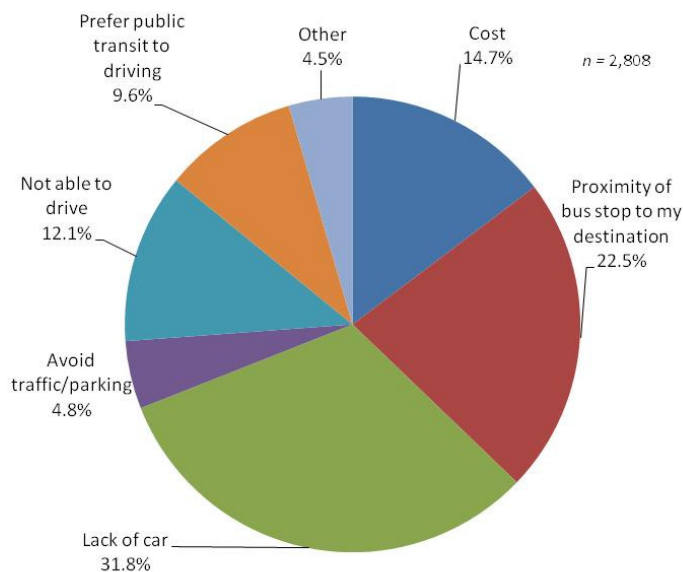
Exhibit 2.15 Trip Purpose vs. Fare Media Used



Question 11: What is your primary reason for choosing County Connection for this trip?

Absence of a personal vehicle was the reason cited by nearly 32 percent of surveyed riders. Another 22.5 percent said they ride County Connection because of the “proximity of bus stop to my destination.” Surprisingly few riders indicated riding the bus as a means of “avoid traffic/parking.” Other common responses included “cost” (14.7 percent) and “not able to drive (12.1 percent).

Exhibit 2.16 Reason for Riding



Taken collectively, responses to this question suggest a relatively high incidence of “transit-dependency” among surveyed riders. We believe this assumption is borne out given rider responses regarding “annual household income,” “auto ownership,” and “frequency of use.”

Cross-tabulation: Reason for Riding (Question 11 – Other) vs. Route (Question 1) and Household Income (Question 17)

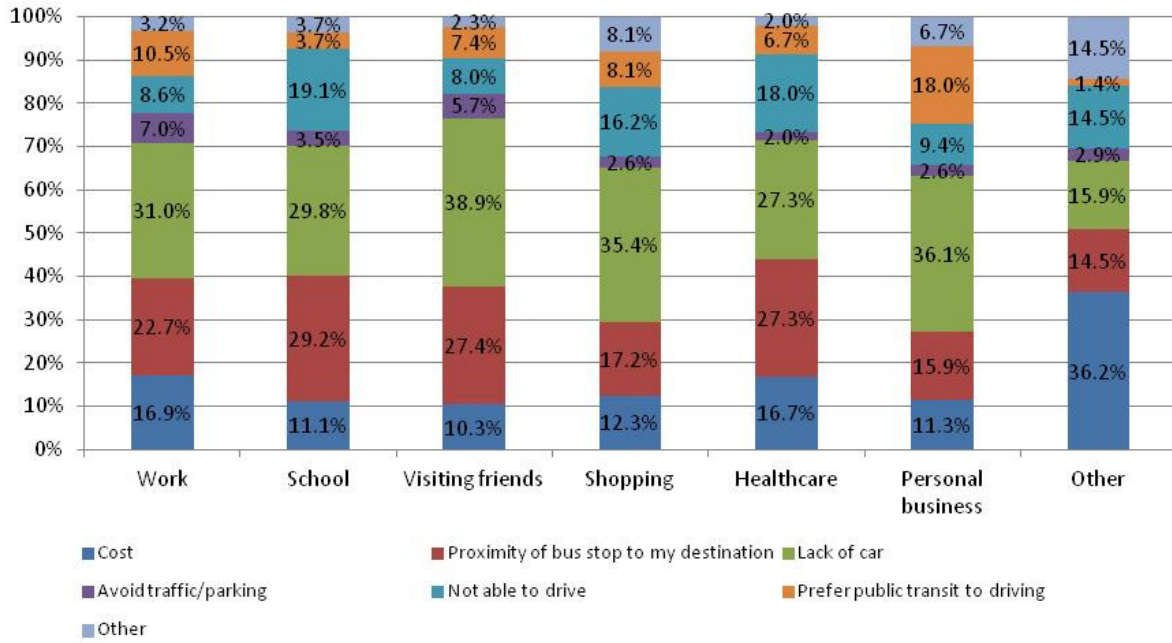
More anecdotal than substantive are the 20 riders who cited “environmental consciousness” as the motivator for riding County Connection. Given transit’s role as a green alternative to driving a single occupant vehicle, we drilled down to see if there were any commonalities among those respondents citing environmental reasons for riding. Of these 20 respondents, 16 were Route 98X riders, with the balance split between Routes 20 and 320. Route 98X is a weekday express service linking the Walnut Creek BART station and the Amtrak station in Martinez. Eighteen of the 20 respondents cited an annual household income of between \$35,000 and \$74,999.

Cross-tabulation: Trip Purpose (Question 10) vs. Reason for Riding (Question 11)

The link between “school” as a trip purpose and “reason for riding” (i.e., lack of a car) is not surprising given the number of school-age youth identified as County Connection riders. This stands in contrast to the link between “work” and “lack of car” (31 percent). While the initial conclusion may suggest a lack of affordability, it could also be attributable to a growing relationship among young working adults to make residential location and work location choices based on availability of public transit (thereby foregoing the need to own a car).

The preference for “public transit versus driving” among riders in the “personal business” category is interesting but not inclusive.

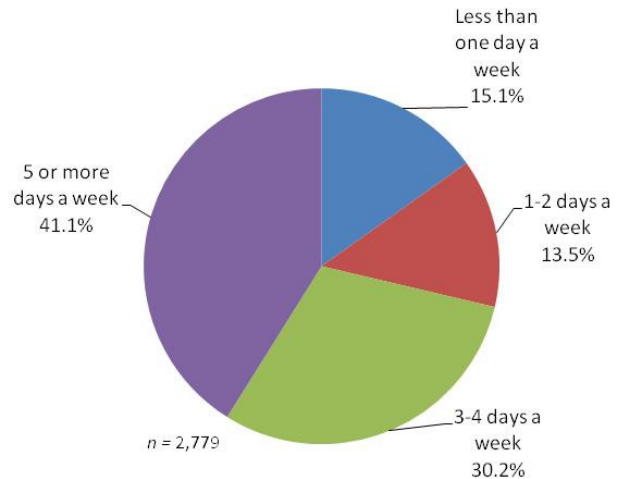
Exhibit 2.17 Trip Purpose vs. Reason for Riding



Question 12: How often do you ride County Connection?

The majority of survey respondents (71.3 percent) indicated riding The County Connection at least “3-4 days per week.” More than forty percent cited riding “5 or more days per week.” This is consistent with the high numbers of respondents indicating either “work” or “school” as their primary trip purpose. (See Question 10.)

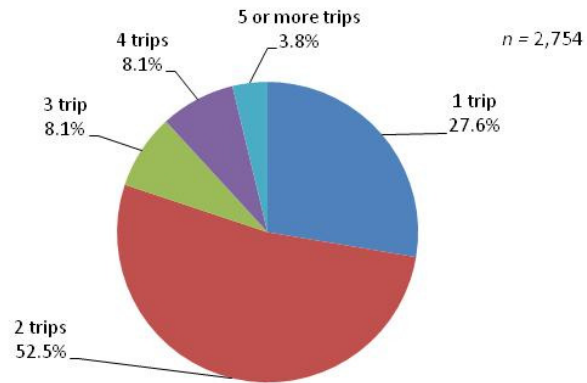
Exhibit 2.18 Frequency of Ridership



Question 13: How many bus trips will you make today using County Connections?

Nearly 28 percent of surveyed riders indicated riding The County Connection at least once on the day they completed the customer survey. Another 53 percent indicated making two rides on the survey date. “Three rides” and “four rides” garnered eight percent each.

Exhibit 2.19 Total Anticipated Trips on Day of Survey

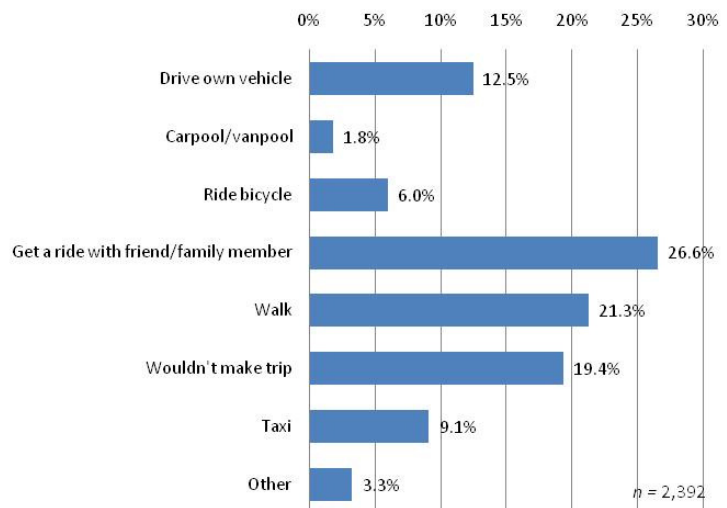


Question 14: How would you have made this trip if County Connection had not been available?

Less than 13 percent of respondents said they would “drive their own vehicle” if The County Connection had not been available (operating) on the survey date. Nearly 27 percent said they would “get a ride with a friend/family member,” while an additional 21 percent said they would “walk.”

Slightly more than 19 percent indicated they would not have been able to make the intended trip if County Connection had not been available. Taken collectively, this suggests a relatively high incidence of transit-dependency among the surveyed riders.

Exhibit 2.20 Alternatives to County Connection



Question 15: What ONE change would encourage you to ride County Connection more often?

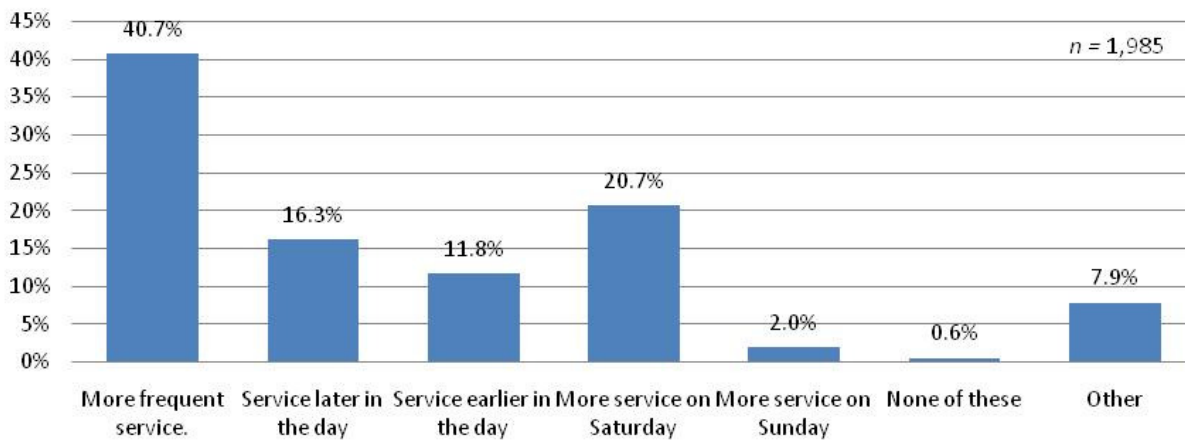
Four responses stood out: “more frequent service” (40.7 percent), “more Sunday service” (20.7 percent), “later service” (16.3 percent), and “earlier service” (11.8 percent).

“More frequent service” was cited most commonly by persons riding Routes 20 (1.8 percent), 10 (1.6 percent), 15 (1.6 percent), and 17 (1.3 percent). “More Saturday service” was cited most frequently by persons riding Route 310. The desired service start time was split between 6 a.m. and 7 a.m.

“Later service” was cited most frequently by persons riding Routes 6 (1.0 percent), 10 (1.0 percent), 97X (0.8 percent), and 17 (0.6 percent). In terms of service hours, 29 persons requested 10 p.m., 23 cited 11 p.m., 22 listed 10:30 p.m., and 15 preferred 8 p.m.

“Earlier service” was cited most frequently by riders on Routes 20 (12 responses) and 6 (11 responses). The desired service hours were split fairly evenly before 5 a.m., 6:30 a.m., and 7 a.m.

Exhibit 2.21 Motivators for More Frequent Ridership



Question 16: How do you rate County Connection?

Respondents were asked to rate a series of attributes on a scale of one to five, where one equaled “poor” and five equaled “excellent.” Responses were aggregated and a mean rating was calculated, allowing the attributes to be compared to one another. The mean ratings are provided in Exhibit 2.22.



Exhibit 2.22 Mean Attribute Ratings

Attribute	Mean Rating
On-Time/Reliability	3.82
Frequency of service	3.80
Time service begins	3.40
Time service ends	3.72
Length of trip	3.41
Driver courtesy	3.86
Connections with other buses	4.18
Condition of buses	4.09

“Connections with other buses” was the highest-rated attributed, with a mean rating of 4.18. Nearly 80 percent of respondents rated this attribute as “good” or “excellent.” “Condition of buses” was the second highest-rated attribute, with a mean rating of 4.09. More than 77 percent rated this attribute as “good” or “excellent.”

The lowest rated attribute was “time service begins,” followed closely by “length of trip” (mean ratings of 3.40 and 3.41, respectively). Slightly more than half (52.5 percent) of respondents rated the time service begins as “excellent” or “good,” while more than a quarter (26.1 percent) rated it as “fair” or “poor.” A similar pattern is observed with respect to length of trip – just 53.5 percent rated it “excellent” or “good,” while 25.6 percent rated this attribute “fair” or “poor.”

Interestingly, while “time service begins” was the lowest-rated attribute, just 11.8 percent of respondents cited it as the one change that would make them ride County Connection more (Question 15). This implies that while people would like service to begin earlier, it may not actually result in increased ridership.

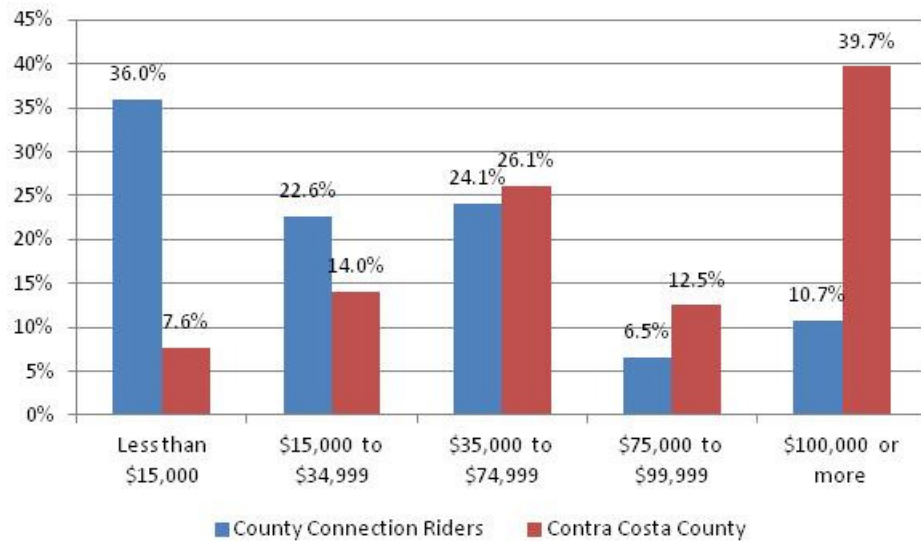
Question 17: What is your approximate annual household income?

More than 20 percent of survey participants declined to provide a response to this question. Among those who did, nearly 83 percent of surveyed riders indicated an annual household income of less than \$75,000. Just over 17 percent cited a household income amount of \$75,000 or greater. This is dramatically different than overall household income levels of Contra Costa County as a whole, where just 7.6 percent report an income of less than \$15,000 and nearly 40 percent cite an income of \$100,000 or more. The mean household income in Contra Costa County is \$106,018.³

³ 2013 American Community Survey.



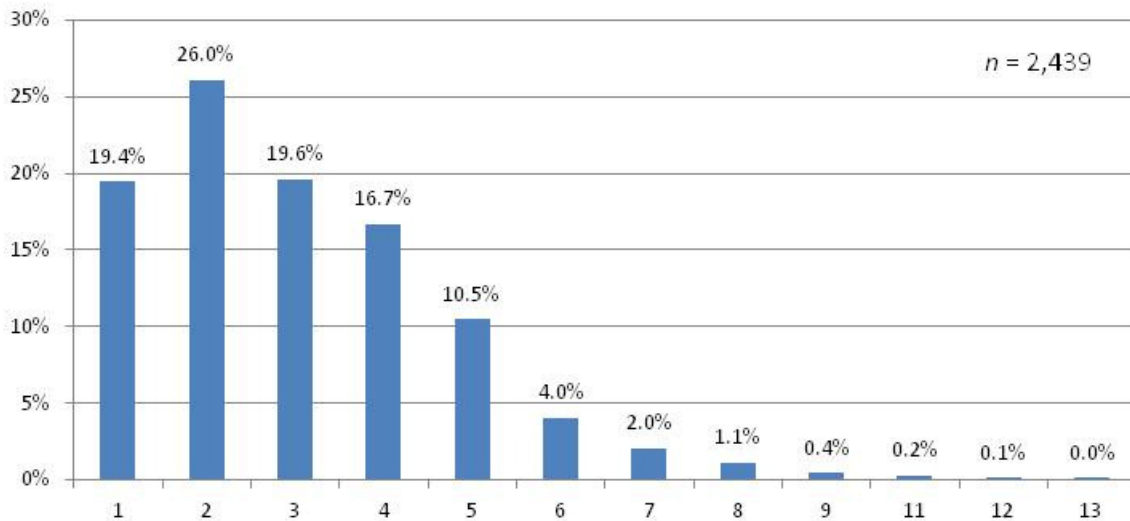
Exhibit 2.23 Annual Household Income



Question 18: How many persons reside in your household?

More than 17 percent of respondents declined to respond to this question. Among those who did provide a response, the majority of respondents (67.7 percent) cited living in a household composed of four or fewer persons. Of those, 38 percent live in a one- or two-person household. The average household size in Contra Costa County is 2.77, while the average family size is 3.26.⁴

Exhibit 2.24 Household Size (Number of Persons)



⁴ 2013 American Community Survey.



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Thirty-six percent of respondents cited an annual household income of less than \$15,000. Depending upon the size of the household, many of these individuals are at risk of being at or below the federal poverty level guidelines. Currently, \$15,930 is the poverty threshold for a two-person household.

Cross-tabulation: Household Income (Question 17) vs. Household Size (Question 18)

To assess the likelihood of customers living below federal poverty guidelines, we compared household size to annual household income. Darker red squares indicate increased likelihood of living below the poverty line, while lighter red squares indicate individuals at risk of living in poverty. Each percentage is shown as the percentage of total respondents who answered both questions. This translates to 1,138 individuals, or 52.4 percent of the total sample, who are at risk for living below federal poverty guidelines.

Exhibit 2.25 Risk for Poverty

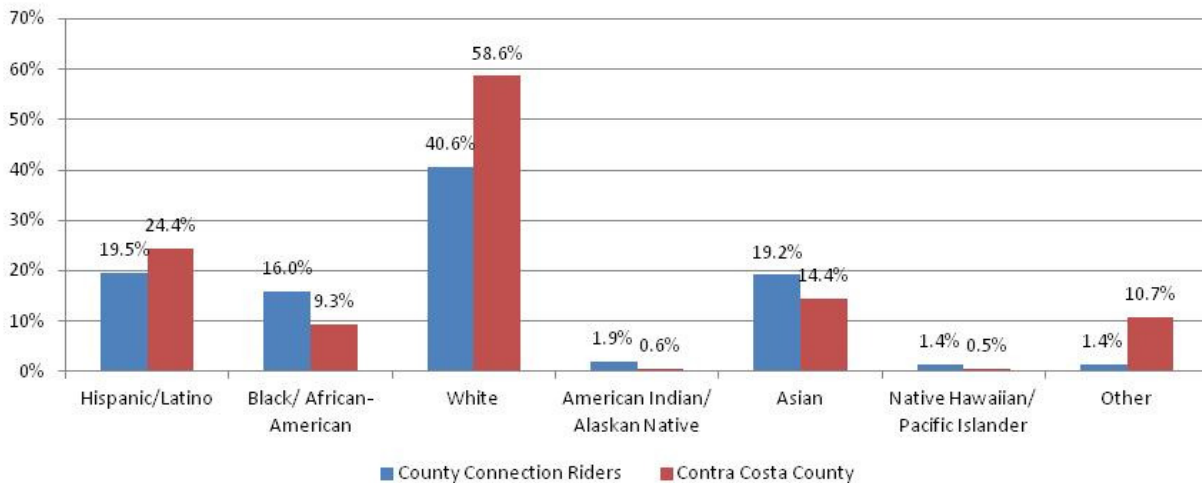
	Number of Persons in Household								
	1	2	3	4	5	6	7	8	9 or more
Less than \$15,000	8.8%	8.3%	6.5%	4.7%	3.7%	1.7%	0.9%	0.5%	0.3%
\$15,000 to \$34,999	5.9%	5.6%	4.2%	2.9%	2.3%	0.6%	0.5%	0.4%	0.1%
\$35,000 to \$74,999	4.3%	6.9%	4.9%	5.1%	2.4%	0.4%	0.5%	0.0%	0.4%
\$75,000 to \$99,999	0.5%	1.9%	1.7%	1.2%	0.7%	0.1%	0.1%	0.0%	0.0%
\$100,000 or more	0.7%	3.7%	2.3%	2.4%	1.3%	0.6%	0.0%	0.2%	0.00%

n = 2,174

Question 19: With which of the following do you most identify? (select one)

More than 17 percent of survey participants declined to provide a response to this question. Among those who did respond, “White” was the most common racial identify (40.6 percent), followed by “Hispanic/Latino” (19.5 percent). Other common responses were “Asian” (19.2 percent) and “Black/African-American” (16 percent).

Exhibit 2.26 Race/Ethnicity

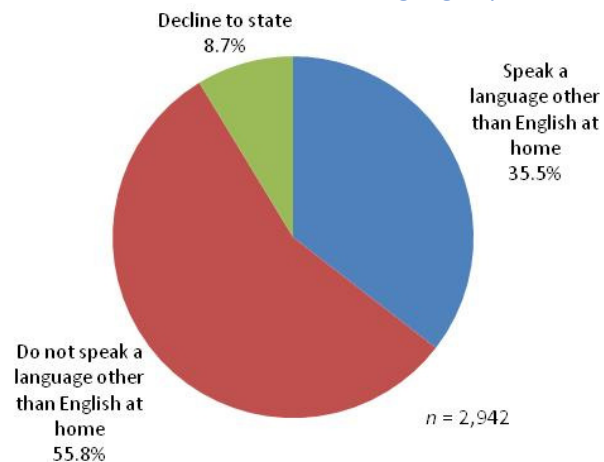


When compared to the overall demographics of Contra Costa County as a whole, County Connection riders are generally in line with countywide patterns. Bear in mind that in the countywide data, Hispanic/Latino is not provided as a separate response option for race, which may explain the significantly higher incidence of “white” reported in the American Community Survey.

Question 20: Do you speak a language other than English at home?

Nearly 56 percent of respondents indicated they spoke a language other than English at home. This could indicate a high percentage of non-native English speakers among County Connection’s ridership.

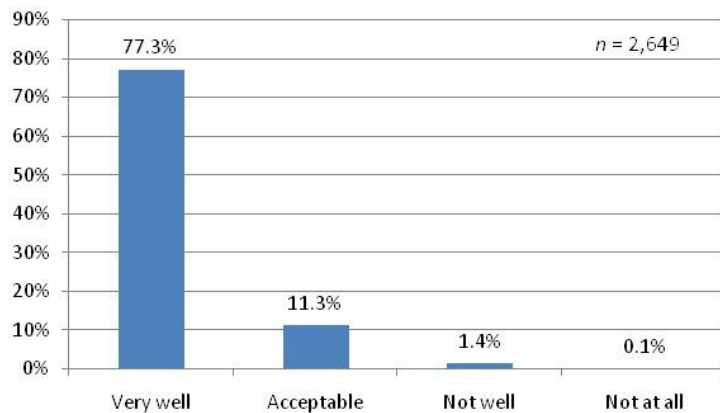
Exhibit 2.27 Language Spoken at Home



Question 21: How well do you speak English?

Four response options were provided, ranging from “very well” to “not at all.” Nearly 86 percent of those riders surveyed indicated speaking English “very well.” This suggests that only in a relatively limited number of cases does language serve as a barrier to effective use of County Connection as a means of travel around the county.

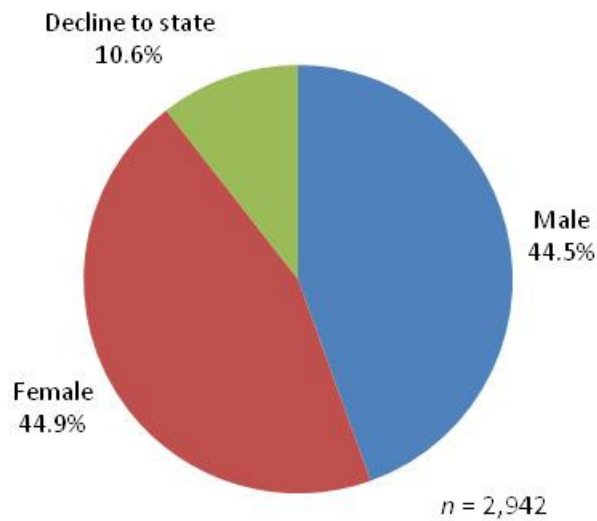
Exhibit 2.28 English Proficiency



Question 22: What is your gender?

Respondents who identified their gender were nearly evenly split between female (44.9 percent) and male (44.5 percent). More than 10 percent declined to identify a gender.

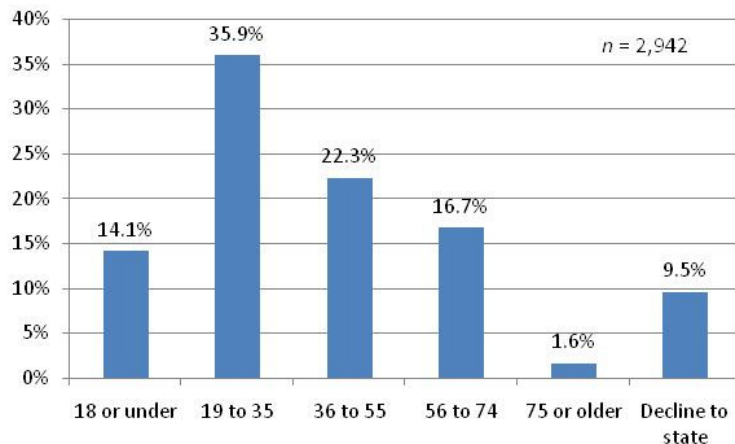
Exhibit 2.29 Gender



Question 23: What is your age?

Persons aged 19 to 35 were the largest single group of respondents (35.9 percent), followed by those age 36 to 55 (22.3 percent). Those 75 years and older were the smallest group of respondents (1.6 percent).

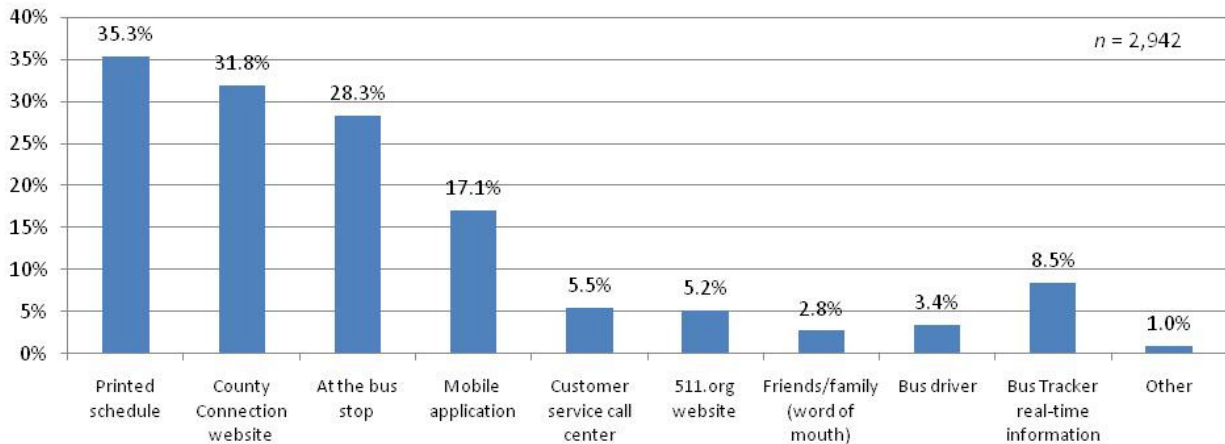
Exhibit 2.30 Age



Question 24: How do you typically obtain schedule information about the County Connection?

Respondents were presented with a series of ten information options, including “other,” and were invited to select all that applied. The printed schedule was the most commonly cited source, selected by 35.3 percent of all respondents, followed by the County Connection website (31.8 percent) and information located at the bus stop (28.3 percent). Just 17.1 percent cited use of the County Connection’s mobile application, while only 8.5 percent used the Bus Tracker real-time information system.

Exhibit 2.31 Typical Source of Service Information

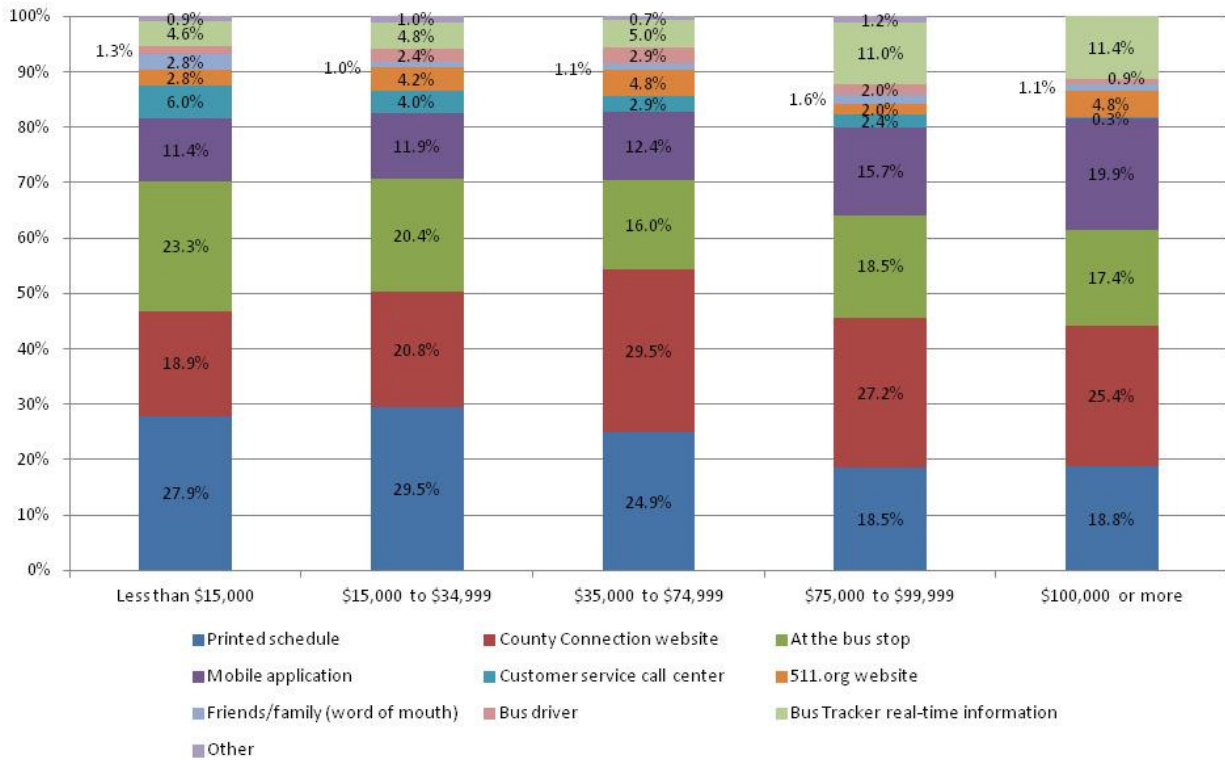


Cross-tabulation: Household Income (Question 17) vs. Source of Service Information (Question 24)

We compared household income against typical source of service information in order to determine if the type of service information used varied depending upon income. Among the lowest income group, the printed schedule and bus stop information are the top two sources of information. Among the highest income group, the County Connection website and mobile application are the top two sources of information. The \$35,000 to \$74,999 group represents the highest usage of the County Connection website, while those citing an income \$75,000 or higher are most likely to use the Bus Tracker real-time information.



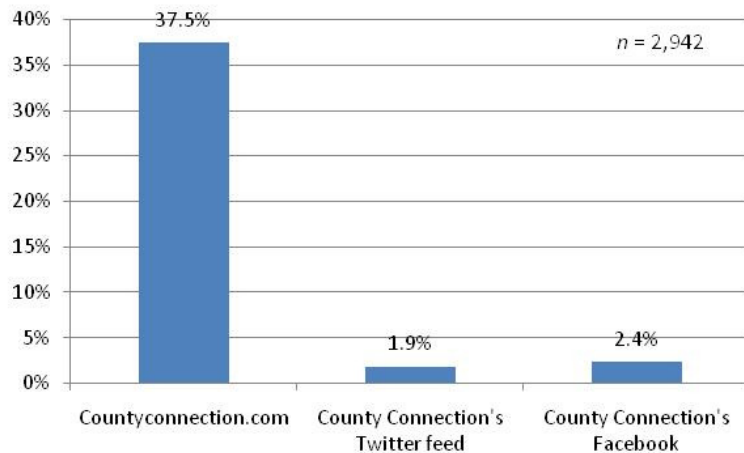
Exhibit 2.32 Household Income vs. Typical Source of Service Information



Question 25: In a typical month, do you visit or receive...? (check all that apply)

Respondents were asked to identify whether they typically receive social media content through the County Connection’s Facebook and Twitter messaging or visit the CountyConnection.com website. Respondents who cited visiting County Connection’s website (37.5) were consistent with those who said they obtained schedule information from the site. Facebook (2.4 percent) and Twitter (1.9 percent) were much less frequently cited resources.

Exhibit 2.33 Use of Digital Resources



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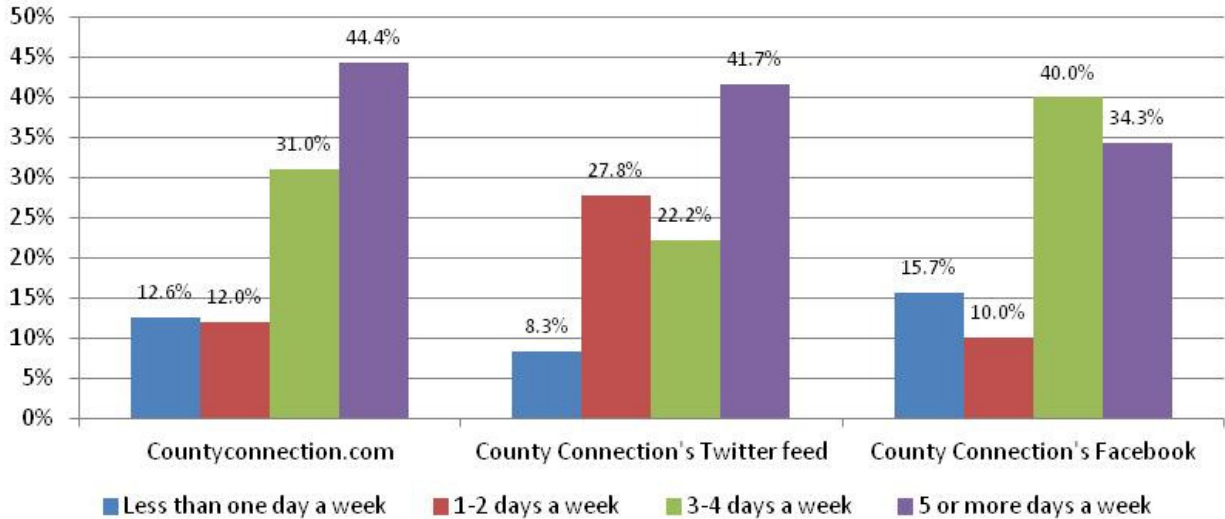
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Cross-tabulation: Frequency of Use (Question 12) vs. Use of Digital Resources (Question 25)

Not surprisingly, frequent riders (those who ride three or more days per week) are more likely to utilize County Connection’s digital resources. Given the broad penetration of smartphones (as discussed in Question 29), there is significant opportunity to promote County Connection’s social media platforms, especially among those who may only ride a couple of days a week.

Exhibit 2.34 Use of Digital Resources vs. Frequency of Use



Question 26: What is your home zip code?

The largest concentration of respondents is from Concord (nearly 30 percent of all survey participants). The top six cited zip codes are provided in Exhibit 2.35.

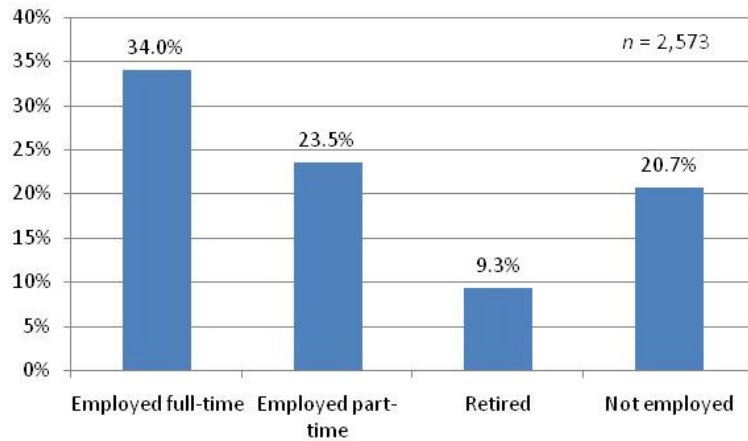
Exhibit 2.35 Home Zip Code

Zip Code	Percent of Respondents
94521 (Concord)	11.2%
94520 (Concord)	10.9%
94553 (Martinez)	5.8%
94565 (Pittsburg)	4.3%
94518 (Concord)	3.9%
94523 (Pleasant Hill)	3.5%

Question 27: What is your employment status?

A majority of respondents (57.5 percent) cited being employed either full- or part-time. Nearly 21 percent said they were not employed, while 9.3 percent indicated being retired.

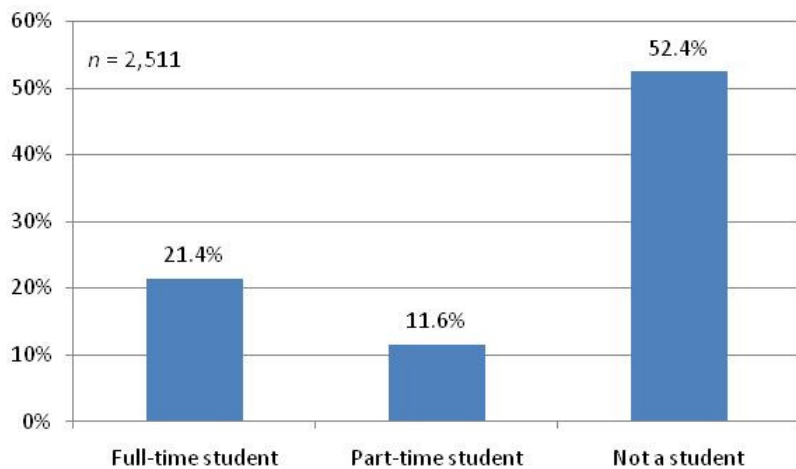
Exhibit 2.36 Employment Status



Question 28: Are you a student?

One-third of respondents indicated being a full- or part-time student.

Exhibit 2.37 Student Status



Question 29: Do you own or regularly use...? (select all that apply)

Respondents were asked if they own or regularly use a smartphone, computer, and/or tablet. Nearly two-thirds indicated owning/using a smartphone, followed by nearly half that cited owning/using a computer. A little over 20 percent said they own/use a tablet. This indicates there is significant potential for increased usage of County Connection’s mobile application, given its current limited penetration (17.1 percent) and high number of smartphone users (61.7 percent).

Exhibit 2.38 Use of Technology

