

To: Board of Directors

Date: May 13, 2015

From: Anne Muzzini, Director of Planning and Marketing

Reviewed by:

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**Subject: On Board Survey**

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Background:

The Board has established a goal of conducting an onboard survey every three years and the last one was done by MTC in 2012. In March Moore and Associates was retained to conduct an onboard passenger survey for a price not to exceed \$40,000. The onboard survey will inform the Board regarding the impact of service and fare changes and gives the marketing and planning staff valuable information.

Details:

The survey was printed in Spanish and English and a total of 3,353 surveys were completed including 411 on the school tripper routes. The school tripper survey, done only on the 600 routes, had fewer questions and was developed with students in mind. The final report separates the results obtained from regular route and student (600) route riders.

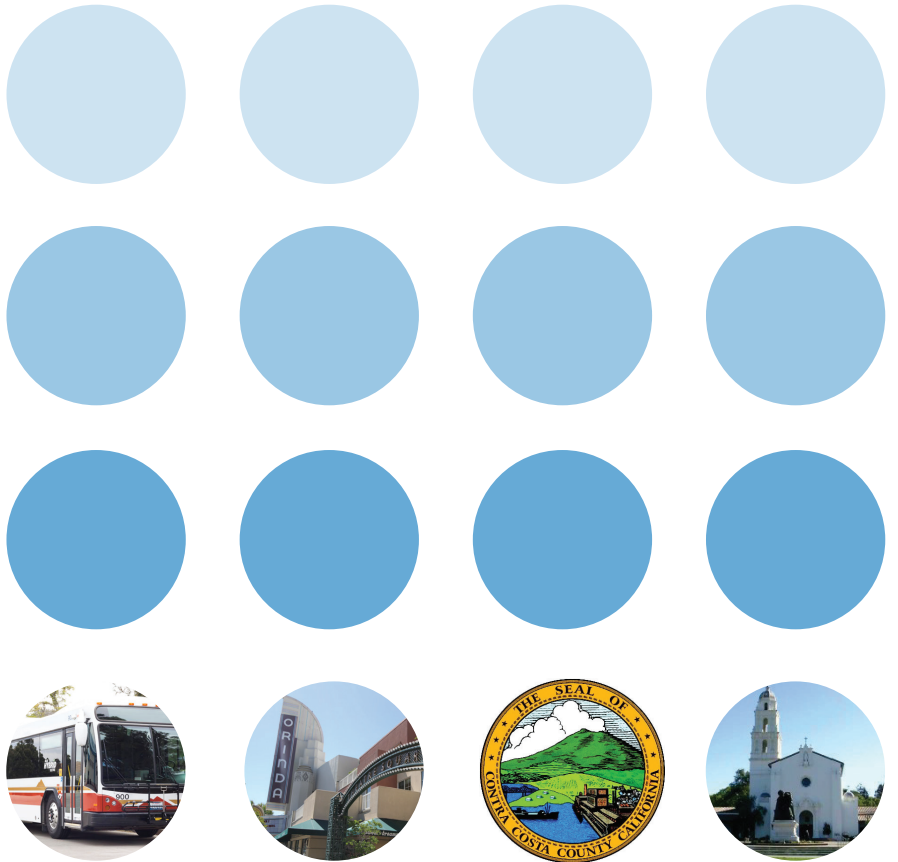
Key Findings:

- 36% of riders still pay with cash
- 75% of riders transfer to another bus or BART (35% BART)
- 35% of riders already have the Clipper card
- 10% ride because they prefer transit to driving
- 40% want more frequent service
- We scored well in the areas of bus connections, on time performance, condition of buses, and driver courtesy
- 36% of regular riders reported household income of less than \$15,000
- 88% speak English with proficiency
- 63% still get schedule information from a printed schedule or at the bus stop

Board Action:

The Final Report is attached and will be reviewed in detail at the Board meeting.

There is no required action. The report will be folded into the Short Range Transit Plan.



# CENTRAL CONTRA COSTA TRANSIT AUTHORITY

2015 FIXED-ROUTE TRANSIT ONBOARD SURVEY

FINAL REPORT

MAY 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

## Central Contra Costa Transit Authority

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Exhibit 1.1 Sampling by Route<sup>1</sup>

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
<b>Total</b>	<b>2151</b>	<b>2402</b>

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
<b>Total</b>	<b>442</b>	<b>411</b>

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
<b>Total</b>	<b>422</b>	<b>540</b>

<sup>1</sup> 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 411<sup>2</sup> 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.

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<sup>2</sup> Note: While 411 surveys were collected onboard the school tripper routes, only 235 were subsequently deemed valid as many of the student respondents provided nonsense responses or drew pictures on the survey forms.

## Section 2

# Fixed-Route 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 and therefore may not be reflective of riders on a specific or individual route. (Note: Riders on the school tripper service utilized a separate survey instrument and the results of that survey are explored in detail in Section 3. Those results are not included in this section.) Given their nature, Routes 627 and 649 utilized the fixed-route survey and are therefore included in the fixed-route analysis in this section.

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. All 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

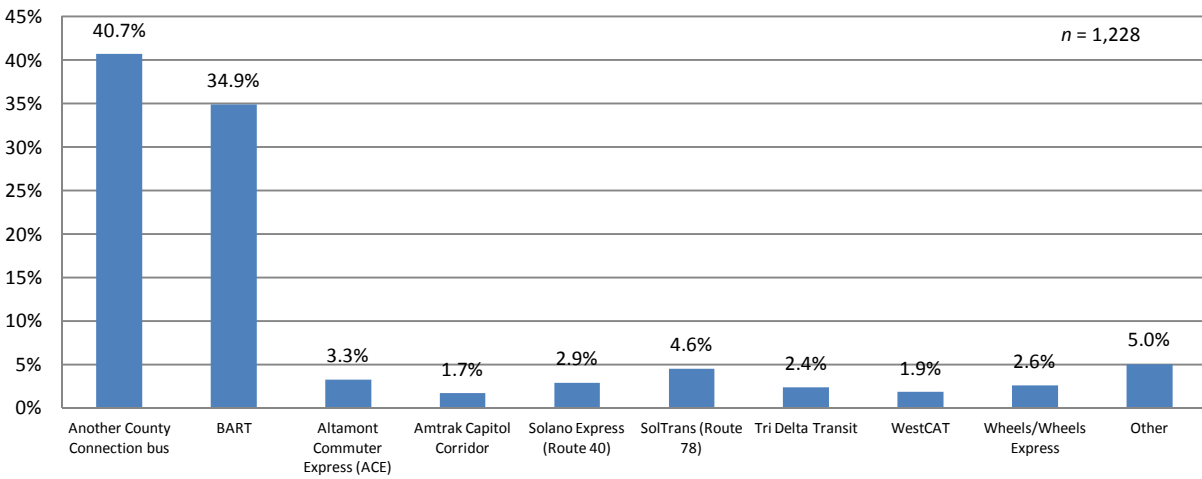
Destination Location	Frequency
BART – Concord	222
Concord	213
Diablo Valley College	134
Walnut Creek	114
BART – Walnut Creek	112
Sun Valley Mall	80
Clayton Rd	78
Pleasant Hill	67
Martinez	66
San Ramon	62

**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

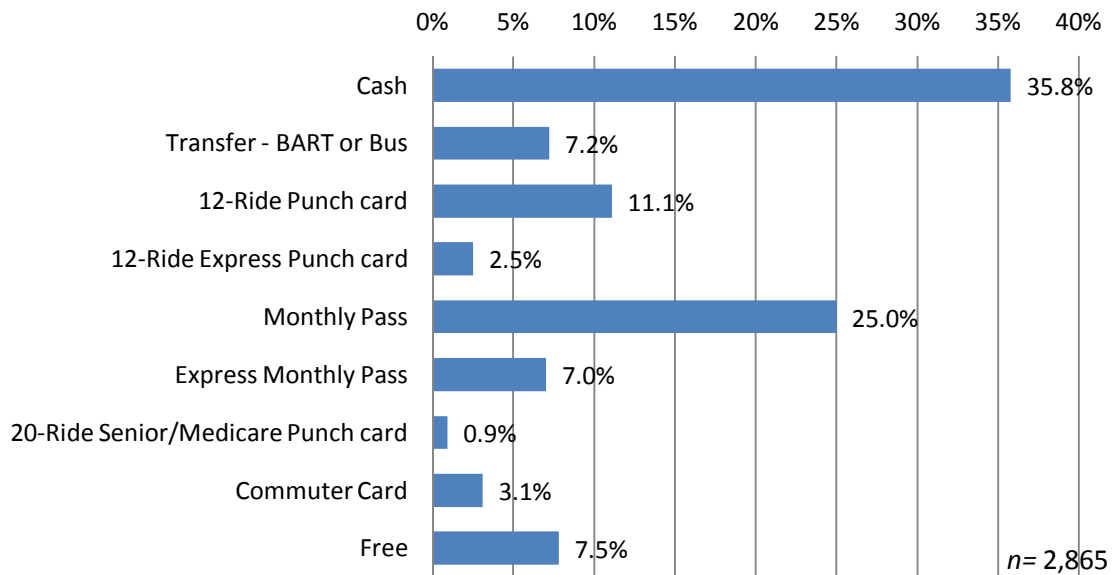


**Question 5: How did you pay for your fare?**

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



## 2015 Fixed-Route Transit Onboard Survey

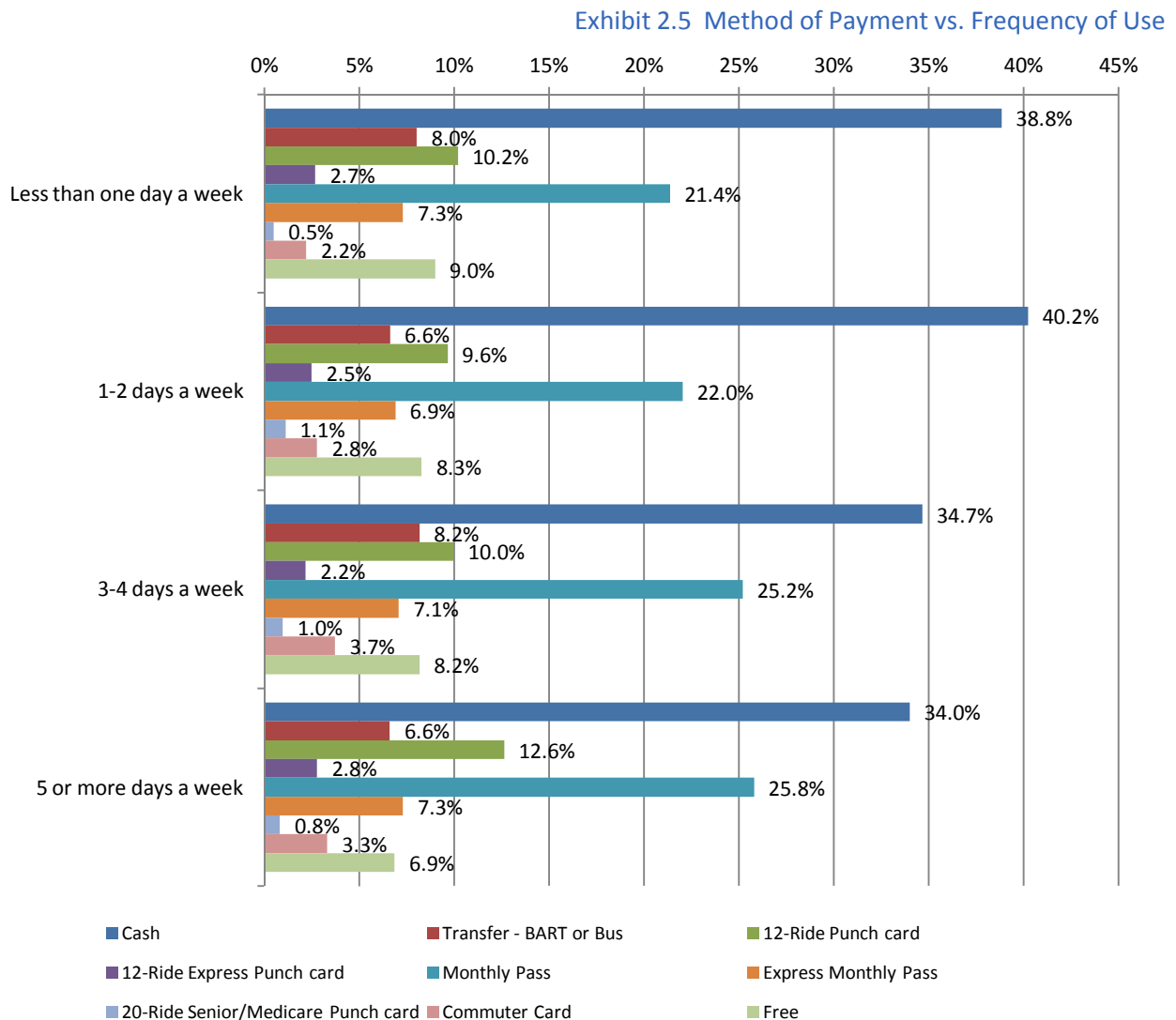
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By contrast, the 12-Ride Punch card was the most common method of payment on the school tripper routes, where 47.3 percent of riders reported paying with the 12-Ride Punch card (see Section 3, Question 3).

#### 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.



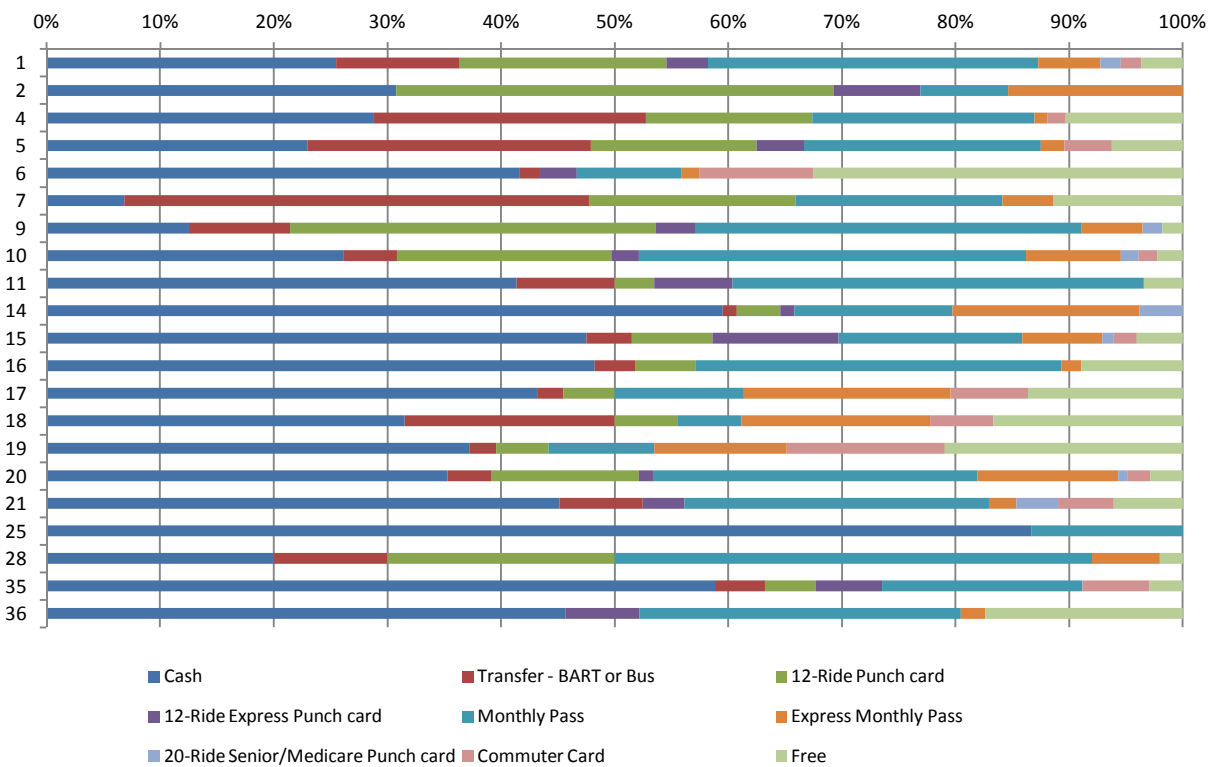
*Cross-tabulation: Route (Question 1) vs. Fare Media Used (Question 5)*

By examining the fare type across all routes, pictures emerge of locational tendencies. For example, cash was far and away the most common fare type reported on Route 25 (86.7 percent), and it was used approximately 60 percent of the time by riders on routes 14, 35, 98X, and 301. On other routes, combined usage of 12-Ride Punch cards and 12-Ride Express Punch cards exceeded all other options, including combined usage of monthly passes and express monthly passes. Nearly half of riders on Route 2 used one of the punch card options, including 38.5 percent who used the 12-Ride Punch card. Half of riders on Route 627 paid their fare with a punch cards.

More than 56 percent of riders on route 95X used the Monthly Pass, while 41.7 percent of riders on 91X used the Express Monthly pass. The Monthly Pass was the only fare media reported on Route 649; however, the extremely small sample size (two respondents) must be taken into consideration.

Given the number of routes, the cross-tabulation is presented in two exhibits for ease of review.

Exhibit 2.6 Route vs. Method of Payment (Routes 1 – 36)



# 2015 Fixed-Route Transit Onboard Survey

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Exhibit 2.7 Route vs. Method of Payment (Routes 91X - 649)



# 2015 Fixed-Route Transit Onboard Survey

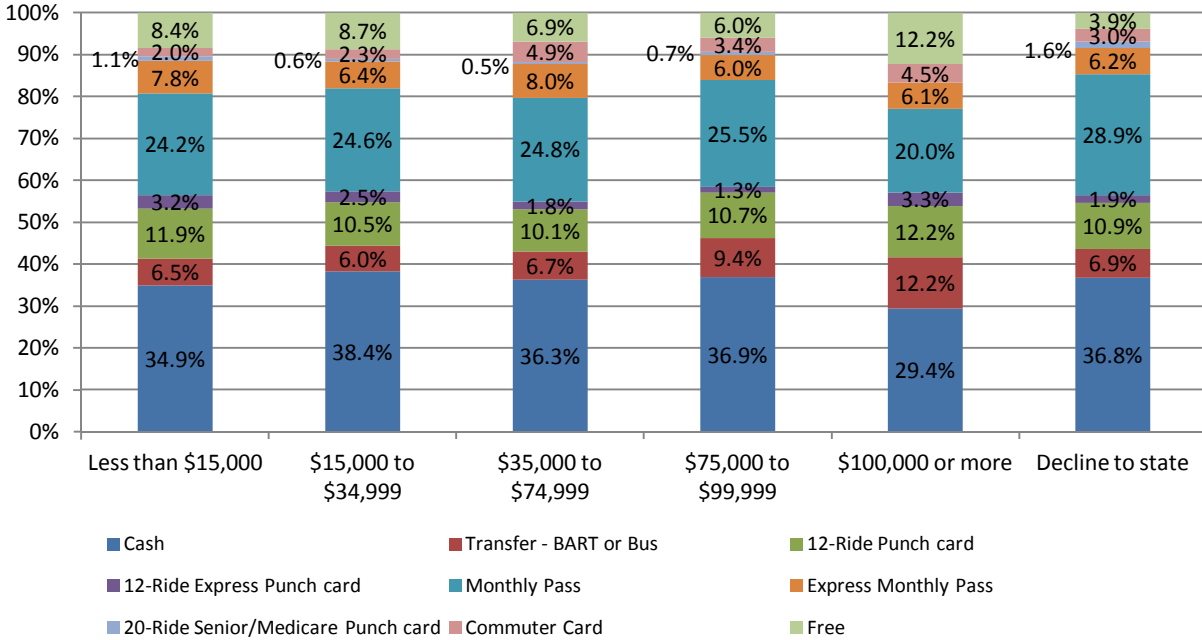
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#### Cross-tabulation: Fare Media Used (Question 5) vs. Household Income (Question 17)

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 2.8 Method of Payment vs. Household Income



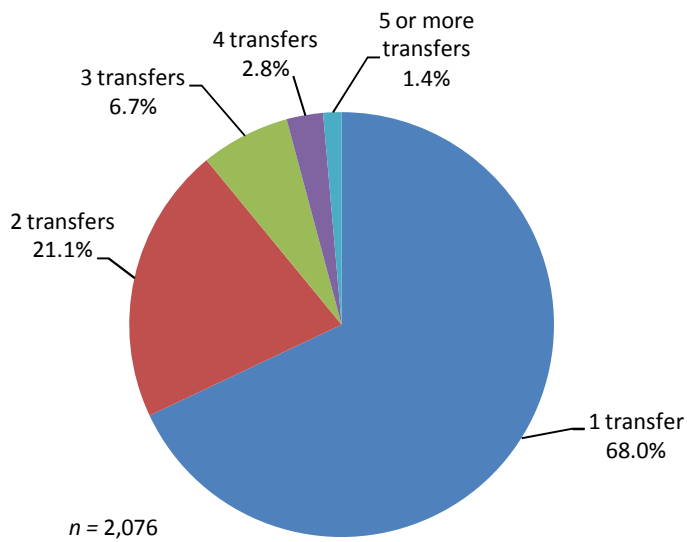


**Question 6: How many transfers are required to complete your trip?**

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).

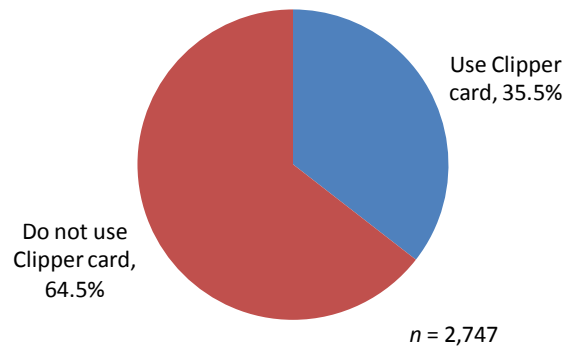
Exhibit 2.9 Transfer Usage



**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.

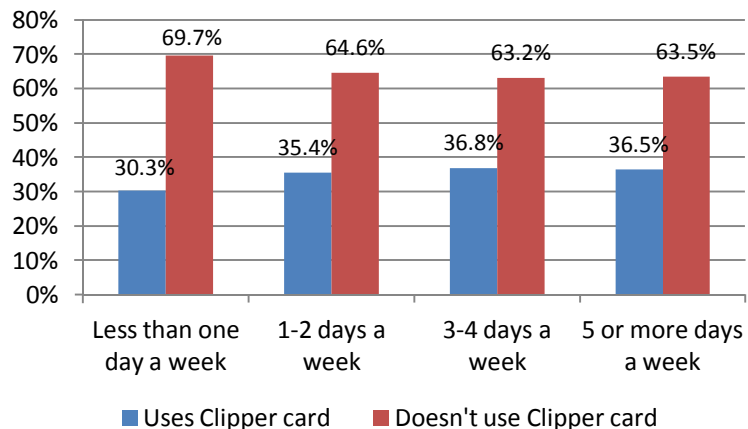
Exhibit 2.10 Current Clipper Card Usage



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

The results of Exhibit 2.11 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).

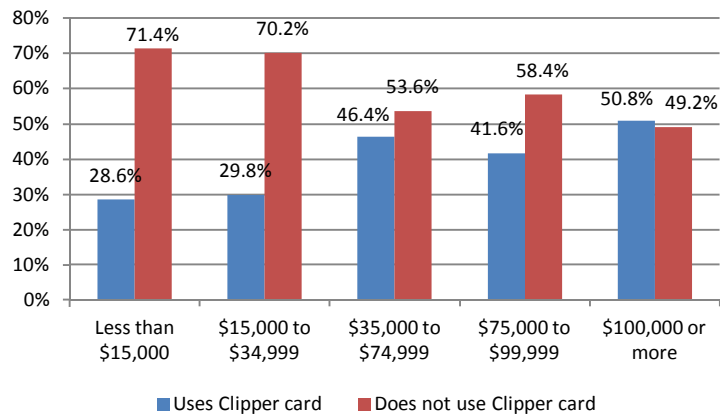
Exhibit 2.11 Current Clipper Card Usage vs. Frequency of Use



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

When comparing “Clipper card usage” with “household income,” it is apparent more persons with higher household incomes exhibit greater use of this non-cash (stored fare) transit media than those at lower income levels. However, at only the highest income level do a majority of respondents utilize the Clipper card. We believe this is due largely to the fact that the rider needs to be able to afford making a higher fare deposit on the card. It does represent a significant opportunity to expand use by higher-income riders once the Clipper card once the program becomes available on County Connection in Fall 2015.

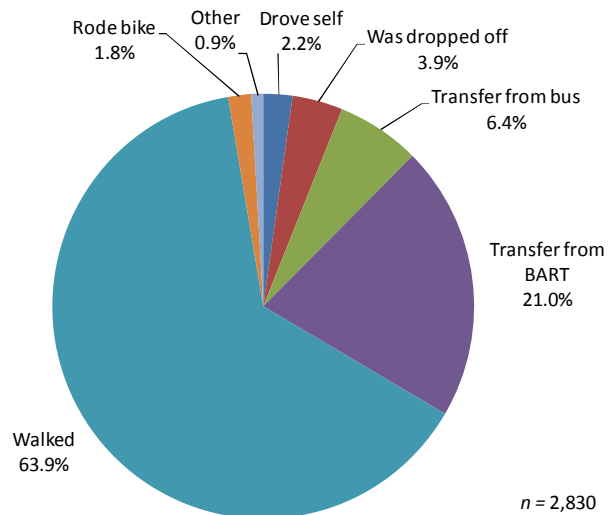
Exhibit 2.12 Current Clipper Card Usage vs. Household Income



**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).

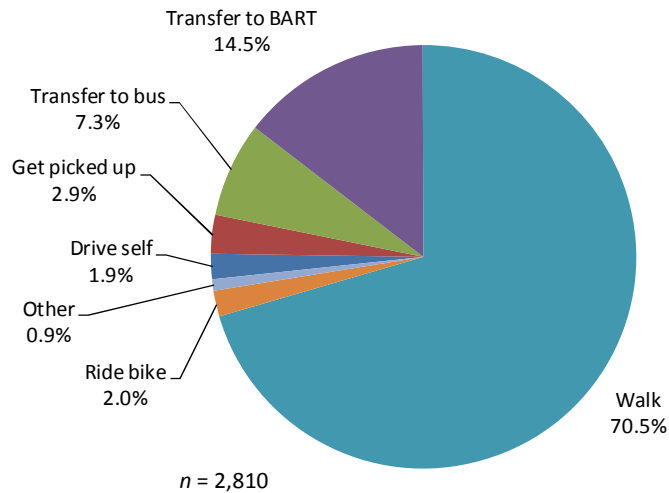
Exhibit 2.13 Method of Bus Stop Access



**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).

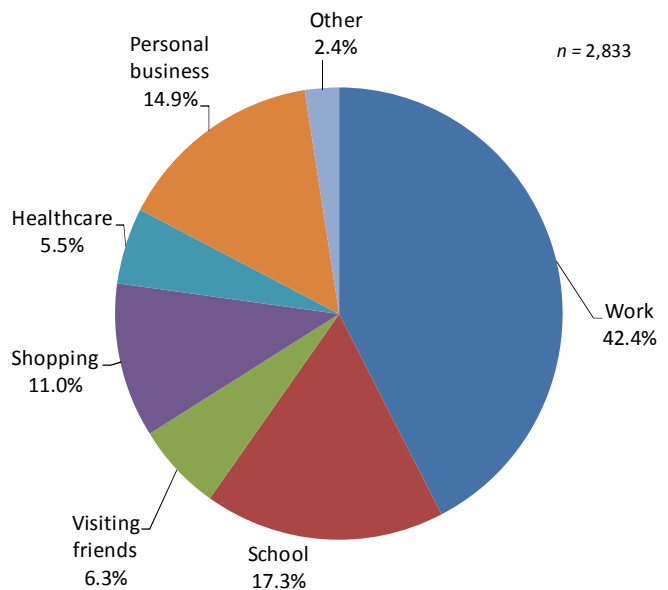
Exhibit 2.14 Method of Destination Access



**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 2.15 Trip Purpose



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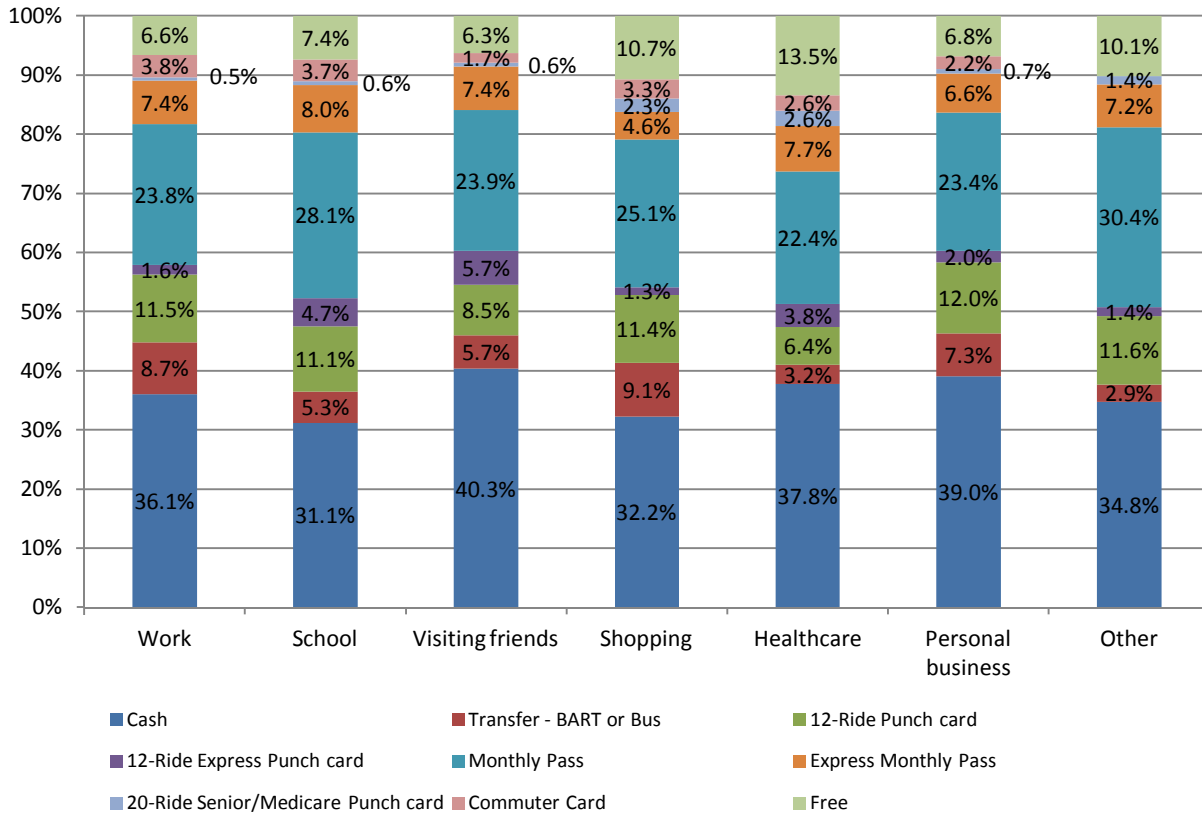
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#### Cross-tabulation: Fare Media Used (Question 5) vs. Trip Purpose (Question 10)

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 2.16 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.

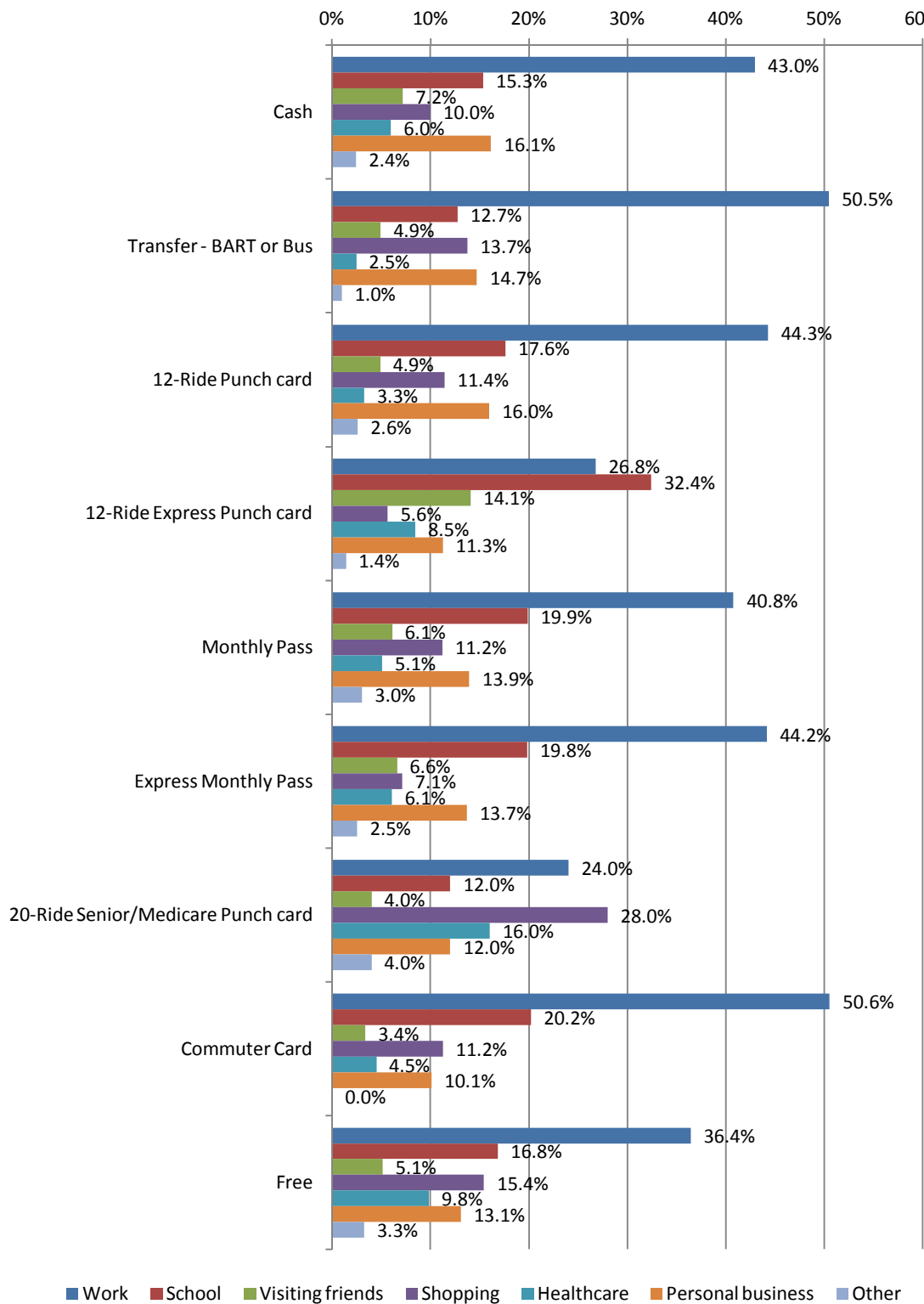
A notable observation is the incidence of “free” work trips. While additional details are not available to confirm this, it may be that many “free” riders use an employer-subsidized fare to travel to and from work. While this would be free to the rider, it would not necessarily be considered a free fare 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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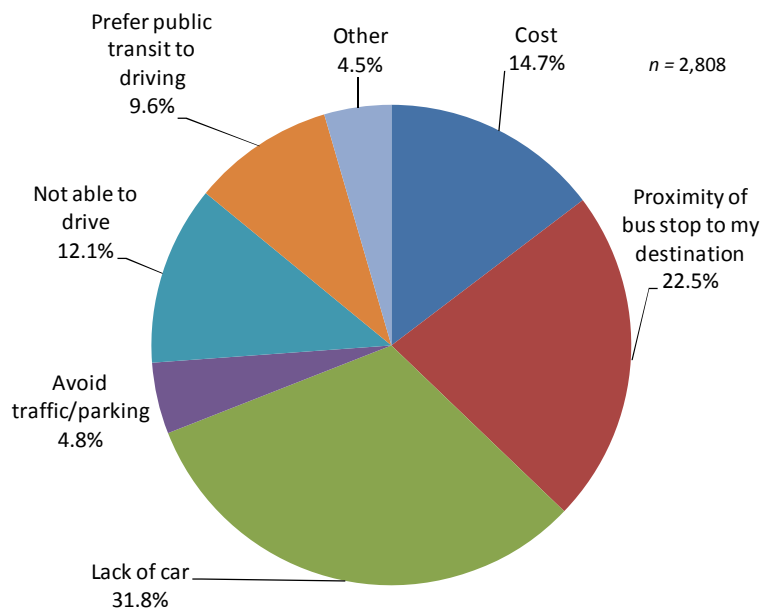
Exhibit 2.17 Trip Purpose vs. Fare Media Used



**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 2.18 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

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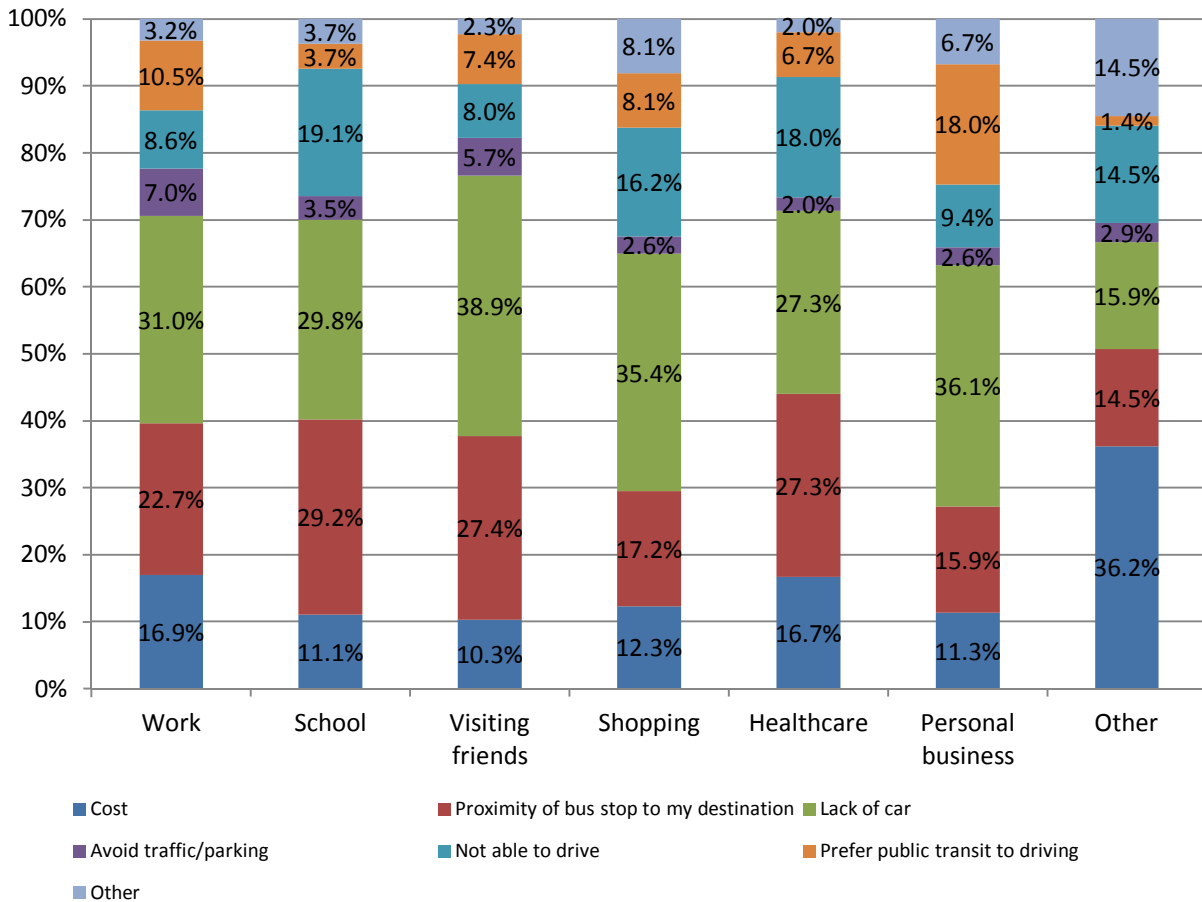
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residential location and work location choices based on availability of public transit (thereby foregoing the need to own a car).

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

Exhibit 2.19 Trip Purpose vs. Reason for Riding

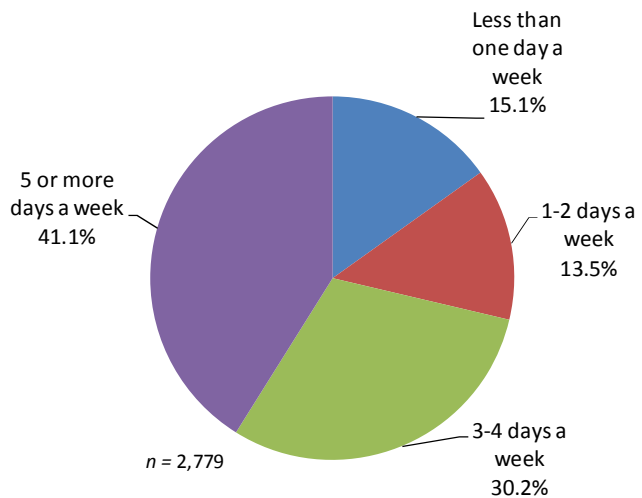




**Question 12: How often do you ride County Connection?**

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.)

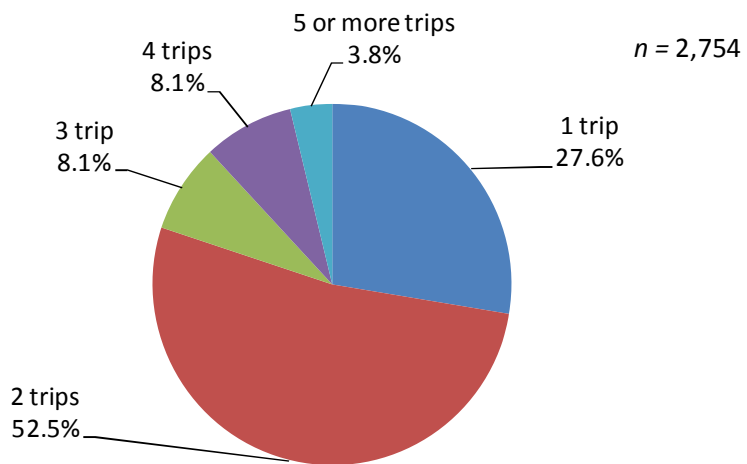
Exhibit 2.20 Frequency of Ridership



**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 2.21 Total Anticipated Trips on Day of Survey

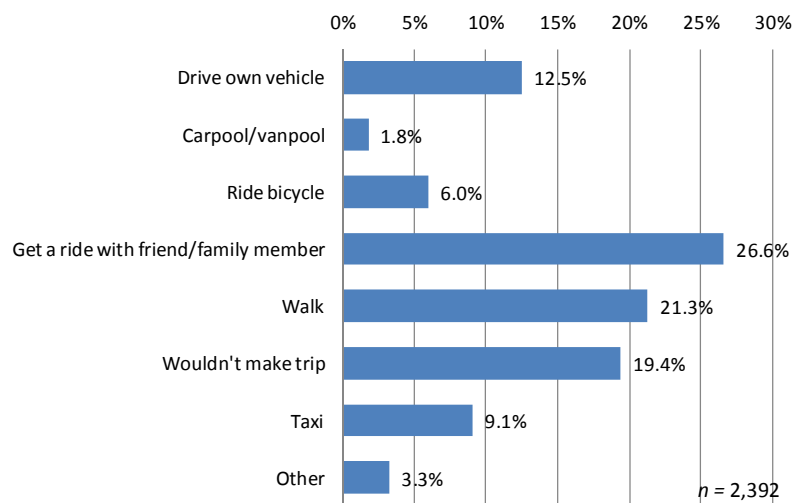


**Question 14: How would you have made this trip if County Connection had not been available?**

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 2.22 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 Saturday service” (20.7 percent), “later service” (16.3 percent), and “earlier service” (11.8 percent).

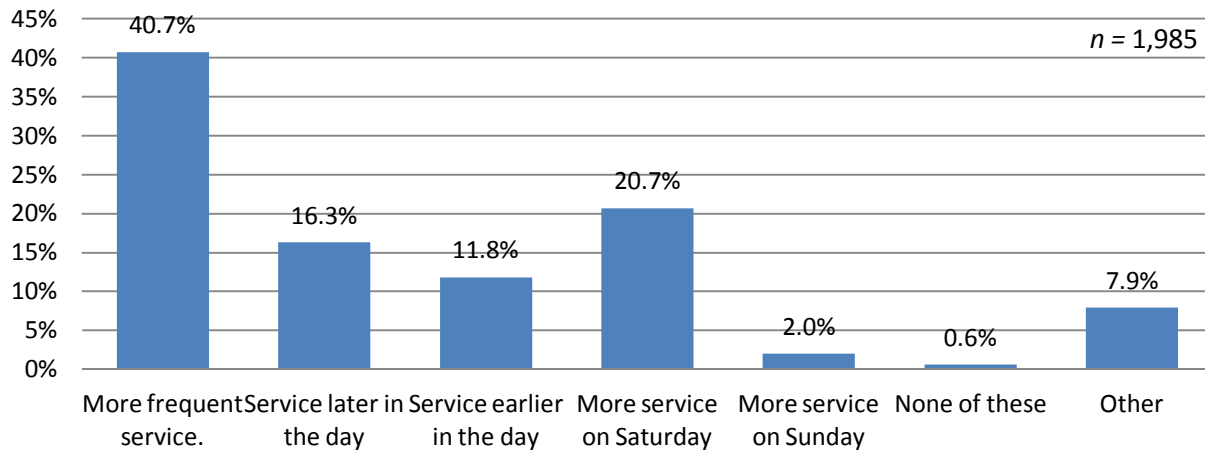
“More frequent service” was cited most commonly by persons riding Routes 20 (1.8 percent), 10 (1.6 percent), 15 (1.6 percent), and 17 (1.3 percent). “More Saturday service” was cited most frequently by persons riding Route 310. The desired service start time was split between 6 a.m. and 7 a.m.

“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 2.23 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 2.24.

Exhibit 2.24 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, the household income levels of County Connection riders were dramatically different than those of Contra Costa County as a whole. More than one-third (36 percent) of County Connection riders reported an income of less than \$15,000 per year, compared to just 7.6 percent of Contra Costa County residents overall. A little more than 17 percent of riders cited a household income amount of \$75,000 or greater, compared to 52.2 percent of Contra Costa residents overall. Nearly 40 percent cite an income of \$100,000 or more. The mean household income in Contra Costa County is \$106,018.<sup>3</sup> It is not uncommon in transit ridership to see ridership inversely proportional to income.

Exhibit 2.25 Annual Household Income



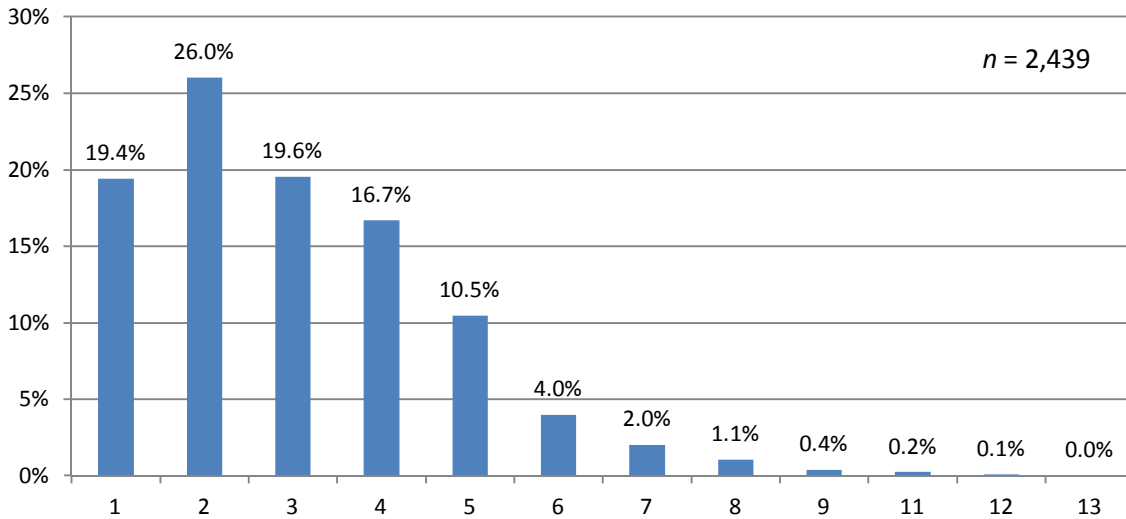
<sup>3</sup> 2013 American Community Survey.



**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.<sup>4</sup>

Exhibit 2.26 Household Size (Number of Persons)



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.

<sup>4</sup> 2013 American Community Survey.



Exhibit 2.27 Risk for Poverty

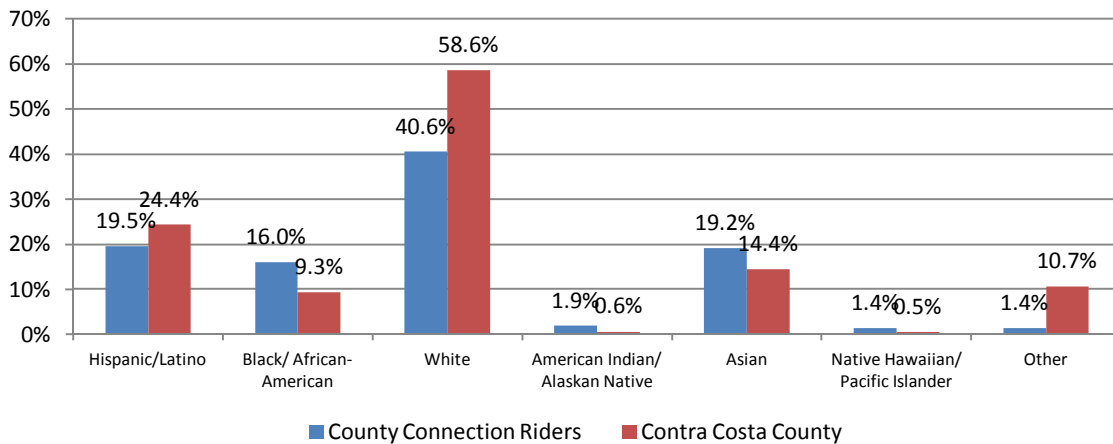
	Number of Persons in Household								
	1	2	3	4	5	6	7	8	9 or more
Less than \$15,000	8.8%	8.3%	6.5%	4.7%	3.7%	1.7%	0.9%	0.5%	0.3%
\$15,000 to \$34,999	5.9%	5.6%	4.2%	2.9%	2.3%	0.6%	0.5%	0.4%	0.1%
\$35,000 to \$74,999	4.3%	6.9%	4.9%	5.1%	2.4%	0.4%	0.5%	0.0%	0.4%
\$75,000 to \$99,999	0.5%	1.9%	1.7%	1.2%	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 2.28 Race/Ethnicity

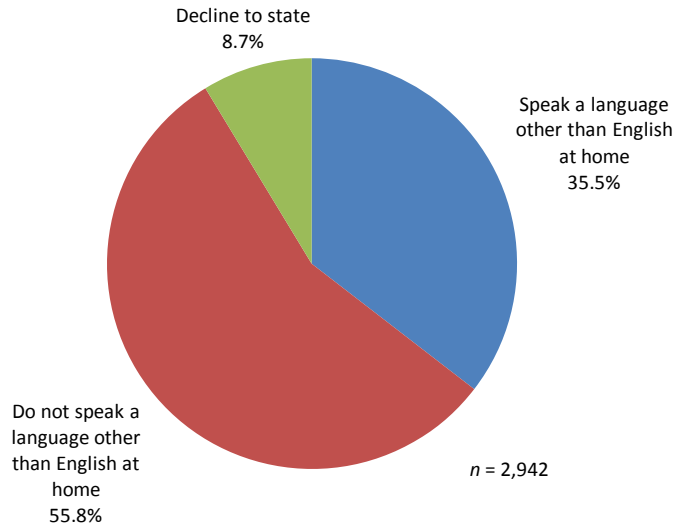


When compared to the overall demographics of Contra Costa County as a whole, County Connection riders are generally in line with countywide patterns. Bear in mind that in the countywide data, Hispanic/Latino is not provided as a separate response option for race, which may explain the significantly higher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

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

Nearly 36 percent of respondents indicated they spoke a language other than English at home. This could indicate a moderate percentage of non-native English speakers among County Connection’s ridership.

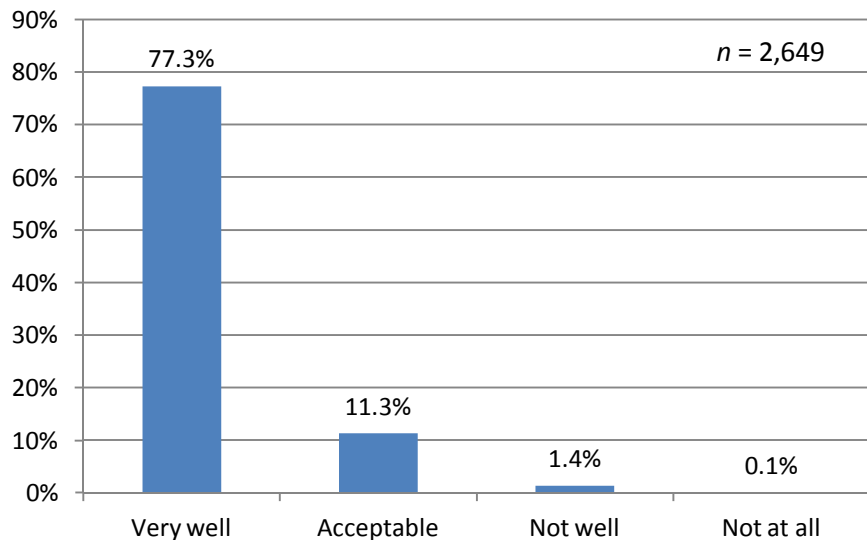
Exhibit 2.29 Language Spoken at Home



**Question 21: How well do you speak English?**

Four response options were provided, ranging from “very well” to “not at all.” Nearly 89 percent of those riders surveyed indicated speaking English “very well” or “acceptable.” 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.

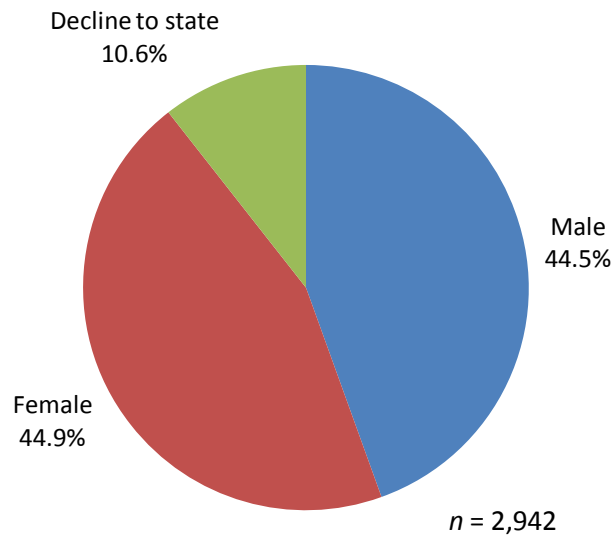
Exhibit 2.30 English Proficiency



**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.

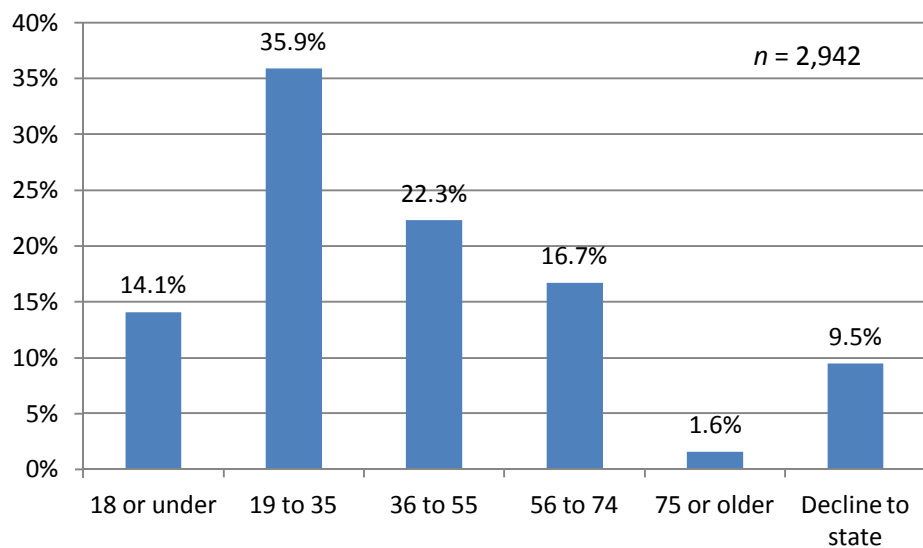
Exhibit 2.31 Gender



**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 2.32 Age

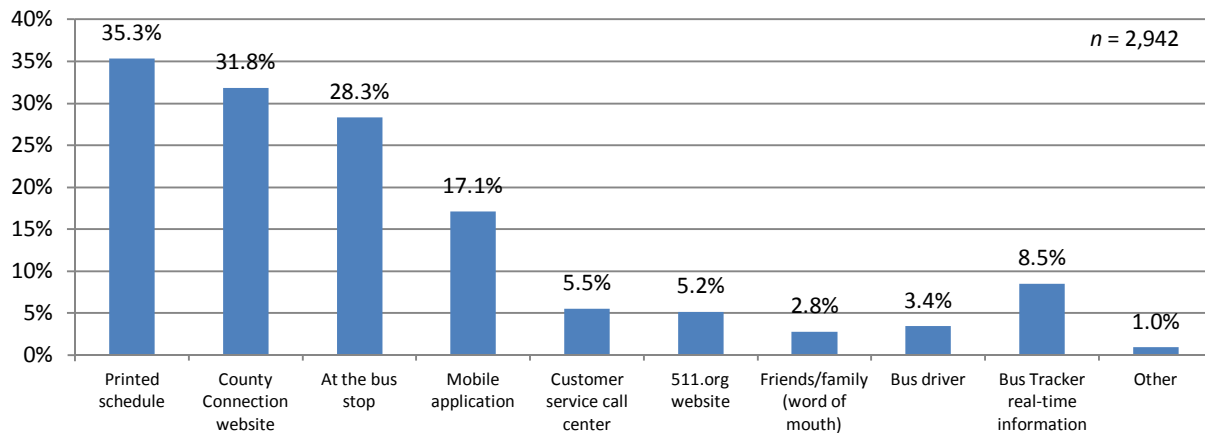




**Question 24: How do you typically obtain schedule information about the County Connection?**

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.

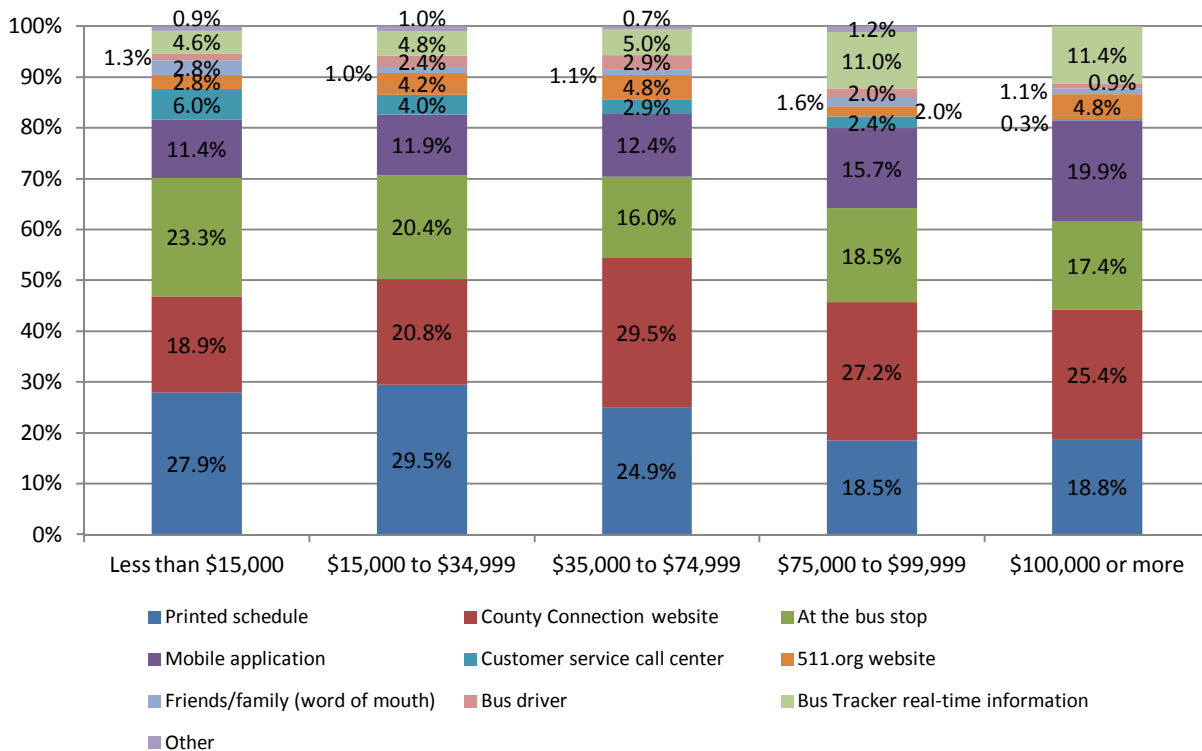
Exhibit 2.33 Typical Source of Service Information



*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 2.34 Household Income vs. Typical Source of Service Information



*Cross-tabulation: Route (Questions 1) vs. Schedule Information Source (Question 24)*

The schedule information source data was broken down by route to identify which information source was preferred by which route. Exhibit 2.35 identifies in green the most frequently cited response for each route (in the case of a tie, multiple responses were highlighted). The printed schedule was used most by the highest percentage of respondents on 21 of the 38 routes, while the County Connection website was used most on 14 routes. On three routes (Routes 20, 310, and 627), the bus stop was cited as the most frequent source of information.

It should be noted that respondents were allowed to select more than one response, as many riders utilize multiple sources of information. As a result, total percentages for each route may not equal 100 percent.

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Exhibit 2.35 Route vs. Typical Source of Service Information

	Printed schedule	County Connection website	At the bus stop	Mobile application	Customer service call center	511.org website	Friends/family (word of mouth)	Bus driver	Bus Tracker real-time information	Other
1	43.1%	29.2%	7.7%	18.5%	4.6%	9.2%	0.0%	6.2%	9.2%	0.0%
2	46.2%	53.8%	15.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4	30.2%	24.8%	25.7%	13.4%	3.0%	0.5%	3.0%	6.4%	2.0%	2.5%
5	45.8%	47.9%	33.3%	16.7%	4.2%	10.4%	6.3%	4.2%	14.6%	0.0%
6	34.1%	42.1%	30.2%	17.5%	1.6%	0.8%	1.6%	0.8%	6.3%	3.2%
7	43.2%	40.9%	25.0%	13.6%	0.0%	4.5%	9.1%	4.5%	11.4%	0.0%
9	30.4%	48.2%	17.9%	8.9%	0.0%	7.1%	0.0%	0.0%	12.5%	7.1%
10	31.9%	29.5%	31.1%	20.0%	5.0%	4.8%	4.0%	1.8%	9.8%	0.4%
11	42.4%	32.2%	30.5%	8.5%	6.8%	8.5%	1.7%	6.8%	5.1%	0.0%
14	43.2%	30.9%	19.8%	14.8%	1.2%	7.4%	0.0%	0.0%	1.2%	0.0%
15	36.4%	33.6%	29.9%	9.3%	6.5%	4.7%	2.8%	1.9%	8.4%	0.0%
16	50.0%	48.2%	21.4%	30.4%	14.3%	17.9%	0.0%	8.9%	1.8%	0.0%
17	56.8%	22.7%	36.4%	13.6%	0.0%	0.0%	0.0%	0.0%	6.8%	0.0%
18	22.2%	40.7%	20.4%	18.5%	1.9%	0.0%	0.0%	0.0%	20.4%	0.0%
19	46.5%	4.7%	32.6%	9.3%	14.0%	7.0%	4.7%	2.3%	7.0%	0.0%
20	30.6%	33.3%	35.7%	17.5%	6.9%	3.8%	2.8%	3.2%	6.0%	1.4%
21	33.0%	28.6%	29.7%	23.1%	3.3%	6.6%	3.3%	5.5%	5.5%	0.0%
25	93.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
28	38.0%	34.0%	36.0%	2.0%	22.0%	0.0%	4.0%	4.0%	2.0%	2.0%
35	39.4%	39.4%	19.7%	15.5%	4.2%	8.5%	8.5%	4.2%	7.0%	0.0%
36	54.3%	30.4%	30.4%	15.2%	8.7%	6.5%	17.4%	4.3%	8.7%	2.2%
91X	16.7%	50.0%	16.7%	50.0%	0.0%	0.0%	0.0%	8.3%	25.0%	0.0%
92X	40.8%	61.2%	4.1%	32.7%	0.0%	4.1%	4.1%	0.0%	24.5%	0.0%
94X	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
95X	18.8%	43.8%	12.5%	18.8%	0.0%	12.5%	0.0%	0.0%	18.8%	0.0%
96X	25.6%	33.3%	24.4%	25.6%	2.6%	5.1%	0.0%	0.0%	28.2%	1.3%
97X	0.0%	67.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
98X	64.7%	11.8%	13.7%	3.9%	2.0%	2.0%	2.0%	0.0%	11.8%	0.0%
301	0.0%	0.0%	0.0%	50.0%	0.0%	50.0%	0.0%	50.0%	50.0%	0.0%
310	39.0%	28.8%	44.1%	20.3%	10.2%	11.9%	0.0%	5.1%	10.2%	0.0%
311	47.1%	13.7%	29.4%	21.6%	5.9%	3.9%	0.0%	0.0%	7.8%	0.0%
314	34.9%	15.9%	30.2%	20.6%	3.2%	1.6%	0.0%	3.2%	6.3%	0.0%
315	39.5%	15.8%	36.8%	15.8%	21.1%	7.9%	5.3%	0.0%	0.0%	0.0%
316	27.8%	46.3%	35.2%	18.5%	16.7%	3.7%	0.0%	0.0%	14.8%	0.0%
320	38.3%	34.0%	34.0%	21.3%	17.0%	2.1%	4.3%	0.0%	4.3%	0.0%
321	44.7%	44.7%	36.2%	17.0%	6.4%	12.8%	0.0%	6.4%	6.4%	2.1%
627	0.0%	0.0%	75.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%
649	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

#### *Cross-tabulation: Age (Question 23) vs. Schedule Information Source (Question 24)*

Younger respondents are more likely to obtain schedule information using online resources such as the County Connection website. In both the 18 and under and 19-35 age groups, 39.1 percent said they most often used the website. Website usage declines with age, while use of the printed schedule increases. Riders age 19-35 were most likely to use the mobile application.

The printed schedule is the most popular source for all age groups 36 and older. For riders 75 and older, by far the two main sources of schedule information were the printed schedule and information posted at the bus stop. Nearly 94 percent of riders in this age group used these two sources. Roughly 10 percent of riders 75 and older also used the Call Center and the real-time Bus Tracker, though no riders over 75 cited use of online resources.

Comparison of these two questions is presented in Exhibit 2.36.

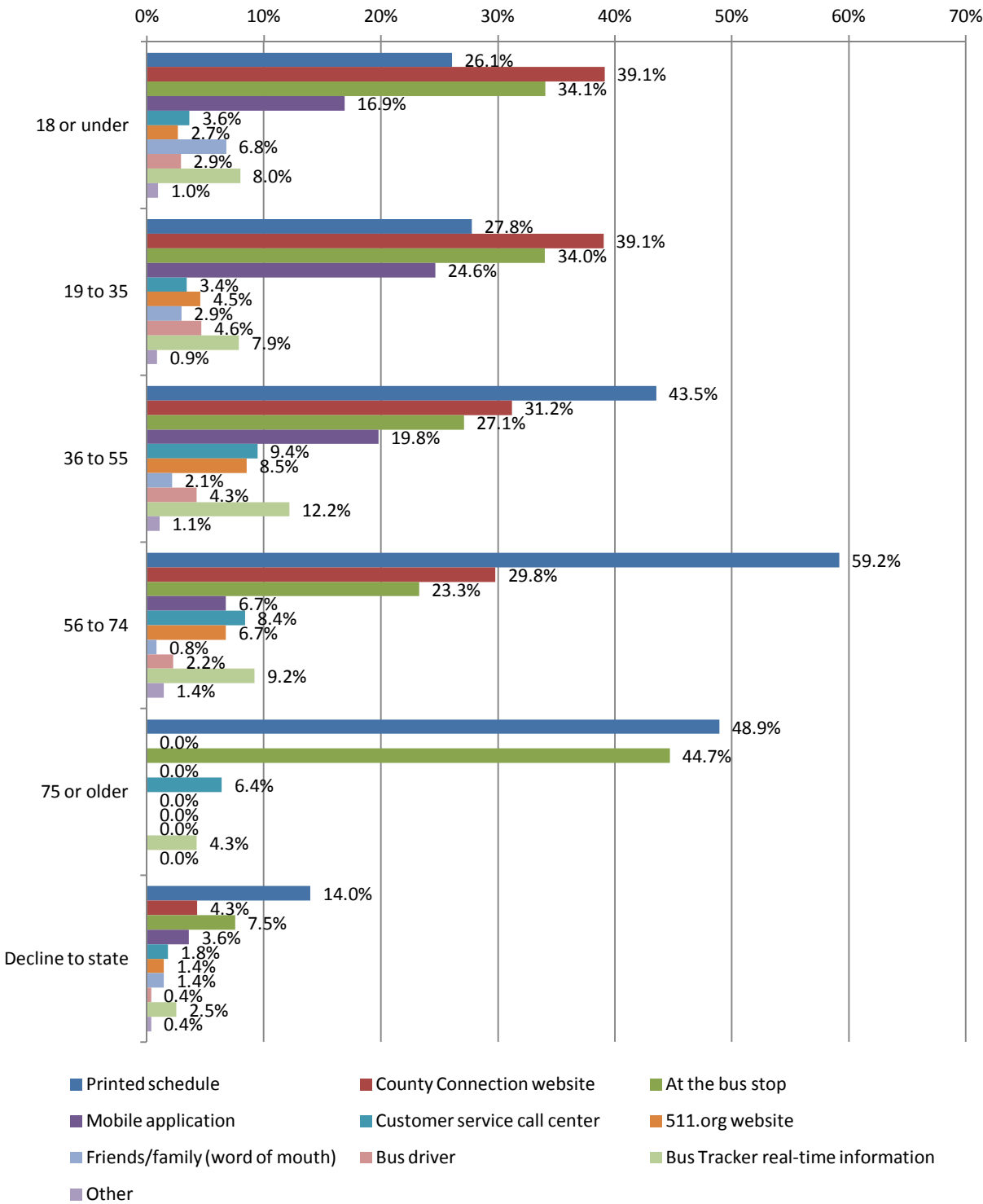


# 2015 Fixed-Route Transit Onboard Survey

## Central Contra Costa Transit Authority

### Final Report

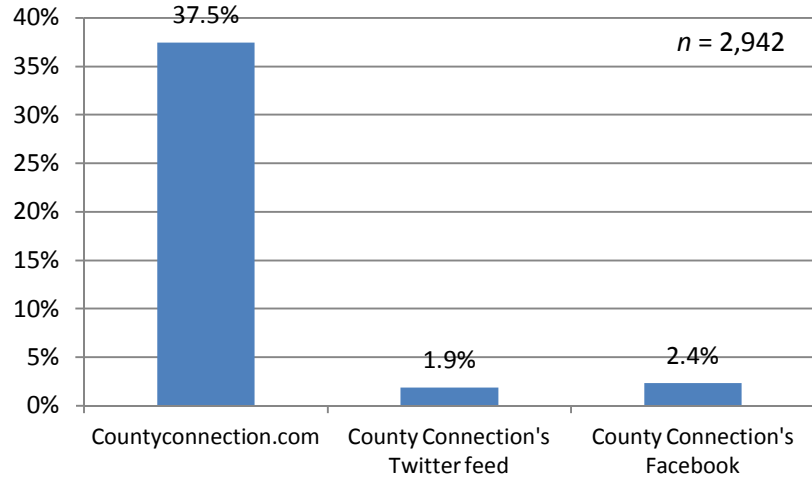
Exhibit 2.36 Age vs. Typical Source of Service Information



**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.

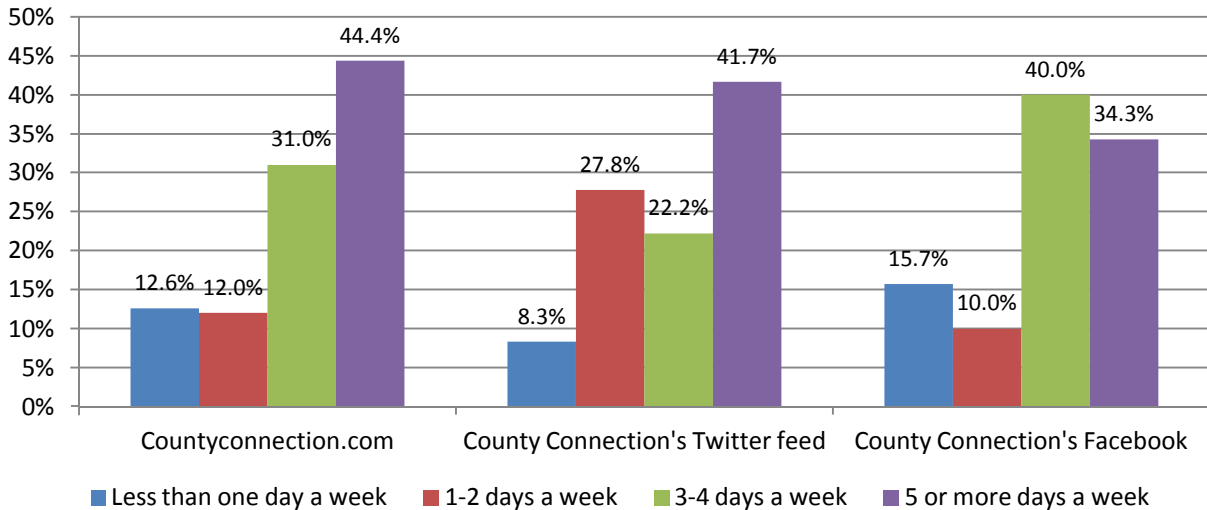
Exhibit 2.37 Use of Digital Resources



**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 2.38 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.

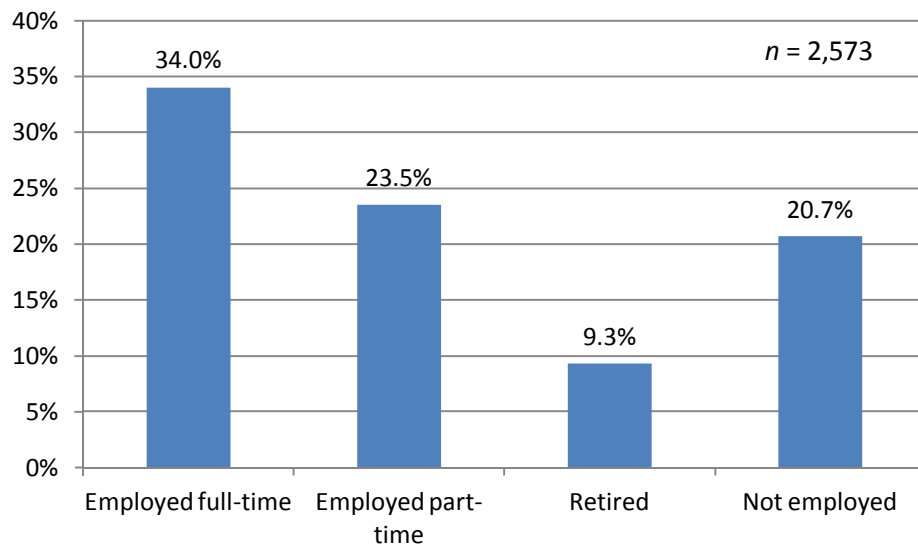
Exhibit 2.39 Home Zip Code

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.

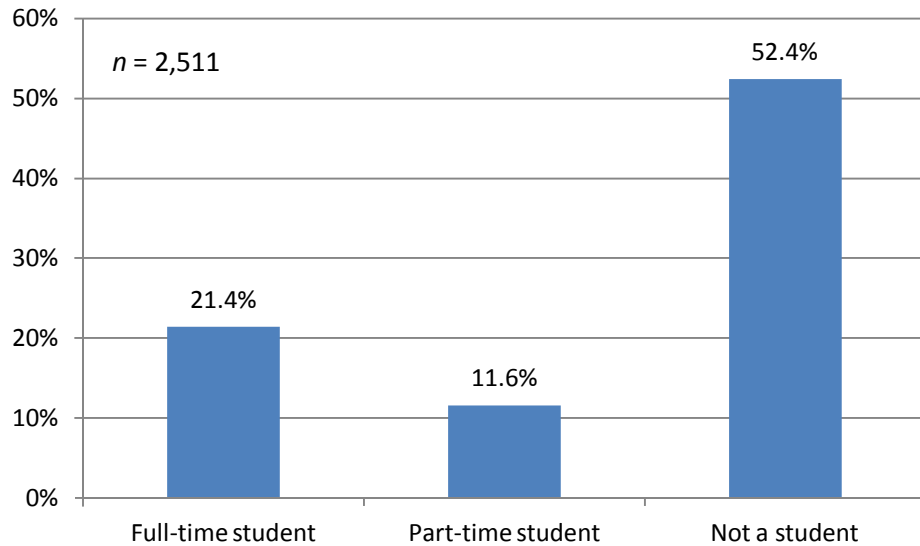
Exhibit 2.40 Employment Status



**Question 28: Are you a student?**

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

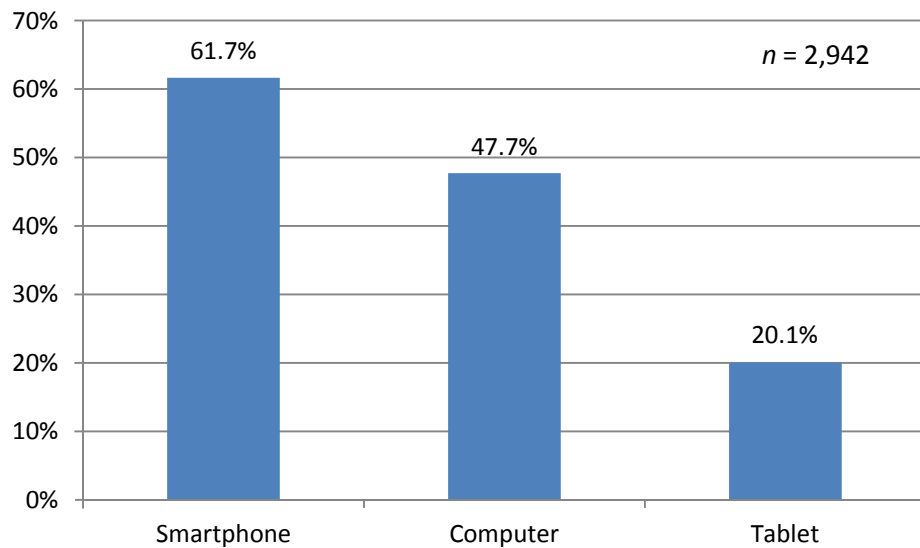
Exhibit 2.41 Student Status



**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 2.42 Use of Technology





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## Section 3

# School Tripper Analysis and Key Findings

The 2015 School Tripper Survey was designed to be short and easy to complete for students who comprise nearly all of the school tripper riders. The survey was distributed to 411 riders across the school trip bus lines, yet only 235 of the responses were deemed usable because many respondents did not complete the form as directed.

By analyzing the frequencies associated with the 2015 school tripper survey, we can gain insights into the riders on the school tripper routes.

### Profile Rider

The typical rider attends intermediate or middle school (grades 6-8), uses the bus solely to travel to school, and makes two trips or fewer per day. He or she uses a 12-ride punch card or cash and does not currently have a Clipper card.

The profile rider either owns or has access to a smartphone and prefers to get service information from County Connection's website. If County Connection were not available, he/she would get a ride from a friend or family member or walk.

The following analysis examines each question in the school tripper survey, offering data cross-tabulations where appropriate to drill down further. All survey instruments are included in the Appendix.

### *Question 1: Which school do you attend?*

Walnut Creek Intermediate was best the best represented school at 19.1 percent, followed by Oak Grove Middle School (15.7 percent) and California High School (8.5 percent). While most of the riders attended high school or middle school, 5.1 percent of riders indicated attending St. Mary's College.



# 2015 Fixed-Route Transit Onboard Survey

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Exhibit 3.1 School Attended

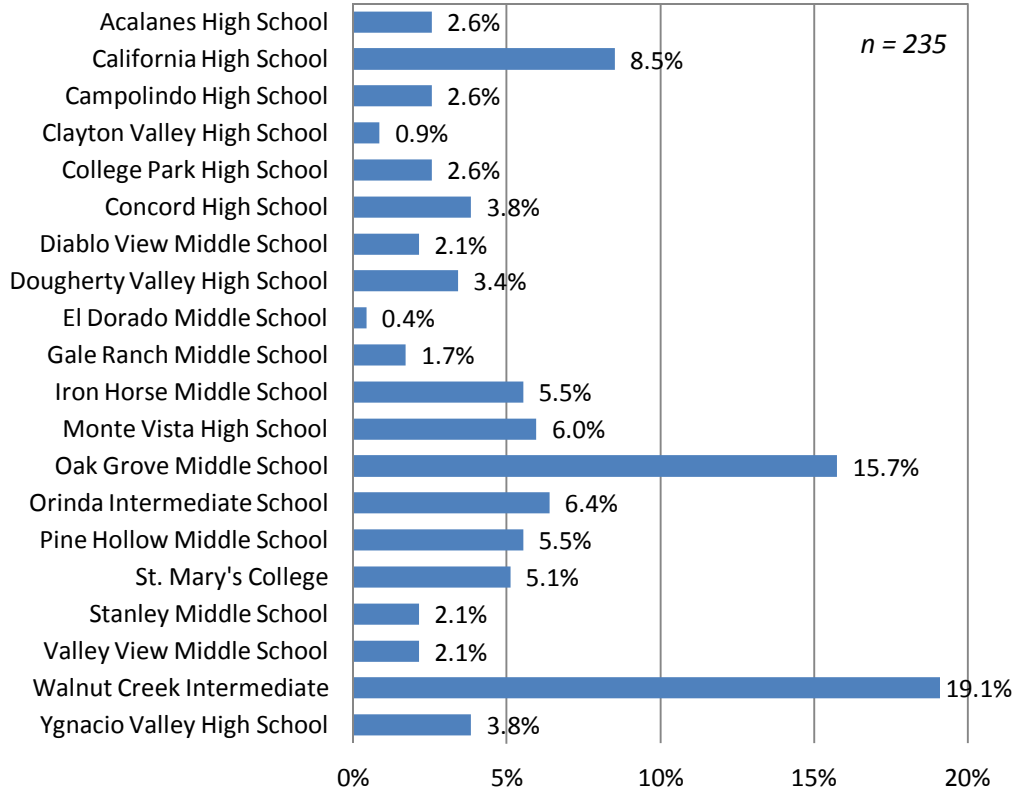
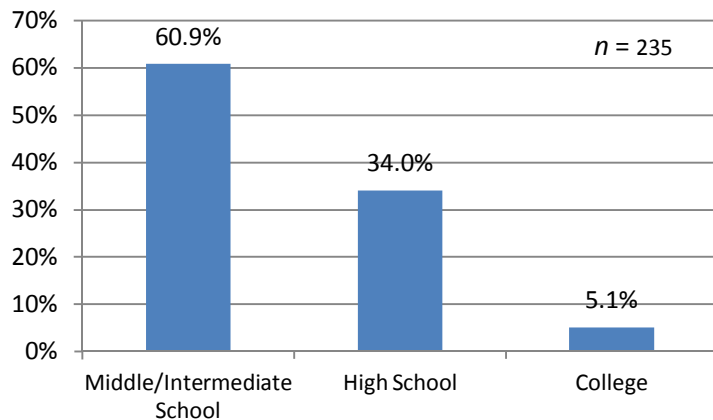


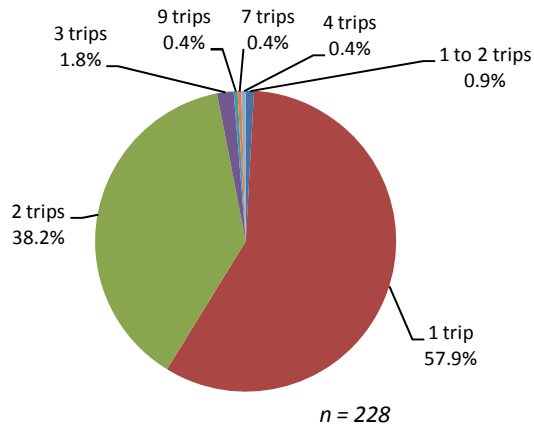
Exhibit 3.2 Ridership by School Type



**Question 2: How many bus trips will you make today?**

The vast majority of riders make just the one trip to school—57.9 percent. Nearly all other riders (an additional 38.2 percent) indicated that they would make two trips.

Exhibit 3.3 Number of Trips



**Question 3: How did you pay for your bus ride today?**

Respondents were asked how they paid for their trip and were given nine possible response options. The “12-Ride punch card” was the most popular answer, at 47.3 percent. This is different from the overall study results, where only 11.1 percent indicated “12-Ride Punch card” use (see Section 2, Question 5). Another 30.1 percent of school tripper riders paid in cash, which is closer in line to the 36 percent of overall responders who reported paying in cash.

Exhibit 3.4 Fare Media Used

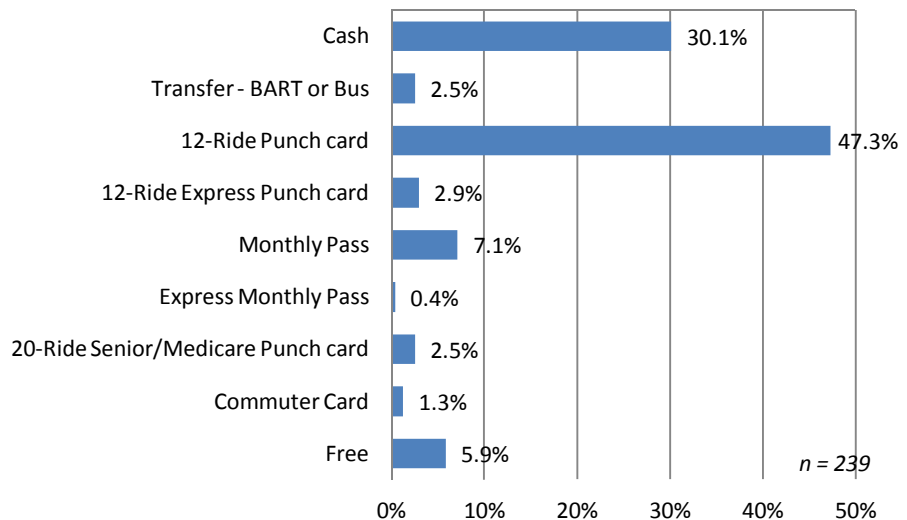
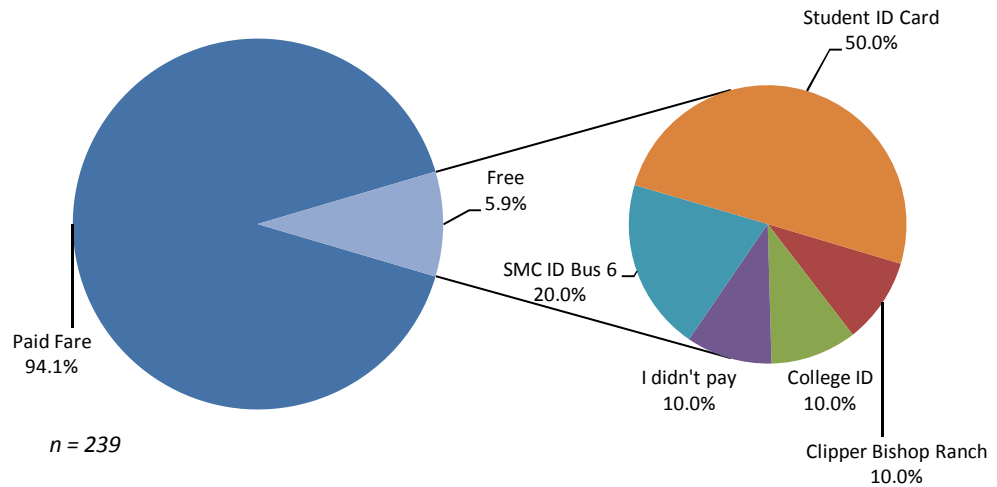


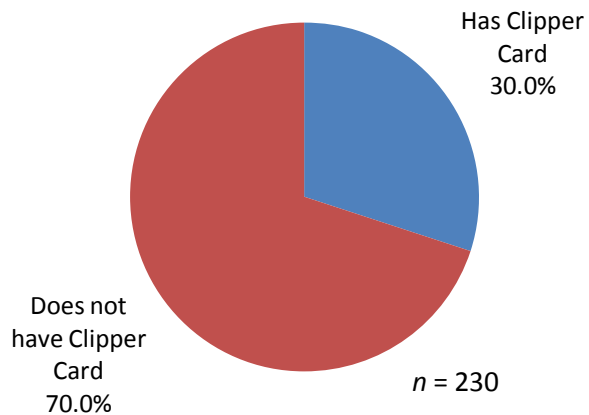
Exhibit 3.5 Fare Breakdown



**Question 4: Do you have a Clipper card?**

The Clipper Card is currently used by 30 percent of respondents. These riders, who already have used the Clipper card on other Bay Area transit services, will likely welcome its acceptance on the County Connection. The 47.3 percent of respondents who use the 12-punch ride card (Question 3) are also likely to embrace the Clipper card and its benefits, which were discussed in Section 2, Question 7.

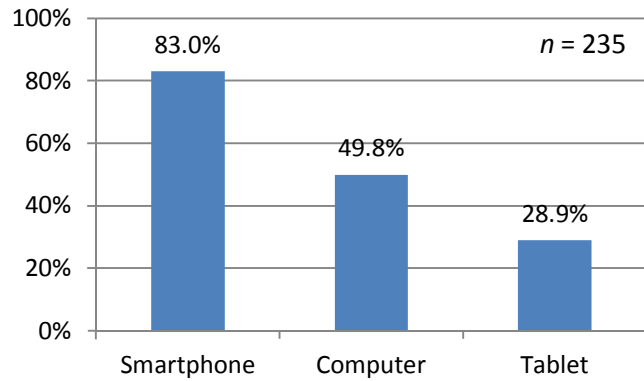
Exhibit 3.6 Clipper Card Use



**Question 5: Do you regularly use a smartphone, computer, or tablet?**

A large majority of respondents (83 percent) reported owning or regularly using a smartphone. Nearly half (49.8 percent) reported using a computer, and 28.9 percent regularly use a tablet.

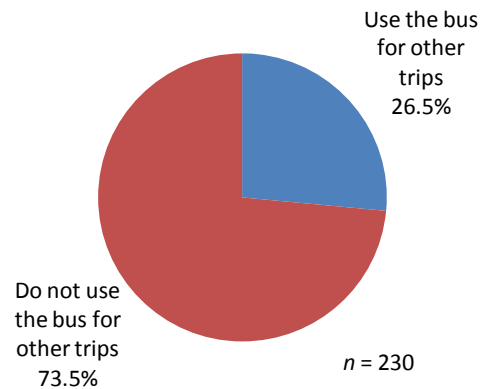
Exhibit 3.7 Use of Technology



**Question 6: Do you use the bus for other trips besides school trips?**

Most of the respondents – 73.5 percent – use the bus exclusively for trips to school.

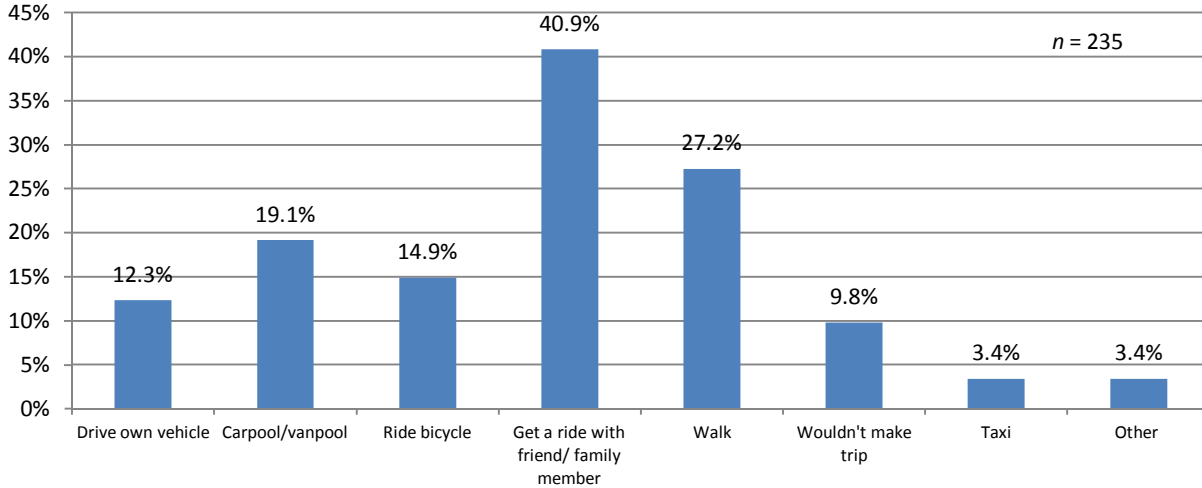
Exhibit 3.8 Transit Use



**Question 7: How would you make this trip if the County Connection was not available?**

Respondents were asked to indicate how they would make their trip if the County Connection was not available. The most popular response was “get a ride with a friend or family member,” indicated by 31.2 percent. “Walk” was the second most popular response, at 20.8 percent. Just 9.4 percent indicated that they would drive, although 14.6 percent did indicate that they would carpool/vanpool.

Exhibit 3.9 Alternative to County Connection



**Question 8: How do you rate County Connection in the following areas?**

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 3.10.

Exhibit 3.10 Attribute Ratings

Attribute	Mean Rating
On-Time/Reliability	3.61
Frequency of service	3.90
Time service begins	3.83
Time service ends	3.83
Length of trip	3.72
Driver courtesy	4.00
Connections with other buses	3.70
Condition of buses	3.93

“Driver courtesy” was the highest-rated attributed, with a mean rating of 4.00. More than 76 percent of respondents rated this attribute as “good” or “excellent.” “Condition of buses” was the second highest-rated attribute, with a mean rating of 3.93. More than 70 percent rated this attribute as “good” or “excellent.”



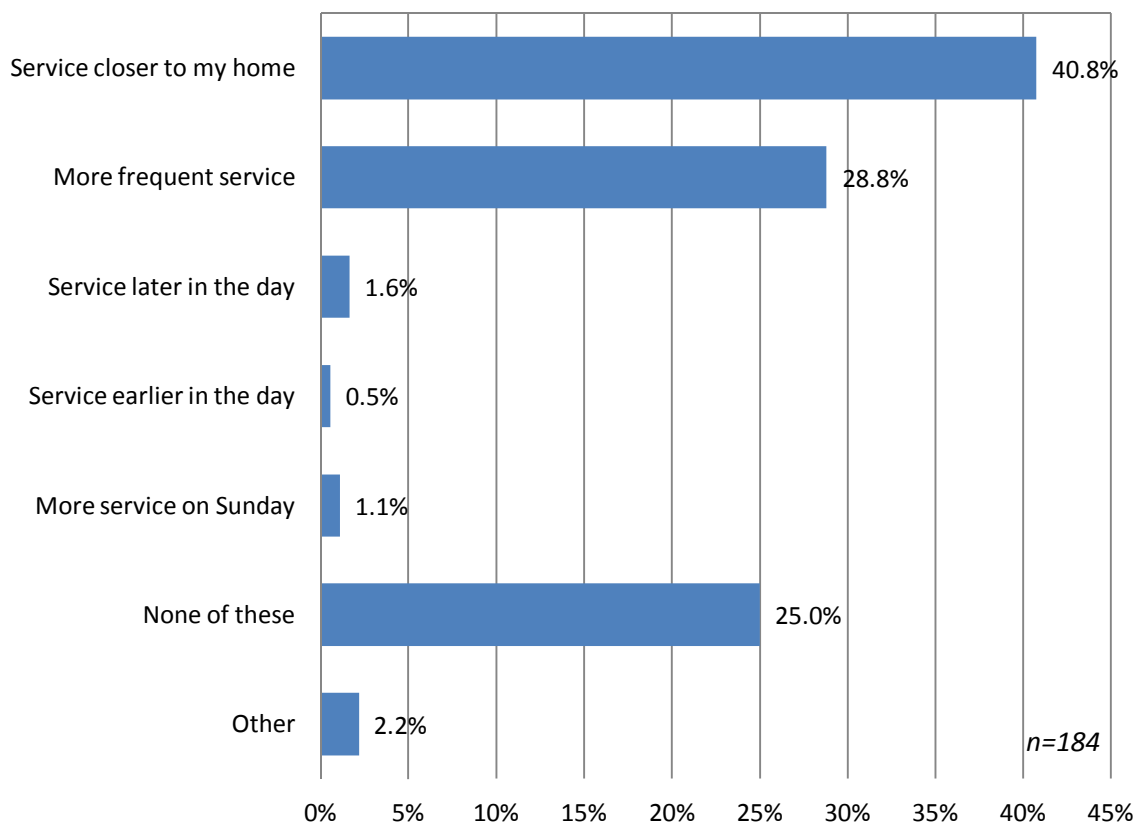
The lowest rated attribute was “On-Time/Reliability,” with a mean rating of 3.61. While 57.1 percent of respondents rated the time service begins as “excellent” or “good,” another 17.3 percent rated it as “fair” or “poor.”

The second-lowest rated attribute was “connections with other buses,” with a rating of 3.70. While 58.2 percent of respondents rated this attribute “excellent” or “good,” another 12.1 percent rated it as “fair” or “poor.”

**Question 9: What ONE change could encourage you to ride County Connection more?**

Convenience is an important motivator in the choice to use County Connection for trips to school. 40.8 percent of respondents chose “service closer to my home” as the one change that could motivate them to ride more. The second most popular choice was “more frequent service,” at 28.8 percent. These were the only two possible changes presented that scored more than 2.2 percent (the choice “none of these” was chosen by 25 percent of respondents).

Exhibit 3.11 Motivator for Riding More



There were write-in responses that proved to be somewhat popular among the 2.2 percent of riders of chose “other” and specified an answer. Five respondents requested better on-time performance of



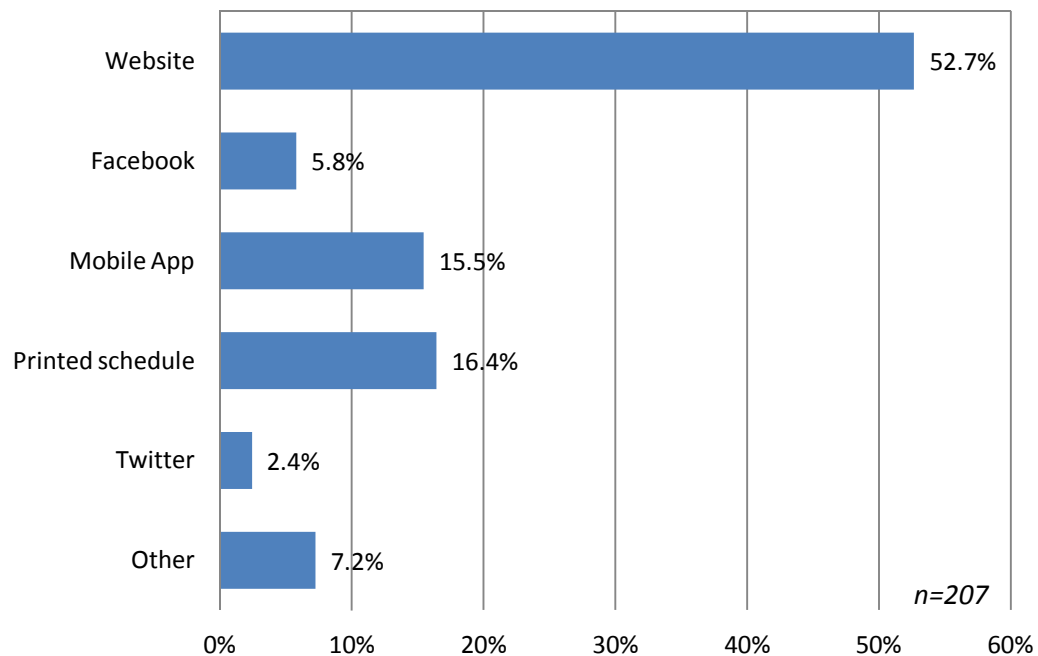


buses; another rider indicated that his or her bus leaves before scheduled times, resulting in missed trips. One other rider mentioned that the 611 bus arrives at his or her school late every day. (These responses seem to reinforce the relatively low rating that the “On-Time/Reliability” attribute associated with Question 8.)

**Question 10: What is your preferred source for County Connection information?**

Respondents were presented with a series of six information options, including “other,” and were invited to select all that applied. The County Connection website was the most commonly cited source, identified by 52.7 percent of all respondents, followed by the printed schedule (16.4 percent) and the County Connection Mobile App (15.5 percent).

Exhibit 3.12 Service Information Usage



While 83 percent of respondents regularly use a smartphone, and 28.9 percent own/use a tablet, only 15.5 percent of respondents said they use the County Connection Mobile App. This reinforces the findings of the overall survey, that there is significant potential for increased usage of County Connection’s mobile application, given its current limited penetration (15.5 percent) and high number of smartphone users (83 percent).



*Cross-tabulation: Route vs. Service Information Usage (Question 10)*

The digital resource data was broken down by route to identify which information source was preferred by which route. Exhibit 3.13 identifies in green the most frequently cited response for each route (in the case of a tie, multiple responses were highlighted). The website was by far the most popular information source on nearly all routes. On Route 608, Facebook was the preferred source, and on Route 619, the largest percentage of riders indicated the printed schedule. Consistent with the data from Question 10, the mobile app is generally underutilized, but sees the highest percentage of usage on Routes 601, 611, 616, and 626 (20 percent each); Route 623 (33.3 percent), and Route 614 (37.5 percent).

It should be noted that respondents were allowed to select more than one response, as many riders utilize multiple sources of information. As a result, total percentages for each route may not equal 100 percent.

Exhibit 3.13 Route vs. Service Information Usage

Route	Website	Facebook	Mobile App	Printed schedule	Twitter	Other
601	60.0%	0.0%	20.0%	6.7%	0.0%	13.3%
602	54.5%	18.2%	9.1%	9.1%	0.0%	9.1%
603	50.0%	0.0%	0.0%	0.0%	0.0%	50.0%
605	57.9%	0.0%	15.8%	26.3%	0.0%	0.0%
606	52.4%	4.8%	14.3%	14.3%	9.5%	4.8%
608	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
610	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
611	40.0%	40.0%	20.0%	0.0%	0.0%	0.0%
612	58.3%	0.0%	8.3%	16.7%	0.0%	16.7%
613	71.4%	14.3%	0.0%	14.3%	0.0%	0.0%
614	62.5%	0.0%	37.5%	0.0%	0.0%	0.0%
615	60.0%	0.0%	10.0%	20.0%	10.0%	0.0%
616	40.0%	13.3%	20.0%	6.7%	0.0%	20.0%
619	14.3%	21.4%	14.3%	28.6%	7.1%	14.3%
622	77.8%	0.0%	11.1%	0.0%	0.0%	11.1%
623	40.0%	0.0%	33.3%	20.0%	6.7%	0.0%
625	50.0%	0.0%	0.0%	33.3%	0.0%	16.7%
626	40.0%	0.0%	20.0%	30.0%	0.0%	10.0%
635	55.6%	0.0%	11.1%	33.3%	0.0%	0.0%
636	61.5%	0.0%	15.4%	23.1%	0.0%	0.0%



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Appendix  
**Survey Instruments**



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# 2015 Fixed-Route Transit Onboard Survey

## Central Contra Costa Transit Authority

### Final Report

#### Exhibit A.1 Fixed-Route Survey (English and Spanish)

**County Connection  
2015 Onboard Survey**

1. What route are you telling us about today? Route: \_\_\_\_\_  
Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Time: \_\_\_\_\_ : \_\_\_\_\_ AM / PM
2. Where did you begin your trip today? (city or neighborhood, and landmark)  
\_\_\_\_\_
3. Where will you end your trip today? (city or neighborhood, and landmark)  
\_\_\_\_\_
4. Does this trip include a transfer? (Check all that apply)  
 Yes – indicate to/from below:     No  
  
 Another County Connection bus     BART  
 Altamont Commuter Express (ACE)  
 Amtrak Capitol Corridor  
 Solano Express (Route 40)  
 SolTrans (Route 78)     Tri Delta Transit  
 WestCAT     Wheels/Wheels Express  
 Other (specify \_\_\_\_\_)
5. How did you pay your fare today?  
 Cash  
 Transfer – BART \_\_\_\_\_ or Bus \_\_\_\_\_  
 12-Ride Punch card     12-Ride Express Punch card  
 Monthly Pass     Express Monthly Pass  
 20-Ride Senior/Medicare Punch card  
 Commuter Card  
 If free, specify program or route: \_\_\_\_\_
6. How many transfers are required to complete your trip?  
 1     2     3     4     5 or more
7. Do you currently use the Clipper card?  
 Yes     No
8. How did you get to the bus stop for this trip?  
 Drove self     Was dropped off  
 Transfer from bus     Transfer from BART  
 Walked     Rode bike  
 Other  
(specify \_\_\_\_\_)
9. How will you travel to your destination once you get off this bus?  
 Drive self     Get picked up  
 Transfer to bus     Transfer to BART  
 Walk     Ride bike  
 Other (specify \_\_\_\_\_)
10. What is the primary purpose for this trip?  
 Work     School     Visiting friends  
 Shopping     Healthcare  
 Personal business  
 Other (specify \_\_\_\_\_)
11. What is your primary reason for choosing County Connection for this trip?  
 Cost     Proximity of bus stop to my destination  
 Lack of car     Avoid traffic/parking  
 Not able to drive     Prefer public transit to driving  
 Other (specify \_\_\_\_\_)
12. How often do you ride County Connection?  
 Less than one day a week     1-2 days a week  
 3-4 days a week     5 or more days a week
13. How many bus trips will you make today using County Connection?  
 1     2     3     4     5 or more
14. How would you have made this trip if County Connection had not been available?  
 Drive own vehicle     Carpool/vanpool     Ride bicycle  
 Get a ride with friend/family member     Walk  
 Wouldn't make trip     Taxi  
 Other (specify \_\_\_\_\_)
15. What ONE change could encourage you to ride County Connection more?  
 More frequent service. Which route? \_\_\_\_\_  
 Service later in the day  
(route: \_\_\_\_\_ time: \_\_\_\_\_)  
 Service earlier in the day  
(route: \_\_\_\_\_ time: \_\_\_\_\_)  
 More service on Saturday  
(route: \_\_\_\_\_ time: \_\_\_\_\_)  
 More service on Sunday  
(route: \_\_\_\_\_ time: \_\_\_\_\_)  
 None of these  
 Other (specify \_\_\_\_\_)
16. How do you rate County Connection in the following areas? (1=poor, 2=fair, 3=neutral, 4=good, 5=excellent)

	1.	2.	3.	4.	5.
On-time/reliability					
Frequency of service					
Time service begins					
Time service ends					
Length of trip					
Driver courtesy					
Connections with other buses					
Condition of buses					

17. What is your approximate annual household income?  
 Less than \$15,000     \$15,000 to \$34,999  
 \$35,000 to \$74,999     \$75,000 to \$99,999  
 \$100,000 or more
18. How many people live in your household? \_\_\_\_\_
19. With which of the following do you most identify? (select one)  
 Hispanic/Latino     Black/African-American  
 White     American Indian/Alaskan Native  
 Asian     Native Hawaiian/Pacific Islander  
 Other (specify \_\_\_\_\_)
20. Do you speak a language other than English at home?  
 Yes     No
21. How well do you speak English?  
 Very well     Acceptable     Not well     Not at all
22. What is your gender?     Male     Female
23. What is your age?  
 18 or under     19 to 35     36 to 55  
 56 to 74     75 or older
24. How do you typically obtain schedule information about the County Connection? (check all that apply)  
 Printed schedule     County Connection website  
 At the bus stop     Mobile application  
 Customer service call center     511.org website  
 Friends/family (word of mouth)     Bus driver  
 Bus Tracker real-time information  
 Other (specify \_\_\_\_\_)
25. In a typical month do you visit or receive...? (check all that apply)  
 Countyconnection.com     County Connection's Twitter feed  
 County Connection's Facebook
26. What is your home zip code? \_\_\_\_\_
27. What is your employment status?  
 Employed full-time     Employed part-time  
 Retired     Not employed
28. Are you a student?  
 Full-time student     Part-time student     Not a student
29. Do you own or regularly use a ....?  
 Smartphone     Computer     Tablet

**2015 Encuesta de County Connection**

1. ¿De qué ruta nos cuenta hoy? Ruta: \_\_\_\_\_  
 Fecha: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
 Hora: \_\_\_\_\_ : \_\_\_\_\_ AM / PM

2. ¿Dónde empezó su viaje de hoy? (ciudad, barrio, y monumento)  
 \_\_\_\_\_

3. ¿Dónde terminará su viaje de hoy? (ciudad, barrio, y monumento)  
 \_\_\_\_\_

4. ¿Este viaje incluye una transferencia?  
 Sí – indique desde o/a donde abajo:  No

Otro autobús County Connection  
 BART  Altamont Commuter Express (ACE)  
 Amtrak Capitol Corridor  
 Solano Express (Ruta 40)  
 SolTrans (Ruta 78)  Tri Delta Transit  
 WestCAT  Wheels/Wheels Express  
 Otro (especifique \_\_\_\_\_)

5. ¿Cómo pago su tarifa hoy?  
 Pago en efectivo  
 Transferencia de BART \_\_\_\_ o Bus \_\_\_\_  
 Tarjeta de 12-viajes  
 Tarjeta de 12-viajes Express  
 Pase Mensual  Pase Mensual Express  
 Tarjeta de 20-viajes de Mayores/Medicare  
 Commuter Card  
 Si gratis, especifique la programa o ruta: \_\_\_\_\_

6. ¿Cuántas transferencias se necesita para completar su viaje?  
 1  2  3  4  5 o más

7. ¿Actualmente utilizas el Clipper Card?  
 Sí  No

8. ¿Cómo llego a la parada de autobús para este viaje?  
 Manejé solo  Dejado en la parada  
 Transferencia de otro autobús  Transferencia de BART  
 Caminé  En bicicleta  
 Otro (especifique \_\_\_\_\_)

9. ¿Cómo llegará a su destino después de bajarse del autobús?  
 Manejaré solo  Recogido en la parada  
 Transferencia a otro autobús  Transferencia a BART  
 Caminaré  En bicicleta  
 Otro (especifique \_\_\_\_\_)

10. ¿Cuál es el propósito de su viaje?  
 Trabajo  Escuela  Visitando amigos  
 Ir de compras  Cuidado medico  
 Negocios personales  
 Otro (especifique \_\_\_\_\_)

11. ¿Qué fue la razón primaria por que escogió County Connection para este viaje?  
 Costo  Proximidad a mi destino  
 Falta de carro  Evitar trafico/estacionamiento  
 No puedo manejar  Prefiero transito público a manejar  
 Otro (especifique \_\_\_\_\_)

12. ¿Qué frecuentemente utilizas County Connection?  
 Menos de una vez a la semana  1-2 días a la semana  
 2-4 días a la semana  5 o más días a la semana

13. ¿Cuantas viajes vas a hacer hoy utilizando County Connection?  
 1  2  3  4  5 o más

14. ¿Cómo harías este viaje si County Connection no fuera disponible?  
 Manejar mi propio vehículo  Carpool/Vanpool  
 Bicicleta  Obtener viaje con amigo/familia  Caminar  
 No hiciera el viaje  Taxi  
 Otro (especifique \_\_\_\_\_)

15. ¿Que SOLO cambio le animaría a utilizar County Connection más?  
 Servicio más frecuente. ¿Cuál ruta? \_\_\_\_\_  
 Servicio más tarde  
 (ruta: \_\_\_\_\_ hora: \_\_\_\_\_)  
 Servicio más temprano  
 (ruta: \_\_\_\_\_ hora: \_\_\_\_\_)  
 Más servicio en sábado  
 (ruta: \_\_\_\_\_ hora: \_\_\_\_\_)  
 Más servicio en domingo  
 (ruta: \_\_\_\_\_ hora: \_\_\_\_\_)  
 Ninguno de estos  
 Otro (especifique \_\_\_\_\_)

16. ¿Cómo calificarás County Connection en las siguientes áreas?  
 (1 = pobre, 2 = aceptable, 3 = neutral, 4 = bueno, 5 = excelente)

	1.	2.	3.	4.	5.
Puntualidad / Fiabilidad					
Frecuencia del servicio					
Hora que empieza el servicio					
Hora que termina el servicio					
Duración del viaje					
Cortesía del conductor					
Conexiones con otros autobuses					
Condición del autobús					

17. ¿Cuál es su ingreso anual de su hogar?  
 Menos de \$15,000  \$15,000 a \$34,999  
 \$35,000 a \$74,999  \$75,000 a \$99,999  \$100,000 o más

18. ¿Cuántos personas viven en su hogar? \_\_\_\_\_

19. ¿Con cuál de los siguientes te identificas más?  
 Hispano/Latino  Negro/Afro-Americano  
 Blanco  Indio Americano/Nativo de Alaska  
 Asiático  Nativo de Hawaii/Isleño del Pacifico  
 Otro (especifique \_\_\_\_\_)

20. ¿Hablas una idioma más que Español en su hogar?  Sí  No

21. ¿Qué bien hablas inglés?  
 Muy bien  Aceptable  No muy bien  
 No puedo hablar inglés

22. ¿Qué es su género?  Hombre  Mujer

23. ¿Qué es su edad?  
 18 o menor  19 a 35  36 a 55  56 a 74  
 75 o mayor

24. Típicamente, ¿Cómo obtienes información sobre County Connection? (marque todos que aplican)  
 Horario impreso  Sitio web de County Connection  
 (countyconnection.com)  En la parada  
 Aplicación móvil  Centro de servicio del cliente  
 Sitio web de 511.org  Amigos/familia (boca a boca)  
 El conductor  Información en tiempo-actual de Bus Tracker  
 Otro (especifique \_\_\_\_\_)

25. En un mes típico, ¿visitas o recibes...? (marque todos que aplican)  
 Countyconnection.com  
 Feed de Twitter County Connection  
 Facebook de County Connection

26. ¿Cuál es el código postal de su hogar? \_\_\_\_\_

27. ¿Qué es su situación laboral?  
 Empleado tiempo-completo  Empleado tiempo-parcial  
 Retirado  Sin empleo

28. ¿Eres estudiante?  
 Estudiante tiempo-completo  Estudiante tiempo-parcial  
 No soy estudiante

29. ¿Eres dueño de o regularmente usas un...?  
 Teléfono inteligente  Computadora  Tableta



Exhibit A.2 School Tripper Survey (English and Spanish)

**County Connection  
2015 School Tripper Survey**

1. Which school do you attend?  
 \_\_\_\_\_
2. How many bus trips will you make today?  
 \_\_\_\_\_
3. How did you pay for your bus ride today?
  - 1 Cash
  - 2 Transfer – BART \_\_\_\_ or Bus \_\_\_\_
  - 3 12-Ride Punch card
  - 4 12-Ride Express Punch card
  - 5 Monthly Pass
  - 6 Express Monthly Pass
  - 7 20-Ride Senior/Medicare Punch card
  - 8 Commuter Card
  - 9 If free, specify program or route:  
 \_\_\_\_\_
4. Do you have a Clipper card?
  - 1 Yes     2 No
5. Do you own or regularly use a .....?
  - 1 Smartphone
  - 2 Computer
  - 3 Tablet
6. Do you use the bus for other trips besides school trips?
  - 1 Yes     2 No
7. How would you make this trip if the County Connection was not available?
  - 1 Drive own vehicle
  - 2 Carpool/vanpool
  - 3 Ride bicycle
  - 4 Get a ride with friend/family member
  - 5 Walk     6 Wouldn't make trip
  - 7 Taxi
  - 8 Other (specify)  
 \_\_\_\_\_  
 \_\_\_\_\_

8. How do you rate County Connection in the following areas? (1=poor, 2=fair, 3=neutral, 4=good, 5=excellent)

	1.	2.	3.	4.	5.
On-time/reliability					
Frequency of service					
Time service begins					
Time service ends					
Length of trip					
Driver courtesy					
Connections with other buses					
Condition of buses					

9. What ONE change could encourage you to ride County Connection more?
  - 1 Service closer to my home
  - 2 More frequent service. Which route?  
 \_\_\_\_\_
  - 3 Service later in the day  
 (route: \_\_\_\_\_ time: \_\_\_\_\_)
  - 4 Service earlier in the day  
 (route: \_\_\_\_\_ time: \_\_\_\_\_)
  - 5 More service on Saturday  
 (route: \_\_\_\_\_ time: \_\_\_\_\_)
  - 6 More service on Sunday  
 (route: \_\_\_\_\_ time: \_\_\_\_\_)
  - 7 None of these
  - 8 Other (specify)  
 \_\_\_\_\_  
 \_\_\_\_\_

10. What is your preferred source for County Connection information?
  - 1 Website
  - 2 Facebook
  - 3 Mobile App
  - 4 Printed schedule
  - 5 Twitter
  - 6 Other (specify)  
 \_\_\_\_\_  
 \_\_\_\_\_





2015 Encuesta de County Connection School Tripper

1. ¿Qué escuela vas?  
\_\_\_\_\_

2. ¿Cuántos viajes en autobús vas hacer hoy?  
\_\_\_\_\_

3. ¿Cómo pago su tarifa hoy?
- 1 Pago en efectivo
  - 2 Transferencia de BART \_\_\_\_ o Bus \_\_\_\_
  - 3 Tarjeta de 12-viajes
  - 4 Tarjeta de 12-viajes Express
  - 5 Pase Mensual 6 Pase Mensual Express
  - 7 Tarjeta de 20-viajes de Mayores/Medicare
  - 8 Commuter Card
  - 9 Si gratis, especifique la programa o ruta:  
\_\_\_\_\_

4. ¿Tienes un Clipper Card?  
1 Sí 2 No

5. ¿Eres dueño de o regularmente usas un...?

- 1 Teléfono inteligente (Smartphone)
- 2 Computadora
- 3 Tableta

6. ¿Utilizas el autobús para viajes más que ir a escuela?  
1 Sí 2 No

7. ¿Cómo harías este viaje si County Connection no fuera disponible?
- 1 Manejar mi propio vehículo
  - 2 Carpool/Vanpool
  - 3 Bicicleta
  - 4 Obtener viaje con amigo/familia
  - 5 Caminar
  - 6 No hiciera el viaje
  - 7 Taxi
  - 8 Otro (especifique)  
\_\_\_\_\_  
\_\_\_\_\_

8. ¿Cómo calificarás el servicio de County Connection en las siguientes áreas? (1 = pobre, 2 = aceptable, 3 = neutral, 4 = bueno, 5 = excelente)

	1.	2.	3.	4.	5.
Puntualidad / Fiabilidad					
Frecuencia del servicio					
Hora que empieza el servicio					
Hora que termina el servicio					
Duración del viaje					
Cortesía del conductor					
Conexiones con otros autobuses					
Condición del autobús					

9. ¿Que SOLO cambio le animaría a utilizar County Connection más?

- 1 Servicio más frecuente. ¿Cuál ruta?  
\_\_\_\_\_
- 2 Servicio más tarde  
(ruta: \_\_\_\_\_ hora: \_\_\_\_\_)
- 3 Servicio más temprano  
(ruta: \_\_\_\_\_ hora: \_\_\_\_\_)
- 4 Más servicio en sábado  
(ruta: \_\_\_\_\_ hora: \_\_\_\_\_)
- 5 Más servicio en domingo  
(ruta: \_\_\_\_\_ hora: \_\_\_\_\_)
- 6 Ninguno de estos
- 7 Otro (especifique)  
\_\_\_\_\_  
\_\_\_\_\_

10. ¿Cuál es método preferido de obtener información sobre County Connection?

- 1 Página web
- 2 Facebook
- 3 Aplicación móvil
- 4 Horario imprimido
- 5 Twitter
- 6 Otro (especifique)  
\_\_\_\_\_  
\_\_\_\_\_