

Altamont Corridor Express

2014 Passenger Study

Draft
Methodology Report

Conducted by:
Redhill Group, Inc.



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PROJECT OVERVIEW

In the spring of 2014, Redhill Group conducted an origin-destination study for ACE (Altamont Corridor Express). This project was part of a larger Metropolitan Transit Commission initiative whose purpose is to compile travel behavior and demographic data for transit passengers in the San Francisco Bay Area. There are two primary goals of the effort. The first is to collect demographic data to assist with Title VI of the 1964 Civil Rights Act compliance for regional expenditures and to facilitate equity analysis. The second goal is to collect passenger travel pattern data to support the refinement of MTC partner agencies' analytical tools and regional and county-level travel demand models. Each transit agency's participation is voluntary and ACE is the eleventh agency to participate.

The project included the development of a sampling plan, onboard data collection using tablet PC surveying with real-time trip mapping to provide fully valid and logical trip summaries that include GIS data for origin, destination, boarding, alighting, and transfer points. All project tasks were conducted by Redhill Group. Using a standard set of questions a tablet survey was used to collect GIS data, access and egress modes, and distance to and from the ACE station, fare media, discounts, traditional demographics and supplemental information to support Title VI reporting. The survey also included transit property-specific questions regarding fare usage, and two operator-specific questions as requested by ACE.

COMMUNICATIONS SUMMARY

FIELD SURVEY OPERATIONS COMMUNICATIONS

Redhill Group coordinated with ACE's original point of contact, Brian Schmidt, Director Operations, Planning & Programming for the San Joaquin Regional Rail Commission. He subsequently delegated management of the project to Thomas Reeves, ACE Marketing and Communications Director, and he worked with us on subsequent survey implementation. Communications began with a kickoff meeting with ACE and Redhill Group on January 27th. This meeting provided an overview of the surveying methodology and process and addressed the following topics.

1. Project goals,
2. Survey methodology and process,
3. Surveying time frame,

4. Sampling plan,
5. Coordination of ACE route specific times and schedules,
6. Fare media,
7. Custom questions, and
8. Surveying language to comply with Title VI, LEP requirements.

Redhill Group worked with Mr. Schmidt to secure both ridership and operations information to facilitate the survey sampling plan and the daily scheduling process. Based on demographic data for the region and input from ACE management, it was agreed that English and Spanish surveying would be sufficient to meet the needs of ACE riders.

Redhill Group subsequently worked with Mr. Reeves to establish the surveying schedule, and on March 14th provided ACE with announcement information for conductors and agreed on a schedule for pretesting (March 19th and 20th), and the full survey (April 8th – 10th and 15th – 17th). The survey announcements are attached as Appendix A: Survey Announcement Documents and included a sample onboard announcement to go along with the general survey announcement document. The survey announcement included a copy of a sample badge which could be presented to conductors to help them identify field surveyors.

Copies of the paper, station-pair survey and onboard tablet surveys were provided to Mr. Reeves for review on March 17th. The surveys are attached as Appendix B: Station-Pair Survey Instrument, and Appendix C: Tablet Survey Instrument.

TABLET SURVEY COMMUNICATIONS

Redhill Group informed Mr. Reeves that each agency is invited to include up to three custom questions as part of the survey. ACE requested two additional questions: 1) Do you ever use any of ACE's shuttle connections during your commute? 2) Would you use ACE, if free shuttle connections were not available? Fare-type and discount questions were also validated through Mr. Reeves to ensure they were logical and system specific.

Throughout the project Brian Schmidt and Thomas Reeves were extremely helpful and supportive of the project.

DETAILED SAMPLING PLAN

ACE is a commuter rail service connecting Stockton and San Jose. Four inbound trains run in the morning from Stockton to San Jose, and the same outbound trains return to Stockton in the evening.

Given the limited number of boardings at certain stations it was recommended that surveys be completed in proportion to boardings by boarding-alighting pairs. In order to develop a sampling plan, a pre-test of the tablet survey and the station-pair counts on randomly selected cars for two outbound trains were conducted on March 19 and 20, 2014.

PRE-TEST FINDINGS:

- Based on the pre-test Redhill Group recommended that the survey proceed as scheduled with data collection occurring the weeks of April 8th and April 17th.
- The station-pair count yielded data that support the development of a draft sampling plan which will be validated using ACE monthly revenue data for station-pairs. Ninety percent of the surveys represented round-trip patterns and 10 percent of the surveys were for one-way trips.
- Based on the station-pair counts Redhill Group recommended that the data collection occur on three inbound and two outbound trains to balance inbound and outbound trips and to facilitate the data collection process, since just under half of the outbound trips board at Great America. This approach improved the data collection flow and also provided a better representation of AM and PM trips and capture of one-way trip respondents.
- The tablet survey instrument was functioning appropriately enabling the mapping of geographic points, capturing all required data.
- Survey respondents understood the questionnaire and were able to respond to questions. Minor wording changes were recommended to questions to improve comprehension and be more conversational, and the addition of an introductory question was recommended to anchor the respondent with their current trip prior to responding to the survey.
- There are quiet cars in each consist and Redhill Group recommended that a short paper survey be used to capture data from these riders, and that a telephone survey be conducted to complete the questionnaire with quiet car riders.

STATION-PAIR COUNTS:

Two PM outbound trains were surveyed:

- ACE-06 4:35pm
- ACE-08 5:35pm

ACE Train-08 5:35pm was a consist of seven cars of which two were quiet cars, three were bike cars, one was a general use car and one was an Internet car. Station-pair data were collected in three cars, two bike and one general purpose car for ACE-08. ACE-06- 4:35pm was a consist of six cars of which two were quiet cars, two were bike cars, one was a general use car and one was an Internet car. Station-pair data were collected in the Internet car and the general use car for this trip. A total of 561 station-pair surveys were collected of which 504 surveys (90%) represented round-trip patterns and 57 (10%) represented one way trips. A matrix of the station-pairs generated from the survey data follows:

Table 1: Completed Pre-test Paper Surveys By Station-Pair

	San Jose	Santa Clara	Great America	Fremont	Pleasanton	Livermore	Vasco Road	Tracy	Lathrop Manteca	Stockton	Total
San Jose		0	0	7	27	7	11	13	13	17	95
Santa Clara			0	2	16	4	5	5	5	1	38
Great America				30	105	28	22	52	30	10	277
Fremont					0	4	7	19	13	11	54
Pleasanton						0	0	35	32	15	82
Livermore							0	4	6	1	11
Vasco Road								2	1	0	3
Tracy									1	0	1
Lathrop Manteca										0	0
Stockton											0
										Total	561

Table 2: Percent Of Boardings Between Station-Pairs

	San Jose	Santa Clara	Great America	Fremont	Pleasanton	Livermore	Vasco Road	Tracy	Lathrop Manteca	Stockton	Total
San Jose		0.0%	0.0%	1.2%	4.8%	1.2%	2.0%	2.3%	2.3%	3.0%	16.9%
Santa Clara			0.0%	0.4%	2.9%	0.7%	0.9%	0.9%	0.9%	0.2%	6.8%
Great America				5.3%	18.7%	5.0%	3.9%	9.3%	5.3%	1.8%	49.4%
Fremont					0.0%	0.7%	1.2%	3.4%	2.3%	2.0%	9.6%
Pleasanton						0.0%	0.0%	6.2%	5.7%	2.7%	14.6%
Livermore							0.0%	0.7%	1.1%	0.2%	2.0%
Vasco Road								0.4%	0.2%	0.0%	0.5%
Tracy									0.2%	0.0%	0.2%
Lathrop Manteca										0.0%	0.0%
Stockton											0.0%
										Total	100%

Table 3: Preliminary Sampling Plan

n=211	San Jose	Santa Clara	Great America	Fremont	Pleasanton	Livermore	Vasco Road	Tracy	Lathrop Manteca	Stockton	Total
San Jose		0	0	3	10	3	4	5	5	6	36
Santa Clara			0	1	6	2	2	2	2	0	15
Great America				11	39	11	8	20	11	4	104
Fremont					0	2	3	7	5	4	21
Pleasanton						0	0	13	12	6	31
Livermore							0	2	2	0	4
Vasco Road								1	0	0	1
Tracy									0	0	0
Lathrop Manteca										0	0
Stockton											0
										Total	212

After completing the station-pair survey, Redhill Group received revenue sales for YTD through March. This was provided for the number of boardings by fare type for station pairs with the same ticket price (i.e. some station pairs are combined because they all have the same cost for the trip). The percentages comparing the revenue and field survey results are presented in the table below and are generally comparable indicating that both sources provide valid information.

Table 4: Revenue And Survey Based Distribution Of Trips By Station-Pair

STATION-PAIR	REVENUE %	SURVEY%
Stockton to Lathrop	0.1%	0.0%
Stockton to Tracy	0.2%	0.0%
Stockton to Vasco/Livermore/Pleasanton	4.0%	2.9%
Stockton to Fremont	2.0%	2.0%
Stockton to Great America/Santa Clara/San Jose	4.9%	5.0%
Lathrop to Tracy	0.1%	0.2%
Lathrop to Vasco/Livermore/Pleasanton	6.7%	7.0%
Lathrop to Fremont	4.2%	2.3%
Lathrop to Great America/Santa Clara/San Jose	12.0%	8.6%
Tracy to Vasco/Livermore/Pleasanton	7.8%	7.3%
Tracy to Fremont	3.7%	3.4%
Tracy to Great America/Santa Clara/San Jose	13.7%	12.5%
Vasco/Livermore to Livermore/Pleasanton	0.1%	0.0%
Vasco/Livermore/Pleasanton to Fremont	1.2%	2.0%
Vasco/Livermore/Pleasanton to Great America/Santa Clara/San Jose	32.4%	40.1%
Fremont to Great America/Santa Clara/San Jose	7.0%	7.0%
TOTAL	100.0%	100.0%

Since the revenue numbers were for a full three-month period, and included the quiet cars that were not surveyed, they provide the best overall estimate of station-pair travel. However, unlike the field survey, they do not address all individual station pairs. To combine the best of both sources of information the revenue percentages were used to allocate the sample between the provided station pair combinations, and the survey percentages were used to allocate the station pairs to individual station-pair combinations where the specific station-pair information was not available from the revenue data. This information is shown in Table 5: Final Target Survey Allocation.

Table 5: Final Target Survey Allocation

STATION-PAIR	REVENUE%	SURVEY %	FINAL %	210	INDIVIDUAL STATION-PAIRS	SURVEYS
Stockton-Lathrop	0.06%		0.06%	0	Stockton-Lathrop	9
Stockton-Tracy	0.15%		0.15%	0	Stockton-Tracy	
Stockton-Vasco	4.03%	0.00%	0.00%	0	Stockton-Vasco	
Stockton-Livermore		0.20%	0.28%	1	Stockton-Livermore	
Stockton-Pleasanton		2.70%	3.75%	8	Stockton-Pleasanton	
Stockton-Fremont	1.98%		1.98%	4	Stockton-Fremont	8
Stockton-Great America	4.93%	1.80%	1.78%	4	Stockton-Great America	
Stockton-Santa Clara		0.20%	0.20%	0	Stockton-Santa Clara	
Stockton-San Jose		3.00%	2.96%	6	Stockton-San Jose	6
Lathrop-Tracy	0.12%		0.12%	0	Lathrop-Tracy	13
Lathrop-Vasco	6.68%	0.20%	0.20%	0	Lathrop-Vasco	
Lathrop-Livermore		0.70%	0.71%	1	Lathrop-Livermore	
Lathrop-Pleasanton		5.70%	5.77%	12	Lathrop-Pleasanton	
Lathrop-Fremont	4.18%		4.18%	9	Lathrop-Fremont	9
Lathrop-Great America	11.97%	5.30%	7.46%	16	Lathrop-Great America	16
Lathrop-Santa Clara		0.90%	1.27%	3	Lathrop-Santa Clara	10
Lathrop-San Jose		2.30%	3.24%	7	Lathrop-San Jose	
Tracy-Vasco	7.76%	0.40%	0.43%	1	Tracy-Vasco	17
Tracy-Livermore		0.70%	0.74%	2	Tracy-Livermore	
Tracy-Pleasanton		6.20%	6.59%	14	Tracy-Pleasanton	
Tracy-Fremont	3.73%		3.73%	8	Tracy-Fremont	8
Tracy-Great America	13.71%	9.30%	10.20%	21	Tracy-Great America	21
Tracy-Santa Clara		0.90%	0.99%	2	Tracy-Santa Clara	7
Tracy-San Jose		2.30%	2.52%	5	Tracy-San Jose	
Vasco-Livermore	0.12%	0.00%	0.04%	0	Vasco-Livermore	3
Vasco-Pleasanton		0.00%	0.04%	0	Vasco-Pleasanton	
Livermore-Pleasanton		0.00%	0.04%	0	Livermore-Pleasanton	
Vasco-Fremont	1.23%	1.20%	0.78%	2	Vasco-Fremont	
Livermore-Fremont		0.70%	0.45%	1	Livermore-Fremont	
Pleasanton-Fremont		0.00%	0.00%	0	Pleasanton-Fremont	
Vasco-Great America	32.36%	3.90%	3.12%	7	Vasco-Great America	7
Vasco-Santa Clara		0.90%	0.72%	2	Vasco-Santa Clara	6
Vasco-San Jose		2.30%	1.84%	4	Vasco-San Jose	
Livermore-Great America		5.00%	4.01%	8	Livermore-Great America	11
Livermore-Santa Clara		0.70%	0.56%	1	Livermore-Santa Clara	
Livermore-San Jose		1.20%	0.96%	2	Livermore-San Jose	
Pleasanton-Great America		18.70%	14.98%	31	Pleasanton-Great America	31
Pleasanton-Santa Clara		2.90%	2.32%	5	Pleasanton-Santa Clara	5
Pleasanton-San Jose		4.80%	3.84%	8	Pleasanton-San Jose	8
Fremont-Great America	6.98%	5.30%	5.36%	11	Fremont-Great America	11
Fremont-Santa Clara		0.40%	0.40%	1	Fremont-Santa Clara	4
Fremont-San Jose		1.20%	1.21%	3	Fremont-San Jose	
	100.00%		100.00%	210		210

The “SURVEY%” is used to allocate the “REVENUE%” where the specific station-pair information is not directly available from the revenue data. For example, the 4.03% “REVENUE%” for Stockton to Vasco/Livermore/Pleasanton is allocated to the “FINAL%” using the “SURVEY%” data for Stockton to Vasco, Stockton to Livermore and Stockton to Pleasanton (e.g. 4.03% x 2.70% = 3.75%).

The “FINAL%” column is then multiplied by the total sample of 210 to get the number of desired surveys for each individual station-pair. Finally, where the individual station-pairs produce fewer than five surveys, they are combined with contiguous station-pairs until they are at least five surveys. The two exceptions to this are Vasco/Livermore/Pleasanton to Livermore/Pleasanton/Fremont (3 surveys), and Fremont to Santa Clara/San Jose which is four surveys. This produces the final sampling plan in the column with the heading of “SURVEYS.”

The final results are shown in the following summary table, Table 6: Final Sampling Plan.

Table 6: Final Sampling Plan

n= 210	San Jose	Santa Clara	Great America	Fremont	Pleasanton	Livermore	Vasco Road	Tracy	Lathrop Manteca	Stockton	Total
San Jose		0	0	3	8	2	4	5	7	6	35
Santa Clara			0	1	5	1	2	2	3	0	14
Great America				11	31	8	7	21	16	4	98
Fremont					0	1	2	8	9	4	24
Pleasanton						0	0	14	12	8	34
Livermore							0	2	1	1	4
Vasco Road								1	0	0	1
Tracy									0	0	0
Lathrop Manteca										0	0
Stockton											0
										Total	210

The sample size of 210 provides statistical accuracy of ± 6.6% at a 95% confidence level for a target universe of 4,151 riders.

SURVEY INSTRUMENTS

TABLET ONBOARD SURVEY

Tablet face-to-face interviews were the preferred method, while paper surveys printed on heavy card stock for easy distribution and completion were used primarily on the quiet cars. The tablet PCs have a built-in survey system and on-screen mapping features that enable real-time geocoding of cross streets, bus stops, and rail routes. The respondents can then confirm the geocoded location based on the on-screen map that shows the searched cross street, or the stops along an identified bus route or rail line. The mapping

component is used to collect the geo coordinates of major survey locations (home, school, work, origin, destination, boardings, and alightings). In addition, the survey system allows the surveyor to walk through each prompted question with the respondent to answer any questions as well as to ensure the quality of the data collected. The respondent can also answer the questions on their own during the demographic section to provide a sense of privacy.

The tablet survey instrument was based on the telephone survey instrument used in previous MTC surveys with modifications to incorporate the proprietary questions requested by ACE and fare media and transfer options specific to ACE.

The modifications to the tablet survey included:

- Adjusting potential transfer agency names and routes to incorporate agencies that intersect ACE.
- Adjusting fare media to match ACE fare options.

In addition to revisions made to the core survey instrument, the survey included supplemental custom questions:

- Do you ever use any of ACE's shuttle connections during your commute?
- If the ACE train you rode was not available, how would you have made the trip?

The survey first asks for the respondent's origin and destination types. It then asks if the rider had any intermediate stops between their origin point and boarding point. This sometimes identifies a new, more valid origin-type based on new information such as stopping to get coffee or to drop off dry cleaning. The interviewer then captures the rider's access mode to their first transit/ACE boarding point as well as the minutes (if walked) or miles (if non-pedestrian mode) from their origin to the boarding point.

The interviewer then determines if the ACE trip where the rider was initially surveyed, was the first leg of their trip, or if they were transferring from another transit vehicle. The survey allows up to three transit segments prior to the trip where they were surveyed, as well as three segments following the surveyed segment of their trip. For each trip segment, the respondent identified the relevant transit operator and route, and the corresponding boarding and alighting points.

The rider is then asked about their egress mode and minutes or miles from their last transit/ACE alighting point to their destination. Riders who do not have work or school as part of their trip are also asked if they are employed and/or a student, so that it is clear whether each respondent is only employed, only a student, both, or neither. Work and school locations are also captured if they were not part of the trip.

If the riders are employed, then depending on their origin and destination types they are asked if they went to work before (riders going to work), after (riders coming from work), or before or after (riders not coming from or going to work) their ACE trip on the day that they were surveyed. If the riders are unemployed students then depending on their origin and destination types they are asked if they went to school before, after, or before or after their ACE trip on the day that they were surveyed. All riders regardless of work and student status were asked what time they left home prior to the trip where they were surveyed and when they returned home after this trip.

Finally, respondents were asked about their fare media type and discount, if any, the ACE proprietary questions, demographics and Title VI questions including:

- If they have a driver's license,
- The number of people that live in their household who work,
- The number of drivable vehicles available to people living in their household,
- The year they were born,
- If they are of Hispanic or Latino origin,
- Race (White, African American, Asian, American Indian or Alaska Native, native Hawaiian or Pacific Islander, or other),
- If they speak a language other than English at home, and if so, which language, and how well they speak English,
- Income, and
- Gender (observed, not asked).

PAPER ONBOARD SURVEY

The paper onboard survey instrument for ACE included a list of ACE stations so that passengers could designate their boarding and alighting locations.

The questions included:

- The rider's current on and off stations
- Name
- Phone number

The survey included a unique identifier (serial number) to track every survey to a date, station-pair, and trip. The surveys were organized in decks of 25 which were sequentially numbered.

FIELD SUMMARY

RECRUITMENT

Sixteen surveyors were locally recruited by Express Employment Professionals of Stockton. All candidates were pre-screened, interviewed and tested with background checks as appropriate by the temporary staffing agency. All candidates were also interviewed by Redhill Group to ensure they had a professional attitude and appearance, and had the technical skills required to use our tablet interviewing system.

The minimum job qualifications for the surveyors are shown in Figure 1: Field Surveyor Qualifications.

Figure 1: Field Surveyor Qualifications

Minimum age, 18	Must be presentable and professional
Minimum Education – HS Diploma or GED	Must not exhibit any extremes in hair style, clothing, jewelry or makeup
Must have a car or other means of reliable transportation that provides the ability to get to the report location	Surveyors are expected to wear a plain white or solid colored shirt or blouse (no tank tops, no t-shirts, no logos, nothing printed on the blouse/shirt); neatly ironed pants, khakis or jeans (no holes), no shorts and no short skirts
Must be reliable, attendance and punctuality are critical	Rubber soled shoes are recommended, flip flops are not allowed
Must be able to continuously observe and legibly record information	Must be able to ride without motion sickness or incontinence
Must be able to recognize where they are at all times while riding the ACE	Must have a reliable timepiece
Must be self-motivated, have a positive attitude, and be customer service oriented	Bilingual a plus
Must be assertive without being a nuisance	Must have skills to operate tablet survey system

TRAINING

The training included manual instruction about the various aspects of the project and the tasks. Technical and non-technical information was explained, including project goals and the significance of the survey. The training also covered procedures and techniques for collecting the surveys, safety, transit terminology and practices, and general employment information.

Field training included a review of daily procedures, showing up on time, demonstrating onboard procedures such as approaching passengers, completing time sheets and shift wrap-up procedures.

Surveyors were also trained in the use of the tablet-based interviewing system with extensive role playing and sample interviews developed specifically for the training process. This ensured that surveyors were able to negotiate all parts of the survey process including capture of accurate GIS data.

The Redhill Group Project Manager conducted the training and was on location during the data collection period. The ACE crew was managed by two Redhill Group GIS Specialists and one Redhill Group Data Quality Assurance Specialist, all who had worked on previous MTC projects and had ACE and field data collection experience. The field surveying training manual is attached as Appendix E: Field Training Manual.

TABLET SURVEYING PROCESS

Prior to interviewing respondents, surveyors familiarized themselves with major streets, landmarks, and transit agencies in the surveyed region by reviewing and testing the survey mapping software. Once familiar with the region, surveyors used the online version of the tablet survey to administer the survey.

The survey first asks the type of location the respondent is coming from, and going to (see Figure 2). Origin (see Figure 3) and destination (see Figure 4) locations are then captured to orient the surveyor to the spatial information to be collected within that geography and to assist riders in recollecting their entire trip. Having the origin and destination near the surveyed ACE station-pair is usually a signal to the surveyor that no transfers took place. If the surveyor is unable to locate the intersection provided, multiple steps are taken to secure a geocodable point, including asking for the spelling of cross streets or entering a nearby landmark, place name, or address.

To ensure the accuracy and logic of geographic and spatial information, surveyors confirmed the ACE boarding and alighting stations. Surveyors use information about access modes (Figure 5) and egress modes (Figure 9) as well as travel time or distance between points to assess the accuracy of information provided. This assures that access and egress mode time/distance and boarding/alighting points are logical in relationship to one another.

Respondents are also asked at which stations they get on and off the ACE train (Figure 8), and if they use any other public transit to get to or from ACE. If they do, respondents must indicate the agency and route (Figure 6), as well as where they got on and off of that route (Figure 7).

In the sample survey, the respondent walked five minutes from their home near Airport Way & 8th St. in Stockton to where they board the San Joaquin RTD route 44 at the same intersection. They get off route 44 at Aurora St. & Weber Ave. in Stockton, and then board the ACE Train at the Stockton station. The rider takes ACE to the Great America station and proceeds to walk another five minutes to their work near Tasman Dr. & Lafayette St. in San Jose.

Once all points for a trip have been captured, the rider is then asked for their demographic and attitudinal information. If any information appears illogical, the surveyor can clarify the trip with the respondent to verify all information is accurate or to correct discrepancies either during the survey, or with a follow-up phone call.

Figure 2: Origin And Destination Type

Where are you coming FROM?		
Work	Business appointment	Your home ✓
Social or Recreation	Shopping	School (K-12) (student only)
College or University (student only)	Airport (airline passenger only)	Maintenance/ Personal business
Escorting others (children, elderly)	Dining/Coffee	Hotel

Where are you going TO?		
Work ✓	Business appointment	Your home
Social or Recreation	Shopping	School (K-12) (student only)
College or University (student only)	Airport (airline passenger only)	Maintenance/ Personal business
Escorting others (children, elderly)	Dining/Coffee	Hotel

Figure 3: Search Origin

Enter the cross street of your Origin

Aiello St & 6th St, Pittsburg	↓	
Aiello St & 7th St, Pittsburg		
Aileen St & Adeline St, Emeryville		
Aileen St & Adeline St, Emeryville		
Ainsley Ct & Abbey Ln, Campbell		
Airport & 98th, Oakland		
Airport & 98th Ave, Oakland		
Airport & Air Cargo Rd, Oakland		
Airport Blvd & 2nd Ln, South San Francisco		
Airport Blvd & Access Rd, South San Francisco		
Airport Blvd & Airport Blvd, South San Francisco		
Airport Dr & 98th, Oakland		
Airport Dr & 98th Ave, Oakland		
Airport Dr & Air Cargo Rd, Oakland		
Airport Dr & Airport, Oakland		
Airport Green Lot Parking Acc & Airport Bl, San Jose		
Airport Pkwy & Airport Blvd, San Jose		
Airport Way & 10th St, Stockton		
Airport Way & 12th St, Stockton		
Airport Way & 1st St, Stockton		
Airport Way & 8th St, Stockton		
Airport Way & 7th St, Stockton		
Airport Way & 8th St, Stockton		
Airport Way & 9th St, Stockton		
Airport Way & Acacia St, Stockton		



Figure 4: Search Destination

Enter the cross street of your Destination

The screenshot shows a search interface with a list of street names on the left and a numeric keypad on the right. The list includes various street combinations such as 'Tasman Dr & 1st St, San Jose' and 'Tasman Dr & Lafayette St, San Jose'. The last item in the list is highlighted in blue. The keypad has a grid of buttons for digits 0-9, a back arrow, and a space button.

Enter the cross street of your Destination

The screenshot shows a map with a green background. A red dot marks the location of 'Tasman Dr & Lafayette St, San Jose', which is highlighted with a green box. Other street names are visible on the map, including 'Tasman Dr & Cll del Sol, San Jose OR Santa Clara' and 'Ave de Los Alumnos & Ave de Guadalupe, Santa Clara'. A scale bar at the bottom left indicates 'Map Scale = 1:1,000'. A vertical toolbar with various map controls is on the right side.

Figure 5: Access Mode Time/Distance And Transfer Before?

How did you get from your Origin to your First Boarding Point?

<input checked="" type="button" value="Walked all the way"/>	<input type="button" value="Bicycled"/>
<input type="button" value="Drove alone and parked"/>	<input type="button" value="Drove or rode with others and parked/carpooled"/>
<input type="button" value="Dropped off by someone"/>	<input type="button" value="Taxi"/>
<input type="button" value="Motorcycle/motorized scooter/moped"/>	

How many MINUTES was your walk from your Origin to your First Boarding point?

5		
1	2	3
4	5	6
7	8	9
DEL	0	CLR

Did you use another form of transit before riding this train?

<input checked="" type="button" value="Yes"/>	<input type="button" value="No"/>
---	-----------------------------------

Figure 6: First Before Transfer Agency And Route

What transit Agency did you get on First?

AC Transit	Amtrak	BART
Caltrain	The County Connection (CCCTA)	Modesto Area Express (MAX)
San Joaquin RTD 	Santa Clara VTA	Wheels (LAVTA)
Bishop Ranch Shuttle	Lawrence Livermore Shuttle	El Paseo Limousine Shuttle
Other		

What Bus Route did you get on first?

1_SANJOAQUINRTD	
2_SANJOAQUINRTD	
23_SANJOAQUINRTD	
3_SANJOAQUINRTD	
310_SANJOAQUINRTD	
315_SANJOAQUINRTD	
340_SANJOAQUINRTD	
345_SANJOAQUINRTD	
360_SANJOAQUINRTD	
365_SANJOAQUINRTD	
375_SANJOAQUINRTD	
380_SANJOAQUINRTD	
390_SANJOAQUINRTD	
4_SANJOAQUINRTD	
40_SANJOAQUINRTD	
43_SANJOAQUINRTD	
44_SANJOAQUINRTD	
5_SANJOAQUINRTD	
51_SANJOAQUINRTD	
52_SANJOAQUINRTD	
54_SANJOAQUINRTD	
55_SANJOAQUINRTD	
564_SANJOAQUINRTD	
0_SANJOAQUINRTD	
00_SANJOAQUINRTD	

Number Pad:

1	2	3	4	5
6	7	8	9	
←				

Figure 8: ACE Boarding And Alighting Station

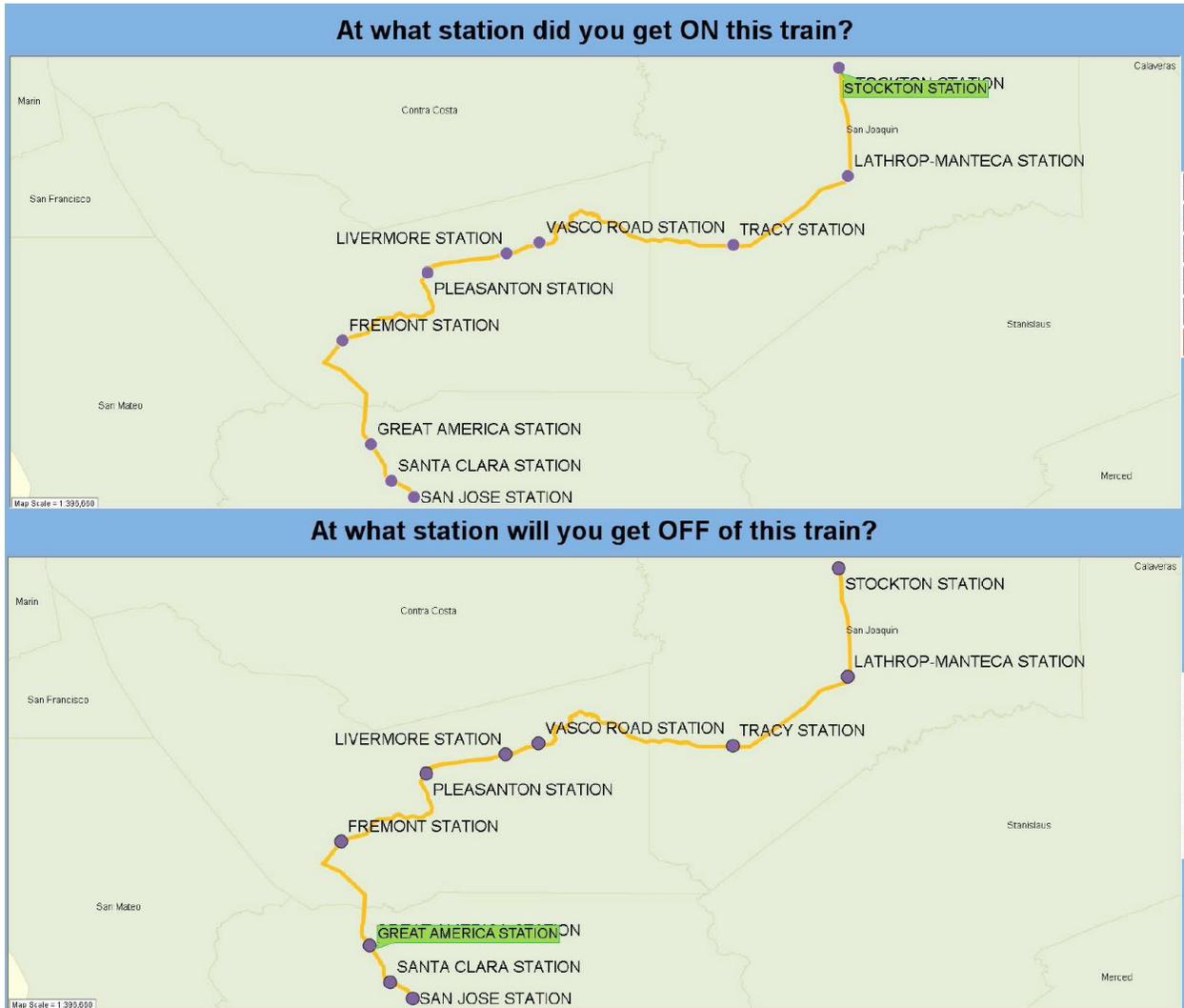


Figure 9: Egress Mode Time/Distance And Transfer After?

Are you going to Transfer to another form of transit when you get off of this train?

Yes

No ✓

How will you get from your last Alighting point to your Destination?

Walk all the way ✓

Bicycle

Retrieve car and drive alone

Retrieve car and ride with others/carpool

Picked up by someone

Taxi

Motorcycle/motorized scooter/moped

How many MINUTES will your walk take from your last Alighting point to your Destination?

5

1

2

3

4

5

6

7

8

9

DEL

0

CLR

ONBOARD DATA COLLECTION

Most ACE riders are employed travelers with higher education levels who ride the train long enough to complete a full survey.

Field supervisors and interviewers reported to the starting ACE station at least 30 minutes prior to the train departure to receive their tablets and daily assignments. Due to the high ridership and physical layout (multiple decks) on the cars, a crew of two was assigned to each non-quiet car. As a quality control measure, the crew included a supervisor on the majority of the trips to ensure that the data collection protocols were being observed.

Surveyors boarded ACE with a supervisor prior to the passengers and were assigned a specific section of an ACE car to survey. Survey sections were rotated by trip to minimize location bias, except for the quiet cars where paper surveys were given to all riders. For the first two days, every fourth passenger was approached to participate in an interview. However, as surveying progressed, some station-pair targets were met and surveyors were directed to interview only passengers that were still needed to meet targets. This was facilitated by the fact that riders must visibly wear their tickets for the conductors to see. Surveyors then selected the first available passenger boarding at the desired boarding station and with the desired alighting station as identified on their ticket. If a passenger refused the survey, or could not complete it due to a language barrier, the interviewer tracked the refusal by marking it in the tablet. If the passenger spoke Spanish, they were given a Spanish language paper survey to collect their name and phone number for subsequent contact by telephone.

QUOTA TRACKING AND MANAGEMENT

At the end of each trip all tablets were turned into Redhill Group supervisors, who uploaded the data to be reviewed for completeness and accuracy. Survey counts by station-pairs were monitored and tracked against the sampling plan quotas. In addition, supervisors were able to evaluate surveyor performance and productivity. This enabled proper schedule adjustments, and provided information which could be used to retrain the surveyors on specific problematic questions and survey procedures.

PHONE SUMMARY

SURVEYOR RECRUITMENT

All phone interviewers who worked on this project had worked on previous MTC data collection initiatives and were already fully trained on data collection procedures. Two phone interviewers, along with two supervisors completed 50 quiet car follow-up surveys. At that point all target quotas had been fully met and total completed surveys exceeded the total sample target by over 150%. Accordingly the additional over-quota, short paper surveys were not contacted.

TRAINING

The small phone survey team received a two-hour training program. The overall training program is outlined below and had been previously completed by these experience surveyors. The training that did occur related specifically to the ACE system, connecting transit agencies, and the geography associated with the service area. The full training program includes the following modules:

- A comprehensive review of research methodology
- Project overview and goals
- Project location information
 - Demographic
 - Cultural
 - Economic
- ACE/transit system overview:
 - Modes and services
 - Transfers
 - Fares
 - Station-pairs
- Survey Methodology
- Interviewing protocol
- Spatial perspectives
- Mapping
- Data integrity
- Privacy and confidentiality
- Customer service

Throughout the duration of the project quality assurance staff observed and reviewed all data collection efforts to ensure the highest level of data integrity.

TELEPHONE DATA COLLECTION

Respondents who did not have time to complete the survey during their ACE trip were also given the option of providing their phone numbers for follow-up. Riders in the quiet cars were given a short paper survey. Those who provided their phone numbers were then contacted by Redhill Group within a week of the original attempt to survey the rider to gather the remaining information needed to create a complete survey record. Fifty follow-up phone surveys were completed.

RESULTS

A total of 532 surveys were completed for this project. This is a combination of tablet surveys completed onboard (482), and short onboard quiet-car paper surveys that were subsequently completed by telephone (50). The results for the surveys completed onboard with tablets are detailed in Table 7. The quiet-car paper/telephone surveys are detailed in Table 8. And the non-English language surveys which were recorded in the tablets and included a short paper survey, are detailed in Table 9.

A total of 523 full tablet surveys were completed onboard, and an additional 72 short surveys were completed. Of these 523 tablet surveys, 41 were missing data or were illogical producing a total of 482 valid tablet surveys. From the total of 739 riders that were approached, 132 refused to participate and 12 were unable to complete the survey onboard due to a language barrier.

The tablet field survey participation rate was 82 percent. The participation rate was calculated as the percentage of total willing participants (607), divided by the total eligible survey respondents in surveyed sections of the ACE trains (739).

Table 7: Tablet Survey Statistics

Approached	739	100%
Refused	132	18%
Net complete	607	82%
Full Tablet Survey	523	71%
Short Survey (all over-quota, not contacted)	72	10%
Language Barrier	12	2%
Tablet surveys cleaned	523	100%
Data issues in full, over-quota categories	41	8%
Net final clean tablet surveys	482	92%

Because the total number of completed surveys exceeded the original target by well over 100 percent, and all quotas were achieved through a combination of the onboard tablet surveys and quiet-car paper/telephone surveys, the 72 short survey participants were not contacted.

A summary of the quiet-car paper survey statistics is detailed in Table 8. A total of 229 paper surveys were completed onboard the quiet cars. Of these, 57 riders were contacted and 52 completed the survey with a follow-up telephone call. The follow-up survey response rate was 91 percent. Five of the 57 riders that were contacted were unwilling to complete the survey (9%), and for those that did complete the telephone survey, two had data issues. Because these were in over-quota categories, they were discarded.

Table 8: Quiet Car Paper/Phone Survey Statistics

Approached	229	
Contacted	57	25%
Over Quota	172	75%
Completed	52	91%
Refused	5	9%
Data issues in over-quota categories	2	4%
Net final clean quiet car paper surveys	50	96%

A total of 12 riders that were approached did not feel comfortable completing the survey in English. This included seven Spanish speakers, two Chinese speakers, and two other language speakers. Among the seven Spanish language speakers five were unwilling to provide a telephone number for subsequent contact. The remaining two provided telephone numbers, but one number was disconnected and the other one was unable to be contacted after multiple attempts.

Table 9: Language Barrier Paper Surveys

Total Language Barriers	12	
Spanish	7	
Did not provide name/#	5	71%
Did provide name/#	2	29%
Completed survey	0	0%
Did not complete survey	2	100%
Chinese	2	17%
Other	3	25%

The target number of surveys for the ACE system was 210. The total number of valid surveys collected was 532 or 153 percent above the target. All survey results met or exceeded sampling targets.

Table 10: Final Sampling Plan

n= 210	San Jose	Santa Clara	Great America	Fremont	Pleasanton	Livermore	Vasco Road	Tracy	Lathrop Manteca	Stockton	Total
San Jose		0	0	3	8	2	4	5	7	6	35
Santa Clara			0	1	5	1	2	2	3	0	14
Great America				11	31	8	7	21	16	4	98
Fremont					0	1	2	8	9	4	24
Pleasanton						0	0	14	12	8	34
Livermore							0	2	1	1	4
Vasco Road								1	0	0	1
Tracy									0	0	0
Lathrop Manteca										0	0
Stockton											0
										Total	210

The final sample size of 532 provides statistical accuracy of $\pm 4.0\%$ at a 95% confidence level for a target universe of 4,151 daily boardings.

Table 11: Completed Surveys

n= 400	San Jose	Santa Clara	Great America	Fremont	Pleasanton	Livermore	Vasco Road	Tracy	Lathrop Manteca	Stockton	Total
San Jose		0	0	7	19	10	8	24	26	14	108
Santa Clara			0	1	5	4	4	4	10	4	32
Great America				22	46	24	25	49	47	19	232
Fremont					0	2	4	15	19	18	58
Pleasanton						0	1	26	32	23	82
Livermore							0	2	8	3	13
Vasco Road								2	1	3	6
Tracy									0	1	1
Lathrop Manteca										0	0
Stockton											0
										Total	532

Table 12: Percent Difference (Complete vs. Quota)

n= 210	San Jose	Santa Clara	Great America	Fremont	Pleasanton	Livermore	Vasco Road	Tracy	Lathrop Manteca	Stockton	Total
San Jose				133%	138%	400%	100%	380%	271%	133%	222%
Santa Clara				0%	0%	300%	100%	100%	233%	0%	105%
Great America				100%	48%	200%	257%	133%	194%	275%	173%
Fremont						100%	100%	88%	111%	350%	150%
Pleasanton								86%	167%	188%	147%
Livermore								0%	700%	200%	300%
Vasco Road								100%			100%
Tracy											
Lathrop Manteca											
Stockton											
										Total	171%

DATA CLEANING AND WEIGHTING

DATA CLEANING AND FILE PREPARATION

All data cleaning was conducted by staff that had experience reviewing data from other MTC projects. All data cleaning staff received supplemental training to ensure they had a comprehensive understanding of the surveying process, survey instrument, and what constituted a logical trip progression. All surveys underwent multiple phases of cleaning to ensure all survey data was complete and all trips followed a logical progression.

Each survey was reviewed by a quality assurance team member for four primary criteria to ensure the logic and accuracy of the captured geographic information.

1. Boarding and alighting points were logical to the ACE station-pairs.
2. All points were labeled with their position along the trip. Labels include Origin, Boarding, Transfer, Alighting, and Destination.
3. The distance between the respondent's origin point and first boarding point as identified using the mapping software was consistent with the access mode and the distance or walk time reported by the respondent during the survey. Similarly, the distance between the respondent's last alighting point and destination point as identified using the mapping software was consistent with the egress mode and distance or walk time reported by the respondent during the survey.
4. Each point had a complete address or set of cross-streets recorded to enable accurate future geocoding.

Through custom programming, the final data file was reviewed for systematic errors which were either corrected or flagged for additional research or a callback. In the few cases where the cleaning process revealed the need for additional information or clarification from a respondent, the respondent was called back and the revised or supplementary data was collected and added into the geographic, CATI, or combined data file as appropriate.

The data is provided in one combined data file, the survey data is provided with a single record for each respondent with 165 survey questions, 31 recoded fields, and the survey weight. The GIS data is integrated in the survey data file and contains GIS coordinates for each prompted geographic location. The file is labeled "ACE 2014 Final DataSet."

DATA WEIGHTING

Data weighting was performed to avoid over or under-representation of any station-pair, where surveys were completed in excess of the desired target level.

Weights were calculated by dividing the total number of trips for each station-pair combination (based on revenue and onboard station-pair surveys) by the number of completed surveys for the station-pair. For example, the number of trips between the Stockton Station and the San Jose Stations for an average weekday is 119. Dividing this by the 14 completed surveys with riders on these trips produces the weight for this station-pair cell of 8.5 as shown in the Stockton-San Jose cell of Table 11: Weights. In accordance with the approved sampling plan, when individual station-pair trip counts did not produce a minimum of five surveys, contiguous station-pairs were combined to create a target of five or more surveys.

Table 13: Weights

Individual Station-Pairs	Target Surveys	Actual Surveys	% Total	Station-Pair Riders	Weights
Stockton-Lathrop	9	30	4.29%	178	5.9333
Stockton-Tracy					5.9333
Stockton-Vasco					5.9333
Stockton-Livermore					5.9333
Stockton-Pleasanton					5.9333
Stockton-Fremont	8	41	3.81%	158	3.8537
Stockton-Great America					3.8537
Stockton-Santa Clara					3.8537
Stockton-San Jose	6	14	2.86%	119	8.5
Lathrop-Tracy	13	41	6.19%	257	6.2683
Lathrop-Vasco					6.2683
Lathrop-Livermore					6.2683
Lathrop-Pleasanton					6.2683
Lathrop-Fremont	9	19	4.29%	178	9.3684
Lathrop-Great America	16	47	7.62%	316	6.7234
Lathrop-Santa Clara	10	36	4.76%	198	5.5
Lathrop-San Jose					5.5
Tracy-Vasco	17	30	8.10%	336	11.2
Tracy-Livermore					11.2
Tracy-Pleasanton					11.2
Tracy-Fremont	8	15	3.81%	158	10.5333
Tracy-Great America	21	49	10.00%	415	8.4694

Individual Station-Pairs	Target Surveys	Actual Surveys	% Total	Station-Pair Riders	Weights
Tracy-Santa Clara	7	28	3.33%	138	4.9286
Tracy-San Jose					4.9286
Vasco-Livermore	3	7	1.43%	59	8.4286
Vasco-Pleasanton					8.4286
Livermore-Pleasanton					8.4286
Vasco-Fremont					8.4286
Livermore-Fremont					8.4286
Pleasanton-Fremont					8.4286
Vasco-Great America	7	25	3.33%	138	5.52
Vasco-Santa Clara	6	12	2.86%	119	9.9167
Vasco-San Jose					9.9167
Livermore-Great America	11	38	5.24%	218	5.7368
Livermore-Santa Clara					5.7368
Livermore-San Jose					5.7368
Pleasanton-Great America	31	46	14.76%	613	13.3261
Pleasanton-Santa Clara	5	5	2.38%	99	19.8
Pleasanton-San Jose	8	19	3.81%	158	8.3158
Fremont-Great America	11	22	5.24%	217	9.8636
Fremont-Santa Clara	4	8	1.90%	79	9.875
Fremont-San Jose					9.875
Total	210	532	100%	4,151	

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APPENDIX A: SURVEY ANNOUNCEMENT DOCUMENTS

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Between April 8th and 17th, 2014, ACE will be conducting an onboard survey of its passengers to gather information on its services. The information that is collected in individual surveys is confidential and the survey results in aggregate will be used to plan services to serve our customers.

On behalf of ACE, Dikita Enterprises, a subcontractor of Redhill Group, Inc., will be conducting tablet based personal interviews lasting approximately 5 minutes. If a rider does not have 5 minutes to complete the survey, they will be given a short paper “card” survey asking for their boarding and alighting stations, and name and phone number so that the survey can be collected by phone at their convenience.

Surveying will take place throughout the service day during the noted surveying dates. Interviewers will board the trains at either the Stockton or San Jose stations. They will also assist passengers in filling out the card surveys if assistance is requested.

Interview staff will be easily identifiable. They will be displaying badges designating them as “surveyors”. Interviewers who are wearing badges are not required to pay a fare while riding the train.

Passengers who fill out a card onboard the train will be contacted by phone within a few days of providing their contact information to one of the onboard survey staff. The call will be made by the Redhill Group and a telephone interviewer will collect additional information from the rider regarding their recent trip. The calls will be placed between 9:00 AM and 9:00 PM on weekdays and 10:00 AM and 8:00 PM on weekends. To encourage passengers to participate, a \$500.00 incentive will be awarded to a randomly selected passenger who completed the full personal interview or telephone survey. The drawing for a winner will be conducted sometime in June, 2014. Riders are never asked to provide social security numbers, driver’s license information or personal credit card information.



Once the winner is selected they will be notified by telephone and they will be asked for their name and address so the check can be mailed. The check will be sent by registered mail and the winner will be required to sign for the check when they receive it. The winner will not be asked for any other information other than their name and address.

If you have any questions, please contact Judith McCourt at 949.752.5900 ext. 903 or jmccourt@redhillgroup.com.

Announcement Suggested Text

Rider Notification:

E-Newsletter:

Between April 9th and April 17th, ACE will be conducting an onboard survey of its customers to gather information on its services. The information that is collected in individual surveys is confidential and the survey results in aggregate will be used to plan services to serve our customers.

On selected morning and afternoon trips riders may be asked to participate in a brief personal interview. The interview takes less than 10 minutes to complete. Interviewers will be collecting the data using tablets.

If a rider does not have time to complete the interview the interviewer will ask for their name and phone number and the rider may be contacted at a later date by telephone to complete the survey.

Because it is important that we interview a representative sample of all riders, passengers riding in the quiet car will be asked to fill out a brief paper survey and also may be contacted by phone at a later date to provide more information about their trip.

Interview staff will be easily identifiable and will be displaying badges designating them as interviewers.

All customers who participate in the survey will be eligible for a \$500.00 drawing which will be awarded to one rider in June.

Onboard Announcements:

ACE is conducting an onboard survey of its customers to gather information on its services. We appreciate your help. All passengers who participate in the survey will be eligible for a \$500.00 drawing.

APPENDIX B: STATION-PAIR SURVEY INSTRUMENT

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Please tell us about this ONE-WAY TRIP

Your participation will help us plan for the future.

1. Where did you get on *this* train?

ON TRAIN:

- San Jose
- Santa Clara
- Great America
- Fremont
- Pleasanton
- Livermore
- Vasco
- Tracy
- Lathrop / Manteca
- Stockton

2. Where will you get off *this* train?

OFF TRAIN:

- San Jose
- Santa Clara
- Great America
- Fremont
- Pleasanton
- Livermore
- Vasco
- Tracy
- Lathrop / Manteca
- Stockton

3. Did you make the reverse trip on the train this morning?

- Yes No

4. If "Yes," what time did you board the train this morning? ____ : ____ am



1 Fill out survey



2 Return when exiting



Thank you!

Thank you!

Español →

Por favor cuéntenos acerca de ESTE VIAJE de IDA

Su participación nos ayudará planear para el futuro.

1. ¿Dónde se subió a este tren?

BORDO:

- San Jose
- Santa Clara
- Great America
- Fremont
- Pleasanton
- Livermore
- Vasco
- Tracy
- Lathrop / Manteca
- Stockton

2. ¿Dónde se bajó de este tren?

BAJAR:

- San Jose
- Santa Clara
- Great America
- Fremont
- Pleasanton
- Livermore
- Vasco
- Tracy
- Lathrop / Manteca
- Stockton

3. ¿Hizo el mismo viaje al revés en el tren esta mañana?

- Sí No

4. Si respondió "Sí", ¿a qué hora se subió al tren esta mañana? ____ : ____ am

1 Liénela



2 Déjala al salir



¡Gracias!

¡Gracias!

English →

APPENDIX C: ONBOARD PAPER SURVEY INSTRUMENT

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\$500 Drawing!

Please tell us about this **ONE-WAY TRIP**

Your participation will help us plan for the future.

1. Where did you get on *this* train?

ON TRAIN:

- San Jose
- Santa Clara
- Great America
- Fremont
- Pleasanton
- Livermore
- Vasco
- Tracy
- Lathrop / Manteca
- Stockton

2. Where will you get off *this* train?

OFF TRAIN:

- San Jose
- Santa Clara
- Great America
- Fremont
- Pleasanton
- Livermore
- Vasco
- Tracy
- Lathrop / Manteca
- Stockton

3. So we can learn more about your use of ACE service, please provide us with your name and phone number. Your name will be entered into a drawing for a **\$500 cash award**.

Name: _____ Phone: (_____) _____ - _____

Your personal information is confidential and will not be shared.

Thank you!



1 Fill out survey



2 Return when exiting



Thank you!

Español →

¡Rifa de \$500!

Por favor cuéntenos acerca de ESTE VIAJE de IDA

Su participación nos ayudará planear para el futuro.



1. ¿Dónde se subió a este tren?

BORDO:

- San Jose
- Santa Clara
- Great America
- Fremont
- Pleasanton
- Livermore
- Vasco
- Tracy
- Lathrop / Manteca
- Stockton

2. ¿Dónde se bajará de este tren?

BAJAR:

- San Jose
- Santa Clara
- Great America
- Fremont
- Pleasanton
- Livermore
- Vasco
- Tracy
- Lathrop / Manteca
- Stockton

3. Para aprender más sobre su uso del servicio de ACE, favor de proveernos con su nombre y un teléfono. Su nombre entrará en in sorteo para la oportunidad de **ganar \$500.**

Nombre: _____ Teléfono: (_____) _____ - _____

Su información personal es confidencial y no será compartida.

1 Llénela



2 Déjala al salir



¡Gracias!

¡Gracias!

English →

APPENDIX D: TABLET SURVEY INSTRUMENT

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Language text of the survey: ACE_2014

(1 Question Name = Available Time Screen)

Hello. My name is _____.

We are doing a short survey to help improve ACE.

Would you be willing to answer a few questions?

Yes (have 5 min +)

Yes (no time for full survey)

No/Refused

Language Barrier

(2 Question Name = Refusal)

Why did the respondent Refuse?

Doing Something Else

Sleep

Doesn't Trust Surveyor

Kids/Children

Already Done

Other

No Reason/Don't Know

(3 Question Name = Refusal Other)

OTHER

Why did the respondent Refuse?

(4 Question Name = Language Barrier)

What language does the respondent speak?

Spanish

Other

(5 Question Name = Language Barrier Other)

OTHER

What language does the respondent speak?

(6 Question Name = AM PM Trip)

Time of Day

AM Trip

PM Trip

(7 Question Name = AM Trip Summary)

Please tell me about your whole trip using this ACE train, including the number of buses, trains, shuttles, or other forms of public transit you used to make the trip you are on now.

(8 Question Name = PM Trip Summary)

Please tell me about your whole trip using this ACE train, including the number of buses, trains, shuttles, or other forms of public transit you used to make the trip you are on now.

(9 Question Name = Origin Type)

(Origin)

What Place did you just Come From
before boarding the train we are on now.

Work

Business appointment

Your home

Social or Recreation

Shopping

School (K-12) (student only)

College or University (student only)

Airport (airline passenger only)

Maintenance/ Personal business

Escorting others (children, elderly)

Dining/Coffee

Hotel
Medical/Dental

(10 Question Name = Origin Location Type)
(Origin)

What is the closest intersection or address there?
Address
Closest Intersection

(11 Question Name = Origin Address)
Enter the full address of your Origin

(12 Question Name = Origin Cross Street Text)
Enter the cross street of your Origin

(13 Question Name = Origin Cross Street Map)
Confirm the cross street of your Origin

(14 Question Name = Destination Type)
(Destination)

What place are you going to when you get off this train?
Work
Business appointment
Your home
Social or Recreation
Shopping
School (K-12) (student only)
College or University (student only)
Airport (airline passenger only)
Maintenance/ Personal business
Escorting others (children, elderly)
Dining/Coffee
Hotel
Medical/Dental

(15 Question Name = Destination Location Type)
(Destination)

What is the closest intersection or address there?
Address
Closest Intersection

(16 Question Name = Destination Address)
Enter the full address of your Destination?

(17 Question Name = Destination Cross Street Text)
Enter the cross street of your Destination

(18 Question Name = Destination Cross Street Map)
Confirm the cross street of your Destination

(19 Question Name = Confirm O_D)
Did you stop anywhere on your way from where you're coming from?

Or will you stop anywhere before you reach where you're going?
No
Yes - Before Train (New Origin)
Yes - After Train (New Destination)

(20 Question Name = New Origin Type)
(New Origin)

Where did you stop before reaching this train?
Work

Business appointment
Your home
Social or Recreation
Shopping
School (K-12) (student only)
College or University (student only)
Airport (airline passenger only)
Maintenance/ Personal business
Escorting others (children, elderly)
Dining/Coffee
Hotel
Medical/Dental

(21 Question Name = New Origin Location Type)
(New Origin)

What is the closest intersection or address there?
Address
Closest Intersection

(22 Question Name = New Origin Address)
Enter the full address of your NEW Origin

(23 Question Name = New Origin Cross Street Text)
Enter the cross street of your NEW Origin

(24 Question Name = New Origin Cross Street Map)
Confirm the cross street of your NEW Origin

(25 Question Name = New Destination Type)
(New Destination)

Where will you stop before you reach your destination?
Work
Business appointment
Your home
Social or Recreation
Shopping
School (K-12) (student only)
College or University (student only)
Airport (airline passenger only)
Maintenance/ Personal business
Escorting others (children, elderly)
Dining/Coffee
Hotel

(26 Question Name = New Destination Location Type)
(New Destination)

What is the closest intersection or address there?
Address
Closest Intersection

(27 Question Name = New Destination Address)
Enter the full address of your NEW Destination?

(28 Question Name = New Destination Cross Street Text)
Enter the cross street of your NEW Destination

(29 Question Name = New Destination Cross Street Map)
Confirm the cross street of your NEW Destination

(30 Question Name = Origin Access Mode)

How did you get from where you were coming from to your first public transit or shuttle boarding point?
Walked all the way

Bicycled
Drove alone and parked
Drove or rode with others and parked/carpooled
Dropped off by someone
Taxi
Motorcycle/motorized scooter/moped

(31 Question Name = Origin Minutes to boarding point)
(Origin to First Boarding point)
How many MINUTES was your walk?

(32 Question Name = Origin Miles to boarding point)
(Origin to First Boarding point)
How many MILES did you travel?

(33 Question Name = 1st Before Transfer)
Did you use another form of public transit or a shuttle to get to this train?
Yes
No

(34 Question Name = 1st Before Transfer Agency)
What transit Agency did you get on First?
AC Transit
Amtrak
BART
Caltrain
The County Connection (CCCTA)
Modesto Area Express (MAX)
San Joaquin RTD
Santa Clara VTA
Wheels (LAVTA)
Bishop Ranch Shuttle
Lawrence Livermore Shuttle
El Paseo Limousine Shuttle
Other

(35 Question Name = 1st Before Transfer Rail ON)
At what station did you get ON?

(36 Question Name = 1st Before Transfer Rail ON Map)
At what station did you get ON?

(37 Question Name = 1st Before Transfer Rail OFF)
At what station did you get OFF?

(38 Question Name = 1st Before Transfer Rail OFF Map)
At what station did you get OFF?

(39 Question Name = 1st Before Transfer Route)
What bus route or shuttle did you get on first?

(40 Question Name = 1st Before Transfer Route ON Map)
Where did you get ON your first bus or shuttle?

(41 Question Name = 1st Before Transfer Route OFF Map)
Where did you get OFF your first bus or shuttle?

(42 Question Name = 1st Before Transfer Other Agency_Route)
What Agency and Route did you get on first?

(43 Question Name = 1st Before Transfer Boarding Loc.Type)
Where did you get ON your First bus or shuttle?

Address
Closest Intersection

(44 Question Name = 1st Before Transfer Boarding Other)
Where did you get ON your First bus or shuttle?

(45 Question Name = 1st Before Transfer Boarding X_St)
Enter the cross street where you got ON your First bus or shuttle

(46 Question Name = 1st Before Transfer Boarding X_St Map)
Confirm the cross street where you got ON your First bus

(47 Question Name = 1st Before Transfer Alighting Loc.Type)
Where did you get OFF your First bus or shuttle?

Address
Closest Intersection

(48 Question Name = 1st Before Transfer Alighting Other)
Where did you get OFF your First bus or shuttle?

(49 Question Name = 1st Before Transfer Alighting X_St)
Enter the cross street where you got OFF your First bus or shuttle

(50 Question Name = 1st Before Transfer Alighting X_St Map)
Confirm the cross street where you got OFF your First bus or shuttle

(51 Question Name = 2nd Before Transfer)
Did you use a second form of public transit or a shuttle to get to this train?
Yes
No

(52 Question Name = 2nd Before Transfer Agency)
What transit Agency did you get on Second?

AC Transit
Amtrak
BART
Caltrain
The County Connection (CCCTA)
Modesto Area Express (MAX)
San Joaquin RTD
Santa Clara VTA
Wheels (LAVTA)
Bishop Ranch Shuttle
Lawrence Livermore Shuttle
El Paseo Limousine Shuttle
Other

(53 Question Name = 2nd Before Transfer Rail ON)
At what station did you get ON?

(54 Question Name = 2nd Before Transfer Rail ON Map)
At what station did you get ON?

(55 Question Name = 2nd Before Transfer Rail OFF)
At what station did you get OFF?

(56 Question Name = 2nd Before Transfer Rail OFF Map)
At what station did you get OFF?

(57 Question Name = 2nd Before Transfer Route)
What bus route or shuttle did you get on Second?

(58 Question Name = 2nd Before Transfer Route ON Map)
Where did you get ON your Second bus or shuttle?

(59 Question Name = 2nd Before Transfer Route OFF Map)
Where did you get OFF route Second bus or shuttle?

(60 Question Name = 2nd Before Transfer Other Agency_Route)
What Agency and Route did you get on Second?

(61 Question Name = 2nd Before Transfer Boarding Loc.Type)
Where did you get ON your Second bus or shuttle?
Address
Closest Intersection

(62 Question Name = 2nd Before Transfer Boarding Other)
Where did you get ON your Second bus or shuttle?

(63 Question Name = 2nd Before Transfer Boarding X_St)
Enter the cross street where you got ON your Second bus route or shuttle

(64 Question Name = 2nd Before Transfer Boarding X_St Map)
Confirm the cross street where you got ON your Second bus route or shuttle

(65 Question Name = 2nd Before Transfer Alighting Loc.Type)
Where did you get OFF your Second bus or shuttle?
Address
Closest Intersection

(66 Question Name = 2nd Before Transfer Alighting Other)
Where did you get OFF your Second bus or shuttle?

(67 Question Name = 2nd Before Transfer Alighting X_St)
Enter the cross street where you got OFF your Second bus or shuttle

(68 Question Name = 2nd Before Transfer Alighting X_St Map)
Confirm the cross street where you got OFF of your Second bus or shuttle

(69 Question Name = 3rd Before Transfer)
Did you use a third form of public transit or a shuttle to get to this train?
Yes
No

(70 Question Name = 3rd Before Transfer Agency_Route)
What Agency and Route did you get on third?

(71 Question Name = 3rd Before Transfer Board_Align)
Where did you get On and Off your third bus or shuttle?

(72 Question Name = Surveyed Boarding)
At what station did you get ON this train?

(73 Question Name = Surveyed Boarding List)
At what station did you get ON this train?

(74 Question Name = Surveyed Alighting)
At what station will you get OFF of this train?

(75 Question Name = Surveyed Alighting List)
At what station will you get OFF of this train?

(76 Question Name = 1st After Transfer)
Will you use another form of public transit or a shuttle after you get off this train?

Yes
No

(77 Question Name = 1st After Transfer Agency)

What transit agency will you use next?

AC Transit
Amtrak
BART
Caltrain
The County Connection (CCCTA)
Modesto Area Express (MAX)
San Joaquin RTD
Santa Clara VTA
Wheels (LAVTA)
Bishop Ranch Shuttle
Lawrence Livermore Shuttle
El Paseo Limousine Shuttle
Other

(78 Question Name = 1st After Transfer Rail ON)

At what station will you get ON?

(79 Question Name = 1st After Transfer Rail ON Map)

At what station will you get ON?

(80 Question Name = 1st After Transfer Rail OFF)

At what station will you get OFF?

(81 Question Name = 1st After Transfer Rail OFF Map)

At what station will you get OFF?

(82 Question Name = 1st After Transfer Route)

What bus route or shuttle will you use next?

(83 Question Name = 1st After Transfer Route ON Map)

Where will you get ON this bus or shuttle?

(84 Question Name = 1st After Transfer Route OFF Map)

Where will you get OFF this bus or shuttle?

(85 Question Name = 1st After Transfer Other Agency_Route)

What Agency and Route will you use next?

(86 Question Name = 1st After Transfer Boarding Loc.Type)

Where will you get ON your next bus or shuttle?

Address
Closest Intersection

(87 Question Name = 1st After Transfer Boarding Other)

Where will you get ON your next bus or shuttle?

(88 Question Name = 1st After Transfer Boarding X_St)

At which cross street will you get ON your next bus or shuttle?

(89 Question Name = 1st After Transfer Boarding X_St Map)

Confirm the cross street will you get ON your next bus or shuttle

(90 Question Name = 1st After Transfer Alighting Loc.Type)

Where will you get OFF your next bus or shuttle?

Address
Closest Intersection

(91 Question Name = 1st After Transfer Alighting Other)
Where will you get OFF your next bus or shuttle?

(92 Question Name = 1st After Transfer Alighting X_St)
At which cross street where you will get OFF your next bus or shuttle?

(93 Question Name = 1st After Transfer Alighting X_St Map)
Confirm the cross street where you will get OFF your next bus or shuttle

(94 Question Name = 2nd After Transfer)
Will you use a second form of public transit or a shuttle after you get off this train?
Yes
No

(95 Question Name = 2nd After Transfer Agency)
What transit agency will you use?
AC Transit
Amtrak
BART
Caltrain
The County Connection (CCCTA)
Modesto Area Express (MAX)
San Joaquin RTD
Santa Clara VTA
Wheels (LAVTA)
Bishop Ranch Shuttle
Lawrence Livermore Shuttle
El Paseo Limousine Shuttle
Other

(96 Question Name = 2nd After Transfer Rail ON)
At what station will you get ON?

(97 Question Name = 2nd After Transfer Rail ON Map)
At what station will you get ON?

(98 Question Name = 2nd After Transfer Rail OFF)
At what station will you get OFF?

(99 Question Name = 2nd After Transfer Rail OFF Map)
At what station will you get OFF?

(100 Question Name = 2nd After Transfer Route)
What bus route or shuttle will you use?

(101 Question Name = 2nd After Transfer Route ON Map)
Where will you get ON this bus or shuttle?

(102 Question Name = 2nd After Transfer Route OFF Map)
Where will you get OFF of this bus or shuttle?

(103 Question Name = 2nd After Transfer Other Agency_Route)
What Agency and Route will you transfer to?

(104 Question Name = 2nd After Transfer Boarding Loc.Type)
Where will you get ON this bus or shuttle?
Address
Closest Intersection

(105 Question Name = 2nd After Transfer Boarding Other)
Where will you get ON this bus or shuttle?

(106 Question Name = 2nd After Transfer Boarding X_St)
At which cross street will you get ON this bus or shuttle?

(107 Question Name = 2nd After Transfer Boarding X_St Map)
Confirm the cross street will you get ON this bus or shuttle

(108 Question Name = 2nd After Transfer Alighting Loc.Type)
Where will you get OFF this bus or shuttle?
Address
Closest Intersection

(109 Question Name = 2nd After Transfer Alighting Other)
Where will you get OFF this bus or shuttle?

(110 Question Name = 2nd After Transfer Alighting X_St)
At which cross street where you will get OFF this bus or shuttle?

(111 Question Name = 2nd After Transfer Alighting X_St Map)
Confirm the cross street where you got OFF this bus or shuttle

(112 Question Name = 3rd After Transfer)
Will you use a third form of public transit or a shuttle after you get off this train?
Yes
No

(113 Question Name = 3rd After Transfer Agency_Route)
What Agency and Route will you use?

(114 Question Name = 3rd After Transfer Board_Alright)
Where will you get On and Off of this bus or shuttle?

(115 Question Name = Destination Egress Mode)
How will you get from your Last public transit or shuttle stop to your Destination?
Walk all the way
Bicycle
Retrieve car and drive alone
Retrieve car and ride with others/carpool
Picked up by someone
Taxi
Motorcycle/motorized scooter/moped

(116 Question Name = Destination Minutes from last alighting point)
(Last Stop to Destination)
How many MINUTES will your walk take?

(117 Question Name = Destination Miles from last alighting point)
(Last Stop to Destination)
How many MILES will you travel?

(118 Question Name = Employment status)
(choose the response that BEST describes you)
Are you Employed?
Employed full-time i.e. at least 35 hrs per week
Employed part time i.e. less than 35 hrs per week
Not currently employed but seeking work
Not currently employed and NOT seeking work
Not employed - retired
N

(119 Question Name = Work Location Type)
What is the address/name of employer or closest intersection to your Work?
Address/Employer

Closest Intersection

(120 Question Name = Work Address or Name)
Enter the full address and/or name of your work place?

(121 Question Name = Work Cross Street Text)
Enter the cross street of your Work

(122 Question Name = Work Cross Street Map)
Confirm the cross street of your Work

(123 Question Name = Student Status)
(choose the response that BEST describes you):
Are you a Student?

- Not a student
- Yes - student through 12th grade
- Yes - college or university
- Yes - other
- N

(124 Question Name = School Location Type)
What is the name and address, or closest intersection to your School?
Address/Name of School
Closest Intersection

(125 Question Name = School Address or Name)
Enter the full address and/or name of your school

(126 Question Name = School Cross Street Text)
Enter the cross street of your School

(127 Question Name = School Cross Street Map)
Confirm the cross street of your School Cross Street Map

(128 Question Name = Home Location Type)
What is the address or closest intersection to your home?
Address
Closest Intersection
N

(129 Question Name = Home Address)
Enter your full Home address

(130 Question Name = Home Cross Street Text)
Enter the cross street of your Home

(131 Question Name = Home Cross Street Map)
Confirm the cross street of your Home

(132 Question Name = Work Before or After Trip)
Were you at work today Before this trip or will you go to work Later today?
Yes - Earlier Today
Yes - Later Today
No Work Today

(133 Question Name = Work After Trip)
Will you go to Back work Later today?
Yes
No

(134 Question Name = Work Before Trip)
Were you at work today Before this trip?

Yes
No

(135 Question Name = School Before or After Trip)

Were you at school today before this trip or will you go to school later today?

Yes - Earlier Today
Yes - Later Today
No School Today

(136 Question Name = School After Trip)

Will you go to BACK to school LATER today?

Yes
No

(137 Question Name = School Before Trip)

Were you at school today BEFORE this trip?

Yes
No

(138 Question Name = Time Left Home)

Approximately what time did you LEAVE
your HOME today before you made this trip?

12:00am-4:59am
5am-5:59am
6am-6:59am
7am-7:59am
8am-8:59am
9am-9:59am
10am-10:59am
11am-11:59am
12pm-12:59pm
1pm-1:59pm
2pm-2:59pm
3pm-3:59pm
4pm-4:59pm
5pm-5:59pm
6pm-6:59pm
7pm-7:59pm
8pm-8:59pm
9pm-9:59pm
10pm-10:59pm
11pm-11:59pm

(139 Question Name = Time Return Home)

Approximately what time will you
RETURN to your HOME after this trip?

12:00am-4:59am
5am-5:59am
6am-6:59am
7am-7:59am
8am-8:59am
9am-9:59am
10am-10:59am
11am-11:59am
12pm-12:59pm
1pm-1:59pm
2pm-2:59pm
3pm-3:59pm
4pm-4:59pm
5pm-5:59pm
6pm-6:59pm
7pm-7:59pm

8pm-8:59pm
9pm-9:59pm
10pm-10:59pm
11pm-11:59pm

(140 Question Name = Twin Trip)

Did you or will you make this EXACT same trip in the opposite direction today?

Yes
No

(141 Question Name = Twin Trip Time)

What time did you (or will you) depart for the same trip in the opposite direction?

12:00am-4:59am
5am-5:59am
6am-6:59am
7am-7:59am
8am-8:59am
9am-9:59am
10am-10:59am
11am-11:59am
12pm-12:59pm
1pm-1:59pm
2pm-2:59pm
3pm-3:59pm
4pm-4:59pm
5pm-5:59pm
6pm-6:59pm
7pm-7:59pm
8pm-8:59pm
9pm-9:59pm
10pm-10:59pm
11pm-11:59pm

(142 Question Name = Fare Payment (Ticket))

What type of ticket did you use to travel today?

One-Way
Roundtrip
20 Ride (20 Trips)
Monthly
Other
Don't Know

(143 Question Name = Fare Payment Other)

OTHER

What type of ticket did you use to travel today?

(144 Question Name = Fare Type)

What type of fare did you pay?

Full Adult
Senior
Disabled
MediCare Card
Other
Don't Know

(145 Question Name = Fare Type Other)

OTHER

What type of fare did you pay?

(146 Question Name = Use Shuttle)

Do you ever use any of ACE's shuttle connections during your commute?

Yes

No

(147 Question Name = Free Shuttle)

Would you use ACE, if free shuttle connections were not available?

Yes

No

(148 Question Name = Driver's License)

Do you have a valid Driver's License?

Yes

No

(149 Question Name = # of Employed in Household)

(either full or part-time)

Including yourself, how many people in your household are Employed?

0

1

2

3

4

5

6 +

I Don't Know

N

(150 Question Name = # of Employed in Household Other)

OTHER

Including yourself, how many people in your household are Employed?

(151 Question Name = # of Drivable Veh. in House)

(Includes Trucks/Motorcycles/Vans, but not RVs)

How many drivable vehicles are available to your household?

0

1

2

3

4 +

I Don't Know

N

(152 Question Name = # of Drivable Veh. in House Other)

OTHER

How many drivable vehicles are available to your household?

(Includes Trucks/Motorcycles/Vans, but not RVs)

(153 Question Name = Year of Birth)

Enter "00" for Refused

In what year were you born? 19 __ _

Enter Year "XX"

(154 Question Name = Hispanic, Latino, or of Spanish Origin)

Are you Hispanic, Latino, or of Spanish Origin?

Yes

No

N

(155 Question Name = Race Ethnicity)

Which of the following do you identify with?

White

Black or African American

Asian

American Indian or Alaskan Native

Native Hawaiian or Pacific Islander
Multiracial
Other

(156 Question Name = Other Ethnicity)

OTHER

What is your race or ethnicity?

(157 Question Name = Language Other Than English)

Do YOU personally speak a language OTHER than English at home?

Yes

No

(158 Question Name = Language)

(If multiple, pick one most often spoken)

What language OTHER than English do YOU personally speak at home?

Spanish

Chinese - Cantonese

Chinese - Mandarin

Vietnamese

Korean

Tagalog

Russian

Portuguese

French

French Creole

Polish

Other

(159 Question Name = Other Language)

(If multiple, pick one most often spoken)

What other language do you personally speak at home?

(160 Question Name = Fluency)

How well would you say you speak English?

Very Well

Well

Not Well

Not Well at All

N

(161 Question Name = Total Household Income)

(This information is confidential, but is necessary to ensure a balanced sample and to secure federal funding)

Which of the following categories best describes your Total Annual Household Income?

Under \$10,000

\$10,000-\$24,999

\$25,000-\$34,999

\$35,000-\$49,999

\$50,000-\$74,999

\$75,000-\$99,999

\$100,000-\$149,999

\$150,000 or Over

I Don't Know

N

(162 Question Name = Riders Name)

(So that you can be entered into a \$500 prize drawing)

May we please have your Name?

(163 Question Name = Phone Number)

(So that you can be entered into a \$500 prize drawing)

May we please have your Phone Number?

(164 Question Name = Outro Thank You Screen)

That's everything! Thank you for your participation to help improve transit services!

(165 Question Name = Gender)

(Observed)

Rider's Gender:

Male

Female

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APPENDIX E: FIELD TRAINING MANUAL

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DATA COLLECTION TRAINING MANUAL

For



Altamont Commuter Express

2014 Onboard Survey

April 8-April 14, 2014

Project Background

Altamont Commuter Express (ACE) wants to learn more about its riders' travel patterns and to gather feedback on its service. You will be interviewing passengers who are riding the train in order to gather this information. Collecting data in the proper manner is key to the success of this research and the quality of work done by the interviewer greatly affects the quality of the study results.

Great care has been taken to design an interview that is straightforward and easy to conduct. You will be collecting all information using tablets that are easy to use. All of the information you need to successfully conduct an interview is provided for you in this training session.

ACE provides regional rail service between Stockton and San Jose. Four trains run between Stockton and San Jose in the morning and four trains run in the afternoon between San Jose and Stockton. There are 10 stations along the route. The majority of the passengers who use the train are people who are going to and from work.

Technical Training Expectations

Today's training will be a hands-on training and you will be using the tablets that you will be using in the field. It is important that during this training you understand and can demonstrate that you know how to use the tablet and conduct an interview.

A skilled interviewer is able to accurately read the questions in the interview and accurately record the answers.

The technical training is designed to familiarize you with the materials you will use to complete your assignment.

What information are we collecting?

All passenger transit agencies collect certain trip level information **to assist them in service planning and improvement**. Examples are:

- Where passengers are coming from
- Where they are going to
- Where they got on and off the train
- How often they take the train
- How many times they transferred (used another bus or transit like BART or a shuttle)
- If they had a choice of transit options (such as car or a ride from a friend)
- Demographic information (age, income, ethnicity, gender)

In this onboard survey we **are gathering information about the train trip that passengers are riding at the time of the interview**. The interview takes about 7-10 minutes to conduct. If the rider does not have time to complete the interview you will be asking them a few questions and for their name and telephone number so that we can contact them by phone later if need more information.

The most important survey answers we will collect are the points along a passenger's mapped trip of the train we surveyed them on.

What is the incentive for a passenger to participate?

Most riders are generally willing to participate in a brief interview especially if they understand that the information you are collecting will be used to help improve transportation services not just for ACE but for the Bay area in general.

Another incentive for riders to participate is the opportunity to be entered into a drawing for \$500. One ACE rider will be randomly selected for a \$500 drawing which will be held in June. To be eligible for the drawing we must have the rider's name and phone number.

Why do we need a passenger's phone number?

We need a phone number for three reasons:

1. We might need to contact the person to clarify information in the interview.
2. If the person completed a short survey we might need to contact them to finish the longer survey.
3. In order to be eligible for the drawing we need a name and phone number to contact them.

Passenger Privacy:

Passenger privacy and data privacy is essential. We respect the privacy of all riders. Rider's personal information will not be shared.

Violation of any privacy issue will result in immediate termination.

1. You may never ask a passenger for any personal information for your use
2. You may not give your personal phone number or personal card to any passenger
3. You may not conduct personal business or solicit anything from a passenger other than information needed to complete the interview
4. You may not use any name or phone number or any information you receive for any personal use
5. You may not share personal information about riders with any other surveyor or passenger

Personal Conduct

Safety and conducting the interviews without interfering with the operation of the train are important.

- Under no circumstances can you interfere with or block passengers who are trying to get on or off the train
- Do not interfere with any staff or engage in any non-task related conversation with him or her.
- If an employee questions your authority to survey, please show him/her your pass. This should answer any questions, but if it doesn't, immediately contact your supervisor, who will be on board with you
- Never run on the platform or train, try to hold open a door or get onto the tracks.

The surveyor's attitude, appearance and amount of effort will have a big influence on the number of passengers who are willing to participate in the interview. Please follow the guidelines listed below to ensure that you have a high participation rate.

As an interviewer you represent both the Redhill Group and ACE to the passenger. A neat, clean and professional appearance, as well as courteous conduct, will be required at all times. This requirement is taken **very** seriously as both ACE and the Redhill Group have well-deserved reputations for excellence in service and performance. Most of the ACE fleet is camera-equipped for the safety of this means that all of our actions may be continuously being monitored.

Although you will be sitting and standing near passengers, never physically touch passengers while surveying. Also do not make physical contact with any person at the stations including children and service animals. Do not engage in personal conversations with passengers while on assignment which includes your breaks. Service animals are working and you should not interact with them in any way.

The Equipment:

You will be collecting the information using a tablet. You are responsible for the tablet that is assigned to you for the shift. Please remember the following when working with the tablet.

1. Make sure it is on and ready to go before you start interviewing
2. Handle the tablet carefully and use the carrying handle and security strap while you are using it
3. Do not change any settings on the tablet – they have been set up for you
4. Do not attempt to use the tablet for anything other than surveying
5. If you need help contact your supervisor immediately
6. At the end of the shift return the tablet and all other paperwork to your supervisor
7. Report any problems you may have had with your tablet

Ready, Set, Smile!

The interview process is made up of three basic steps

1. Identifying the person you will interview
2. Approaching the person
3. Conducting the interview

A friendly and enthusiastic manner is the most effective tool you have to encourage participation. You're happy to be there, and you're happy the passengers are there with you!

Your supervisor will tell you in which area of the train you will be conducting interviews. Each car of the train has two levels and you will be assigned to either the upper or lower level for a trip. You must survey in your assigned area unless your supervisor changes your assignment.

On an average train trip you will be expected to complete between 10 and 12 interviews. In order to complete this number of interviews, it is important to quickly move onto the next rider when you have completed one interview.

We want to survey a random selection of passengers who board at each train station, appear to be at least 16 years old, and are not employees of ACE and who are in the survey section.

1. Approach every fourth passenger that boards the train at each stop and is seated in the section that you are surveying. If fewer than four passengers board at a stop then approach the last passenger who got on the train at the stop

“Hi! ACE is conducting a brief interview with its passengers today. We’d really appreciate your participation. Thank you so much!” By participating you will be eligible for a \$500 drawing!

2. Note any refusals and passengers under 16
3. Answer any questions passengers may have about the purpose of the interview
4. Conduct the interview with the passenger
5. You will generally be able to complete more than one interview per stop. When you have completed the interview with the selected passenger. Select the fourth person seated before or after the person you interviewed
6. Return equipment to the Redhill Group at the end of each shift or as required

Refusal Rebuttals

There is a common misconception that the information on one survey doesn’t matter, even though it really does. It’s your job as the interviewer to convince a customer that his or her opinion is important and really does count. Always assure the person that THEIR trip information is very important to ACE and that we want to ensure that their viewpoint gets properly represented.

Below we have listed some common reasons a passenger may give for not participating in the survey as well as some techniques for overcoming them.

1. Does not speak English

- If Spanish-speaking hand them the paper survey in Spanish and ask them to complete it
- If they don’t speak English or Spanish, smile and thank them and move on

2. Senior/Persons with Disabilities

- Treat all people with respect. It may take longer to complete these surveys but it is important to get the opinions of all riders

3. Tourist/Visitor/Infrequent Passenger

- First impressions are really important to ACE

4. Already Completed

- “A while ago”: Say that this is a different survey and ask them to participate

5. Asleep/On Phone

- Do NOT disturb them! If a rider is on the phone and looking at you, you can make eye contact and hold up the survey, otherwise just come back later

- Approach the person again if they wake up or get off the phone, and you're able to get their attention without being intrusive

7. Other – Working, reading, dealing with children, too tired/no time

- If appropriate encourage them to complete the brief paper survey participate, otherwise thank them and move on quickly to the next person

Conducting Surveys

We are conducting a random sample of riders. Approach every fourth passenger that boards the train at each stop who is seated in the section that you are surveying should be approached for an interview. If fewer than four passengers board at a stop then approach the last passenger who got on the train at the stop.

“Hi! ACE is conducting a brief interview with its passengers today. We’d really appreciate your participation. Thank you so much!” By participating you will be eligible for a \$500 drawing!

When first asking a rider to complete an interview there are four possible responses:

- Yes (have 5 min +)
- Yes (no time for full survey)
- No/Refused
- Language Barrier

Always remember to mark No/Refused and Language Barrier when these situations come up. Further, when a person says they don't have much time, encourage them to complete the short version of the survey (Tablet or hand them a short paper survey), which is designed to be completed during a telephone call back. In most situations passengers will be agree to complete the full interview, as our experience has shown that the ACE riders are friendly and willing to help!

The rest of the interview is broken down into the following general sections:

- Mapping the rider's trip sequence
 - Where they are coming from
 - Where they are going
 - Where they got on and off the train
 - If and where they transferred before and after the ACE train
 - How they got to and from the public transit trip
- Time that rider's leave and return home
- Ticket and fare type, and
- Demographic information

The most complex sections of the survey are the mapping and collecting the demographic information. All of the sections will be covered during the hands on training, but these sections are discussed below for your reference.

Mapping the Riders' Trip Sequence

The unique focus of this project is **learning about each rider's one-way trip they are taking at the time of the survey**. A one-way trip is defined by the last place that the person was at before they boarded the ACE train they are currently riding.

For example, a passenger was

- At home, then
- Took the bus to get to the ACE train
- Rode the ACE train. After they got off the train, they
- Went shopping

In this example, the person went from home to shopping, and transferred one time before they got on the ACE train.

After you get a general idea of what the trip is, **each point of this trip is then systematically mapped** using the **addresses, intersections, and/or place name locations** that the rider gives you. Think of it like a "connect the dots": each location is a dot that gets connected by the busses, trains, and shuttles the rider takes. Using the example above, the interviewer then asks for the address, intersection or place name of:

- the **home location**,
- the location of where they **got ON the BUS**,
- the location of where they **got OFF the BUS**,
- the location of where they **got ON the TRAIN**,
- the location of where they **got OFF the TRAIN**, and
- the **shopping store location**

Collecting each part of the rider's trip is extremely important. On occasion it may seem confusing so it is important to listen to the rider you are surveying and to clarify all questions which will avoid mapping mistakes. This will assure the information you gather from them is correct. A survey is not complete without this information.

If rider decides to begin a full interview and has to end the interview, cancel the survey and collect the rider's name and phone number on the screen that is displayed in the tablet. This is important so that we can call the passenger and finish the survey at a time that is more convenient for them.

Demographic Information

Collecting some demographic information is sensitive in a public space; however, people are generally willing to answer these questions when they are asked professionally. Responses to questions about ethnicity, income, and driver license availability may not be something a rider wants surrounding people to hear. Allow your tablet screen to be seen by the rider you are surveying and lower your voice when

asking these questions. Riders will most likely point to the answers to the question and allow the survey to continue while assure correct information and allowing everybody to feel comfortable in their surroundings.

Hand-on Training:

Part One: Group Session

Simulated Trip Interviews

The Tablet

Beginning an Interview

Mapping

Entering Addresses

Finding Intersections

Mapping Functions

Pan

Zoom

Select

Full Scope

Collecting Sensitive Information

Finishing or Terminating a Survey

Handling Passenger Questions

Part Two: Small Group Break-Out Sessions

Simulated trip interviews with trainers

Final Review and Wrap Up