

APPENDIX B

Train Car Model: In-Depth Interview Memo



Quantum Market Research, Inc.
1635 Telegraph Avenue
Oakland, CA 94612

August 14, 2013

TO: Maureen Wetter
FROM: Veronica Raymonda and Patty Hoyt
RE: Topline Results of Interviews with BART Passengers with Disabilities

BACKGROUND

As you know, QMR conducted a total of 27 in-person interviews with passengers with disabilities onboard the model train car at the MacArthur Station on July 30 and July 31, 2013. Each interview was conducted by one of three QMR staffers: Veronica Raymonda, Patty Hoyt or Sonya Ervin. Participants had been recruited primarily through intercept interviews at various BART stations and through BART's customer database¹. Each received \$75 for taking part in the research.

These in-depth interviews were one part of a two-part research effort to evaluate the planned layout of BART's new train cars. The other part of the research involved group exercises onboard the model train car to test the layout under crowded conditions.

For the in-depth interviews, the multi-branch pole was placed in the center of the vestibule (not offset). We had the option to move the pole to the right to two different pre-determined locations if it was problematic for research participants (2" off center and 4" off center). During the research, the pole was only moved for one participant, a wheelchair-user. While he was able to maneuver around it in the initial position, he had concerns about the placement and wanted to test it in the offset positions.

Of the 27 passengers taking part, 12 used a wheelchair or scooter, eight were blind or had other vision disabilities, and seven had mobility impairments but did not use a wheelchair or scooter. Please refer to the Appendix for participant demographics.

¹ BART's customer database includes passengers who had been randomly selected to take an onboard survey and who consented to future contact for research purposes.

The majority of passengers came from the East Bay, although a couple came from San Francisco or Daly City. Conditions when they ride BART vary with the time of day they are using the system. These individuals seemed about evenly split between calling conditions very crowded, calling them somewhat crowded and calling them not very crowded. Nearly everyone reported finding it somewhat easy or very easy to board or get situated on the train. More reported encountering difficulties only when it came time to exit. Again, the severity of any difficulties they encountered varied depending on the number of fellow passengers.

Throughout this memo, the following notations appear where needed to designate the commenter's particular disability.

- (w) Wheelchair user
- (v) Vision-impaired
- (m) Mobility-impaired but not a wheelchair user

KEY FINDINGS/OBSERVATIONS

Overall Layout

Many commented that the car felt bigger, roomier or more spacious.

- “It just seems roomier the way the seating is arranged. It seems easier.” (m)
- “When it’s crowded on BART, I always feel I’m about to fall over. This mock-up doesn’t feel this way. It feels roomier somehow and yet I can see that the windows are smaller. Visually, it looks like half the seats are gone. The roominess comes from the feeling that a hell of a lot of seats have been removed.” (m)
- “I like this. It’s very open. Not as open on the current trains. More space, it feels wider and more open.” (w)
- “Is it a lot bigger? It appears to be a lot roomier. That’s a positive.” (w)

Multi-branch Pole

During the exercises with wheelchair users, at least one researcher was holding onto the pole to simulate the pole in use, creating an obstacle to maneuver around. And, in a few instances, up to three researchers held onto the pole to better simulate a crowded train. Additionally, for most of the exercises, one researcher was sitting in the side-facing seat to the left of the door. Each participant took part in two exercises. Wheelchair or scooter users were randomly assigned to either enter and exit from the open door (A) or enter from the open door and simulate an exit from the closed door (B) for the first exercise. For the second exercise, wheelchair or scooter users were directed to either simulate an entry from the closed door and exit from the open door (C) or simulate an entry and exit from the closed door (D). All other passengers performed A and B. The first exercise took place under “crowded commute conditions with all seats taken.” For the second exercise, these passengers performed the exercise in non-crowded conditions.

Passengers using wheelchairs were able to maneuver around the pole without hitting it during the research exercises. It should be noted that many passengers commented that the exercises would have been more difficult had they been conducted on a crowded train and/or on a moving train.² Also, a couple of passengers bumped into the pole outside of the actual research exercises. One bumped into it at the conclusion of the exercise when initially positioning her wheelchair to head down the aisle, but then changing her mind and backing up to exit through the open door. Another boarded and positioned his scooter to the right of the door, in front of the side-facing seats, rather than in the wheelchair space. He appeared to brush against the pole when exiting, but he did not comment about it. After he explained that he enters and turns to the right on the current trains because that is where open space is, he was asked to re-enter as he would knowing where the wheelchair space will be on the new trains.

Opinions about the multi-branch pole are summarized here:

	Like	Dislike	No opinion/ Mixed opinions
Wheelchair users	2	8	2
Blind/low vision	3	1	4
Mobility impaired	7	0	0
Total	12	9	6

A couple of participants wanted to know the reasoning behind the pole in order to ensure it was in fact addressing a current problem.

Maneuvering Around the Pole: Wheelchair Users

Most wheelchair users went around the pole clockwise; however two went around the pole counter-clockwise in order to get positioned in the wheelchair space. One explained that she did not like to go in front of people and preferred to wheel into position from the back. (One researcher was holding onto the pole during this exercise). This should be taken into consideration with regards to offsetting the pole. The other person who went around the pole in the “opposite” direction had a large scooter and mentioned that she could not make a sharp turn to go around clockwise. **Wheelchair users must be able to easily maneuver around the pole both clockwise and counterclockwise.**

For the one respondent for whom the pole was re-positioned to both the 2” and 4” offset positions: the 2” offset did not make a noticeable difference for him. He felt that 4” was better – “*the lesser of two evils.*” Although his initial preference for offsetting the pole was about 10”, he changed his mind when he realized the impact such a move would have on being able to maneuver down the aisle in case the wheelchair space was already occupied.

² BART conducted a separate “crowded train” research exercise to test boarding, alighting and moving through the train under crowded conditions.

A couple of wheelchair users noted that the presence of the pole means that they will need to adjust the angle at which they are used to entering and exiting the car, which they were able to do during the research exercises.

- “It's different because I can't make a straight go. I have to go at a different angle because of the pole. Usually before I exit, before my stop is coming, I go place myself in front of the door. I have to maneuver around this pole now.” (w)

Two wheelchair users noted it was easier to get into position in the wheelchair space when entering from the door closest to it (simulated entry since this door was closed on the mockup).

Of the 12 wheelchair users, just two liked the pole – noting they felt other passengers would appreciate having it – and two had no real opinion one way or the other. The other eight all disliked the pole, expressing concern about their ability to maneuver around it (although, as noted, all maneuvered around it with relative ease). They also commented on how many more people would congregate in the space around the pole, causing additional maneuverability issues for them. One also was concerned about the visibility of the pole. (A couple of other non-wheelchair users also suggested ways to make the pole more visible.)

Comments from wheelchair users expressing their dislike included:

- “If I have to get out quick, I’m scared I’m going to hit the pole.”
- “That pole isn't going to stop you from getting on and off the train, it's just more of an inconvenience and another obstacle. It's no different than a lot of passengers that don't move out of your way.”
- “This can be a bit confusing. It's something that could appear to be in the way. If you have more than one or two passengers holding on to this pole, it's going to make it difficult for a chair to come in and out of here. I think that's going to be a hindrance for people in a wheelchair and maybe even blind people.”
- “That pole is going to be a real issue because it is... There’s a human tendency, if there’s a pole right there, people are going to be there. Like a magnet. They’re not going to move. Because, ‘this is my territory.’”
- “I was kind of worried about this pole here. I didn’t want to bump into it. And I couldn’t see it. When I looked back from my wheelchair, I could not see it... Could you paint it? I don’t see these very well, the metal very well.”
- “I have to say this thing on a busy day, it makes me nervous. I wish it could be made in such a way like an umbrella with a bunch of hanging straps rather than something that went straight to the floor.”
- “That [center pole] is no longer in my vision when I’m here so sometimes you need to back up for whatever reason, but that’s okay. From my perspective, it would be better if that’s not there. Period. But there is room to maneuver around. It’s just another thing to get around.”

Opinions of the Pole by Vision-impaired and Other Mobility Impaired

As noted previously, none of the other mobility-impaired passengers and just one of the vision-impaired passengers disliked the pole. In fact, all of the other mobility-impaired passengers liked the pole for the security or safety it provided them. (Four vision-impaired passengers either vacillated between liking the multi-branch pole and disliking it or had no opinion about it.)

Comments from the other mobility-impaired passengers reflected this:

- “I think it would be a good idea for other people with a less robust situation with their bodies. It gives them something to hold onto.”
- “I think it makes the BART ride itself safer. When it comes to a stop or sometimes there’s a jolt or something, there’s something for people to hold on.”
- “I like that idea. It made me feel that if I got on...there would be something to hold onto. It’s safe. It seems stable.”
- “The pole is great. I’d love to see two or three more throughout the car, but I know that would be a problem for wheelchair users. It’s almost like it gives you just a tiny bit of extra personal space. Because if it was just one pole, now you’ve got people grandstanding for the entire pole.”
- “I like that one because it’s very solid.”
- “It’s good to have this here because then you can come forward and that’s here rather than standing back there. You definitely don’t have enough time to exit. But this makes it easy because you’re right here plus you have something to hold onto, less of a chance of falling.”
- “I like the way they made the bar in the middle. It’s very convenient.”

A number of the vision-impaired spoke of the multi-branch pole in a similar vein regarding its ability to provide them with additional stability:

- “I do like the center pole. If the train takes off, you run into it with the gravitational pull. Pretty aware of it being there.”
- “With these ones, with multiple people on multiple sides, it provides some degree of space on an otherwise, crowded commute.”
- “I like that there’s that pole there. If it’s really crowded, you’re looking for something to hold onto. The only thing from the other trains have been near the door. The overhead bars I can’t reach. So I like that that’s there now; it’s an additional place I can grab onto.”

Several of the vision-impaired expressed concern about the pole and people surrounding it when it came time to exit, with one bumping into the pole and noting he would need to get used to it. Another blind person, this one with a guide dog, was concerned that his dog-in-training would get excited by many people around the pole.

- “When trying to exit through the opposite door, it’s the only time the pole gets in the way. It’s not a huge disturbance. It’s pretty easy to get around.”

- “If I stand here I'm going to be blocking people's way to get off the train. I'm assuming there's going to be a lot of people grabbing onto these. It's a pole that's close to the door and people hold to it for support.”
- “If it's crowded, those poles are right in the middle of the doorway. As the cars are now, it's totally open in front of the doors. I frankly think the placement of those poles could be a problem particularly if it's crowded because people will probably cluster there.”

Handholds

All of the passengers involved in the research had good things to say about most of the various types of handholds. The only handhold which some people seemed to have resistance to was the pole between the priority seats. For these few passengers commenting on it, the issue was the potential invasion of space for those seated in the priority seats; these passengers believed it would be uncomfortable to have people standing right in front of them. Another passenger expressed a need for it to stand out better for visibility, as she wasn't expecting it to be there and didn't want to run into it. She suggested marking it with a bright decal for better visibility.

Another type of handhold that a couple of passengers mentioned was the windscreen that used to be near the doors on BART's current cars. A couple spoke positively about having the ability to hold onto the windscreen pole.

Overall, the number and variety of handholds available was quite pleasing to passengers.

Windscreen

- “That was useful. Because you had this handle right here, you could hold onto the divider. Two people could hold onto that handle and a handle right here also.” (v)

Pole Between Priority Seats

- “I'm not sure why you would want to put a pole in the middle of where these two side seats are. I understand that you want passengers to hold on.” (w)

Seatback Handles

- “[I like] the seat back handles. When you're short, people would reach over you and have nowhere to grab.” (m)

Handstraps

- “For a short person, straps are good. For a tall person, the pole is good.” (m)
- “No matter how many of these straps you put, they'll move. I want more of these. Literally one for every person standing.” (m)
- “A couple more of the hanging ones would be good for shorter people.” (m)
- “The straps are okay. I hope they use the same robust material.” (m)
- “The hanging straps, I can reach them. I like that. There's a lot more possibility to find a spot where I can keep my balance if I can't get a seat.” (v)

- “I know for myself it's hard to reach the straps. On very crowded trains I have had to reach for the straps. I'm very grateful for the straps because if they weren't there I definitely couldn't reach the rail at the top.” (v)
- “I would say probably the more the better. I see you've got three on this side and one over there. If this is more than what they have now, that's really good.” (w)

Seatback Pole

- “The seatback pole is great, holding onto this. The seats they have now, they have nothing, you're just grabbing on the person in front of you.” (m)
- “If I'm sitting down and I'm coming to my stop, knowing that there's poles behind chairs or close by I could easily stand up and hold onto those and wait until the train stops. I could easily do that without having to navigate without the worry of tripping over someone or getting in someone's way.” (v)
- “I find that the [seat] pole is real helpful for me to get out.” (w)
- “I like the idea of you putting handles on the seats. That's genius.” (w)

Door Handhold

- “I actually feel less claustrophobic. It's probably the psychological effect of having this [door] handhold.” (m)
- “I'd like it lower because sometimes I like to go here and line myself up here.” (v)
- “I do like the poles on the side of the doors because if you're sitting on one of those seats you can grab onto it for leverage when getting up.” (v)
- “It gives me stability until the train stops.” (v)
- “For exiting and entering it's absolutely perfect.” (w)

Altering Metal Poles

- “Maybe color them and maybe something soft or cushioned. Color them so people don't run into them. Cushion [them in case] they do bump into them.” (m)
- “The bars are cold when you touch them. They're uncomfortable to touch. Different type of metal. I know you can't pad them.” (m)
- “Change the texture.” (v)
- “I'm not really sure [about] having all metal because sometimes, these can get slippery when wet. Since I have arthritis, I can't always hold on tight. That's why I like the straps, with the straps, you can loop your wrist.” (m)
- “Center pole and priority seating pole should be marked.” (v)

Additional Door

The addition of a third door was seen as positive by those noting it, envisioning it making it easier and quicker to enter and exit.

- “Since you said there's going to be a the third door, so it's in the middle of the train, you don't have to go all the way to the end to exit.” (m)

- “More doors will help...having more doors will make it much better for someone like me because there’s a door closer. There’s no space on the train that will be so far from a door that I’m going to have to move people out of the way.” (m)
- “I like the three doors. There's more opportunity to get on and off, more exit room.” (v)

LCD Digital Screen and LED Sign

Although there was some concern that the size of the maps was too small, passengers definitely saw the inclusion of the digital maps on the LCD screens and the end-of-car LED sign as positive additions to the train. Comments about not always being able to hear the announcements seemed to go hand-in-hand with finding these information displays helpful.

End-of-Car LED Sign:

- “The crawler sign is a great idea.” (m)
- “If you could see that, you can see where the next stop is going to be if you couldn’t hear [the announcement].” (m)
- “I like the sign for the next exit. I always thought that was strange because normally on BART they have the maps over here but if you're sitting back here you really can't tell what is the next stop or how close you are to your next destination. And there's nothing in between so at least you can look forward down the aisle and you can see your next stop. That's a big plus.” (m)

LCD Digital Display next to Doors:

- “That will help a lot.” (m)
- “This is absolutely fabulous. So you can know which train you’re on. If you’re on the wrong one, you can find out.” (w)
- “I really like the signage. I can read it from there.” (w)
- “It needs to be bigger for people who don’t live here and in different languages.” (w)
- “I think there's way too much advertising and not enough of the maps of where you are and where you're going. Is that how small they'll be? A lot of older people aren't going to be able to read that small writing. If that was as big [as the advertisements] then people can read it and see it. (w)

Intercom

There was overwhelming support for the new locations and increased number of intercom buttons. Only one wheelchair user thought the door handhold might be in the way and that the button might be too high. Another passenger was concerned about “18- to 24-year-old sports fans” pushing the button as a joke. One vision-impaired passenger liked the location but was concerned about labeling, saying, “Having that near here is better. It could be labeled better because I thought that [the emergency door release] was it. I'd be pushing this that one wondering why it isn't working. There's no way I can read that. In bigger print in black letters that says intercom.”

But the comments overall strongly supported the intercoms' placement:

- “The intercom on each side of the door, I think that’s a really good thing safety wise.” (m)
- “I like the fact of having the intercom near the exit.” (m)
- “Intercom is a good idea for safety purposes.” (v)
- “I think it’s in a better spot to get to than at the end of the car.” (v)
- “I really like the intercom. Never used it before because it’s too far.” (w)
- “It’ll be good to have the emergency intercom there.” (w)

Priority Seating Decal and Wheelchair Decal

One wheelchair user liked “the fact that the [priority seating] signs are bigger and much more visible and the wheelchair symbol is so big,” and while others did express they liked the new decal for priority seating, a sizable number suggested the signs and decals be more prominent. Other suggestions included changing the coloring, adding language indicating it is a wheelchair priority area and including text in other languages. One blind passenger stated that the international wheelchair icon indicated accessibility and not that the area is specifically reserved for wheelchair users. BART should consider including text that makes it clear.

- “I’d like to see this a third larger so folks can actually see it.” (m)
- “Signage, I don't see anything that says these seats are for people with a disability. I see this one thing for wheelchairs. This needs to be high contrast, black on white, or white on black. I didn’t know it was there. This is cool, the person with the cane. That's good. This needs to be blue and white. If this sign was the same blue and white.” (v)
- “I like that the priority seating sign is bigger. I'd like to see it jump out more and maybe even be on the seat.” (w)
- “That priority seating side should be more bold, prominent. Not that people pay attention to it because they don't so much now. If it were more highlighted. I don't know if that would make a difference. Color, size, placement, even where it is or this spot would be great. If it were bigger, bolder color.” (w)

Wheelchair Space, Bike Space and Bike Rack

Although the bike rack was generally well received, a couple of wheelchair users expressed disappointment that the bike space was no longer located near the wheelchair space. The “co-existence” of wheelchair users and bicyclists enabled each to overflow into the other’s space if designated space was already occupied. With the movement of the rack to the middle of the car and the wheelchair space on the two ends, that was no longer seen as a viable alternative. Additionally, when riding with a fellow wheelchair user, the ability to ride together would be eliminated. As for the bike racks themselves, many who commented on it seemed to like the idea, although one wheelchair user

expressed the need for additional bike rack space and another wheelchair user advocated for a bike-only car instead.

Middle Armrest

The addition of the middle armrest was only mentioned when passengers were asked specifically about it by the researchers. Those who did comment generally said something positive about it, although one did complain that the armrests were “in the way, preventing extra large people from sitting.” Another wanted the armrests to be able to be flipped up like those on airplanes. Positive comments were:

- “That one I think would be okay because when you’re sitting next to a stranger, having this, that way their butt isn’t sliding to your side.” (m)
- “It definitely feels like an individual seat now rather than just a bench where you might accidentally run into the person next to you. I like it.” (v)
- “That works really good for sitting down and getting up. Gives you a little more stability to get in and out. If I was to sit down I would reach back. It's good for sitting and standing, good choice.” (w)

Lighting and Contrasting Colors

Some respondents commented that they liked that the mock-up was well-lit, with several mentioning that good lighting is especially important for low-vision passengers. Along those same lines, concern for those with visual impairments was expressed with regard to ensuring seats and floors were in contrasting colors and, as noted when discussing the handholds, that all poles are made more visible, perhaps, as was suggested, with a bright decal.

Automated PA System and Sound-Reducing Door Technology

Description of the automated PA system was well received. One blind passenger wanted BART to ensure that train operations could not disable it, complaining that Muni drivers disable the announcements, apparently because it annoys them. Passengers also welcomed the news that the door technology would provide a reduction in noise, better enabling them to hear the enhanced automated PA system.

**APPENDIX:
MOCK-UP TRAIN RESEARCH:
BART PASSENGERS WITH DISABILITIES**

Telephone Screener
Consent Form
Discussion Guide
Participant Demographics

RESULT: <input type="checkbox"/> Ineligible <input type="checkbox"/> Recruited	DATE: TIME:
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**BART TRAIN MOCK-UP
SCREENING QUESTIONNAIRE**

ONE-ON-ONE INTERVIEWS

Interviewer: _____

Date: _____

Time: _____

➤ **ASK FOR NAME ON SAMPLE**

INTRODUCTION

Hello. My name is _____ from Quantum Market Research in Oakland, and I'm calling on behalf of BART regarding an opportunity to participate in paid market research. We are looking to conduct one-on-one interviews with disabled passengers and seniors in order to evaluate the accessibility of BART's new train cars.

[FOR THOSE FROM BART PROVIDED SAMPLE **ONLY!**] You recently completed an online questionnaire to participate in a research project. We are also conducting in-depth interviews with members of the disabled community that are critical to ensure everyone's needs are heard and addressed when it comes to designing the new train cars. Given the importance, we are paying \$75 for taking part in 45-minute interviews scheduled in the coming week. I'd like to tell you more about the project to see if you are still interested in taking part.

[EVERYONE] Participants who qualify for the study and take part in the 45-minute interview will receive \$75 as a token of appreciation for giving us your time and opinions. I have a few questions to ensure that we include a variety of people in the research. If you do qualify, my supervisor will call you back to schedule the interview. These interviews are being held for the purpose of research only.

S1. [IF NOT FROM BART-PROVIDED SAMPLE – ALL OTHERS SKIP TO Q1] How did you happen to hear about the research we are conducting? [PROBE FOR SPECIFICS – NOT JUST ORGANIZATION BUT WHETHER PHONE CALL, EMAIL, MEETING, TWITTER, FACEBOOK, ETC.]

1. [EVERYONE] In a typical month, how often do you ride BART?

6-7 DAYS PER WEEK	
5 DAYS PER WEEK	
3-4 DAYS PER WEEK	
1-2 DAYS PER WEEK	
1-3 DAYS PER MONTH	
LESS THAN ONCE A MONTH (SPECIFY: _____)	
LESS THAN ONCE A YEAR OR NEVER	
REFUSED	

- THANK & TERMINATE
- THANK & TERMINATE

2. When do you usually ride BART? Is it: (MULTIPLE RESPONSE PERMITTED)

WEEKDAYS DURING MAIN COMMUTE TIMES (6 A.M. TO 9 A.M./ 4 P.M. TO 7 P.M.)	
WEEKDAYS AT OTHER TIMES (BETWEEN 9 A.M. AND 4 P.M. OR AFTER 7 P.M.)	
WEEKENDS	

3. Which BART station do you usually use when starting a trip from your home?

Home BART Station: _____

4. What county do you live in?

ALAMEDA	
CONTRA COSTA	
SAN FRANCISCO	
SAN MATEO	
SANTA CLARA	
OTHER (SPECIFY) _____	

5. Into which of the following categories does your age fall? (READ CATEGORIES)

18 TO 24		
25 TO 34		
35 TO 44		
45 TO 54		
55 TO 64		
65 OR OLDER		MAKE SURE TO ASK Q11

6. [ASK EVERYONE] Are you a person with a disability?

YES	
NO	

➤ ASK Q8

➤ TERM UNLESS 65+ IN Q5 – THEY GO TO Q11

7. What type of disability? (PROBE FOR SPECIFICS) [MULTIPLE RESPONSE PERMITTED]

LOW VISION		ASK Q8
BLINDNESS		ASK Q8
DEAF/HEARING IMPAIRED		SKIP TO Q10
MOBILITY PROBLEM – USE A WHEELCHAIR		SKIP TO Q10
MOBILITY PROBLEM – USE A SCOOTER		SKIP TO Q10
MOBILITY PROBLEM – DO NOT USE WHEELCHAIR OR SCOOTER		SKIP TO Q10
MENTAL OR COGNITIVE IMPAIRMENT		SKIP TO Q10
OTHER (SPECIFY) _____		SKIP TO Q10

8. [IF LOW VISION OR BLINDNESS] Do you use a cane?

YES	
NO	

9. Do you use a guide dog?

YES	
NO	

10. Are you a member of any advocacy groups for the disabled? [IF “YES,” ASK: Which ones?]

YES: SPECIFY:	
NO	

NOW SKIP TO Q12

11. [IF 65+ AND SAYS IS NOT A PERSON WITH A DISABILITY] When riding BART, how often, if ever, do you have difficulty [ITEM], would you say you frequently do, sometimes do, rarely do, or never do? [ASK FOR BOTH] [IF “NEVER” TO BOTH, THANK AND TERMINATE]

ITEM	FREQUENTLY	SOMETIMES	RARELY	NEVER
GETTING IN AND OUT OF SEATS?				
MAINTAINING YOUR BALANCE ON THE TRAIN?				

12. [ASK EVERYONE] What is your racial or ethnic background? [MULTIPLE RESPONSE PERMITTED]

AMERICAN INDIAN/ALASKAN NATIVE	
ASIAN/PACIFIC ISLANDER	
BLACK/AFRICAN AMERICAN	
HISPANIC/LATINO	
WHITE	
OTHER (SPECIFY) _____	
REFUSED	

13. Do you speak any languages other than English?

YES	
NO	
REFUSED	

- CONTINUE
- SKIP TO Q14
- CONTINUE

14. Would you feel comfortable listening and talking and reading in English during the interview?

YES	
NO	

- SKIP TO Q16
- ASK Q15

15. [IF "NO" IN Q14 – ALL OTHERS SKIP TO Q16] What language do you speak?

16. Have you participated in any focus group, interviews or other research projects related to accessibility in the past 12 months? [IF YES, SPECIFY]

YES: SPECIFY:	
No	

19. Articulation question: If you could make just one change to improve BART, what would it be and why?

RESPONDENT SHOULD ANSWER USING AT LEAST A FEW SHORT SENTENCES, GIVING A CLEAR, THOUGHTFUL RESPONSE. HOWEVER, IF RESPONDENT IS NOT ABLE TO GIVE A RESPONSE DUE TO DISABILITY, DO NOT EXCLUDE FROM THE RESEARCH. NOTE THIS ON THE SCREENER SO THAT ASSISTANCE CAN BE PROVIDED.

20. Gender (DO NOT ASK)

MALE	
FEMALE	

Thank you for your responses. We're trying to include a mix of BART riders in this research and there are a limited number of time slots, so we might not be able to schedule you. Once we have conducted all of the screening interviews, my supervisor will select the ones to be scheduled. If we are able to schedule you at that time -- or to place you on a waitlist -- we will contact you right away. If we are not able to include you at this point in the research, we will call and let you know that as well.

We are arranging interviews for Tuesday, July 30, and Wednesday, July 31. The research will be conducted in person on a stationary BART train car model. It will be conducted at a centrally located East Bay BART station. You will be asked to get on and off the train several times, and you will be asked to respond to several questions. Assistance will be available if needed. The interviews will be video and/or audio recorded, and you will be asked to sign a consent form regarding the recordings. These recordings will **only** be used for research purposes. To thank you for your time, you will receive a \$75 check. Are you interested in participating in this research? (IF NO, THANK THEM FOR THEIR INTEREST. IF YES, CONTINUE.)

Interviews will be conducted all day on Tuesday, July 30, and Wednesday, July 31. They will be scheduled every 45 minutes from 9 a.m. to 8 p.m. What are your preferences as far as timing?

Day	Time
_____	_____
_____	_____
_____	_____

If we're able to schedule you, my supervisor will confirm the specific time and location of your interview. After you speak to my supervisor, we will also be sending you an email confirming the date and time. May I please confirm your name and email address?

(They **must** be able to be reached to confirm their participation. Respondents will need to receive and bring with them the confirmation letter, so strongly encourage them to provide their email address. Letters can be sent only as a last resort.)

NAME _____

E_MAIL: _____

We will call you a day or so before the research to confirm the time. What is the best time to reach you? What is the best telephone number to reach you at that time?

(They **must** be able to be reached to confirm their participation. Without phone number(s), respondents do not qualify.)

TIME _____

PHONE _____

Is there number we can try if we miss you?

2nd PHONE _____

Thank you!

BART Research Consent Form

I understand that the research project QMR is conducting for BART may be audio and/or video recorded for research purposes only. I give my consent to be recorded.

Name (Print): _____

Name (Signature): _____

Date: _____

BART MODEL TRAIN CAR INTERVIEWING GUIDE: One-on-one Interviews

I. Introduction

Thank you for taking part in this research project. We really appreciate your taking time to give us your opinions. My name is [NAME], and I'm with Quantum Market Research. BART is currently working on designing its new train cars which will go into service a few years from now, and they have asked us to conduct this research with current riders – you – to get your opinions about the interior design of the new train cars.

Just as background, the current BART cars are among the oldest in the nation [REFER TO BOARD]. BART is planning to replace them with new cars that can better accommodate more riders [REFER TO BOARD]. Here's an image of what the new cars might look like with a list of some of the changes made [REFER TO BOARD; POINT OUT KEY CHANGES; ALSO MENTION THE DOOR TECHNOLOGY THAT BETTER SEALS OUT NOISE IF ARISES].

We have a model of BART's new train car behind me. I have a few questions to ask you before we get started, and then I'd like to have you board the train.

As much as possible, we'd like you to ride this model train car as you would ride any BART car. Board as you normally would. Situate yourself as you normally would. I'm going to have you board and exit a couple of times.

I'm hopeful you will get a feel for the new cars and be able to give your opinions about a variety of factors when we're done with the exercise. Please be open and honest – you won't hurt our feelings – we're outside consultants and not involved in designing the new cars.

Now a little about this train car model. BART had this wooden model constructed to give passengers a sense of how being onboard the new train cars will feel in terms of overall layout – placement of seats, open areas, handholds, etc. It is a model of the **interior** only. Some other things to point out about the model:

- This mock-up represents about two-thirds of the size of the car. You are going to be using two doors, but there will be three doors on the real cars. [POINT OUT SIGN FOR END DOOR AND MIDDLE DOOR] The seats are wooden. I promise: the real train cars won't have wooden seats. They've been painted to indicate where a vinyl cushion would be.
- The seats have legs that connect to the floor. The real seats will be connected to the train walls, as today's seats are.

- Most of this car is painted white. The actual colors haven't been determined yet, but will not be white.
- The real armrests will be hollowed out and will be a different material.
- There are three "fold-down seats" in the bicycle area. On the mock-up, they do not fold down, but they will on the real cars.
- [MOBILITY AND LOW VISION ONLY] The digital "screens" won't be decals; they will be digital displays indicating the type of information you see on the decal.
- Of course, there will be real doors everywhere.

Before we get started, do you have any questions?

II. Initial Questioning

1. Prior to today's exercise, had you already visited the train car model?

Yes

No

2. When do you usually ride BART?

Weekdays during peak commute hours

Weekdays at other times

Weekends

3. What types of trips are you usually taking?

4. At which station do you usually board?

5. Which are your usual destination stations?

6. What are the general conditions when you board – are there few fellow passengers or is it a full train or is it a crowded train?

Few fellow passengers

Full train

Crowded train

7. How easy or difficult is it for you to typically board? Would you say it is generally:
Very easy
Somewhat easy
Somewhat difficult
Very difficult

8. How about getting situated? How easy or difficult is that? Would you say it is generally:
Very easy
Somewhat easy
Somewhat difficult
Very difficult

9. How about exiting the train? Would you say it is generally:
Very easy
Somewhat easy
Somewhat difficult
Very difficult

III. On-board Exercises

[Blind/visually impaired people will first be given a tour of the car. Those with mobility issues, in a wheelchair or not, will be asked to come up the ramp without first touring the car.]

Now I'm going to ask you to board the train and get situated as you would do for your most common BART trip. I'm going to announce that the train has arrived at the station and that the doors are open. Then you'll have about 30 seconds in which to get situated. [Indicate wheelchair space and priority seating for informational purposes. Riders do not need to be in those spaces.] During that time, please move about the train as you would in a typical situation. I will announce when the doors will be closing. Then we'll wait a minute or so, and I'll let you know which door I want you to exit from. Obviously, if it's that one [point to fake door], you'll just simulate exiting.

[INDICATE WHICH SCENARIO TO FOLLOW]

- A. Enter from the open door; exit from the open door
- B. Enter from the open door; simulated exit from the closed door.

[CONDUCT EXERCISE]

E1A. Tell me how you think it went getting situated? [PROBE FOR SPECIFICS]

E1B. Tell me how you think it went exiting? [PROBE FOR SPECIFICS]

Next, I want you to

[INDICATE WHICH SCENARIO TO FOLLOW]

- C. Simulated enter from the closed door; exit from the open door
- D. Simulated enter from the open door; simulated exit from the closed door.

[CONDUCT EXERCISE]

E2A. Tell me how you think it went getting situated? [PROBE FOR SPECIFICS]

E2B. Tell me how you think it went exiting? [PROBE FOR SPECIFICS]

IV. Debriefing

Now I would love to get your reactions to the interior design of the cars and the two exercises we just did.

[EXIT TO WAITING AREA]

F1. Tell me what you thought about the whole experience, and feel free to give as much feedback as you'd like.

F2. [FOR BLIND AND MOBILITY ONLY] Overall, what did you think about the types of handholds and quantity of handholds available? Excellent, good, only fair or poor?

Types of Handholds

- Excellent
- Good
- Only Fair
- Poor

Quantity of Handholds

- Excellent
- Good
- Only Fair
- Poor

Thank you! [LEAD TO SIGN-OUT]

PARTICIPANT DEMOGRAPHICS

In a typical month, how often do you ride BART?

BART Frequency	Count	Column N %
6-7 days a week	4	15%
5 days a week	8	30%
3-4 days a week	9	33%
1-2 day a week	3	11%
1-3 days a month	3	11%
Total	27	100%

When do you usually ride BART?

	Count	Column N %
Weekday commute (6 - 9 am, 4-7 pm)	16	59%
Weekday non-commute (9 am - 4 pm, after 7 pm)	20	74%
Weekends	16	59%
Total	27	100%

Multiple responses accepted

Which BART station do you usually use when starting a trip from your home?

	Count	Percent
EL CERRITO DEL NORTE	4	15%
EI CERRITO PLAZA	3	11%
DALY CITY	2	7%
DOWNTOWN BERKELEY	2	7%
FREMONT	2	7%
FRUITVALE	2	7%
SAN LEANDRO	2	7%
12TH ST CITY CENTER	1	4%
24TH ST. MISSION	1	4%
ASHBY	1	4%
CONCORD	1	4%
LAKE MERRITT	1	4%
NORTH BERKELEY	1	4%
PITTSBURG	1	4%
RICHMOND	1	4%
WALNUT CREEK	1	4%
WEST OAKLAND	1	4%
Total	27	100%

In which county do you live?

	Count	Column N %
Alameda	13	48%
Contra Costa	10	37%
San Francisco	3	11%
Santa Clara	1	4%
Total	27	100%

Into which of the following categories does your age fall?

	Count	Column N %
18-24	2	7%
25-34	3	11%
35-44	2	7%
45-54	6	22%
55-64	7	26%
65+	7	26%
Total	27	100%

Type of disability

	Count	Column N %
Blind/Low Vision	8	30%
Mobility problem - use wheelchair/scooter	12	44%
Mobility problem - do not use wheelchair/scooter	7	26%
Other	2	7%

Multiple responses accepted

Among blind/low vision passengers

	Count	Column N %
Use cane	8	100%
Use guide dog	2	25%
Total	8	100%

Are you a member of any advocacy groups for the disabled?

	Count	Percent
Yes	9	33%
No	18	67%
Total	27	100%

What is your racial or ethnic background?

	Count	Column N %
American Indian/Alaska Native	3	11%
Asian or Pacific Islander	5	19%
African American / Black	4	15%
Hispanic/Latino	2	7%
White	18	67%
Total	27	100%

Gender

	Count	Column N %
Male	15	56%
Female	12	44%
Total	27	100%

Recruitment source

	Count	Percent
BART Station Intercept	19	70%
BART Customer Database	8	30%
Total	27	100%