

APPENDIX A

Train Car Model: “Pack the Train” Research Exercises



BART TRAIN CAR MODEL EXERCISE

We hope you enjoyed your experience on the train car model. Please complete this questionnaire – front and back – and provide it to one of the QMR staffers when you're done. If you have any questions, just ask one of us.



BEFORE WE START

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

- Yes
- No

2. Approximately how tall are you?

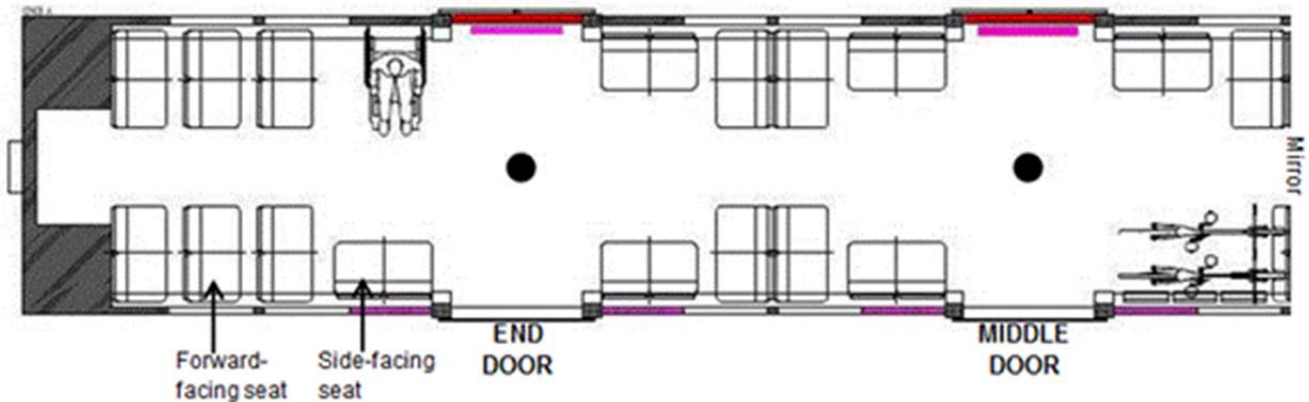
_____ ft. _____ in.

3. Please indicate which, if any, items you brought onboard with you during the exercise. (Check all that apply.)

- Bicycle
- Backpack
- Other (Specify): _____
- Stroller
- Briefcase
- Luggage
- Laptop

ON THE TRAIN

Diagram of Train Car Model



- 4a. On the diagram above, please indicate all of the places you **sat** during the exercise by placing an "X" on these seat(s).
- 4b. Next, please indicate on the diagram all of the places you **stood** during the exercise by placing an "O" in the approximate location(s).

5. Please rate each of the following. (Check only one response for each item.) If you rate any of the following as "Only Fair" or "Poor," please tell us why. If you have no opinion, check "DK/NA."

ITEM	RATING	WHY (IF "ONLY FAIR" OR "POOR")
a. Seat width	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	
b. Seat height	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	
c. Legroom	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	
d. Armrests	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	
e. Side-facing seats	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	
f. Forward-facing seats	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	
g. Aisle width	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	
h. Digital screen locations	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	

6. Please refer to the attached page of photos of the handholds to answer this question. If you rate any of the following as “Only Fair” or “Poor,” please tell us why. If you have no opinion, check “DK/NA.”

HANDHOLDS	RATING	WHY (IF “ONLY FAIR” OR “POOR”)
a. Types available	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	
b. Quantity available	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	
c. Door handhold	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	
d. Priority seating pole	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	
e. Multi-branch pole	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	
f. Seat back pole	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	
g. Seat back handle	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	
h. Hand strap	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	
i. Overhead railing	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Only Fair <input type="checkbox"/> Poor <input type="checkbox"/> DK/NA	

7. How easy or difficult was it to do each of the following? (Check only one response for each item.) If you rate any as “Somewhat Difficult” or “Very Difficult,” please tell us why. If you have no opinion, check “DK/NA.”

NAVIGATING	RATING	WHY (IF “SOMEWHAT/VERY DIFFICULT”)
a. Board the train	<input type="checkbox"/> Very Easy <input type="checkbox"/> Somewhat Difficult <input type="checkbox"/> Somewhat Easy <input type="checkbox"/> Very Difficult <input type="checkbox"/> DK/NA	
b. Move through train	<input type="checkbox"/> Very Easy <input type="checkbox"/> Somewhat Difficult <input type="checkbox"/> Somewhat Easy <input type="checkbox"/> Very Difficult <input type="checkbox"/> DK/NA	
c. Exit train	<input type="checkbox"/> Very Easy <input type="checkbox"/> Somewhat Difficult <input type="checkbox"/> Somewhat Easy <input type="checkbox"/> Very Difficult <input type="checkbox"/> DK/NA	

OVERALL

8. Taking everything into consideration, and remembering that this is only a train car model, what is your overall opinion of the interior design of the new train car?

- Excellent
- Good
- Only Fair
- Poor

9. Please tell us the reasons for your overall opinion of the interior design of the new train car.

Thank you for your participation!!

APPENDIX A: Frequencies
Fleet of the Future Train Car Model - Research Exercise Data

Q1. Prior to today's exercise, had you already visited the train car model?

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Yes	6	5%	4	9%	2	3%
No	109	94%	42	91%	67	96%
No response	1	1%	0	%	1	1%
Total	116	100%	46	100%	70	100%

Q2. Approximately how tall are you?

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
5' 4" or shorter	33	28%	15	33%	18	26%
5' 5" - 5' 8"	36	31%	13	28%	23	33%
5' 9" - 6'	33	28%	12	26%	21	30%
6'+	14	12%	6	13%	8	11%
Total	116	100%	46	100%	70	100%

Q3. Please indicate which, if any, items you brought onboard with you during the exercise.

	Total		Moderately Occupied Train		Crowded train	
	Count	Column N %	Count	Column N %	Count	Column N %
Bicycle	3	3%	2	4%	1	1%
Backpack	50	43%	19	41%	31	44%
Briefcase	8	7%	5	11%	3	4%
Luggage	6	5%	1	2%	5	7%
Laptop	6	5%	3	7%	3	4%
Other	29	25%	8	17%	21	30%
Nothing	12	10%	6	13%	6	9%
purse	18	16%	7	15%	11	16%
Total	116	100%	46	100%	70	100%

Q5. Please rate each of the following.

5a Seat width

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	26	22%	9	20%	17	24%
Good	67	58%	31	67%	36	51%
Only Fair	15	13%	5	11%	10	14%
Poor	2	2%	1	2%	1	1%
Illegible	0	%	0	%	0	%
Don't Know / NA	6	5%	0	%	6	9%
Total	116	100%	46	100%	70	100%
Exc/good		80%		87%		76%
Only Fair/Poor		15%		78%		66%
Mean (scale: 1 - 4)		3.06		3.04		3.08

5b Seat height

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	30	26%	11	24%	19	27%
Good	72	62%	31	67%	41	59%
Only Fair	7	6%	4	9%	3	4%
Poor	1	1%	0	%	1	1%
Illegible	0	%	0	%	0	%
Don't Know / NA	6	5%	0	%	6	9%
Total	116	100%	46	100%	70	100%
Exc/good		88%		91%		86%
Only Fair/Poor		7%		9%		6%
Mean (scale: 1 - 4)		3.19		3.15		3.22

5c Legroom

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	21	18%	8	17%	13	19%
Good	55	47%	19	41%	36	51%
Only Fair	18	16%	7	15%	11	16%
Poor	15	13%	10	22%	5	7%
Illegible	0	%	0	%	0	%
Don't Know / NA	7	6%	2	4%	5	7%
Total	116	100%	46	100%	70	100%
Exc/good		66%		59%		70%
Only Fair/Poor		28%		37%		23%
Mean (scale: 1 - 4)		2.75		2.57		2.88

5d Armrests

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	10	9%	4	9%	6	9%
Good	35	30%	20	43%	15	21%
Only Fair	10	9%	1	2%	9	13%
Poor	21	18%	10	22%	11	16%
Illegible	0	%	0	%	0	%
Don't Know / NA	40	34%	11	24%	29	41%
Total	116	100%	46	100%	70	100%
Exc/good		39%		52%		30%
Only Fair/Poor		27%		24%		29%
Mean (scale: 1 - 4)		2.45		2.51		2.39

Q5e Side-facing seats

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	24	21%	8	17%	16	23%
Good	52	45%	24	52%	28	40%
Only Fair	5	4%	1	2%	4	6%
Poor	2	2%	2	4%	0	%
Illegible	0	%	0	%	0	%
Don't Know / NA	33	28%	11	24%	22	31%
Total	116	100%	46	100%	70	100%
Exc/good		66%		70%		63%
Only Fair/Poor		6%		7%		6%
Mean (scale: 1 - 4)		3.18		3.09		3.25

Q5f Forward-facing seats

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	19	16%	5	11%	14	20%
Good	64	55%	27	59%	37	53%
Only Fair	9	8%	3	7%	6	9%
Poor	2	2%	2	4%	0	%
Illegible	0	%	0	%	0	%
Don't Know / NA	22	19%	9	20%	13	19%
Total	116	100%	46	100%	70	100%
Exc/good		72%		70%		73%
Only Fair/Poor		9%		11%		9%
Mean (scale: 1 - 4)		3.06		2.95		3.14

Q5g Aisle width

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	30	26%	16	35%	14	20%
Good	76	66%	28	61%	48	69%
Only Fair	7	6%	1	2%	6	9%
Poor	2	2%	0	%	2	3%
Illegible	0	%	0	%	0	%
Don't Know / NA	1	1%	1	2%	0	%
Total	116	100%	46	100%	70	100%
Exc/good		91%		96%		89%
Only Fair/Poor		8%		2%		11%
Mean (scale: 1 - 4)		3.17		3.33		3.06

Q5h Digital Screen locations

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	29	25%	10	22%	19	27%
Good	55	47%	27	59%	28	40%
Only Fair	20	17%	6	13%	14	20%
Poor	5	4%	2	4%	3	4%
Illegible	0	%	0	%	0	%
Don't Know / NA	7	6%	1	2%	6	9%
Total	116	100%	46	100%	70	100%
Exc/good		72%		80%		67%
Only Fair/Poor		22%		17%		24%
Mean (scale: 1 - 4)		2.99		3.00		2.98

HANDHOLDS

6. Please refer to the attached page of photos of the handholds to answer this question.

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
6a Types available						
Excellent	51	44%	21	46%	30	43%
Good	55	47%	22	48%	33	47%
Only Fair	6	5%	1	2%	5	7%
Poor	2	2%	1	2%	1	1%
Illegible	0	%	0	%	0	%
Don't Know / NA	2	2%	1	2%	1	1%
Total	116	100%	46	100%	70	100%
Exc/good		91%		93%		90%
Only Fair/Poor		7%		4%		9%
Mean (scale: 1 - 4)		3.36		3.40		3.33

6b Quantity available

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	37	32%	14	30%	23	33%
Good	62	53%	25	54%	37	53%
Only Fair	12	10%	5	11%	7	10%
Poor	3	3%	1	2%	2	3%
Illegible	0	%	0	%	0	%
Don't Know / NA	2	2%	1	2%	1	1%
Total	116	100%	46	100%	70	100%
Exc/good		85%		85%		86%
Only Fair/Poor		13%		13%		13%
Mean (scale: 1 - 4)		3.17		3.16		3.17

6c Door handhold

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	40	34%	13	28%	27	39%
Good	61	53%	25	54%	36	51%
Only Fair	4	3%	2	4%	2	3%
Poor	2	2%	2	4%	0	%
Illegible	0	%	0	%	0	%
Don't Know / NA	9	8%	4	9%	5	7%
Total	116	100%	46	100%	70	100%
Exc/good		87%		83%		90%
Only Fair/Poor		5%		9%		3%
Mean (scale: 1 - 4)		3.30		3.17		3.38

6d Priority seating pole

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	32	28%	13	28%	19	27%
Good	58	50%	25	54%	33	47%
Only Fair	5	4%	1	2%	4	6%
Poor	4	3%	2	4%	2	3%
Illegible	0	%	0	%	0	%
Don't Know / NA	17	15%	5	11%	12	17%
Total	116	100%	46	100%	70	100%
Exc/good		78%		83%		74%
Only Fair/Poor		8%		7%		9%
Mean (scale: 1 - 4)		3.19		3.20		3.19

6e Multi-branch pole

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	72	62%	31	67%	41	59%
Good	31	27%	10	22%	21	30%
Only Fair	5	4%	2	4%	3	4%
Poor	4	3%	3	7%	1	1%
Illegible	0	%	0	%	0	%
Don't Know / NA	4	3%	0	%	4	6%
Total	116	100%	46	100%	70	100%
Exc/good		89%		89%		89%
Only Fair/Poor		8%		11%		6%
Mean (scale: 1 - 4)		3.53		3.50		3.55

6f Seat back pole

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	29	25%	10	22%	19	27%
Good	72	62%	32	70%	40	57%
Only Fair	3	3%	0	%	3	4%
Poor	0	%	0	%	0	%
Illegible	0	%	0	%	0	%
Don't Know / NA	12	10%	4	9%	8	11%
Total	116	100%	46	100%	70	100%
Exc/good		87%		91%		84%
Only Fair/Poor		3%		%		4%
Mean (scale: 1 - 4)		3.25		3.24		3.26

6g Seat back handle

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	27	23%	10	22%	17	24%
Good	65	56%	28	61%	37	53%
Only Fair	6	5%	3	7%	3	4%
Poor	1	1%	0	%	1	1%
Illegible	0	%	0	%	0	%
Don't Know / NA	17	15%	5	11%	12	17%
Total	116	100%	46	100%	70	100%
Exc/good		79%		83%		77%
Only Fair/Poor		6%		7%		6%
Mean (scale: 1 - 4)		3.19		3.17		3.21

6h Hand strap

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	27	23%	11	24%	16	23%
Good	57	49%	26	57%	31	44%
Only Fair	19	16%	4	9%	15	21%
Poor	8	7%	4	9%	4	6%
Illegible	0	%	0	%	0	%
Don't Know / NA	5	4%	1	2%	4	6%
Total	116	100%	46	100%	70	100%
Exc/good		72%		80%		67%
Only Fair/Poor		23%		17%		27%
Mean (scale: 1 - 4)		2.93		2.98		2.89

6i Overhead railing

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	33	28%	13	28%	20	29%
Good	56	48%	21	46%	35	50%
Only Fair	15	13%	7	15%	8	11%
Poor	8	7%	5	11%	3	4%
Illegible	0	%	0	%	0	%
Don't Know / NA	4	3%	0	%	4	6%
Total	116	100%	46	100%	70	100%
Exc/good		77%		74%		79%
Only Fair/Poor		20%		26%		16%
Mean (scale: 1 - 4)		3.02		2.91		3.09

7. How easy or difficult was it to do each of the following?

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
7a Boarding Train						
Very easy	77	66%	35	76%	42	60%
Somewhat Easy	35	30%	11	24%	24	34%
Somewhat difficult	3	3%	0	%	3	4%
Very difficult	0	%	0	%	0	%
Illegible	0	%	0	%	0	%
Don't Know / NA	1	1%	0	%	1	1%
Total	116	100%	46	100%	70	100%
Easy		97%		100%		94%
Difficult		3%		%		4%
Mean (scale: 1 - 4)		3.64		3.76		3.57

Q7b Moving through train

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Very easy	39	34%	22	48%	17	24%
Somewhat Easy	60	52%	22	48%	38	54%
Somewhat difficult	13	11%	2	4%	11	16%
Very difficult	1	1%	0	%	1	1%
Illegible	0	%	0	%	0	%
Don't Know / NA	3	3%	0	%	3	4%
Total	116	100%	46	100%	70	100%
Easy		85%		96%		79%
Difficult		12%		4%		17%
Mean (scale: 1 - 4)		3.21		3.43		3.06

Q7c Exiting train

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Very easy	67	58%	33	72%	34	49%
Somewhat Easy	41	35%	13	28%	28	40%
Somewhat difficult	6	5%	0	%	6	9%
Very difficult	0	%	0	%	0	%
Illegible	0	%	0	%	0	%
Don't Know / NA	2	2%	0	%	2	3%
Total	116	100%	46	100%	70	100%
Easy		93%		100%		89%
Difficult		5%		%		9%
Mean (scale: 1 - 4)		3.54		3.72		3.41

Q8. Taking everything into consideration, and remembering that this is only a train car model, what is your overall opinion of the interior design of the new train car?

	Total		Moderately Occupied Train		Crowded Train	
	Count	Column N %	Count	Column N %	Count	Column N %
Excellent	37	32%	16	35%	21	30%
Good	61	53%	21	46%	40	57%
Only Fair	14	12%	5	11%	9	13%
Poor	1	1%	1	2%	0	%
Illegible	1	1%	1	2%	0	%
Don't Know / NA	2	2%	2	4%	0	%
Total	116	100%	46	100%	70	100%
Exc/good		84%		80%		87%
Only Fair/Poor		13%		13%		13%
Mean (scale: 1 - 4)		3.19		3.21		3.17

Q9. Please tell us the reasons for your overall opinion of the interior design of the new train car.

Refer to verbatim report.

APPENDIX A: Verbatim Report
Fleet of the Future Train Car Model – Research Exercises

Reason for Poor/Only Fair Rating of Seat Width
(Verbatim Responses)

- Wide bottoms would not fit with armrests.
- I like space to spread out and be comfortable.
- If you have passengers who are bigger size, you will not have enough room.
- A bit narrow.
- Too small, people are getting larger and taller, not smaller.
- I have my handbag and another bag. The divider makes seating uncomfortable.
- Not spacious, I may fall
- A bit narrow
- Arm rests and poles restrict the width
- Not enough space/very fair
- My right shoulder was jammed in the rear seat
- People are getting larger
- Ok for me, concerned for the people heavier.
- I fit ok, but a big person or me with extra bag, would have felt compressed
- I weigh 230lbs.

Reason for Poor/Only Fair Rating of Seat Height
(Verbatim Responses)

- Higher back easier to sleep like Caltrain.
- For short people or children, will not be able to reach their feet on the ground.
- Prefer a high seat back to allow a comfortable nap!!
- Not enough space for legs/if higher more space.

Reason for Poor/Only Fair Rating of Legroom
(Verbatim Responses)

- Space between side facing and adjacent forward facing is narrow.
- Not enough room for legs.
- Could have more leg room. I'm comfortable crossing my leg.
- There is never enough leg room on a train just part of riding a train
- If you're sitting in one of the seats that's at a 90 degree angle to the seats by the door, there is almost no room to even slide into the seat.
- Not a lot of space w/ wheel chair in place.
- Tight in corner, have to sit at angle.
- Too shallow- even for me.
- Too close to the front seat.
- Could not stretch out. Had to keep legs really close to body.
- On the perpendicular seats near doors, the seats are (still) too close together.
- Too little space between end of seat and side or back of next seat.
- Narrow between side-facing seat and forward-facing seat.
- Feel cramped at knees.
- Not enough leg room.
- A little cramped.
- I need more. Knees bash seatbacks of forward-facing seats.
- Leg room in backwards seat impinged on personal space.
- Not enough leg room with my bag.
- Corner seat by mirror was uncomfortable to get out of with people sitting next and in front.
- I brought luggage on board/ needed more space.
- Knees were touching opposite seat.
- Cramped if you have bags. Hard on/off when next to window.
- I had to turn my legs to the aisle.
- I don't like having to move or get up if your neighbor needs to get off.
- Was ok until it was crowded.
- Front-facing seats adjacent to side-facing seats' legroom, it's really bad.
- Felt cramped, no room.

Reason for Poor/Only Fair Rating of Armrests
(Verbatim Responses)

- Sometimes it can get in the way.
- I would sit on or hit them.
- Not easy to get around to exit.
- Forward facing seats are hard to get around between seats.
- The placement in the middle of the seats makes it hard to get out window seat.
- Didn't have anywhere to sit.
- Only on center seats; acts more like a divider than armrest.
- Inside rests are unnecessary.
- Arm rest is not necessary, getting seats is not roomy.
- They were too low and therefore seemed pointless. Maybe they just feign the idea of more defined personal space but I didn't feel that they were particularly comfortable/ functional.
- Get in way of sitting for end.
- Small, but I don't use them anyway.
- Impossible to scoot off sideways so someone can sit down.
- One can't be shared by both, it is very hard to use it.
- They could be longer.
- I don't really like that arm rest. It feels like it is a hurdle to get in and out.
- Arm rest is too low to serve purpose. If actually used it would invade space on next seat.
- Too thin.
- Not necessary, too restrictive, unfair to big people or those w/ 3 or more kids.
- Could be uncomfortable for longer rides.
- Not comfortable but I probably wouldn't use much.
- They don't exist on the seats next to the door.
- Don't like armrests at all. Obstructive getting off when on inside seat.
- Better like airline arms.
- Don't use armrests.
- No need to have one. It limits movement.
- Need to support both sitters.
- Seat width takes away comfort.
- Not comfortable.

Reason for Poor/Only Fair Rating of Side-facing Seats
(Verbatim Responses)

- Bar is too close. If someone held on during rush hour it would be very uncomfortable
- Too small.
- Seems extremely close to adjacent forward facing seats.
- Not enough seats for a comfortable ride.
- Good until it was crowded, then had people's butt in my space.

Reason for Poor/Only Fair Rating of Forward-facing Seats
(Verbatim Responses)

- Leg room.
- All OK except for front facing seats adjacent to side facing.
- Armrests in between make it hard to move for another rider.
- Too small, no legroom.
- Not enough seats for a comfortable ride.
- I think they should just face the aisle in a row.
- Not enough leg room.
- More leg room.
- Too little leg room.

Reason for Poor/Only Fair Rating of Aisle Width
(Verbatim Responses)

- Felt a little narrow.
- Worry it won't be enough capacity for a crowd.
- There is not enough aisle width to move with luggage or bag.
- Poor spacing/ could be longer width.
- Also could be wider- fewer seats though.
- Train seems narrower.
- Standing by the pole, there was not enough room for the wheelchair.
- Seemed more narrow than current trains, not a big deal.

Reason for Poor/Only Fair Rating of Digital Screens
(Verbatim Responses)

- Difficult to see from the ends of the car, they're also very small and I wouldn't be able to read the map unless I was standing right in front of it, which often other people are.
- Good locations but too small.
- No one pointed out the screen.
- A little too high.
- Could not see from my seating position #3.
- I had to look around to find it but OK then, hard to see from some locations in car.
- Above entry/ exit doors would be good as well.
- From where I sat they were hard to see in a crowded train.
- Smaller than old-school posters.
- They were hard to see where I was, I like the big map.
- The screen is too small with limited info.
- Nothing special.
- They could be larger.
- OK!
- They are tiny!
- Not easily seen by people who are further from it.
- Couldn't really see it, and I was on an aisle!
- Unobtrusive.
- Some poles blocked them.
- It should be visible to everyone on the side panel.
- Need more than two.
- Couldn't see people standing.
- Would be cool if they were designed "longer" like in NYC subway cars.

Reason for Poor/Only Fair Rating of Types of Handholds
(Verbatim Responses)

- Ones up top are a bit high for me.
- On high bars (overhead railing), there need to be more lower hand straps or holds.
- The big pole in the middle of the doors is in the way.
- Need a few more to hold on.
- Don't need one in middle of aisle facing seats.
- For the people standing, having more hand straps available would be nice. They're more comfortable than the overhead railing.
- Too low.
- I'm pretty tall and they were almost too high for me.

Reason for Poor/Only Fair Rating of Quantity of Handholds
(Verbatim Responses)

- Need more straps.
- I'd like hand strap closer to doors.
- Don't see enough for peak commute times.
- More needed.
- Need to put more especially on crowded trains.
- More multi-branch would be good.
- For the people standing, having more hand straps available would be nice. They're more comfortable than the overhead railing.
- Not enough.
- Train too crowded to use.
- I think there could be more hand straps (for crowded times).
- There weren't enough of lower hand rails.

Reason for Poor/Only Fair Rating of Door Handhold
(Verbatim Responses)

- Behind the hand hold the panel extrudes too far. People will hit heads from face seating seats
- Possibility to have a split door rail.
- Should be extended up.
- The steep angle of the door made it a little strange.
- Top edge should be rounded.

Reason for Poor/Only Fair Rating of Priority Seating Pole
(Verbatim Responses)

- Do not like that pole.
- Feel like other people more likely to use and be intrusive.
- I held onto this while waiting for my next stop on trip 3. Felt like I was violating the space of seated riders.
- Too obtrusive should be on edge not in the middle.
- I don't like that pole.
- Stupid and intrusive.
- Should be on sides not in between seats.
- In the way.
- Better handicap access.

Reason for Poor/Only Fair Rating of Multi-branch Pole
(Verbatim Responses)

- Too high.
- In the middle of door space prevents access in/out.
- I wonder how many broken arms we will have.
- Don't think it is needed especially on crowded trains.
- If rider put hand through, it might be a safety issue.
- It's more of an obstruction for me.
- Need to be spaced out more.
- I guess it's functional, but I feel 1 pole would suffice and take up less room.

Reason for Poor/Only Fair Rating of Seatback Pole
(Verbatim Responses)

- Put stress on chair hold.
- Didn't seem substantial.
- They could be out more--worried about hitting someone's head.

Reason for Poor/Only Fair Rating of Seatback Handle
(Verbatim Responses)

- Some riders don't like people's hands coming near them.
- Odd, uncomfortable angle.
- Doesn't look stable.
- Don't like hands behind my head.
- Seems hand will be touching a person seated

Reason for Poor/Only Fair Rating of Handstrap
(Verbatim Responses)

- I hate hand straps in general.
- These are so gross-would be better if metal.
- I don't use. Too high for me.
- More. Why nylon? Kind of gross.
- Need more spread out.
- More needed.
- Material is not comfortable for long periods of standing tall; shorter people can't really make use of them.
- Very uncomfortable for me.
- Unless because it's a mock more straps should be available because bars too high for shorter people.
- Need more of those for short people. Too little.
- Too few locations.
- Doesn't seem very useful or able for use.
- This type wiggles a lot.
- Need more straps.
- Could be more.
- More!
- Need more- especially if crowded. I'm short.
- Not enough of them.
- Not enough of them.
- Need more!!!
- Should use metal ones.
- I don't like hand straps.
- Harder for short people to use.
- Too high.
- Need a few more.

Reason for Poor/Only Fair Rating of Overhead Railing
(Verbatim Responses)

- Can't reach it comfortably and keep balance.
- Seemed just a little too high, missed it when I wasn't looking. Not quite intuitive height.
- It's an inch or two too high to comfortably hold onto, especially if the car is moving.
- I don't use. Too high for me.
- Too high.
- Perhaps too high for many.
- Too high for me.
- Hand straps aren't available at all areas.
- Hard to reach if you are short.
- A little too high.
- Better than current- I think the train car is shorter.
- I'm too short to take advantage of that.
- Too tall for me.
- Too high for me, some hand straps are good.
- Seemed kind of high. And I'm not that short.
- Too low.
- Could be lower for short passengers.
- Too low!
- Maybe can't reach for the short people.
- Cold metal is unpleasant.
- Way too high for average person.

Reason for Poor/Only Fair Rating of Boarding the Train
(Verbatim Responses)

- With the bike rack on the right of middle doors, it is hard to get in.
- Nobody lined up. BART needs to enforce lines. Please!
- Kind of slim.

Reason for Poor/Only Fair Rating of Moving Around the Train
(Verbatim Responses)

- Hard to get out of corner seat.
- The aisle between back to back seating is a little small.
- It was very crowded.
- Because aisle width is too short, hard to move around.
- Crowded.
- Always a bit hard to move than a crowded train. But no different than today's cars.
- I think the multi branch is cool but it did impede my egress.
- Almost never move through a train!
- At full capacity, plus bikes, standing room only.
- Crowded and wheelchair.
- When crowded.
- Crowded on second trip.
- So many standing people with no clear designation of moving lanes among all the standing people

Reason for Poor/Only Fair Rating of Exiting the Train
(Verbatim Responses)

- It was hard to get off at West Oakland- too many people.
- Moving bike from rack required some negotiations on a full train.
- I've seen trains a lot more crowded than today and we might have a problem with the multi branch.
- Always difficult and cumbersome.
- Bike rack placement awkward. Wheelchair seemed to have restricted movement.
- The door seems low, it feels as if I need to duck.

Reason for Excellent/Good Overall Rating
(Verbatim Responses)

- It is very similar to the current design with the exception of the arm rests and multi-branch pole.
- I like there are more handles in the car (because I'm not tall and I'm always struggling to find handle bars during peak times. What I will miss is the seats forward/ backwards in the center. I notice that wasn't in the interior design because I usually sit there.
- Overall I didn't find much difference between this train and current trains. Generally, my experience is good on current trains.
- Liked the headroom in the center portion of the car. The forward facing seats had less leg room than the current cars. I like the multi-branch pole in the center.
- Maps are a bit small and hard to see, other than that it looked nice and was pretty comfortable.
- I like the railing design and the seat divider armrest interior feels more spacious. I like the bike rack.
- For excellent the noise level needs to be low and temp control on train.
- Additional hand holds for standing are very good, the multi-branch middle pole is a very good idea.
- Nice interior; streamlined and less bulky; would like to see/view entire size of car!
- Overall, I am pleased with the size and modern design of the train. I like the digital screen and multi-pole. I'm also pleased with how much wider the train felt. Thanks for this!
- I like the new design. I like all the options of handrails. Seems like it would be easier to keep clean.
- I like that it seems more open than the current cars, especially the aisles. The multi-branch pole is a very good addition. I wish there was a larger map, or even just a list of stops that was more clearly visible. Sometimes I'm travelling to an unfamiliar station and need to be able to double-check the stops onboard to see how much further it is.
- Seems spacious. More hand hold options. Fold-down seats are an excellent idea. Well behind the times on this. More doors is also an excellent idea. Finally catching up with Paris Metro of the 1960s.
- I like the design, more room for luggage and bicycles.
- Great model. New is better.
- Concerned re: if sitting down in fold up seats, would people have to get up if bikes or strollers (multiple or single) entered train.
- It's great but one thing that bugs me is that the row seats with armrests make it hard to move between them.
- It's ridiculous to do this study without real seats – waste of money since those are a big part of ride comfort. Also, put bike racks in the ends of cars, not middle- like where the homeless people currently sleep, and regular commuters don't like to sit anyway.
- The seats are bigger and they have an arm rest. The train looks like it will be a lot more comfortable and have a lot more room.

Reason for Excellent/Good Overall Rating
(Verbatim Responses)
(Cont'd)

- I like the design. The reason is that there is more handle to grab. Also there is more space overall. The handles are good to hold onto when the train is in motion.
- The digital screen looks helpful, and the multi-branch pole is a great addition for exiting.
- With the addition of the location monitor the train was very comfortable.
- Very simply.
- Possibly more space needed between side seat and front facing, not convinced the side seating in mid train works, too tight for exiting easily.
- Large enough. Easy to deal with other crowds. Good handlings. Bicycle rack.
- I like that it's more updated and has more and better handholds. I think bike riders should be directed to the bike rack (told which door to enter). Leg room was the only bad thing; however, I would prefer poor leg room over fewer seats. I'm concerned there will be fewer seats and I can't stand on my 45 min commute.
- Like to have more poles in this train, especially center poles. Maybe seats need to be a bit more wide since more people are bigger nowadays.
- The space and openness of the new cars is great. One concern would be for the multi-branch pole areas. Since they're near doors, it seems like that could pose a potential "traffic" problem.
- Good layout but more seats needed. Why not dedicate half of one car to bikes and strollers? Larger digital screens.
- The interior seems more spacious and I like the seat arrangement. I like the exterior armrests being removed from the seats.
- I love the East coast design but put strap a little lower for shorter people and kids.
- Multi-branch poles are very convenient. The center armrests make me feel more comfortable sitting next to strangers. Straight forward seating arrangements. But including a non-digital route map would be a good idea. Digital displays are a bit small.
- Very familiar which is nice. Fold-up seats for bikes is good. Quieter trains will be very good! Thanks!
- Improvement is always good. Multi branch pole was my favorite, a real BART train moves a lot and sometimes it is hard to find something to hold on to. This pole makes it easier.
- Appears BART focused on safety and stability of the passengers, especially when trains
- The design seems very similar to the current cars. I think the digital screens would be better placed above the handicapped spot or across from it. The mirror was horrible, please don't put them in the trains. The design seemed a little narrow, but that's something I would just get used to.
- I like the shorter car- I got to sit for most of my "commute," but straps are uncomfortable and overhead poles too tall.
- I am glad there will be no carpet or upholstery, train looks easier to keep clean. Seats also seem more spacious.
- I think it's good. Clean, modern, and not too different from what we have now.

Reason for Excellent/Good Overall Rating
(Verbatim Responses)
(Cont'd)

- It seems fine, it does seem like there are less seats, and I worry for larger people sitting in the seats w/ the arm rest.
- It's nice and simple.
- It was a lot nicer than I expected. Seeing the divider between the seats had me worried there would not be enough room. Multi-branch pole will hopefully be very helpful for long crowded train rides.
- There seemed to be plenty of room for everyone and their "stuff." People flowed on and off nicely. Great amount of holding areas but it seems to lack seating. Better for crowded trips than medium impacted trips. There are some concerns with the bike rack and the spokes of my bike wheel.
- I like all the different ways to hold on and prevent falls. The seats are well designed. However, weight challenged persons may have some problems. Test the design with really fat people and the seats along the wall next to others seats needed more leg room for tall people to use.
- I like the three prong pole! Great idea. The priority seating is AWFUL.
- Spacing of handrails is good as well as multi-branch poles.
- Areas for the bikes are a very nice addition. Easier to stand and hold on with the many options. The seats were the right size for me as well.
- It is modern and clean looking it seems like it will be useful to people w/ bicycles, handicapped people, and other users.
- It appears to have more room to move around in.
- It feels more spacious compared to the old train.
- Seems to provide more standee room on rush-hour train. I like more parallel (side-facing) seats. See 5b for suggestion about seat back height.
- I like the new train design I like how the seats are divided instead of together. I love the idea of digital screens.
- Spacious, but sparse seating. Very clean looking, great hand rails.
- I like the bright white looks. It makes the space feel and look clean. The brightness provides a more comfortable atmosphere.
- I love the extra standing space, will make it easier to exit train during rush hour. Love the extra poles. More stuff to hold on when standing. Like the screen locations.
- The hand holds are good and with fewer seats it seems easier to get to the doors. However, if there are not more trains on a route they will be very crowded during commute times.
- Head room! Too short.
- Bright yet a little too pale.
- I liked the increased amount of handholds and am very pleased about the digital screens, for all passengers, but specifically deaf passengers who do not hear the onboard announcements.

Reason for Excellent/Good Overall Rating
(Verbatim Responses)
(Cont'd)

- It seems like it could fit more people, which is excellent. However it is much less comfortable. I'm not talking about the lack of padding, but the fact that there are a lot less seats. I don't think I could fall asleep on these trains.
- It looks nice and clean. Having the screens with the station stops is excellent as it is often hard to hear announcements. Not sure about how less seating will be as it's sometimes awkward to stand for long rides. I have certainly seen current trains much more crowded than this mock-up seemed.
- I only dislike the seat divider. They are painful and encourage me to sit near the disabled seats.
- It doesn't seem much different than the existing trains. - I guess I was expecting something more like Muni seating although that isn't necessarily better.
- Emergency button may be too close to the door. It can cause people to accidentally hit the emergency button.
- Much room between seats which makes it easier to enter and exit regardless of where you sit. The proximity of locations of the doors facilitate entrance & exit.
- Spacious, comfortable good lighting, good color.
- Lighting was very good-I actually like the white interior! It seemed that there are more poles to hold on to- which is great.
- Overall the layout and design is good. If the next train cars will be used for the next 30-40 years, a more streamlined aerodynamic design might be more valuable.
- Screens are great idea. Armrests suck. Multi branch pole good idea.
- More seats are needed. A lot of people will be standing.
- Good floor space, hate the armrests- intrusive. Seats a little too small, good space around doors. I like the theatre type setting.
- Digital maps should be large. Priority seating graphic good.
- I like the additional hand rails.
- Be more colorful.
- It was clean and looked like it could be utilized by all sizes of people. It's a little sterile though.
- This new design seemed more spacious, efficient use of space. I especially like the multi-branch pole. Good work overall!!!
- They are better than older trains and seem to have more room to move around on train, just think hand strap should be metal would last longer.
- I like hard seats. I like multi hand rail it feels spacious. I wish there were more side seats.
- Thanks BART, a little late though. It was time to replace these old cars for safety of passengers. I hope BART will re-consider the ticket prices also.
- I think BART has moved from the original concept of being somewhat luxurious to more utilitarian like the New York subway or the London Metro.
- Didn't like the armrests. Overall-good model.

Reason for Excellent/Good Overall Rating
(Verbatim Responses)
(Cont'd)

- It's pretty good but that's not the real one. I'm just wondering if it has enough seats. Every other things are pretty good to me.
- Good hard flooring and seat, good electronic board, need Wi-Fi signal and indicator strength, BART adv. So you make revenue and lower the fare.
- Overall, I loved it. Great improvement!! Like the way BART is moving towards.
- Seems like there's not enough seating, but ample standing/walking room. I like the extra space for bikes, and the real time digital screens.
- Could be better but everyone has a budget.
- The hand rails are too high-if you were 5'0" fewer options for hand rails especially when train is lurching during starting and stopping.
- Seats seem smaller, less foot space, I like the multi branch poles, arm rests aren't very comfortable, seats aren't very comfortable, especially if car rides are long.
- Like the armrests to separate passengers and prevent sleeping- digital screen a big plus! Non-fabric seats will make clean-up easier to be more hygienic! Multi branch pole better than single pole.
- Open space make more enjoyable ride and easier to build community, not so claustrophobic. Also the new digital things are easy to see and are better overall. Especially w/ride experience.
- The bike rack is an improvement.
- It seemed like there was more room to move around. Hand holds were more numerous and easier for short people then they are now. I would miss the seats where 2 seats face 2 seats. They are nice for a group. I did not see them here.
- Pole in the middle between the doors seems like it could be in the way of people with wheelchairs or bikes.

Reason for Poor/Only Fair Overall Rating
(Verbatim Responses)

- Needs some more work/ rethinking staying true to original design. I think priority seating should include kids. Also need more emergency buttons.
- Not all seats “sittable”– i.e. leg room.
- Not enough seats. Not enough space for suitcases, make bike area in back of cars or make last car for bikes like Caltrain. More consideration for seniors and handicapped. Handicapped area not large enough.
- Seats are too small for large people. Non- padded seats for a 40- min ride is unpleasant. There is no leg room for tall people. There weren't enough seats either.
- Unsure about the bike rack. If 3 seats were functional during exercise, that might've helped more- will “no bikes” be enforced during peak commute? Or does this encourage more bike riders? How many bikes fit- more than 1? Also noticed there is no horizontal hand rail in the wheelchair seating. I didn't like that because I like to stand and lean against it when space isn't occupied by wheelchair users.
- In my opinion, we don't need 3 doors which take away too many seats
- Too few seats.
- I hate the division between seats. Would also like to see a monitor displaying the upcoming/current location/destination.
- Aisle width is small. Seat width is small. Bike rack in wrong place. Hand strap move. Digital screen too small. Good the train is so bright and nice. White color may get dirty soon.
- There seem to be too few seats and because of the arm rests, not as many choices or ways to use those seats I like the 3 doors and the multi-pole.
- It felt a bit morbid and almost as if I was in a hospital ward. The train ride felt very arduous and I was not comfortable. I almost felt like I was worried about boarding/ exiting the BART with my luggage for the whole trip!
- Not enough seats. But the roof seems higher, which is good. What are the lines painted on the floor for?
- Us bikers (more than 2 or 3) will need to invest in “folding-type bikes in the future... Etiquette prevailing to the women and elderly, a lot of standing. Even on weekends...
- Too much reliance on standing. No room for holding stuff. In real life I see more luggage and strollers and didn't see room for them. Lots of people sleep and don't see how that would work out.
- Good elements- high ceilings, bright lightings, spare design. Bad elements- hard seats, lack of leg room on clustered seats, too few seats, no clear lines of egress on cars.