

Appendix 1

Community opinions on the experience of travelling with luggage

For those carrying larger luggage and buggies the experience is usually a stressful one. Community members who had experienced this talked about feeling in the way, awkward and constantly having to adjust to allow people to get past.

Passengers with larger luggage or buggies have resorted to using the dedicated wheelchair and bicycle spaces but have then had to move when someone with a bike or wheelchair has needed the same space.

Community members talked about their reluctance to leave items of luggage unattended in vestibules, or having to monitor it at every stop, which made it hard for them to relax.

“If I have to leave my case somewhere further down the train, I find myself constantly checking when we stop at a station to ensure that my bag remains there. This isn't so bad when there's only 2 or 3 stops on your journey. But when stops are frequent (as on Merseyrail) I would find myself constantly looking up to make sure my bag was still there.”

Those with smaller bags have either used the overhead racks or placed them between their knees in a bay of four; though the latter recognise this can be uncomfortable when others need to sit down.

There is recognition that there will be greater demand for additional luggage space on those trains serving the airport; and that because Merseyrail serves larger mainline stations such as Lime Street there is a need to take account of those with luggage.

Some of those who have travelled with young children and buggies also talked about the difficulties of travelling with more than one child. Some have used the existing area around the fold down seat to store a pushchair but have then had to sit a toddler further away and keep an eye on both throughout the journey. Some also talked about being reluctant to ask people to move trying to find a place to stand/leave their buggy.

“If it wasn't too busy, I made use of bike area and was able to sometimes use fold down chair. This is hard if you are travelling with more than one child and no other adult. Often I'd have to stand with buggy in vestibule area and often felt in the way or had added job of watching other children if they'd sat down further up carriage.”

Several community members mentioned the difficulty of trying to change people's behaviour and that there would be a need for clear instruction around appropriate luggage storage. One passenger highlighted the problems created by those who refuse to remove their rucksacks whilst standing on-board when they could use the overhead racks.

Appendix 2

Alternative seating materials

Plastic seating

None of the plastic seats designs shown were liked. They were seen as unwelcoming, hard, uncomfortable, potentially cold in winter, and potentially sticky in summer. This was despite reminders that the carriages would have smart air conditioning.



Wooden seats

Some thought the wooden seats looked aesthetically pleasing. A few noted the high backs (a good thing) which the plastic examples had lacked. However, none thought the wooden seats would be comfortable. It would be hard, and potentially even more uncomfortable for the elderly. It was thought the wood would be sticky in summer, and subject to vandalism such as etching.



Whilst many could see it might be easy to wipe down and clean, some thought this would only last until the surface started to crack, either through wear and tear, or as a deliberate act.

Stainless steel seats

This example was universally disliked, often described as looking like a urinal, so not even aesthetically pleasing. It was expected to be cold, especially in winter, so perhaps more suited to a warmer climate where this example came from (Hong Kong). It was generally thought it would be easy to keep clean, but even this material might be subject to vandalism such as etching.



Appendix 3 - Detailed feedback on table design

Initially those making short journeys did not want any table as they were felt to be disruptive and restrict space. They would get in the way and make it a struggle to get off the train. The community questioned whether there was real need for a table. They liked the space in between for legs, so did not want that reduced. There was some feeling that seats should be seen as a communal space, not a workspace.

On discussing it in more detail, and having physically tried out the mock-up bay, the community saw the usefulness of having a table to put hot drinks on – but only if it didn't take up too much space.

A small number (a couple) preferred a bigger table to put an iPad or laptop on, whilst others pointed out that they did not want to put their bags on the floor and would like a table to put shopping on. Others felt that the smaller options would only really be of use to those sat next to the window.

A small table in the wheelchair space would be good.



The favourite - the smallest table

Of the four options the community really liked the smallest table as it did not restrict people's space or movement and allowed those on the inside seat to get up without disturbing the person next to them. It didn't invite people to take over the whole space either. It was seen as functional but not restrictive.

The runner up – longer small table

The community felt this was restrictive and bumped into knees too much. It made them feel cramped and weren't suitable for pregnant passengers. The groups just felt they got in the way. Again, some members asked whether it could go up an inch. The taller men in the group banged their knees on it. Getting up to get off could be awkward and result in banging into other passengers' legs, making it harder to get off the train overall. It was not big enough to do anything with, but at the same time too big to not get in the way.

The groups felt it did not really add anything and really did not like that it would force people in the window seat to sit with their legs to the side, thereby encroaching on the person in the aisle seat.

Third - smaller of two larger tables.

The community felt it is an awkward size, and passengers were likely to bang into it. It was felt to be restrictive for the person leaving the window seat, who would have to barge into the person sat next to them. It was too restrictive.

It was felt this wasted space and very close to knees.

A small number said it might be more useful if it had four cup holders. A group of friends or family would not mind the infringement of space and might like this option.

Fourth – largest table

The groups really did not like this option with some saying they would stand rather than sit at this table as it just got in the way. It was felt to be very awkward for the person next to the window to get out and really disadvantaged the person next to them. It was just too intrusive. The community didn't like the fact that it used up space and restricted movement.

Some questioned whether it could fold up, and whether items would slide off?

A smaller number suggested it might work if the seats were wider.

Suggested improvements/alternatives

During the course of the discussion the community suggested the following improvements and alternatives. The improvements could equally apply to all of the different table options:

- USB socket in wrong place (socket under small table)
- having a deeper cup holder – or just making the surface flat
- hooks on the table to be able to put stuff on
- technology within table to charge phone, smart table
- foldable tables
- notices telling passengers to keep them clean and not to leave rubbish.

Suitable alternatives:

- just having cup holders
- Cambridge tables (like those on Greater Anglia?) have triangular tables
- a range of options, so some bays have small, whilst others have larger tables
- flip up shelf on side of seat.
- combining a perch seat with a table, so duo purpose
- cradle for phone is this possible.
- trains making longer journeys should have different tables.

Post it note feedback from the community included the following comments:

"I'm not sure of the need for a table at all with short journeys, but of the four I preferred the very small one, effectively a shelf. It did not hamper getting in and out of the seat but did give at least a cup stand."

"Prefer very small table/drinks shelf if any, but do not see the need for a table. Will people leave their empty cups etc. Could there be a cup holder at the side of the aisle chair, so everyone has somewhere to put a drink."

"Prefer smallest table as easy to get in and out of seat."

"Either the shelf table an inch higher or no table at all."

"Large tables obstruct passengers' access/egress. Passengers on aisle seats would be reluctant to reach over window seat passengers to use the table. Use proper cup holders if providing space for cups. For short journeys are tables really required."

"Smallest option the best as others not good for tall people."

"No tables."

"The only option that works is the smallest."

"Cup holder rather than table for safety. USB – how easy would it be to reach the USB charge socket under the seat."

"Where do I stow my handbag, on a window seat if the table is there and my bag is on the floor how do I get to it if my phone rings?"

"Passengers will just leave rubbish on them, not needed."

"I think having a fold down table would be practical for wheelchair users."

"Should be fold down."

"Smallest table with no cup holders is my preference."

"Wireless charger within the table would be good."

"Smallest is too small to be useful, prefer larger table in order to be able to put iPad or laptop on."

"I prefer the smallest."

How strong was the evidence behind the suggestion of wireless charging tabletops?

A small number, no more than a couple, of the community mentioned the possibility of using a table surface that could be used for wireless charging. This received strong backing from those that heard the point being made.

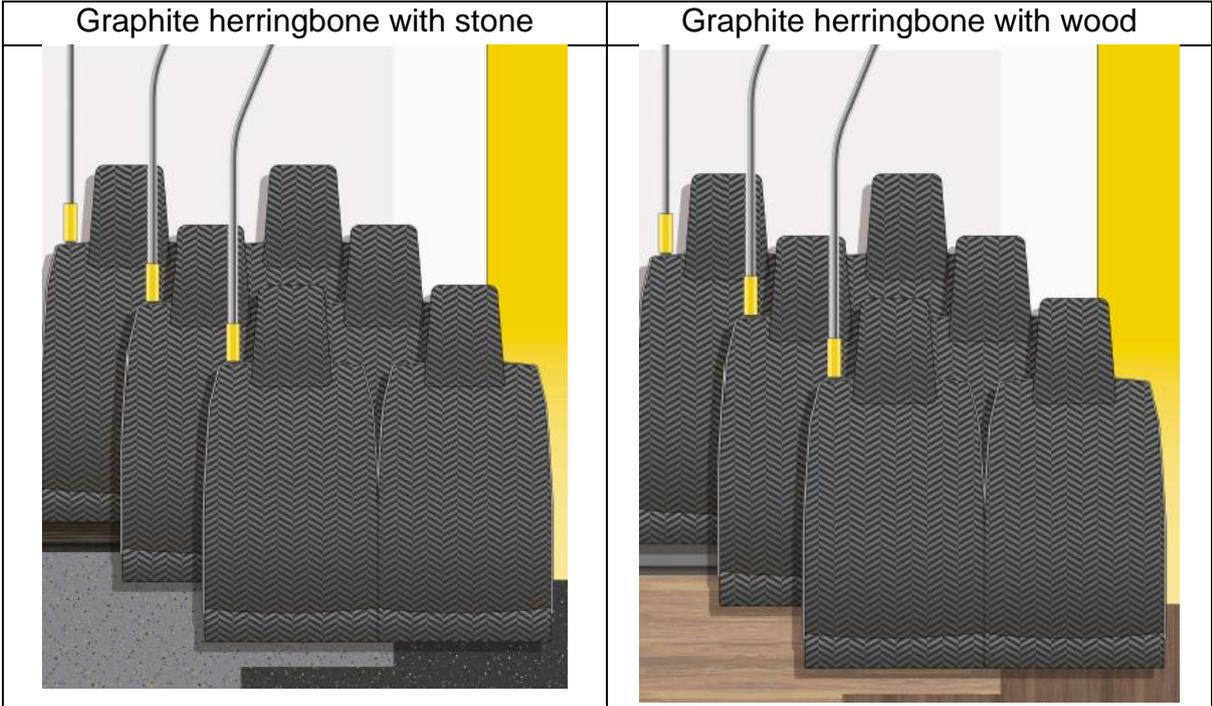
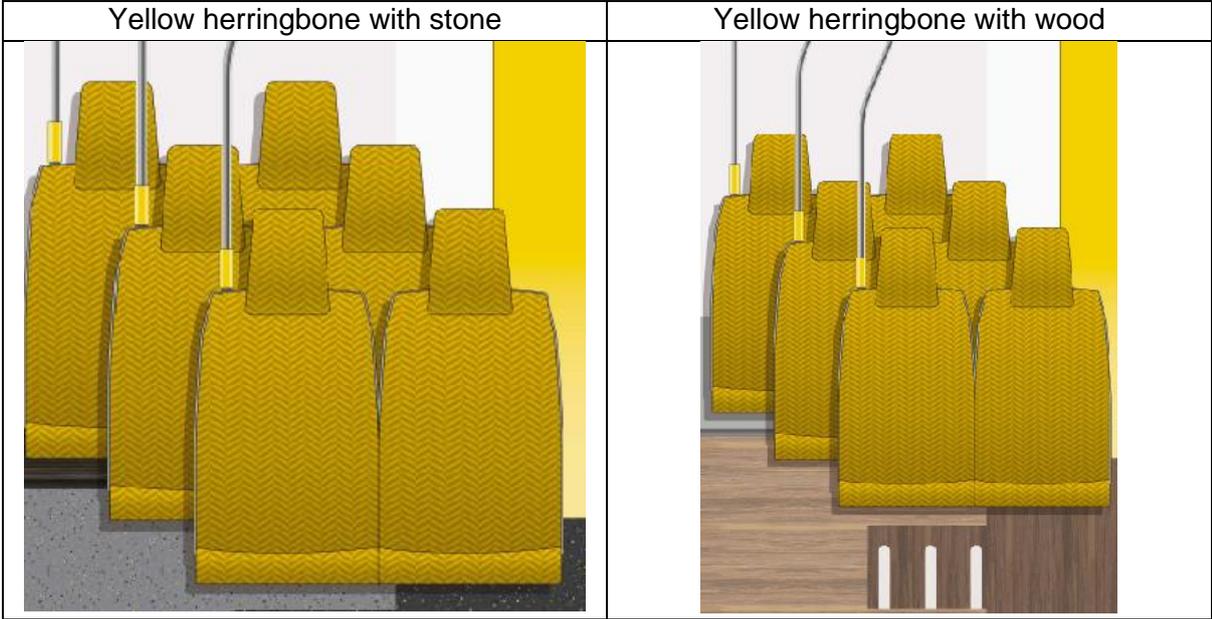
We cannot say that there is strong evidence for this. On the face of it, it would seem like a useful addition to the design. High Street food outlets such as MacDonald's and Starbucks are now making wireless charging available to their customers. Both Apple and Samsung would appear to be pushing this capability in their latest models of phones. Adapters can also be bought by owners for some earlier models of smartphones. However, wireless charging is not as quick as wired and given the short journey lengths on Merseyrail it is hard to say how useful it would be. Wireless charging would also mean that the user would be unable to hold the phone in their hand whilst it was charging.

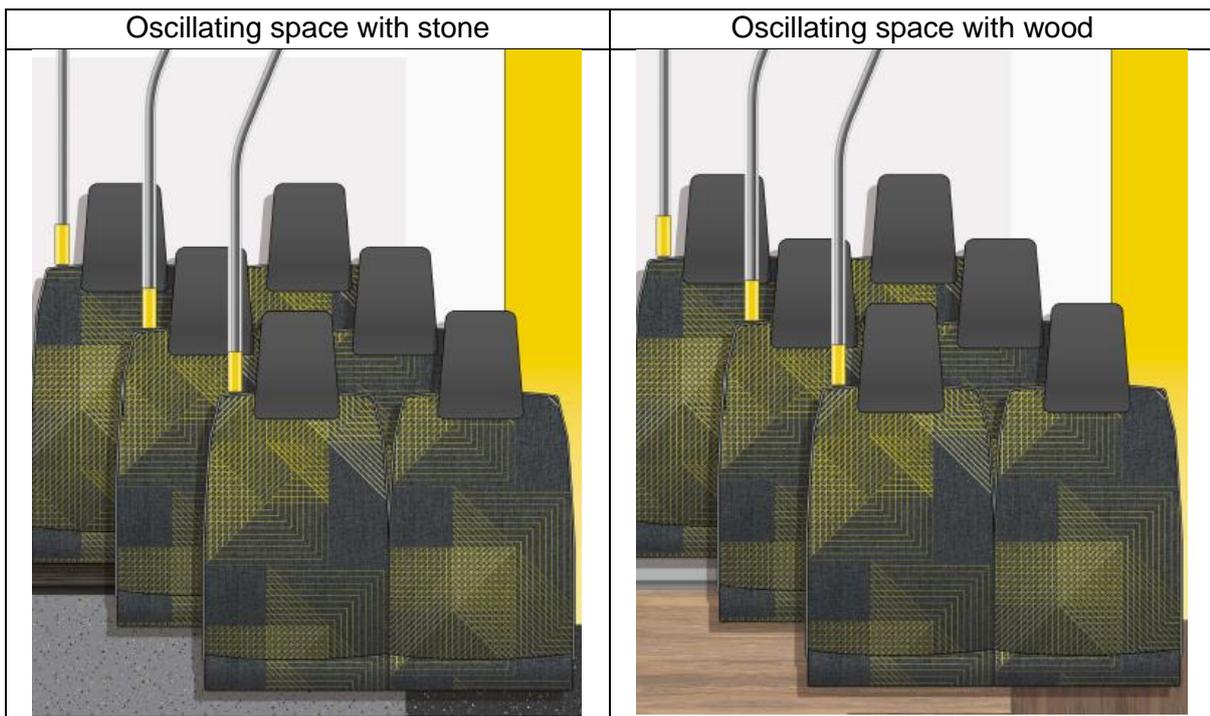
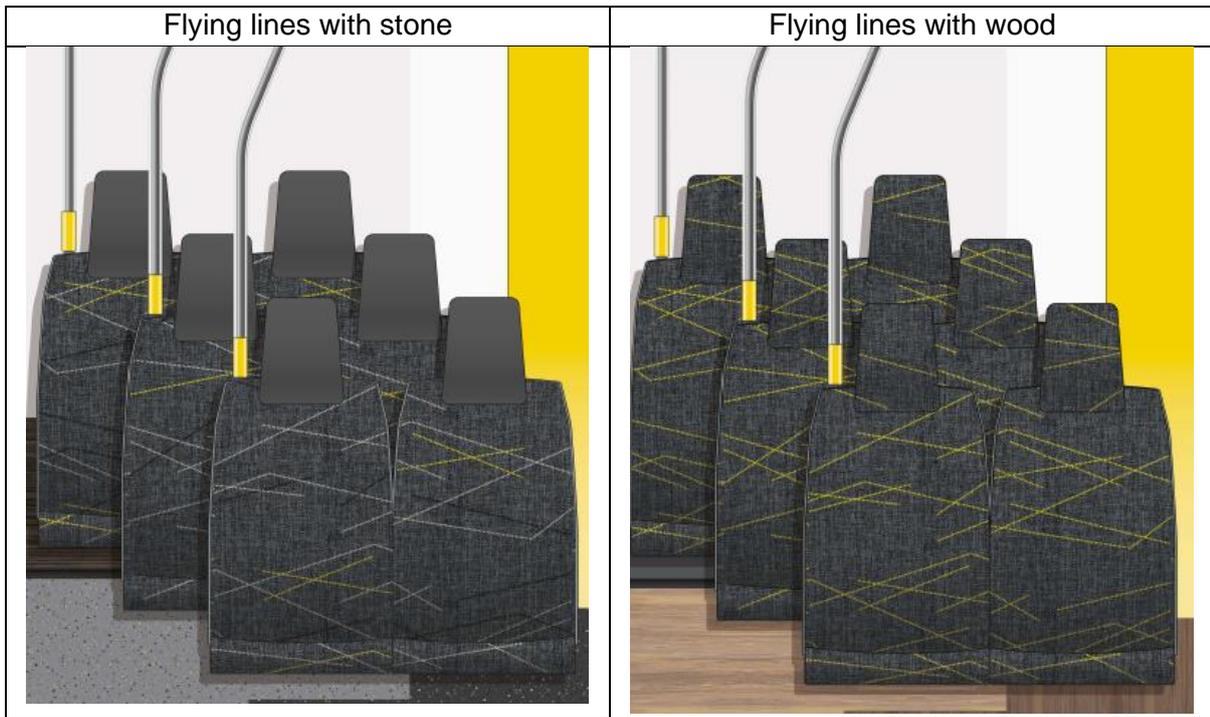
Is there a body of evidence to suggest that locating the charging point between the seats is the wrong thing to do?

The disadvantages of locating the charging point between the seats came over strongly from participants in each of the groups. The notes they made point out how awkward it is to try and plug in charger under a seat with someone sitting next to you.

Appendix 4

Upholstery choice





First - Flying lines with stone came out as the most popular. Whilst 3A overall was the most popular the community would prefer it with a lighter dado panel than the darker wood they were shown pictures of.

Second (based on the strength of reaction in the groups) - Oscillating space with stone. It was the direct comparison with flying lines that caused it to come second. The oscillating pattern was seen by several as 'too busy'. However, the main issue with the oscillating lines is the way they converge on the centre. Altering a pattern like this with less convergence towards the middle

would be preferable. There was also an idea with the oscillating pattern that it should alter on each row of seats, so that the pattern doesn't get 'too heavy'.

Third - Graphite herringbone. There was some concern that the image used may not accurately represent the actual pattern; confirmed by some of the members who saw the book with a more accurate picture. However, as presented, it was not greatly loved, though it was considered better than the yellow herringbone. There was a suggestion that this would have been better with a yellow accent somewhere in the pattern, to break up the grey. If altered it would be more in keeping with the Merseyrail corporate colours and would work with yellow or leather headrests.

Comments from each of the three groups at workshop two, are provided below. Group C did the task first, followed by B and then A.

Group C

Interior of the train:

Option 01A – Yellow Herringbone with stone

Stone flooring was expected as the standard floor on trains. Darker floors were felt to hide dirt and scuffs.

Mustard colour was not great. Will show more dirt. The lighter yellow was seen as better, and more in keeping with the Merseyrail identity.

Clean modern floor. Having a darker floor was seen as more practical.

Option 01B – Yellow Herringbone with wood

The wood was unexpected and seen as 'weird'. It was said that the two together didn't go, and that the wood looked cheap. One group member commented:

"it's not wood full stop – don't pretend it is."

Other comments were that wood looked dated, and that it was more appropriate for a cafe, bar or house. Wood seems too 'sterile'.

Option 02 A – Graphite Herringbone with stone

The seats were seen as too grey and too dark but better than the first option of yellow. It was felt this would be better with yellow or leather headrests.

The group didn't like the stainless-steel bars.

Grey on grey (seats and floor) was seen as 'too much'. The group suggested introducing more yellow.

It was seen as the favourite so far by the majority of the group. Though the pattern of the

Herringbone seat was not nice for some people.

Option 02 B – Graphite Herringbone with wood

The group really didn't like the wooden floor. The seat back was the same as for 02a.

Option 03 A – Flying lines with stone

It was seen to be like an 80s retro design, but in a good way. Whilst it was seen as good now, it was recognised it might not date well. The group liked the headrest being one colour but the seats were felt to be dated. Comments included 'it looks funky' and that is was 'like train tracks'.

It was felt leather type headrests would be a good idea, practical, better for hygiene and feel, and more luxurious. It was felt to look expensive.

This was the preferred option so far by some.

Comparing flying lines with herringbone combinations. The group preferred the grey herringbone but with the yellow headrest to break things up as there was a lot of grey in the design.

Option 03 B – Flying lines with wood

The group felt that there was too much yellow, though some actually preferred this. A solid headrest colour was preferred. The group still didn't like the wood floor.

Option 04 A – Oscillating space with stone

The group generally liked the seat pattern, though there was a suggestion the option could be tweaked with a mild herringbone. It was felt to be 'striking', 'distinctive', 'modern', 'fresh' and 'pleasing to the eye'.

The design was seen to be good, and not retro like the previous one. A lighter grey background was preferred. They liked the square.

Of all the options presented so far this was considered the favourite by the majority of the group and was felt to promote the Merseyrail brand through using the corporate colours. It would help people remember the trains. It was felt that it made the flying lines in the previous option seem more dated.

It was suggested that this design might help those with a visual impairment.

However, it was suggested by some that it would be good to alternate the patterns on each seat. Some were happy with a uniform design of patterns.

Option 04 B – Oscillating space with wood

The group really didn't like the wooden floor.

Comparisons

When comparing with other options the oscillating space was seen to be too busy in comparison with the flying lines, which was viewed as the safer option.

It was suggested that the oscillating space would be good with less lines, so it wasn't as busy.

The herringbone was good but needed a yellow headrest and an accent line.

Oscillating – would be a bold decision! The best tweak to this would be to lessen where the yellow lines converge – 'something that doesn't meet in the middle so much'.

Some of the group would like the steel rails changed to yellow.

Group A

Option 01 A – Yellow Herringbone with stone

It was commented that the design looked like it belonged in a 'kitchen', in a bad way. The yellow herringbone was felt to look dated (70s). The floor was a safe option as it was familiar. Though it was bland and perhaps uninviting

The group expressed a preference for having specific markings to discourage blocking the areas around the doors. In winter months the floor shows up badly.

The use of the Mersey rail colour pallet was seen as a good thing.

Brighter colours were considered to be much better for people with visual impairments, so the use of yellow would be good.

Option 01 B – Yellow Herringbone with wood

The group felt the wood didn't go with the yellow, and that the wood itself would become outdated. The 'fake wood' was not liked, with the majority preferring the stone option.

Option 02 A - Graphite Herringbone with stone

The grey on grey was felt to be depressing with one member of the group commenting 'If you've had a bad day you would be suicidal!' There wasn't enough colour. It wasn't preferred to the last option (yellow seats).

Option 02 B – Graphite herringbone with wood

This was a better option and would break up the colours. The wood floor looked better with the all grey seats but the wood floors in general weren't liked as it felt 'wrong' being on a train.

Option 03 A – Flying lines with stone

This option was really liked by the group and was considered more eye catching than others. The pattern and material were liked, it wasn't standard and felt more modern.

The group didn't like the wood side panelling.

Liked a different, solid colour headrest; it was modern and easy to keep clean.

The design was visually appealing, and not far from current offer. It didn't look 'depressing' like the other option.

The different elements complimented each other.

There was a suggestion that the stone would look good on the side panel.

Option 03 B – Flying lines with wood

The side panel was preferred to that in option 03 A. The wood floor was again disliked.

Option 04 A – Oscillating space with stone

This was not liked, with some comments stating that it looked psychedelic. The design was felt to be 'too busy' with 'loads going on' which might 'bring on a migraine'. The pattern was really disliked.

Option 04 B – Oscillating with wood

This was considered to be the worst option by the group.

Provided the side boards were changed option 03 A was seen as the favourite.

Group B

Option 01 A - Yellow Herringbone with stone

The stone floor was felt to be better with the yellow seats, though some thought the seats were 'dodgy'. The side boards were said to be too dark.

One community member suggested that Merseytravel were missing a good opportunity to change the colours, moving away from the corporate colours. Although this was brought up at the first workshop there wasn't a great deal of support for this.

Option 01 B - Yellow Herringbone

This option provoked a mixed response. Whilst some felt that this was 'even worse than the grey (option 02B)' others said that it was brighter and nicer. Those who didn't like the seats said that it was the herringbone design that was the issue.

One of the group suggested a grey wooden floor option

Option 02 A - Graphite Herringbone with stone

This was considered worse than 02 B, which also provoked a negative reaction. It was considered 'dreary', 'boring' and 'too grey'.

Option 02 B - Graphite Herringbone with wood

The initial response was 'oh no!' with some commenting that the seat design hurt their eyes. However, others commented that they liked the herringbone element. Some felt that it had an industrial look to it.

Other designs were felt to be better, as this was considered gloomy and not as 'interesting' to look at. Again, some didn't like the wooden flooring anyway.

Option 03 A - Flying lines with stone

With this option the group preferred these seats with the wooden floor. This was the favourite seat design, but the group were more split on the floor choices. It was felt the design blended the other features well.

Option 03 B – Flying lines with wood

The seats were not liked in this option, though the pattern was preferred to 04 A by the majority. The grey was seen as too dark and dour and the option needed more and brighter colours. The floor looked complicated and didn't match well with the seats.

Option 04 A – Oscillating space with stone

Whilst practical the floor was considered dreary. The side panel was felt to be too dark. When put together the seats and floor go together better than some of the other options.

The seats were not particularly liked; and the group wanted a different headrest. Although better visually the conversation was strayed towards hygiene. It was seen as better as it provided a plain wipe clean surface.

One passenger asked if there was a need for a headrest if it wasn't safety related.

This option was felt to be visually better with a different headrest.

Option 04 B – Oscillating space with wood

The group didn't like the seats and were not felt to suit the background. As with other groups the wood was not liked by most, and it wasn't felt to go with the seats. The seats themselves were felt to be old fashioned. It was felt to be too dark and dreary, and a result needed to be brighter and cheerier.

Appendix 5

Detailed feedback on cab back wall

Positives

For some, being able to see the driver would make them feel more secure. Those people would choose to sit in the front carriage. They tended to think that the driver could alert someone somewhere if they saw an incident (rather than deal with it themselves).

- The sight of the driver would act as a deterrent to other passengers who might be considering causing trouble.
- Seeing a member of staff, especially if there are to be no guards on trains, was seen as a positive¹.
- The idea of extra light throughout the train was very appealing to most people. Even those who didn't much like the idea overall tended to comment favourably on this when they saw the pictures of the proposed design.
- Many people liked the idea of being able to see out of the front and have a different view of the journey. It was thought this would be especially exciting for young children.
- Looks modern and spacious.
- Someone who had experience on Sheffield trams thought it worked well there and would be happy to see it introduced.
- The idea of Liverpool being the first mainline service in the country to have a transparent wall was seen as a positive by some – cool and leading the way.
- Good for people who feel travel sick to be able to look out of the front.
- Glass that could be turned opaque was seen as a sensible solution to some of the concerns raised. People particularly welcomed the idea that in an emergency it would be activated automatically (for example if the driver applied the emergency brake) rather than that the driver having to do it.

Concerns

Some said that being able to see the driver wouldn't contribute to their security – this was either because they didn't feel nervous/needed reassurance in the first place or because they took the pragmatic view that the driver wouldn't be able to do much if there was an incident (even if he could see it).

- Even if the driver sees an incident should it be his/her job to intervene? Some feared that the driver could be put in a challenging situation that is difficult for them to decide how to deal with.
- The driver could be distracted by what is happening in the carriage – a range of anti-social and drunken behaviours were mentioned as giving cause for concern.

¹ At the time of the research Merseytravel were proposing changes to the roles of on-board staff. This included removing the need to have a second member of staff on-board every train. A decision has since been taken by Merseytravel to retain the second member of staff on each service.

- Many feared that being visible would make the driver a target for anti-social behaviour and that some passengers might see it as a challenge to try and distract them.
- If a passenger tried to distract the driver and he/she turned the glass opaque this could provoke further trouble (and other passengers might be the ones who had to deal with the fallout).
- There were widespread concerns about the impact on drivers. Some people felt that it was something of an invasion of staff privacy or showed a lack of trust in the driver doing their job. Many people said that if the drivers weren't comfortable with the idea then it shouldn't go ahead.
- If there was an incident (such as the train hitting a person) passengers could be exposed to an extremely unpleasant experience.
- If the glass was turned unexpectedly opaque, then passengers might panic/be concerned about what was happening.
- Having to turn the glass opaque is yet another thing for the driver to have to think about.
- Concern that reflections at night could make it difficult for the driver to see.
- Malicious passengers could try and catch the driver doing something that would look bad and record it/put it online.
- Even if there are positives such as increased security or a better view, only a small proportion of passengers in the front carriage would get the benefit.
- 'What's the point?', 'solving a problem that doesn't exist' and 'unnecessary' were frequent comments.

Appendix 6

Detailed feedback on labels

Colour

There was some indifference regarding specific colours; the community did not express strong preferences towards a colour in its own right. Views on colour were in the context of ensuring that whatever was chosen was **noticeable**.

The yellow background in option 3 was divisive, with some in favour for its ability to stand out and for being relevant to the brand. Others disliked this colour choice stating that they wanted to avoid adding more yellow to the train appearance.

There was general dislike of the colour scheme in option 1 where the white background was thought to be bland and not eye-catching enough for an important sign. The blue and grey backgrounds of options 2 and 4 featuring contrasting white text were received more favourably; many felt that they would adequately stand out if positioned on a window. Some did query whether options 1 and 3 would 'look right' as they are not the brand colours. However, generally they were more concerned on the content and positioning.

Look and Feel

There was agreement that options 1-3 were too verbose and not visual enough and the appropriate information could be conveyed clearly in fewer words with the use of icons such as in option 4. However, they emphasised the importance of using the correct images to ensure that they are accessible and comprehensive to any passenger where language may be a barrier such as tourists. The pictogram in option 4 was thought to be a good starting point containing several key pieces of information: what the area is for, how to use it and instructions for passengers who are not the intended users (as illustrated below).

Some felt that if a title was to be used, they preferred the simpler wording of option 1 for both the wheelchair and bicycle areas rather than the wordier versions in options 2 and 3.

Many noticed the arrow on the bicycle icon used in options 1 and 4 and stated that it added confusion to how to correctly store a bike. They felt that an arrow through the wheel would be more useful as an instruction. Another idea was to remove this element of the sign and place a separate label closer to the bicycle hooks. They stated that passengers not travelling with cycles did not need access to this information and that it wasn't essential to be on the main sign.

Tone of Voice

Community members felt that choosing the appropriate language was crucial, particularly when reducing the number of words on the signs. Many thought that 'priority' was a key word to include as something that's understandable and already widely recognisable on transport. However, the group did feel that there were differences between the wheelchair and bicycle spaces, with mixed views over whether 'priority' should be included in both areas, or just the wheelchair space. One group suggested that the wheelchair area could state 'priority by law' whilst the bicycle area could simply say 'priority'.

Some said that 'do not obstruct' along with the image of crossed-through luggage indicated that passengers could not use the area even if it was unoccupied. The wording 'no unattended luggage' was preferred as many felt that it was recognisable language and made it clear that passengers could occupy an area if travelling with large items but must stay with it throughout the journey.

They took a pragmatic approach acknowledging that the majority of passengers travelling on the network would take notice of and follow the signs, therefore the overall message was more important than the exact wording. They stated that a minority of passengers would be likely to ignore the signs regardless of their content.

For the wheelchair area, some were in favour of a more formal and direct tone than the bicycle area, as shown in option 1. A few thought that the word 'please' should be removed as it might appear to 'ask' passengers to move rather than 'tell'. However, others felt that a polite and friendly tone was favourable as offered in option 2: 'please be prepared to move if a customer with a cycle needs to use this area'. They stated that most passengers would show common courtesy towards others and use common sense; therefore, an authoritarian tone wasn't necessary.

Size

Many didn't feel that the labels needed to be larger than the A3 stimuli they were shown, and a few commented that they could possibly be made smaller if they were composed predominantly of icons rather than text. Some stated that their success at being eye-catching may be more down to the colour choice of text and background rather than overall size.

Labels elsewhere

Recognising that the tip-up seats would be a novel feature of the new fleet, some groups had concerns regarding whether passengers would be able to distinguish and identify them, particularly in the instance that they had been left in the 'down' position. Therefore, they saw value in placing small signs in these areas to indicate that they existed. They also stated that if the default was the 'up' position, these signs would not be needed.

When asked about whether the area with tip-up seats should specify which passengers had priority, they stated that it should be used on a 'first come, first served' basis. Whilst they recognised that travelling with luggage, a pram or a bulky item can be challenging, they felt that it was best to avoid adding further complexity by introducing additional rules. They felt that simply having a luggage and buggy symbol in these areas would be enough to act as a suggestion of how to use the area but that specific wording with instructions regarding who could use it was not needed. A handful suggested that these could be placed between panes of glass (as they had seen on the mock-up) to prevent their damage/removal. 'Tip-up seats are an added bonus of the new trains and you don't want a rule book that comes with buying a ticket.'

Many also stated that it would be useful to have signs by seats that have USB charging points indicating that they are there.

Appendix 7

Passenger information on-board – feedback detail

Train plan alignment and station facilities

Passengers liked the concept of having a train diagram that showed how station facilities aligned with the different carriage numbers at upcoming stations, and symbols to show what facilities the next station had. However, given how small some of the stations are on the network there was some questioning of how appropriate it would be to display this for every station. It was suggested that the carriage numbers should be marked on the platforms. Where facilities such as lifts and toilets were out of order it was important that those on-board the train were given this information before disembarking. As with the next stop timings, the importance of real time information was emphasised.

Information relating to the location of lifts was felt to be particularly important for those with accessibility needs, such as wheelchair users or those with pushchairs. An indication of where the dedicated spaces for these was on-board the train was also felt to be important – for bikes as well. In addition to there being some signage on the outside of the train it was suggested that platforms could also be marked up to indicate to waiting passengers where they should wait with wheelchairs or buggies.

Passengers welcomed the idea of a display indicating capacity within the train, so that those carriages with space could be easily identified. On balance however this was felt to be more useful for those waiting on the platforms. With the open plan carriages some felt that it would be easy enough to see where the space was from within the train. A display on the outside of the carriage and perhaps on platform screens was felt to be of more use. There should also be some indication on the outside of the train whether the bike and wheelchair spaces were occupied.

All passengers agreed that a visual and audible indication as to which side of the train the doors would open was important to have.

Interchange information/onward journey connections

The suggestion that passengers might be given information about onward travel received a mixed response from the groups.

Whilst platform numbers and minutes until departure were considered useful on the approach to interchanges, for those connecting with other trains services, the potential to extend this to bus information was met with less enthusiasm. Some passengers pointed out that not many bus services actually linked to trains 'so there didn't seem much point'. Others felt there was a danger of providing too much information – showing lots of connections that many passengers would not need. The exception being Liverpool South Parkway where connection information for links to the airport was felt to be of particular use – the status of flights was also felt to be useful for those heading to the airport. It was suggested that information on the ferries might prove useful at relevant station stops.

Even though those making unfamiliar journeys often pre-planned their routes, the provision of such information would provide reassurance/comfort.

Passengers questioned how this might work at stations managed by other operators such as Arriva.

Delays

As with other research Transport Focus has conducted, passengers were keen to be notified of any disruption as soon as it impacted their journey and within two minutes if the train had come to a standstill. In such circumstances they would want to know why the train had come to a stop and how long the delay was going to last. They also wanted reassurance that assistance would be provided if necessary.

Passengers valued 'truthful' messaging; though they appreciated that in some circumstances this might not be appropriate, for example with suicides. Hearing from a human voice was also felt to be important as it conveyed more empathy/sincerity.

If delayed passengers would like to know whether connecting services were also impacted, and which platforms to go to at the interchange station.

The need for audio announcements to replicate visual information, and vice versa, was considered important.

CCTV

The proposal to display live CCTV images from within the carriage received widespread support, though some questions were raised about how this would operate. Passengers were keen that steps be taken to ensure that the CCTV images provided were of evidential quality. They raised the following observations/concerns, though no-one was opposed to the use of the images inside the train:

- whether those passengers intent on causing harm to others be able to work out where the dead spots are from the images displayed or use the footage of other carriages to target vulnerable passengers
- from the diagrams shared there didn't appear to be any cameras pointing towards the driver's cab
- it would be good for passengers to know how many cases of anti-social behaviour. had been successfully won in courts as a result of CCTV footage – so helping prove its worth.

News Feed

The groups discussed whether it would be desirable for some of the screens to display a news feed/news channel. The idea provoked a fairly negative response. Many suggested that people already use their phone if they want to access news, whilst others explained that they enjoyed the train journey because it provided an opportunity to escape from all of the bad news going on in the world. Others pointed out that certain news items might prompt, unwelcome, heated debate amongst passengers.

If there was a large-scale security incident passenger felt it would be good to receive some sort of alert pointing them towards news websites or other information. A passenger recalled seeing this in Paris following a terrorist attack.

On the other hand, other passengers felt that news that affected local travel would be important. As an example, a reminder that there was a football match taking place, or marches in the town centre, would enable people to plan their travel outside of the busiest times.

Adverts

The suggestion that some space could be given over to advertising, even if only for a short period (as the information would rotate) was unpopular. The opposition was fairly consistent, though some would be more accepting if the advertising were relevant to local amenities and events. Local restaurants and coffee shops were favoured over multi-national/chains.

Some questioned whether the advertising revenue would bring down the cost of fares and were keen to know what would happen to the revenue generated.

In all cases, except where consideration for those with hearing impairments was given, passengers did not want the adverts to have sound.

Additional points raised

- In each group there were calls for audio announcements to replicate the information being provided on the screens. This would be particularly important during live disruption. However, given the frequency of stops and extended level of detail that could be provided there was also some discussion around not overloading passengers with information – particularly audio.
- The step free access the new trains would provide was welcome; but those who might still require assistance/reassurance should not have to look at phones for updates. Information and assistance should be provided proactively by staff.
- It was suggested that there should be some thought given to providing bilingual information during an emergency.
- For those who have difficulties with literacy there was discussion around whether an alternative map could be provided that used either numbering or symbols for each station.
- Whilst not everyone used Twitter an output feed from Merseytravel/rail could be useful
- Passengers wanted reassurance about the type of digital display that will be used as some were not good in direct sunlight. There were also questions about quality/lifespan of the screens.
- Although it was commonplace on the railway not everyone understood the 24-hour clock; particularly those with learning difficulties. Thought needed to be given to providing both the 24-hour and AM/PM format.

Additional detail on the dynamic route map

- There was a clear view amongst all groups that the station shown as 'next' (whichever option) should change once the doors are locked and as the train is pulling out of the previous station.
- It was not entirely clear why there was such a clear preference for showing the whole route as in option 1. Participants accepted (objectively) that seeing stations already visited was of limited value to those who already knew the network. There was however, still a very clear preference for them to be shown. Some suggested that this would be useful for visitors and comparisons were drawn with information on London Underground. There was also a small number who thought that seeing the whole route might also help reinforce what direction the train was travelling in.
- There was a suggestion that stations already visited could be 'greyed out' to help indicate direction of travel; or dimmed.
- There was a clear preference for numbers showing minutes to the next station (option 1), rather than actual time due to arrive at stations (option 3). Participants expected these numbers to count down as train progresses towards station.
- There was some discussion about what would happen if the train was stationary for some time because of a problem. It was largely accepted, for example, that showing five minutes would mean five minutes travel time once the train got going again.
- The consensus amongst all groups was that it is unclear, especially to unfamiliar passengers, what the 'dotted line' on option 2 and option 3 meant. Though some guessed it meant some stations were not being displayed other guesses included that it might mean the train was going underground from that point, or that it was running fast. A possible fix of stating the number of station stops not displayed might help.

There was discussion about if/how stops being skipped (timetabled or reacting to disruption) should be displayed. It was suggested they could be 'greyed out' or shown with a red cross through the name.

In the event of disruption, it was thought that a 'BBC news style' ticker tape should display the reason for the disruption. This would effectively replicate the pre-recorded announcements made at stations when trains are delayed rather than any 'live' driver announcements. It was pointed out that those with hearing impairments, or wearing headphones, could easily not hear information provided by the driver/guard over the train PA.

Participants also wanted to be notified if there was disruption on other lines (possibly rainbow board style) to help inform their interchange decisions.

There was a suggestion that on option 1 lifts/accessibility information could be shown with an icon at the end of each station name. Otherwise, the group was generally keen that option 1 remained clear of 'clutter'. Again, reference was made to the tube map and the way it displayed fully accessible stations.

There were mixed views on 12-hour vs 24-hour clock. One group felt it should be 24-hour as this mirrored the way the industry displayed timetable information. It was suggested that the style of clock ('flip-style' with a line through the numbers) may make it harder for visually impaired people to read.

There was some discussion about the example which showed the train destination as West Kirby. Moderators were told by participants that the train operates in a loop; West Kirby – West Kirby. It was therefore suggested that the train destination should (as current trains do) switch at James Street from being a Liverpool train to a West Kirby train. Some thought it would help if the loop was displayed visually as it is on current network maps.

There was a suggestion that the black background was not ideal in terms of making the other lines/colours legible. Particularly for those with colour blindness.

Other/miscellaneous points:

The groups suggested it would be useful to have option 1 shown on screens at stations – participants were keen to know not just the minutes until the train arrives, but also where it was on the route.

Some participants were keen that the static network map should still be made available on the train.

All groups were asked about the recorded voice used for automated announcements. There was no clear consensus on who it should be, but it was clear that it shouldn't be too local/'scouse'. This was felt to be important for the sake of clarity especially for visitors. No-one suggested that the current voice needed to be changed.

Key questions answered:

Which of the three options gives customers the level of information they would want to see?

Of the three options presented option 1 was the clear favourite, though each of the groups felt that it would benefit from additional information being provided.

Do the group feel that viewing the whole line, including stations already travelled through is useful (as shown in option one) or not (as in shown in options two and three)

There was a clear preference in each of the groups to be able to see the whole line of route, including those stations called at. But this was in conjunction with additional information screens and there were concerns about legibility.

Do the group feel seeing the time to the next station would be most useful (as shown in options 2 and 3) or do they prefer to see this information for the rest of the journey (as shown in option 1)

All groups agreed that it was preferable to have 'minutes to' displayed for each remaining station on the trains' journey.

In what circumstances do the group think the view of the map should change? When should the station travelled through disappear - on the approach to the station, at

the station or on departure?

If using a combination of option 1 and option 2 the groups felt that the information displayed on option 2 should change as the train was departing a station.

Overall, what was the panel's favourite option?

Option 1.

Would a combination of the options above be preferable?

The ideal would be a combination of option 1 and option 2. The latter being particularly useful as a train approaches and departs a station.