Future Merseyrail rolling stock
Passenger influenced design
October 2020

Transport Focus foreword

Transport Focus has long argued that passengers' views should be factored into the design of new trains. Involving them throughout the design process will help ensure they are fit for purpose from the end users' perspective. We were therefore delighted when Merseytravel approached us in 2013 to conduct research on the design of its proposed new trains. Our agreement to work together on the project hinged on the ability of passengers to have a genuine influence over the final design.

The industrial design and the procurement process that followed, demonstrated that Merseytravel listened to the results of the first stage research. Most obvious, was the welcome attempt to address passenger concerns over the gap between the train and platform. And Merseytravel's insistence that the appointed manufacturer incorporate the first and future stages of research into its work.

After appointing Stadler as manufacturer, Merseytravel came back to Transport Focus to discuss a further stage of work. They were convinced by our earlier proposal that passengers should continue to input into the look, feel and functionality of the new trains as they took shape.

We felt that the best way to achieve that, was to recruit a passenger community for a combination of online and workshop tasks. Passengers who had experience of the existing trains, who travelled at different times of the day/week and for different purposes.

Amongst many things the community tested and gave feedback on two train mock-ups. As a result, in addition to the platform train interface, they have helped influence:

- The selection of seat model and width. How those seats will look and feel.
- The layout of different seat types in the designated areas – the bike and wheelchair spaces. They spelt out how those spaces should be demarcated, and their intended use communicated to fellow passengers.
- The colour schemes of the train both inside and out.
- How new 'flexible' spaces should be used. Improving the experience of those travelling with pushchairs or luggage.
- What content and format of passenger information (both live and static) is to be displayed.

The influence of the passenger research on the end-product should hopefully be clear to anyone who uses one of the new trains. We encourage other bodies responsible for designing and procuring trains to adopt a similar approach, putting passenger feedback at the heart of decision making.

Ian Wright, Head of Innovation and Partnerships at Transport Focus

Merseytravel foreword

The replacement of the Merseyrail fleet has provided a unique opportunity to place passengers at the heart of the design process. These trains have been procured and will be owned directly by Merseytravel on behalf of the taxpayers of the Liverpool City Region. They are intended to remain on the Merseyrail network throughout their working life which has created a clear opportunity to explore how they could best be adapted to the specific needs of our network.

Since the origins of the project, Merseytravel has wanted to ensure that the views of Merseyrail passengers have been understood and used to develop the specification and design of the new fleet. The two phase approach that we have taken, working with Transport Focus, has enabled us to achieve that ambition. What became clear throughout the process is that passengers' opinions are far from uniform and that clear-cut choices are rarely available. Through structured research, we have been able to make informed choices into design features and, in our opinion, refined and improved on our original concepts. As a consequence of this work, we are confident that our new fleet reflects the aspirations of our passengers.

On a personal note, I clearly recall from my interview for this position back in 2012 being asked by Merseytravel's chairman what features I thought Merseyrail's passengers would want on the new trains. My response was 'I don't know, but it's a central part of the job to work that out.' This body of research encapsulates that approach.

I would particularly like to thank all of the participants in the process, including Transport Focus, Merseyrail and Stadler but most importantly all of the passengers who have participated in both phases of the research. Your views have made a big difference.

David Powell, Rolling Stock Programme Director at Merseytravel

Merseyrail foreword

It has been a pleasure to work with a wide range of customers from across the Liverpool City Region to help develop, what we believe, will be the UK's most co-created train experience. Their input has had a direct impact on the final design of the new trains in a large number of ways from the type, shape and size of seating on offer to the digital displays that will help keep customers informed as they travel around the network in the future.

Transport Focus has helped both Merseytravel and Merseyrail to understand our customer's preferences in an engaging and innovative way. We believe that when the first trains roll out in 2020 the people of the city region will agree that the new trains benefit from this collaborative approach.

This is supported by the positive feedback received from over 12,000 customers that visited the mock-up of the train during 2018 that featured all of the key elements that our customers have helped to design.

Greg Suligowski, Head of Customer and Stakeholder Experience at Merseyrail

The role of the three organisations

Transport Focus is an independent watchdog for transport users. Our mission is to get the best deal for passengers and road users. With a strong emphasis on evidence-based campaigning and research, we ensure that we know what is happening on the ground. We use this knowledge to influence decisions on behalf of passengers and road users to secure improvements and make a difference. We designed and ran this research project, and have compiled the views of the passenger community, who we recruited, on the design of the new Merseyrail train fleet.

Merseytravel is the executive body that provides professional, strategic and operational transport advice to the Liverpool City Region Combined Authority to enable it to make informed decisions. It is also the delivery arm, making transport happen. It oversees the public transport network and is responsible for coordinating bus and rail services and maintaining transport infrastructure. Merseytravel commissioned Transport Focus to run this research project so that the views of passengers could be captured and then used to shape the final design of the new trains.
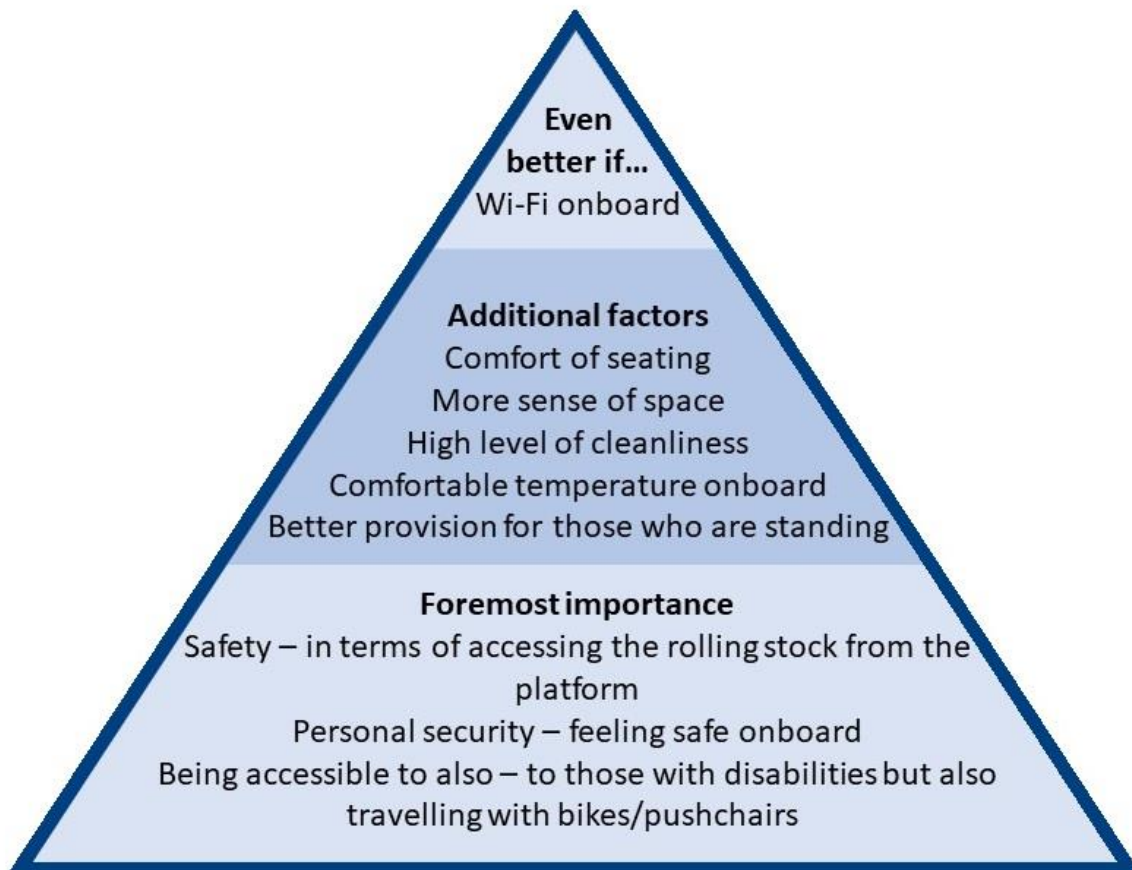
Merseyrail (a 50:50 joint venture between Serco and Abellio) were appointed by Merseytravel to run the Merseyrail Electrics network in 2003. It operates over 600 regular services per day, every 15 minutes, to 68 stations throughout the Liverpool City Region. The network carries over 100,000 passengers on an average weekday. As the current operator, Merseyrail helped develop and facilitate the design of the tasks the community were asked to undertake.

Introduction

In a welcome move, before embarking on a new rolling stock procurement process, Merseytravel asked Transport Focus to conduct research to understand passengers' views on what the new trains should look and feel like.

Qualitative and quantitative research was conducted and the findings were fully reported in 2014.[1] This research identified areas that were of key importance to passengers in terms of the design. Without addressing those areas the new trains would likely disappoint passengers and not be considered a marked improvement. Those areas identified could be split into two: those that were important for enabling travel, and those which would make journeys more pleasant. These are shown in the diagram below:

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[1] https://www.transportfocus.org.uk/research-publications/publications/future-merseyrail-rolling-stock-what-passengers-want/

Even better if...
Wi-Fi onboard

Additional factors
Comfort of seating
More sense of space
High level of cleanliness
Comfortable temperature onboard
Better provision for those who are standing

Foremost importance
Safety – in terms of accessing the rolling stock from the platform
Personal security – feeling safe onboard
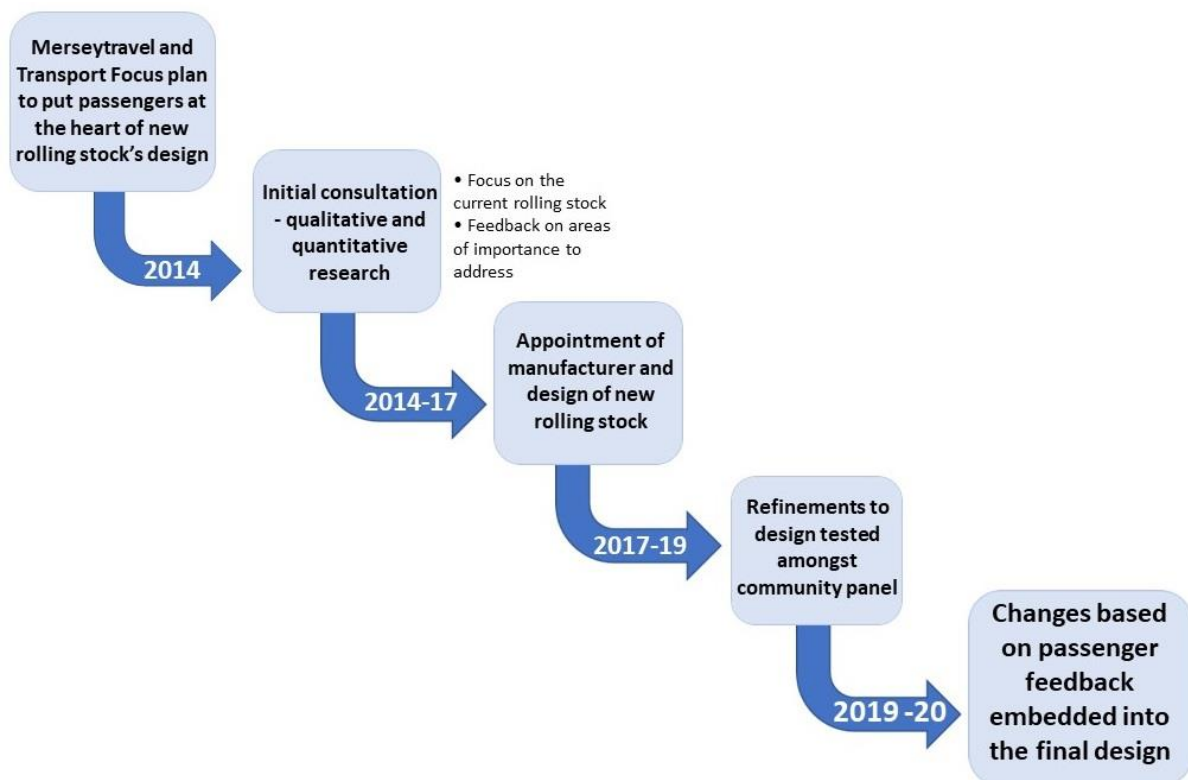Being accessible to also – to those with disabilities but also travelling with bikes/pushchairs

The initial steer from passengers helped Merseytravel develop a specification and an industrial design, against which manufacturers were invited to bid. Following the appointment of Stadler, a second stage of research was launched in 2017 to give passengers further influence over key design decisions.

An online community was established in order to provide passenger insights around specific parts of the design to ensure that the views of passengers were embedded in the build process.

This report summarises findings from this second stage of research.

The experience of being part of the community was a positive one for those passengers involved. They felt the experience reflected well on Merseytravel and Merseyrail. More detail around the experience and viewpoint of the community can be found in section 8.

"I've thoroughly enjoyed taking part in the workshops over the past year. Merseyrail should be congratulated for making the effort to consult and listen to their passengers. It has been encouraging to actually see many of the ideas and suggestions that have been put forward by the group implemented in the final design. I'm looking forward to travelling on the new stock."

Merseytravel and Transport Focus plan to put passengers at the heart of new rolling stock's design

2014

Initial consultation - qualitative and quantitative research

• Focus on the current rolling stock
• Feedback on areas of importance to address

2014-17

Appointment of manufacturer and design of new rolling stock

2017-19

Refinements to design tested amongst community panel

2019 -20

Changes based on passenger feedback embedded into the final design

Findings in this report should be viewed in the context of a programme of research, a journey to ensure that, as much as possible, the final design meets the needs of rail passengers in the Liverpool City region.

Method and sample (stage 2)

A diverse and representative selection of 40 Merseyrail passengers were recruited to join an online community and to take part in face-to-face workshops. In total they were brought together for three face-to-face workshops and set eight online tasks. These related to seating, exterior and interior design and the overall look, feel and functionality of the interior of the train.

The workshops provided the opportunity for community members to pose questions to Merseytravel and Merseyrail, and to discuss the designs in greater depth. Online tasks were often extensions of those discussions, as well as stand-alone subjects.

Findings from both the workshops and analysis from the tasks undertaken by the community are provided in this document.

Some of the themes cut across different areas. For example, accessibility was a key concern raised in the 2014 research in respect of boarding the train. It was also discussed in many of the topics considered during the second stage such as seating, posters, flooring and livery. For ease of navigation, findings are grouped into several chapters by area of the train, not area of need, as outlined below:

- livery

- use of space
- seating and tables
- carriage interior
- communications tools
- passenger information
- experience of panel and overall views.

The report covers all the main findings. Any further information gathered and reported to Merseytravel during the research can be found in the Appendix.

Summary of key findings

1.1 Livery

The community identified the need for accessibility symbols to be clearly visible on appropriate parts of the train, as well as a moderately sized logo. Buttons to operate doors should be easy to press for those with dexterity issues.

The need for the doors to visually stand out, as well as a sleek design were the main factors determining the choice of colour scheme. Yellow is a slightly polarising colour and the design which incorporated yellow to define the doors against a grey body of the train was more popular than the reverse.

The community suggested additional artwork to provide a sense of local identity to the train. There was a positive reception towards the ideas presented by Merseytravel once they had opportunity to work-up some designs.

It was felt that the design(s) chosen need to balance the look of the train and also have a resonance beyond the City of Liverpool.

1.2 Accessibility

Seating options in the wheelchair and bicycle areas were tested. The importance of accessibility to all and designing out the possibility of conflict between passengers was a very clear message from the initial research on the current rolling stock. There was no strong consensus for any individual options that Merseytravel presented. However, the reasoning behind their answers was used by Merseytravel to decide on perch seats being available in the bike area and no seating in the wheelchair area.

The need to clearly signpost and provide instructions for use of these areas was thought to be fundamental for ensuring that those who needed to use them (those using a wheelchair or travelling with a bike) were able to do so. There was a clear preference for strongly delineated flooring and instructions to passengers that were polite but firm, and succinct.

Provision for luggage and pushchairs was highlighted by passengers as having the potential to cause congestion. The community welcomed the additional space available in the vestibule areas, aisle, and the storage under seats – all with some

caveats. The tip-up seating areas which could also accommodate luggage were welcomed. Based on community feedback Merseytravel made the decision to accommodate these at intervals throughout the train.

1.3 Seating

The provision of comfortable seating is clearly a vital part of the design to get right. The community was consulted on the layout of seating and overall seat design and viewed two different mock-ups during the research. The first demonstrated a small range of seats, all of which could have been procured by Merseytravel. The second, showed the final design that incorporated the community's feedback on the first.

A fabric upholstered seat with support for the head was preferred. Using the mock-ups the community was pleased at the width and the comfort of seats. Tables were not thought to be a useful addition unless very small. The position of USB charging points needed careful consideration and potential labelling.

As with the livery, reactions to the colour scheme were influenced by the overall look of the design, potential for keeping seats fresh and smart, as well as reactions to the yellow component of the Merseyrail branding. More were drawn to the options that were predominately grey with some yellow highlights than the reverse. And whilst a light and bright carriage was important, the need for seating to avoid becoming visibly dirty whilst resisting any wear and tear was strongly expressed.

1.4 Flooring

Overall, the preferred design (presented at workshop two) was 'flying lines with stone'. However, the community suggested that a lighter colour dado panel should be used, rather than the dark wood that was shown to them. The strongest objections were towards those designs that showed a combination of wood flooring and wooden side panels, which were disliked by the community.

1.5 Cab back wall

The Merseytravel proposal of a transparent window on the driver's cab back wall to allow light to pass though the carriage and provide a view of the oncoming track to passengers was for many (at the initial workshop) surprising and thought provoking. Although it had some aesthetic and security benefits, reactions suggest that assurances would be needed on safety and staff readiness for passengers to fully embrace this.

1.6 Communication tools

The community could see the need for posters on board – for safety, security and bylaw notices in particular. The promotion of rail travel and information on travelling by train was also thought to be useful. There was less appetite for advertising – though the community indicated that they would be more tolerant of adverts if the advertising revenue was invested back into improving services. They would also be more tolerant if the advertising was for 'local' ads, for example, for nearby attractions and points of interest.

There were suggestions for advertising space to be given over to local community groups or events.

The preferred positions of posters were influenced by visibility and the need for the train to avoid appearing too 'busy'. Some positions – on window columns were less popular than other potential locations such as car end walls and overhead panels.

A mix of paper and digital seems to be appropriate. Paper was seen as a good medium for information that doesn't rapidly change and for important information that should not be compromised by any technological failure.

1.7 Passenger information
There were overwhelmingly positive reactions to the proposed dynamic route map. Further developments of the concept showed that a map with the entire route, toggling with upcoming destination information, was considered a good combination to pursue.

Train plan alignment with station facilities and information about delays were both highly valued. Live CCTV footage within the carriage was welcomed although there were questions over how it would work. Some of those concerns were offset by the explanation that the CCTV would be monitored remotely. It was also explained to the group that when a passenger alarm was activated Merseyrail's security team would see live footage of the passenger activating it.

Quantity of information was something to be balanced - too much interchange information was not thought to be helpful and newsfeeds (unless highly relevant such as in an emergency) and adverts were not considered helpful by most.

1.8 Overall experience
Community members expressed a strong sense of pride in the development of the design and welcomed their involvement in the process. The process has allowed the development of ideas and ensured that the views of passengers have been central to decision making with regards to the rolling stock design.

"The final thing I will say that it has been a pleasure to work with Merseytravel, Transport Focus and especially the members of the panel that have come together to help agree on ideas and solutions for the trains."

Livery

The external look of the train did not emerge as being something fundamental to address by passengers to improve journeys. That said, any new rolling stock would be expected to deliver a new and fresh look. Four different livery options were revealed to community members at the initial workshop to critique. A subsequent online task which took account of feedback at the workshop asked the community to consider revised proposals. For clarity the findings are split into two parts.

2.1 Reactions to initial designs (workshops)

Four designs were presented to the community in the workshop. The community commented on the colours and designs of the individual options.

<u>Specific points on individual designs</u>

Option 1:

- Some thought that this looked too similar to the current 'boxy' train design, and that the new fleet should look 'sleeker' and more noticeably different.
- The doors seemed to blend into the background colour of the train and perhaps would be better in yellow. All doors should be the same colour.
- Many preferred the front of the train in option 1 to the other designs, indicating that it should also feature the destination and 'M' logo.

Option 2:

- The large 'M's in yellow and grey were disliked by all groups. They expressed that they do not associate them with the brand and think they are too large to notice what they are from the platform. Additionally, it was noted that the diagonal lines could contribute to disorientation when a train passes through a station at speed.
- Some felt that the contrast of the yellow doors against the grey background looked effective and may help to orientate a passenger rushing onto the platform to catch a train.

Option 3:

- The predominantly yellow background was controversial with some of the community liking it and some disliking it. Those in favour found the design to be cheerful, on-brand and different to existing trains. Those against thought that there was too much of one bright colour and it might not be what a passenger wants to see on a 'dreary morning commute to work'. Some also expressed concerns about yellow showing up dirt more easily.
- Some identified the fact that the door colour contrasted the background colour and noted that it was a positive element of the design to ensure they are easily identifiable.

Option 4:

- The diagonal shaping of the yellow and grey design was universally disliked; some felt that the benefit of the colour contrast on the doors was lost.
- Upon seeing this design, some commented that they preferred the combination of yellow and black over yellow and grey for being bolder and less bland.
- As with option 1, the design on the front seemed brighter and sleeker than options 2 and 3. Some of the community stated that the front could be more noticeable by featuring more yellow.

Other observations
There were other observations that were not specific to any particular design, but related to symbols, logos and the door open/close button.

Bike and wheelchair symbols
Bike and wheelchair symbols indicating the appropriate place to board if a passenger requires one of these spaces were universally viewed as valuable for all passengers. The view was that those in need of this space are directed to the right place, and those not in need can take the decision to board elsewhere.
Some were in favour of a white on blue wheelchair symbol stating that it was more recognisable (based on premise that this is a 'universal symbol') and commented

that the height of the symbols should be appropriate to those in a wheelchair. Some suggested implementing a similar system for prams.

There were some questions raised over whether the symbols would obstruct the view of those boarding and disembarking, however, the consensus was that these symbols would be valuable nonetheless.

Merseyrail logo
TheMerseyrail logo ('M' in a circle) was seen to be sleek and recognisable of the brand. It was thought that this should be repeated across carriages and on the front of the train. Most people didn't notice the 'M' on the front of the designs until it was pointed out, and even then, said that it wasn't recognisable in its current form and should be the 'M' in a circle.

Buttons
Buttons on the doors should be easy to press for those with dexterity issues. This was seen as even more important when the community discovered that the doors would not automatically open at every stop. Touch sensor buttons were raised as an option.

Driver's cab
An easily identifiable driver's cab was noticed in most of the designs. The community highlighted this as being important for passengers to clearly see the difference between the carriages and the location of the driver.

Additional suggestions from community members during the workshop included:

- Artwork in vinyl on the side was suggested as a way to brighten up the basic design in a non-permanent manner (this idea was later extended by Merseyrail).
- Colour of gap closers[2] could contrast a grey background if coloured yellow.
- Naming the trains was brought up by several groups and generated discussion.
- Destination name on the doors would be a useful addition if the doors are to open by sliding out over the exterior of the train - as demonstrated by a virtual reality presentation at workshop 1. Additionally, a PA system on the train exterior by the doors was suggested.
- Passenger Information Displays (PIDs) provided on the sides of the trains.

2.2 Reactions to revised designs
After digesting and acting on the findings from the workshop, designs which incorporated feedback from the workshop were sent to the online community for further evaluation. There were two elements that members commented on: the

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[2] Strip of bodywork running along the length of the carriage, designed to narrow the gap between the train and platform

overall livery and specific elements relating to local artwork (a suggestion from the workshop).

The two overall designs tested are shown in the following image. Community members were asked what their general preference was between those designs and explain why.

Options presented to the community online:

Q1. Which option do you prefer? Why?

Option 1.0
Yellow & grey combination

Option 2.0
Full yellow

The majority of community members had a preference for option 1.0. The reasons for this choice were given as:

- good balance of colours
- subtle, classy, smart, aesthetically pleasing
- in keeping with Merseyrail branding
- not overwhelming in use of yellow
- effective use of yellow to highlight doors
- very clear for those with impairments
- easy to find right part of the train quickly
- grey colour at base of train would mean the train did not look 'dirty' (conversely there were observations that the yellow would quickly start to look dirty).

Option 1 did not have universal appeal. There were those who found it a little 'dull' and 'boring' and some preferred the alternative as 'bright', 'eye-catching' and having 'good stand out'. One community member observed that the gap between the train and the platform was clearer for option 2. The yellow against the platform contrasted strongly against the platform, unlike the grey on grey which did not.

However, those who did not select it as their preference frequently commented that it is just 'too yellow'. Other comments were that it was 'too bright', 'garish', 'annoying' and that it did not allow sufficient stand out for the doors to be easily noticeable. As mentioned, yellow was not a popular colour and as a result, there were those who were not very keen on either variantand found it hard to choose. But, where they did, they gravitated towards option 1.

Yellow & grey combination

This suggests that of the options presented, option 1 has the widest appeal and balance of colours.

"Yellow and grey, as I think this makes best use of the bold yellow without the colour overpowering the train. I also think this takes on board what was discussed within my group on the workshop day where it was highlighted that current passengers with visual impairment are accustomed to identifying the doors on the present trains as being bold yellow, and these stand out to these passengers as such."

"The full yellow option looks a bit too, well, full! I think option 1.0 is a little more subtle. It retains the distinctive Merseyrail yellow, while not inducing a headache."

"I prefer option 2.0 because yellow is the colour of Merseyrail, and it makes the trains stand out a lot more."

Local artwork
Local artwork was suggested in the workshop (by passengers) as a way to add relevant interest to the design. Merseytravel took this suggestion and developed two potential artworks. These were also shown on both the livery designs for feedback.

There was a very positive reception towards both the concept of the artwork extension to the livery as well as to the designs tested. A majority of community

members said that they liked what they saw. Reasons for this included:

- adding a 'local feel'
- bringing a welcome sense of local identity
- being personal
- making the trains 'unique'
- having some standout
- appeal for tourists/visitors/showcases.

"I LOVE the artwork depicting the Liverpool skyline and iconic buildings. Fantastic idea and makes it totally unique to Liverpool!"

There were two versions presented to community members in the task that can be seen in the images shown – Liverpool 'skyline' and 'signature'. 'Signature' consisted of a small number of images, such as the Liverbird and a silhouette of the Anthony Gormley figures on Crosby Beach.

There seemed to be a balance of opinion towards the 'skyline'. 'Skyline' was liked for being a relevant and appropriate local image and also for the way it fitted on the overall livery/train exterior. Those who liked it expressed that it was:

- representative of the city/showing the iconic skyline
- neat/regular/worked well on the bottom of the train
- grounded in the local area.

The 'signature' images were preferred by some, for being instantly recognisable and

interesting, but attracted the following criticisms:

- the 'liver bird' was too closely associated with Liverpool (city) or Liverpool FC – any Liverpool FC association either needed to be balanced with other club emblems and/or considered very carefully as it would be a big put off for some
- some thought it was too large an image
- only some identified the 'men' as being the Anthony Gormley work, but not all were clear about what it represented.

The artworks were not polarising. There was crossover andsome liked both. There were also common observations and queries:

Colour
Those who preferred the 'option 1' livery (grey underside) felt that it had better standout for the images. There were some who felt that the 'subtle' look portrayed in the images they were shown was appealing, but for others, there could be a benefit of the image being in a different/stronger colour for a sharper contrast.

'Liverpool-centric'
Both the designs were thought by some to represent Liverpool more than the Liverpool City Region more generally. And this was thought inappropriate – if this was the only design in use. It wasn't something mentioned by all the commentators but there was strength of feeling amongst those who did.

"I do not like it and I never have apart from anything else it is Merseyrail that is the company. Not the Liverpool train company. The images are all very Liverpool centric. I think both the two new livery designs are good and would be spoiled by the addition of superimposed local artwork."

Roll out
There were questions as to whether all trains would have the same design and whether they would be changed. It may be the case that those 'less keen' on particular designs would have less issue if there was a rotation/diversity amongst the fleet.

Placement
Not mentioned by many but obstructing the window view was not considered desirable by some. And others disliked the mix of placement on both the carriage itself and window.

Although there was a considerable balance of positive opinion towards the inclusion of artwork on the livery, it was not universal. Some were not drawn to either design, and others felt that its addition was unnecessary and detracted from the livery.

Merseytravel commentary
Option 1.0 was selected incorporating the yellow passenger doors which had been proposed by the community. Separate consultation with Merseytravel's disability reference group also showed a preference for this option as providing a clear colour contrast.

The local artwork is an idea that the community clearly liked. Merseytravel sees this as part of the fleet's future once the initial launch across the network has been successfully completed.

The 'M' in a circle logo has not been adopted as there is now an alternative graphic treatment which is part of a wider re-branding exercise across the Liverpool City Region's transport network

3. Use of space
It was clear from the initial research in 2014 that passengers viewed improved accessibility as an essential requirement (an area that the current fleet performed poorly on). This would mean ensuring that trains were more accessible to those with disabilities. Specifically, there would need to be improvements to reduce the gap between the train and platform.

The current usage of space by those with bikes and pushchairs was felt to contribute towards crowded vestibule areas and a sense of congestion (although narrow gangways were also identified as a factor). There was, therefore, also a need to provide improved space inside the carriage for those travelling with pushchairs, luggage and bicycles.

To address the gap between the train and the platform the manufacturer proposed a sliding step within each door entrance. This would allow unassisted access for both those with a mobility impairment and wheelchair users. To overcome the concerns over space inside Merseytravel developed different seating layouts. These were initially evaluated online by the community and then further tested/developed at the workshops.

Insights relating to 'wheelchair space', 'bicycle area space' and 'luggage and pushchair' space can be found in the following sections.

3.1 Wheelchair space
The community were asked on two occasions (online and during the February workshop session) if they preferred to have; no seats, fold up seats or perch seats in the wheelchair space. These were in addition to a separate 'companion seat' provided for those travelling with wheelchair users. This would be located opposite the backboard facing the wheelchair seat. The option of a companion seat was not discussed in depth by the community.

The community gave a wide range of responses; none of the proposed seating options were supported by a clear majority. Responses indicated that the community understood the difficult balance between keeping the space available for wheelchair users, avoiding conflict with other passengers, and maximizing the use of the space when not occupied by a wheelchair user.

"I have wavered between perch seats and no seats. I think my preferred option would be to have no seats. You confirmed at the workshop that there will be dedicated bike locations at the front and rear of the train. You also confirmed the aisle and space between seats will be wider, this will enable prams to be moved into the aisle/area. This leaves this space as a dedicated wheelchair area. I guess in simple terms, let's leave it as that and not encourage other users to populate this space."

"No seats' is my least favourite option. While no seats would mean that this space could be used by standing passengers in the absence of a wheelchair user, my concern would be the safety of people standing in the space. Would there by hanging straps for people to hold on to, or would they be left to their own devices as trains stop at stations?
However, a pro of the no-seat option would be that the space is more likely to be free for actual wheelchair users, particularly outside busy commuting times. If there are no seats in the space non-wheelchair users will be far less likely to use the area unless the train is particularly busy."

"Perch seats as it correctly gives the message that it is a space which is transient and temporary for able body users."

"My preferred new seating area is the fold up seats. I think it is good to have that as an option as you do on buses as it means that there are extra seats which can be used when there is no wheelchair user requiring the space. I understand there are probably concerns from wheelchair users that people may not give up those seats so they can use the space so it may be worth having a sign on the chairs requesting passengers to relinquish the space for a wheelchair user."

As illustrated in these quotes, feedback from the panel showed a wide variety of considerations. Although no clear route forward was identified, community members demonstrated clear thinking around the rationale for the choices they made. The principles for Merseytravel to keep in mind were that:

- the design of the new trains should help reduce the conflict that arises when a wheelchair user needs to use the space when it is occupied by non-disabled passengers
- fold up seats were more likely to be considered 'standard' seats that non-disabled passengers might be less inclined to vacate when the space was needed by a wheelchair user
- perch seats were more likely to be vacated as they felt less like a 'permanent seat'
- wheelchair users did not want to be put in a position where they had to ask passengers to move
- providing no seating at all was considered by most of the community to be a 'waste of space'.

It should be noted that the community raised the need of wheelchair users' travel companions to be able to sit with those using the wheelchair space. It was explained that this need would be met by the provision of a companion seat located directly opposite (facing) the wheelchair backboard.

Merseytravel commentary

As well as consultation with the community, specific consultation was undertaken with Merseytravel's Disability Reference Group. The need to minimise the risk of conflict between different passenger groups has been raised consistently and, on this basis, it was decided to have no wall mounted seating or perches in the wheelchair space.

The pair of companion seats facing the wheelchair have been retained. A suggestion, by the community to provide additional manoeuvring space for larger wheelchairs through using tip up seats has been adopted.

3.2 Bicycle space

Improving the space for bicycles was identified as an important issue to address in the initial 2014 research. Although the existing trains already have designated cycle spaces, bicycles often end up being stored in the vestibule area. This contributed to congestion at busy times.

Existing bicycle space:

A potential solution in the form of a clearly designated area was shown to community members. Like the wheelchair space, the community were asked to comment on what seating should be provided in the bicycle space.

As before, with the wheelchair space, there was no consensus for either the fold down, perch or no seating proposals. Choices were frequently given in the context of:

- current arrangements can sometimes mean that those with bikes are unable to use the space they are provided because people are sitting there
- there is a need for people to be able to store bikes during a journey
- perceived comfort of seats.

"Perch seats would best as there is more room to store bikes. I hardly see anyone sit with their bikes and sit next to them but option two gives them a choice."

"I would opt the folded seats as it's making use of the space. But like the wheelchair space you do want to avoid conflict. Bikes should be a priority not just for convenience of cyclist but for the safety of all passengers."

"Least favourite option is to have fold down seats in this area. I believe this replicate some of the issues I mentioned above with the current configuration. Fold down seats encourages users to use the seats that don't necessarily have a requirement to sit in this area. Let's leave it as a dedicated bicycle space."

"I personally wouldn't put my bike there and sit somewhere else, I would stay with the bike. If there is more than one bike, it makes it a little difficult. I prefer either the perch seat or no seat for the reasons above. Additionally, no seat could also mean extra luggage space."

Final design of bike space:

As illustrated in the previous quotes, the feedback from the panel showed a wide variety of considerations with no single clear route forward. Clear thinking around the rationale for making decisions was, however, provided. Therefore, a decision was

made based on the feedback and logic of the community. The conclusion from Merseytravel, based on the feedback of the community is outlined below.

The same reasoning applies as is used for the wheelchair space; the perch seat is the right solution. There seemed to be more of a sense that the conflict between passengers wanting a seat and the space being used for its intended purpose was more likely to occur in this area. Perch seats have a less permanent character than a fold up seat so will be vacated quicker when a bicycle enters the train as people feel less entitled to it which minimises conflict. A perch seat also provides some comfort when standing in the area during busy periods to make most use of the space. It is therefore the solution that provides the balance between the different forces.

Another positive is that when there is only a single cyclist, they can park their bike in the rack closest to the gangway and lean on the perch seat behind his bike, so they stay near to it.

The bike rack system for this area has not been chosen yet. It's important that the perch seat does not limit the space when using the bike rack system.

Merseytravel commentary
Additional consultation with Merseytravel's cycling reference group also informed decision-making. The group agreed with the community's assessment, and as a result wall mounted perch seating was selected for the bicycle space.

The size of the draught screen between this area and the adjacent doors was minimised in order to improve access to the bike storage.

A bespoke bike storage system has been designed which enables the safe and stable storage of three full size bicycles in each area.

3.3 Luggage/pushchair space
The research in 2014 highlighted that current carriage design meant luggage and pushchairs could also contribute to crowding in the vestibule area, or conflict with wheelchair or bike users. Those who travelled with these items found it difficult to manage. As a result, Merseytravel developed design concepts to address storage of luggage and pushchairs on board, and the use of space more generally. Further feedback was sought on these ideas by the online community and during the workshops.

Echoing the findings from 2014, most community members recognised the problems that come with attempting to travel with larger luggage or when travelling with children in buggies, particularly at the busiest times of day. More detail on the views of the community on luggage and buggies can be found in Appendix 1.

3.3.1 Reactions to Merseytravel plans for overall carriage space

Plans for additional space in the aisles, vestibules and for the potential for under seat storage were outlined to the community.

The additional space created in the aisles and vestibules were welcomed, as it was felt that it would address many of the existing problems created by passengers standing in the doorways. There was a more mixed reaction to the suggestion that the aisles could be used to accommodate larger luggage and buggies whilst still allowing passengers to pass.

Several community members felt that this could impede those with buggies and wheelchairs wanting to pass though the train, whilst a smaller number talked about a possible health and safety hazard in the event of an evacuation. It would seem they were concerned that the benefits of having the wider aisles (increased flow and access) should not be lost through them becoming cluttered with luggage.

"I would have thought it best to keep the aisles and vestibules clear if possible, for movement of passengers along the train. One of the criticisms of cyclists concerns them staying in the vestibule with their bike rather than placing it in the bike area, so the same would apply to luggage and pushchairs."

On the flip side a good number of passengers recognised the positive benefit of being able to sit in an aisle seat whilst having luggage/a buggy sat next to them in the aisle, but also allowing other passengers to pass.

"The new space in the aisles will be good for passengers with pushchairs. They can sit in the seat next to the aisle and have their pushchair next to them. On busy trains the extra space in the vestibule can also be used for someone to squeeze into with a pushchair"

Most passengers recognised the benefit that the cantilevered seats provided, by creating storage space underneath. Community members felt that this would be helpful when carrying shopping and smaller bags; but also suggested that some would be reluctant to place bags on a dirty or wet floor. They wanted assurance that smaller items could not roll out from under the seats.

It's worth noting that one community member appears to have had experience of a bag being stolen from underneath her seat. There was also mention of the increased likelihood of people forgetting their bags when getting off. At the first mock-up tested by the community, several members suggested that the overhead racks were too high. They pointed out that if an item slipped to the back they wouldn't be able to

reach it. Following that, Merseytravel lowered the height of the racks and included the revised version on the second mock-up.

Some community members felt it important to retain the overhead racks and to ensure that they could safely accommodate items of smaller luggage. One member talked about the need to ensure that items could not slip out/off.

Overall, the greater flexibility that that the new design would give passengers was felt to be a significant improvement.

There was a modest amount of interest in the provision of a small number of fixed luggage stacks (racks fixed to the floor), particularly when thinking about how to accommodate the needs of those traveling to the airport. One passenger talked about the need for an innovative design in the cycle space that might combine cycle/luggage/buggy storage.

If provided such storage would need to allow passengers to sit next to, or have clear sight of, their bags. Many community members talked about their desire to have sight of their luggage and that they were reluctant to leave their bags at racks located near doors. This presents a design challenge, as at the same time passengers later talked about the need for easy access to the bay seating area intended for luggage/buggy storage and locating them near doors.

3.3.2 Reactions to Merseyrail plans for specific luggage/pushchair space
An image of the potential area for luggage storage is shown below.

Overall the designs attempt to recognise the needs of those travelling with buggies or large luggage and provide an area of flexible space was welcomed by the community. However, this was tempered by concern over the impact that this area will have on seating capacity and the politics of who will have priority.

"I think it's good as it provides an option for people to use the space as seats as well. The configuration works well as you can sit and have your pram/luggage near you. Although it may annoy people if they want a seat and there is a suitcase taking up the space of the drop-down seat!"

There was a belief that if not managed appropriately it could effectively recreate the conflict between buggy and wheelchair that exists on current trains – but with luggage/buggies/and people wanting a seat. This led some to suggest that there should be separate areas for both luggage and buggies in order to avoid any conflict. But again, the negative impact that this would have on seating capacity and the inability to provide a space for every user group was recognised.

"A dedicated area is an excellent idea, minimising stress, tripping hazards and congestion in the aisles and doorways. If these areas were not kept clear and used by general passengers, then it could cause a lot of stress to luggage carrying passengers. After negotiating their way to this area only to find they have to move elsewhere. Transitioning on and off the train with the least amount of disruption to other passengers I feel would be the goal here."

As an alternative to providing a dedicated space for each, some suggested that the dedicated bays should be used either for luggage or pushchairs (but not both). It was thought the extra space in the aisles, and elsewhere, could be used to accommodate the other items. It was suggested that whichever item has the biggest impact on capacity, and reduces flow throughout the carriage, should get priority.
Several community members felt that passengers sitting in the dedicated bay area would be more likely to make way for someone with a buggy, as opposed to someone carrying luggage.

If a dedicated space is provided for luggage and/or buggies several community members mentioned the need to ensure that it is stored securely, and that it cannot roll out into the aisles. One suggestion to address this was to have a contoured or ridged floor.

Seating in the dedicated luggage/pushchair area
The majority of the community members felt that in order to provide maximum flexibility all four seats should be foldable. Those who didn't agree with this appeared to be concerned either about ineffective use or the conflict between users. As an example, it was suggested that someone placing one pushchair in the bay might block off all four seats in one go. It was felt this would be an inefficient use of space.

"I've seen families travelling with lots of luggage, so space is needed. Therefore, I think you need all four seats to fold up so you can maximise the number of possible configurations. Stacking the luggage in the area next to the window and still having the seats next to aisle or using the whole space for luggage or using one of the seats for luggage and seating in the seat opposite."
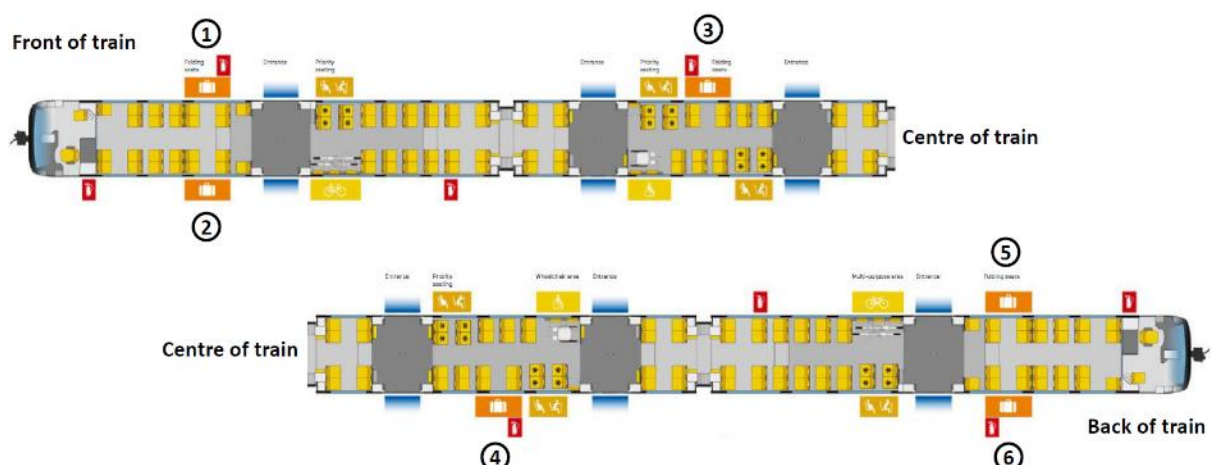
One community member suggested that perhaps two of the seats could be marked as flexible for buggies whilst the other two marked for luggage. It was felt this might help avoid some of the potential conflict.

Number of luggage/pushchair areas on the train

It was difficult for some of the community to comment on the number of spaces that should be provided without knowing what the actual demand for luggage/buggy space. At the other extreme there were those who felt that all of the bays should have fold up seats to provide maximum flexibility throughout the train – but they do stop short of suggesting that all of the bays should be prioritised for those with luggage/buggies.

"It really does depend on demand doesn't it? We have identified four categories of passenger who require space other than seating: those with a cycle, a wheelchair, a pushchair or luggage. How have we determined that two spaces each should be allocated for wheelchairs and for cycles? Would two spaces specifically for pushchairs be appropriate? On any one journey it may be that there is a lack of space for one category but spare space for another, so presumably passengers will use space not specifically designed for them."

Q3c. There is a maximum of 6 places on the train that the luggage/pushchair bay area could be located

How many of these bays would you like to see on each train? Do you have a preference on their position? Use the numbers on the train above to describe which locations you are referring to.

The key consideration in terms of location was that the dedicated bays need to be easy to access and that in doing so passengers with luggage/buggies don't have to

squeeze past others in the aisles. This suggests that they should be located near the doors, possibly at either ends of the carriages.

Wherever they are located there were widespread calls for these areas to be marked on the outside of carriages so that passengers know where to board - rather than having to move through the train once on it. That said there was also a desire for it be easy to reach an alternative dedicated space if the first was found to be full. In keeping with this are the suggestions that there should perhaps be one dedicated area in each carriage.

An important question raised by one community member is whether providing multiple areas of flexible space in one part of the train could potentially create a bottle neck.

In respect of their location relative to the wheelchair space, one of the wheelchair users suggested that they would like to see the fold-up bay seats on the opposite sides of the doors to the wheelchair space - as they are with the bicycle spaces. They believed this would mean people would not need to walk as far from the doors with their luggage and reduce congestion. Too close to the wheelchair/priority spaces meant a greater risk of people tripping or for bags to crash into the wheelchair user.

When looking at the number of dedicated areas, there is a real concern amongst some passengers that by providing too many different areas for specific groups there is a risk of causing confusion about where exactly it is ok to sit.

Suggestions for guidance on the luggage/pushchair areas
The majority of community members stressed the need for there to be clear guidance to passengers that sets out who has priority. The consensus appeared to be that whilst it was likely that passengers with buggies would be offered the space by someone sat in the proposed area, this was much less likely for those with luggage only.

"Perhaps we could have signage asking people to leave this space free for pushchairs and luggage where possible."

"Personally, I would be happy to move for a pushchair, but wouldn't be too impressed in being asked to move so someone could put their luggage in the space."

On balance community members appeared to favour those with buggies being given priority over those with luggage. It was felt that the signage should ask those passengers without either to give up their seat and make space for those who need to use it for its intended purpose. A smaller number preferred the idea 'first come, first served' as long as the space was being used for the appropriate purpose.

There was some scepticism amongst the community about whether passengers wanting a seat would pay attention to any signage. At the extreme this prompted one member to suggest that the dedicated area shouldn't have any seats in order to help avoid the conflict.

It was suggested that there should be clear signage on the side of the carriage, as well as a clear indication on the floor. Community members felt that it would be helpful if this included pictorial illustrations of what could be stored in the space. One community member pointed out the value of also making audio announcements, as passengers are often absorbed in a book or on their phone – perhaps more likely if the new trains have Wi-Fi.

"Ideally I'd like these messages to be verbal (recorded message) as passengers tend to take more notice of these rather than written messages. You're reliant upon people taking their eyes away from a screen/newspaper/book for a written message - especially if our new trains have WIFI too! I've seen people take no notice of the signage about putting their feet on seats, but then as soon as a recorded message is played they move their feet (maybe they think they've been spotted on CCTV, or maybe they think everyone else in the carriage is now looking at them because they heard the message too! Either way it seems to work...)"

It was felt important that passengers be given a clear indication of where the nearest alternative space is, if the one they were attempting to use had become full. There was also a suggestion from one respondent that passengers should be given some sort of indication as to when the space is full. This point appeared to be more about concern over passengers putting too much into the space rather than indicating whether or not it was occupied.

Merseyrail commentary
Overhead luggage racks will be provided throughout the train but with a lower height than originally shown to passengers to improve accessibility.

Under seat storage will be provided at the majority of seats.

Each carriage will include one bay of four seats configured with flexible seating to accommodate buggies or bulky luggage. These will be readily accessible from any passenger doorway.

System functionality has been created to allow the flexibility to introduce new verbal announcements on any train and at any given point in a journey

Information and staff training will be provided to help minimise any risk of conflict between passengers.

4. Seating

Seating comfort was highlighted in the initial 2014 research as a key consideration in future rolling stock design. This referred to the type of seat and the seating layout. It was also thought there was a need to improve the comfort of those passengers who had to/or preferred to stand, for example by providing better grab handles. The second stage therefore sought detailed feedback on the current seat, the proposed new design and connected issues of table and USB point provision.

4.1 Overall design

Context – current seat

The current seat is seen as at least adequate, and good by some. It is comfortable because it is thought to be well padded, and the high back can give extra support. The gap between the seats is also seen to contribute to this comfort, providing a sense of personal space. The few seats on the current stock that do not have this gap are seen as the worst place to sit currently. The image below illustrates current seating.

The high back was felt to prevent the banging of heads where seats are back to back. Though a few passengers were worried about putting their head where someone else's hair had been.

More generally the seat fabric pattern was seen to hide dirt, which is seen as a good thing on the whole. Some were more concerned about the hygiene of fabric seats, citing examples which harboured bugs. Many were interested in how frequently seats were cleaned.

Many contextualised their views on the current seat and alternative designs with the short journeys they tend to make, which in reality means the quality of the seat is not a top concern as long as adequate.

The proposed new Merseytravel design

The pictured image was the preferred option of the new designs tested (not colour or fabric) and is in effect an evolution of the current design. It looked comfortable because it appeared to have a substantial amount of padding. It was covered in fabric and so would be neither cold nor sticky to sit on. It also has a head rest, which

serves a similar function to the high back of the current seat. There were mixed views on whether a headrest was an improvement on the high back. Some saw the value of a better view of the carriage, some asked whether the headrest would be removable/adjustable to suit personal preference.

However, based on reactions, it did not seem that a headrest instead of a high back

would mean that the seating would be rejected.
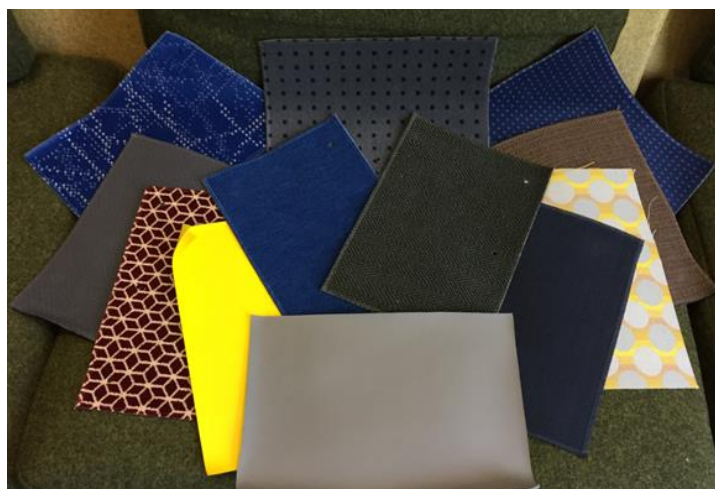
Material preference

A fabric upholstered seat was preferred to the plastic, wood and steel examples shown to the community (which were felt to be uncomfortable, subject to vandalism and, in the case of metal and plastic, have aesthetic drawbacks. More information on reactions to these can be found in Appendix 2).

The upholstered seat looked more comfortable due to padding, and fabric was generally preferred as it would be neither cold nor sticky.

Seat cover material

The community were shown a range of potential seat coverings which they could touch and feel. When doing this the community were asked to disregard the colours of the material as the colours they were shown were not intended for the new seats.

Seat material swatches:

The community tended to prefer materials that were soft to the touch, wouldn't scratch, wouldn't stick to skin or attract things such as dog hair.

The leather look divided opinion. Some were advocates, citing the fact that something similar is used on local buses. These advocates would contemplate the entire seat being covered in leather if this were possible. One or two picked up on possible sustainability credentials. However, although all agreed it would be an easy material to clean, the majority thought leather would be cold, and probably sticky in hotter weather. They were also concerned it would be easy to graffiti or slash, and possibly even invite this. If leather were to be used just for the headrest, this increases its popularity a little as some see the value of a wipe clean headrest given earlier concerns about hair and cleanliness. However, overall there was not strong support for the use of leather.

The design of the seating material is explored in section 5.

Merseytravel commentary
Based on the feedback we received from passengers we selected a flat weave fabric seat covering. Following suggestions from the community workshops leather fabric will be used for the headrests

4.2 Seat models and layout
The research in 2014 suggested that passengers wanted a mix of seating styles. A combination of bay (a group of four seats, two seats facing two seats) and airline (rows of seats facing in the same direction) was felt to offer the best solution. This would take account of peoples' need for personal space, whilst maintaining the ability of small groups to sit together. Elements of space management have already been discussed in this report (section 2). This section explores the views of the community on the seating layout developed by Merseytravel.

A mock-up of both bay and airline seats was shown to the community. This included:

- two different seat models – for evaluation in regard to the comfort and shape of the seat
- three different seat widths for understanding the preference and the impact of width on the gangway.

Picture of the bay seating are on mock-up one:

Picture of airline seating are on mock-up one:

Legroom in both the airline and bay seats was felt to be sufficient, with some remarking that there was noticeably more room than on the current trains.

Seat choice was between two different models. This question was divided into two, with community members stating their preference for 'seat backrest (shape and comfort)' and 'seat base (comfort)' separately.

Seat
Model 2 was preferred for the shape and comfort of the backrest, with many stating that it felt more ergonomic and provided good back support. They also commented on its appearance as modern and stylish, and liked the fact that there was more space between headrests for passengers to see down the train. Some also felt that the headrests were in a more natural position than in model 1.
Model 1 was preferred for the comfort of the seat base, with many saying that they liked the additional padding, and imagined that it would be more comfortable on longer journeys. A smaller number of the community stated that they preferred the firmer base that model 2 offered.

The community stated preferences for different aspects of both of the seat models. Based on their feedback, the community asked Merseytravel to explore whether the design of model 2 could be developed to feature increased cushioning and padding in the seat base, as displayed in model 1.

Seat and aisle width
There was a clear preference from community members for seats to be at least as wide as on current trains (440mm), with some stating that, given the choice, wider at 450mm would be even better. There were a few comments suggesting that as the space between seats was reduced, passengers would benefit from the 450mm width. This is particularly for those in the window seats as foot space was limited by ducting between the wall and floor.

They were impressed with the amount of space in the aisle when comparing the mock-up with the current trains, and some remarked that this made the train feel wider and more spacious.

Both community wheelchair users were able to move up and down the aisle unobstructed. The community also experimented with a suitcase and pushchair, finding that these were also manoeuvrable down the carriage. Some tried passing down the train whilst there were standing passengers and a suitcase in the aisle and remarked that they felt there was enough space to be able to pass through.

A small group also experimented with manoeuvring the suitcase into the bay seating area as a passenger passed. They felt that the amount of legroom provided more space to manoeuvre items. Generally, it wasn't seen as a negative if it wasn't possible to store things in the aisle. It was, however, seen as a positive to have more aisle space for standing passengers.

Those preferring a 450mm seat width said that they didn't feel that aisle width suffered as a result of a wider seat. However, there was a handful of people who,

when considering all options, chose 440mm as the best compromise between seat and aisle widths. They stated that the differential benefit between 430mm and 440mm was far more noticeable than between 440mm and 450mm.

Merseytravel commentary
Seat model 2 was selected based on the community's preference for the comfort of the backrest. Additional padding has also been introduced to the base of the seat following the feedback provided.

A seat width of 450mm has been adopted throughout, reflecting the community's views on seat comfort, whilst maximising the usability of the aisle width between the seats. This particularly increases the ability of wheelchair users to move through the train.

4.3 Tables
Tables did not emerge as a huge priority from the initial research in 2014. However, responding to feedback from the community, Merseytravel agreed to test four different table options at the first mock-up to help ensure the final design reflected the needs of passengers.

The options explored included:
- no table
- very small table (coffee cup only)
- small table (coffee cup plus phone)
- medium table (coffee cup plus tablet)
- half table.

Overall the community didn't feel that tables were really needed for shorter journeys; though they could see the case for them on longer trips. If tables are to be provided the majority preferred the smaller design, as they did not get in the way of

passengers getting in and out of seats. There was some concern that fellow passengers would just take the opportunity to dump their rubbish on the tables.

The smallest table was liked 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.

Feedback on all options tested can be found in Appendix 3.

Merseytravel commentary
The small table has been adopted for the bay seating areas within the lower floor parts of the train. In order to address the concerns of the group we raised their height, in order to minimise the risk of conflict with passengers' knees.

4.4 USB charging points
Wi-Fi and power sockets were considered in the 2014 research to be 'enhancements' – a nice to have. However, considering that provision of both is more commonplace in public spaces, it is likely that they would now be considered a 'standard' feature to include.

Options with regards to the position of charging points were explored in the second workshop using the mock-up seating. The community felt the charging points were best located on the carriage wall or in between the headrests. A significant number of the community felt it was very awkward to plug cables in under the seat as they couldn't see the charging point and it would involve disturbing the person next to them.

A number of the community demonstrated this point by physically putting their hands under the seat as if to plug in and showing how awkward it can be. This was from both men and women.

Merseytravel commentary
Charging points have been retained for all seats with both three pin and USB sockets provided.

Some charging points have been moved to the wall but others have been retained below the seats (positioning between headrests was unfeasible) but brought forward to avoid the problems of awkward access experienced by community members. At these locations, the three pin sockets have been inverted to improve ease of access and use.

5. Carriage interior
Cleanliness was identified in the initial research as one of the main weaknesses of the current trains. This reflected a general feeling that the carriages had signs of wear and tear, that better provision of bins was needed and that more than surface

cleaning was required. Therefore, any design for the interior needed to ensure that the space looked clean and was easy to maintain.
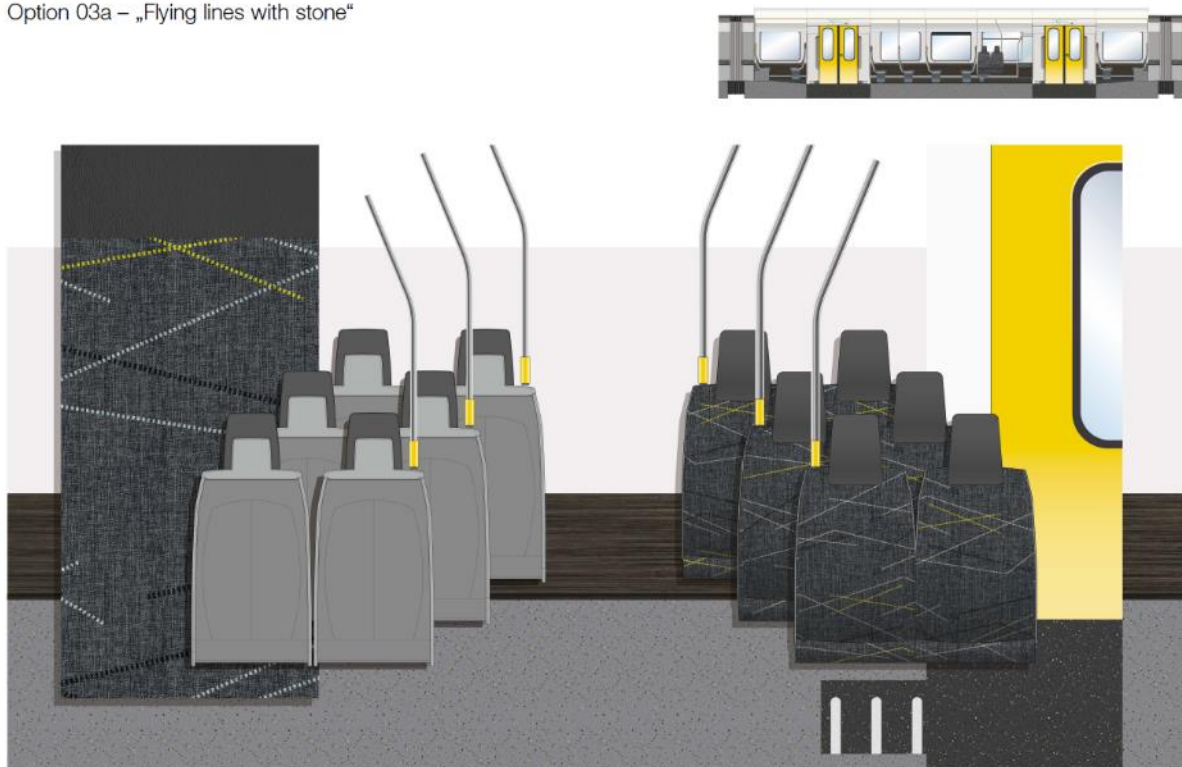
The community were asked to reflect on designs for the interior, initially at a workshop and then online as the designs were refined.

5.1 Initial designs

At the first workshop the community were split into three groups and given an opportunity to view four distinctive seat designs and two flooring designs – presented in the different combinations.

Whilst 'Flying lines with stone' (option 3a) was the clear first choice for the community this was not without reservations about some of the features within the design, in particularthe wooden side panel.

Interior material concept
Option 03a – „Flying lines with stone"

In the workshop groups, community members appeared to favour a lighter solid grey panel in preference to the wood. The two-line design was preferred overall, with some preferring mixed colour, whilst others preferred the yellow only. A leather effect headrest was preferred to upholstery for both design and practical reasons.
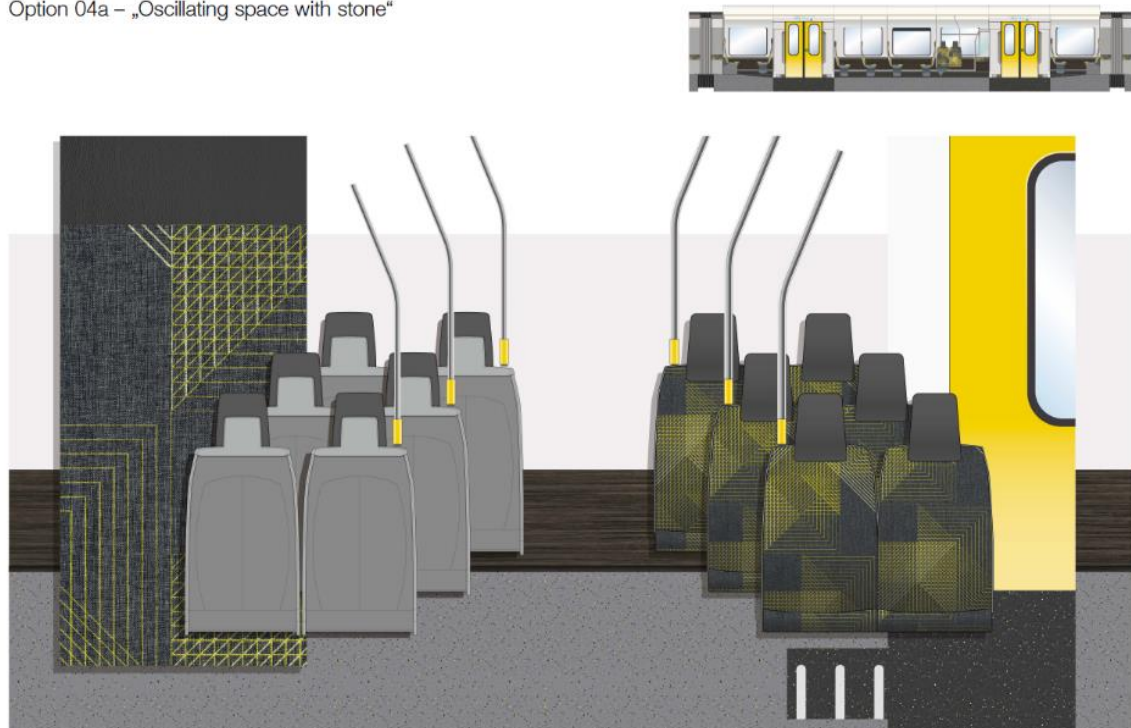
Overall neither the wooden side panels nor the wooden floors, across the designs, were very popular. Although some community members made favourable comments, they were definitely in the minority.

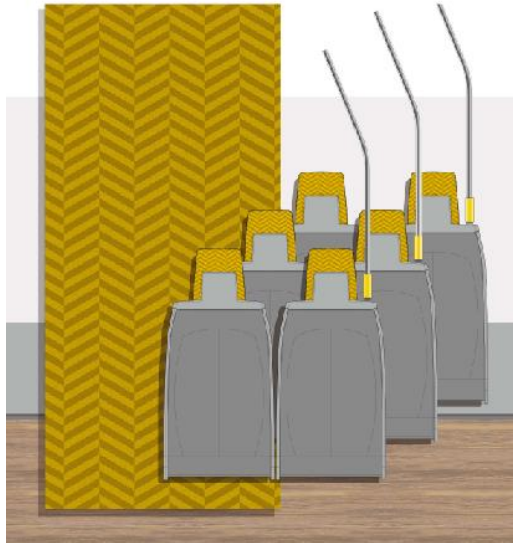Interior material concept
Option 03b – „Flying lines with wood"

In terms of the 'next best' options, opinion was much more divided; there wasn't a clear second or third choice. The community favoured 4A 'Oscillating space with stone' and then the 'graphite herringbone with wood'. There was a real mix of views over these two designs. The oscillating design was the 'marmite option', where there were both very strong positive and negative reactions. There was a suggestion that the appeal could be strengthened by making it 'less busy'.

Interior material concept
Option 04a – „Oscillating space with stone"

The 'Yellow herringbone' had very little support:

Wood flooring was rejected by the first two groups outright. The third group were more accepting of the wood, but even then, a significant section (around a third) didn't like it either.

More detailed analysis and reactions by workshop breakout group can be found in Appendix 4.

5.2 Refined designs

Merseytravel took the feedback from the workshops and tested three further refined designs on the online panel, using 3D images (see below). The community was asked to rank images in preference, and to give reasons for their responses.

Option 1: Mersey diversity

Option 2: Connected yellow

Option 3: Concrete

'Mersey diversity' (option 1) was chosen by more people as their preferred option than options 2 or 3. The reasons for this were around the following themes:

- Darker seat - thought to be hardwearing/better resist stains/look cleaner/contrast with floor and ceiling
- Line colour mix - not too strong, subtle, aesthetically pleasing/but conveys the Merseyrail corporate colours
- line colour and design - modern/clean/sharp/elegant.

"Looks smart and relates to the Merseytravel corporate colours. Still bright but won't look dirty after some time."

Those who had a preference for 'Connected yellow' (option 2) appreciated the bolder pattern but also felt it had some of the advantages of 'Mersey diversity' in terms of the darker upholstery wearing better. The drawback for some of the 'Connected yellow' pattern was that the yellow was too overwhelming/bright/garish/loud/stark, and others responded that the pattern was too busy/cluttered.

"Option 2 would be my second choice for similar reason as Option 1 in that it offers a darker overall colour which should be better for visual cleanliness. However only one Merseyrail colour included."

'Concrete' (option 3) was liked as having a lighter/brighter feel, with a lighter grey and the use of yellow lines (which for them contrasted better than in 'Connected yellow'). The main drawback, observed by many in the community, was the lighter grey colour. They felt it ran the risk of becoming dirty/shabby/stained or would require more regular maintenance. It was also thought that there was insufficient contrast and that it was a little 'washed out'/bland/dreary/dull.

"It is too bland; the colour of the floor, walls and seats are quite similar and all kind of blend into one and there is not much difference between any of them."

Not everyone liked 'Mersey diversity' and indeed, some disliked all the designs. The pattern itself was criticised (for similar reasons as identified in the workshops) and there was a general sense that the colour scheme was rather bland/boring. But detractors were in a minority.

Merseytravel commentary
Option 1, 'Mersey diversity', was selected as the preferred choice, based on the community's feedback.

Consultation on this option with Merseytravel's disability reference group revealed a preference for a greater contrast between the background and the coloured lines, which was adopted.

5.3 'Cab back' wall design
Passengers wanted carriages to be light and to have a spacious feel. Merseytravel wanted to test a proposal, which would aid this, to have a window in the cab back wall. See image below. It was explained that the glass could be turned opaque by the driver if it was necessary to do so.

At the initial workshop, groups were presented with examples of other transport networks/modes where passengers could see into/through the drivers' cab. Across all the groups there were mixed views.

The main benefits were thought to be an increased feeling of security and a sense of more light and space that the clear glass provided.

The main concerns were that the driver could be distracted and become a target for anti-social behaviour. Some community members also made the point that passengers could potentially be more exposed to distressing experiences such as a person or animal being struck by the train.

Once Merseytravel had opportunity to work up its proposal and provide a design, the community were more positive – though not without concerns.

There were positives expressed (see Appendix 5 for more detail) over feelings of enhanced security (from a member of staff being visible, and the additional light) having a view of the journey, being modern and leading the way in terms of design.

As a radical departure from how the current cab back wall looks it is not surprising that there were many questions raised. The majority of those who said they were in favour still expressed some concerns but tended to believe that Merseytravel would put appropriate mitigations in place. The community largely agreed that for the new cab back wall to be worthwhile drivers would need to be comfortable with what Merseytravel were trying to achieve with the new design.

Merseytravel commentary
The transparent cab back wall was retained with the ability for this to be easily turned opaque by the driver.

6. Communication tools

Communication tools on board (not the passenger information system) were not identified as a very high priority for improvement amongst passengers in the 2014 research. However, it is clearly important that any on board communication meets the needs of passengers. In many instances, the community felt that clear communication was required in order to make sure the accessibility improvements were fully realised. For example, guidance to passengers on who had priority in the wheelchair space.
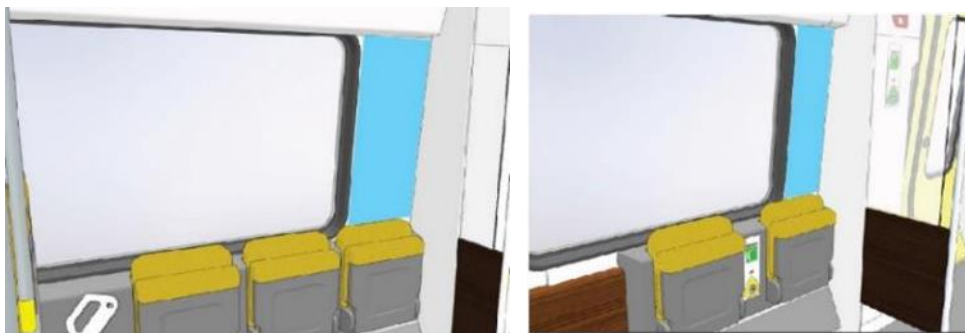
6.1 Posters

The online community were asked for their views on the positions and content of posters in the new rolling stock fleet. Posters are currently used for safety and security messages with limited advertising and promotion of travel by rail.
There was a sense that posters were useful (and expected to some extent) but that an overload should be avoided. Other factors that determined reactions towards the locations were:

- how easy posters were to see
- how important it was that they could be seen by everyone
- the amount of space available
- the extent to which views were clear or could be blocked
- the angle of viewing and the general aesthetic of the train.

A key message was that important notices should be as visible as possible to all, and hence visibility was a key factor in how people responded. Reactions to each location are below:

Wall area of cycling area/wall area of wheelchair area (locations 1 and 2)

Reactions to both these areas were very similar. Many thought them suitable for posters but with some caveats:
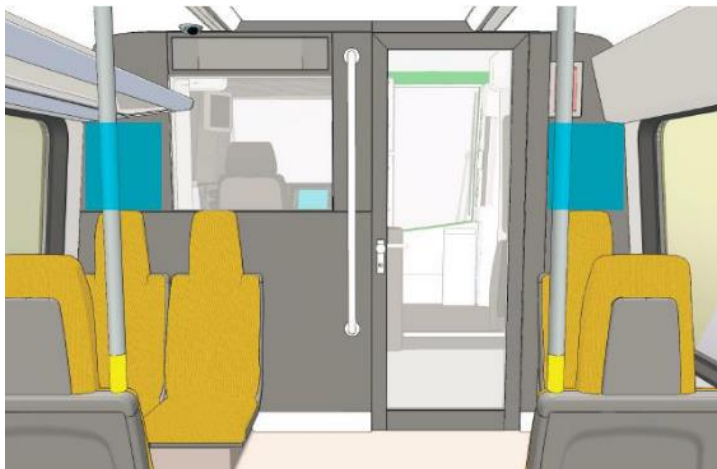
- only for messages that were not vital for all to see - as they could be blocked
- perhaps most suitable for messaging around priority order of area or other messaging relevant to users of that area
- some thought it would be a good location for posters as it would often be vacant

Car end walls (location 3)

There was a positive reaction to this location by many. It was thought to be relatively noticeable and would not take up any usable space. There were some concerns that it is not automatically visible to all due to location as it is only visible if you are sitting opposite.

Unit end walls (location 4)

One of the areas which attracted less support due to its size, potential to be blocked and for the limited space to feel squashed and cluttered. There were also the same issues with location 3 in terms of people having their backs to the poster.

Window columns (location 5)

Relatively strong opinions were expressed by some about this location, often finding all other locations acceptable other than this one.
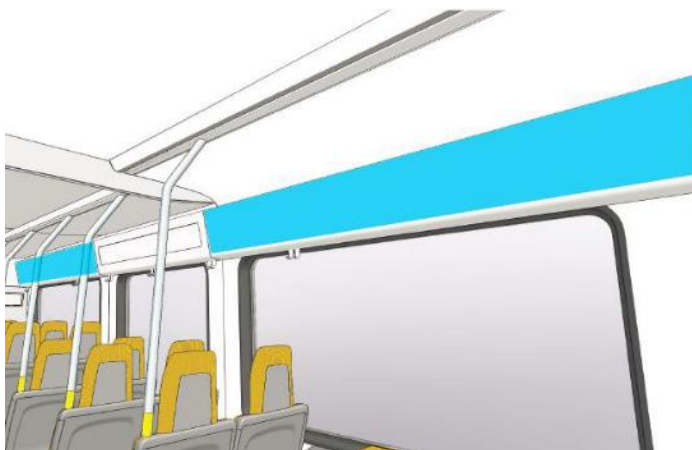
Issues with placement here were around:

- making the train feel overcrowded and cluttered
- the sense that it would feel untidy/break flowing lines
- it may be that if posters were not found in all other locations that these concerns would lessen.

"I don't like location 5 as I think it just looks like you are trying to use every space possible for a poster and it looks overcrowded."

There were some positive responses around this location being highly visible, and that it might be suitable for safety and security information. But balance of opinion was probably more negative.

Overhead panels (location 6)

One of the more popular locations amongst community members, this had familiarity due to current usage for posters on other types of transport. An expectation was expressed by some that it would be used for advertising, although route information was also suggested as being highly suitable to place here.

Size and orientation of posters
There was general sense that posters should 'fit' the available space which applied to both orientation and size.

As visibility was such a key factor more thought posters should be A3 (or as large as possible) than smaller. However, it may well be that the assumption here is that this would be for train information rather than advertising.

Many assumed that posters on the overhead panels would be landscape. Other locations were more often suggested to be portrait than landscape – but for some this depended on what the poster conveyed (such as a picture or other type of information).
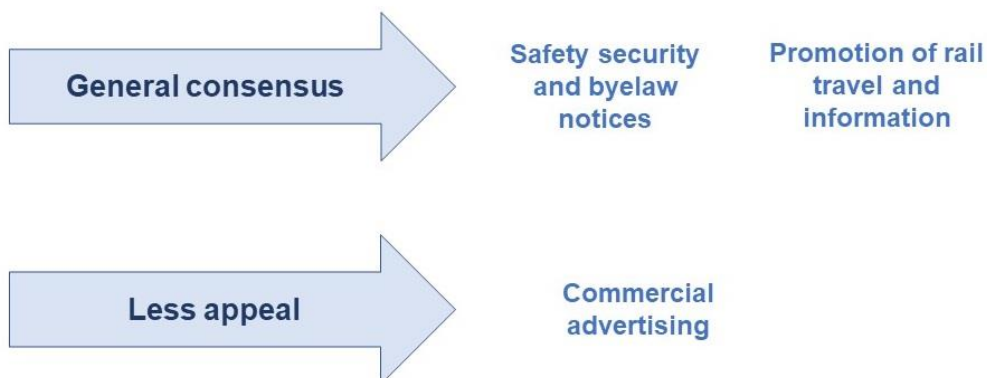
Types of posters
Community members were asked which types of information they would want on posters and what they would like less. There were three choices, with some accompanying descriptions:

- **Safety, security and byelaw notices** - these posters play a critical role in ensuring customers are informed about safety and security issues as well as helping to reduce antisocial behaviour.
- **Commercial advertising** - working with a commercial partner agency, selected advertisers are allowed to visually promote their goods to customers. There are strict rules around what can and can't be displayed and these are reviewed regularly to reflect public opinion.
- **Promotion of rail travel and information** – this includes things like route maps, adverts for ticketing products and general information aimed at marketing the railway to customers.

As shown in the diagram, there was clear agreement (and little differentiation in levels of support) that safety, security and byelaw notices and promotion of rail travel and information should be displayed on posters on board trains.

Need by type of posters

General consensus → Safety security and byelaw notices   Promotion of rail travel and information

Less appeal → Commercial advertising

Commercial advertising was more divisive. Some absolutely reject it outright and others reluctantly agree it has a place (due to revenue) but would like the number of posters to be kept to a minimum. There were suggestions by some community members that they could tolerate ads to a greater degree if they were for local businesses/attractions/had discounts/other benefits to passengers.

There were several suggestions as to other types of information to display on posters – they have, in common, a strong focus on the local area:

Medium (digital or paper)
It was most common for people to suggest some kind of mix of paper and digital. There was no settled consensus of opinion as to what medium best suited thetype of ads. However, there were some clear strands of thinking:

- Safety/security/byelaw information should have some paper element to guard against any screen malfunctions and to ensure that it is as accessible to as many people as possible
- paper was seen to be a more useful medium for information that doesn't change quickly, and for this reason seems to tick a box for 'safety/security/byelaw' which is felt to be more static in nature
- conversely digital avoids having out of date or irrelevant content on board
- using digital with flashing images/moving text could be distracting or difficult to read for some, however, very few rejected digital outright.

Merseytravel commentary
Customers told us they wanted to see both paper and digital information. They weren't opposed to advertising, as they saw the benefit it delivered to the service but thought it should be appropriately located and not dominate the space.

The final design stays true to these principles with advertising/information poster sites located at infrequent intervals through the train and digital screens which are ideally situated for maximum visibility

6.2 Labels
Both stages of passenger research identified that ensuring the dedicated spaces on board were available to those who needed them would require clear communication to help avoid conflicts. To signpost effectively where individuals can sit on the trains.

During a workshop, community members were shown A3 label options (see image below) for each of the identified areas of potential conflict: the wheelchair and bicycle spaces. Each option presented a different tone of voice, colour and layout.

Option 1: Formal

Space for wheelchair user

Please give up this space to a wheelchair user
No unattended luggage

Position the rear of your wheelchair against
the support panel and apply the brakes

Cycle Storage

Secure your cycle by placing the front wheel
on the hook provided. Where both hooks are
in use, place a third bike's rear wheel in the
centre gap.

Cycles have priority in this area.
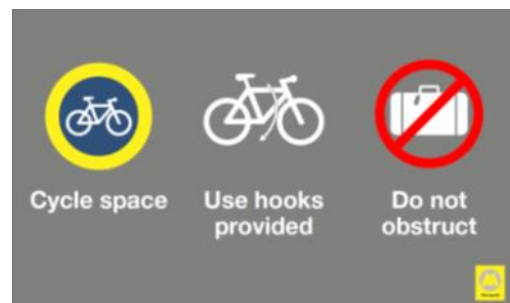
Option 2: Less formal

This space is for
wheelchair users only

Please don't stand in this area or leave
luggage here

If using this area, place the rear of your
wheelchair against the support panel and
apply your brakes

This space is designed
for cycles

Please be prepared to move if a customer
with a cycle needs to use this area

If using this area, secure your bike by placing
the front wheel on the hook provided. Where
both hooks are in use, please a third bike's
wheel in the centre gap.

Option 3: Informal

Welcome to our customers who
use wheelchairs, this area is
designed for your use.

Make yourself at home by parking with your back
against the support and applying your brakes.

Customers who aren't using a wheelchair - please
be considerate and don't stand here or leave your
luggage unattended in this area.

Welcome to our customers who
are travelling with a cycle, this
space is designed for you.

We want to keep you and your bike safe whilst
on-board. Please place the front wheel on the hook
provided. Where both hooks are in use, place a third
bike's wheel in the centre gap.

Please be considerate and make way if a customer
with a cycle needs to use this space.

Option 4: Pictogram

Wheelchair user space   Back against support and apply brake   Do not obstruct

Cycle space   Use hooks provided   Do not obstruct

Colour

Although not important in its own right colour was key in terms of how well the label would stand out. Options 2 and 4 were felt to stand out well on a window. option 1 lacked stand out and 3 had stand out for some but was divisive due to the yellow.

<u>Look and feel</u>
There was agreement that options 1-3 were too wordy and not visual enough. Also the appropriate information could be conveyed clearly in fewer words with the use of icons, such as in option 4.

<u>Title</u>
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.

<u>Tone</u>
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.

<u>Size</u>
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.

<u>Labels elsewhere</u>
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.

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

More detail on each of the areas above can be found in Appendix 6.

Merseytravel commentary
Customers told us that they wanted simple labelling, with a less is more approach to their placement and frequency. There was also a strong preference expressed for text to be present but succint and to the point. The labelling scheme designed and implemented reflects this, as they use intuitive pictograms with a direct but minimal text approach.

6.4 Flooring in specialist areas

On the current fleet of trains, there was no difference in floor colour or floor signage to differentiate the spaces available in either the wheelchair or bicycle areas. Both the initial research in 2014 and subsequent stages indicated that the usage of these areas could cause conflict for passengers. Ensuring 'priority areas' were clearly marked on flooring (along with other messaging as already discussed in this section) would help overcome these issues.

General reaction

The floor design concept was thought to be positive by almost all – although some were a little sceptical whether it would always produce the right outcome for those passengers with a bicycle or wheelchair.

The markings were thought to have the potential to reduce conflict – making it clear to those using the space who has priority and supporting anyone asking to use the space for its intended purpose.

"I think this would be a good idea as if there was any conflict the person who is presumably the bike or wheelchair user can refer easily to the rules and regulations to aid their point."

Good idea to avoid conflict but it does rely on all users of the train (and the staff) to respect and uphold these rules for the good of cyclists and wheelchair users."

Specific designs

The online community were provided six different floor design options for each of the bicycle and wheelchair areas and asked for their feedback on the overall proposition as well as the individual options. In most instances the community gave the same responses for both the bicycle and the wheelchair area.

The majority of the community selected option 6. This was because it was thought to be visible and clearly defined the area and its purpose.

Option 1 colour contrast:
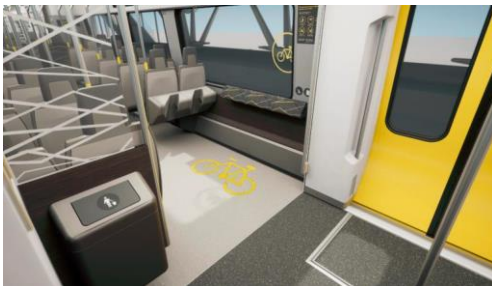
Option 2 colour contrast:

Option 3 colour contrast:

Selection of option 6 was not universal – options 2 and 3 had their merits for those who felt them to be clear and aesthetically pleasing (perhaps more so than 6). There were a couple of suggestions to have the bicycle space and wheelchair space defined differently (for instance having the bicycle with 3 and wheelchair with 6), so there would be more stand out.

Options 1, 4 and 5 were thought not to define the space distinctively enough as they didn't stand out.

Option 4 colour contrast:

Option 5 colour contrast:

Option 6 colour contrast:

"The area is clearly defined for everyone to see so are able to understand the area is for a particular reason. It is easily separate from the rest of the floor area which will enable people to not use the area when there maybe someone else has a need."

"I prefer option 6 for both. The yellow background makes it clearly distinguishable from the rest of the floor and draws attention to the fact that it is a designated space for wheelchair users/bicycles."

Merseytravel commentary

Option 6 was selected for both the wheelchair and bicycle spaces.

7. Passenger information

The initial quantitative research amongst passengers in 2014 indicated a good level of satisfaction with the provision of information on board. Provision of information during the journey is important to passengers; particularly for those making unfamiliar journeys and for those travelling during disruption. It also provides valuable reassurance to those passengers who might be less confident using public transport such as those with disabilities.

Several different areas of a passenger information system were investigated in order to ensure that passenger needs were addressed. These included:

- route map – initial views (workshop 1) and further design discussion (workshop 2)
- train plan alignment and station facilities
- interchange information/onward journey connections
- delays
- CCTV
- news feed
- adverts.

A summary of reactions to each of those areas is here:

Passenger information system – feedback summary (1)

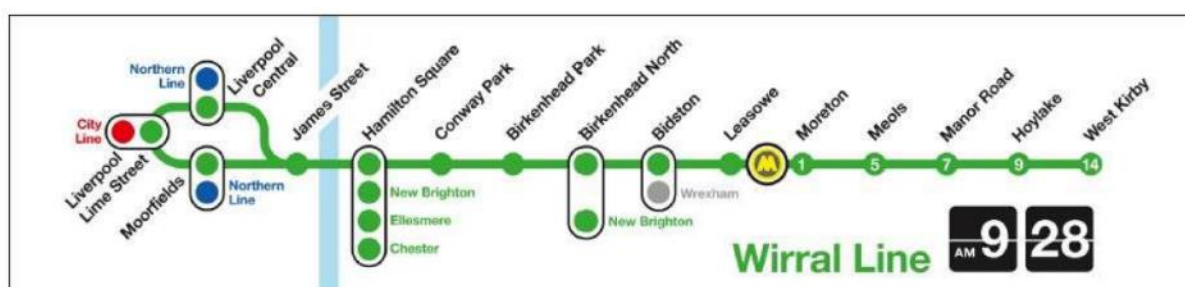|		Overall reaction	Comments
Dynamic Route Map	✓	Considered to be very useful	Needs to be real time journey information Easy to see including those in wheelchairs
Train plan alignment and station facilities	✓	Positive reaction Very useful to those with accessibility needs Capacity indicator and door indicator also thought useful	Facilities not needed for all stations Should reflect if facilities out of order Should be accompanied with appropriate signage on platforms for those boarding
Interchange information/ onward journey connections	✓ ✗	Useful for connecting trains but not all transport options, ie bus (too overwhelming)	Airport information useful for Liverpool South Parkway
Delays	✓	Crucial to receive real-time, accurate information	Needs to be both visual and audio

Passenger information system – feedback summary (2)

		Overall reaction	Comments
CCTV	✓	Widespread support in principal	Passengers welcome but queries over arrangements
Newsfeed	✗	Only felt appropriate if a large scale security incident or it highly relevant to journey – ie football match taking place	News available to those who want it on smartphones.
Advert	✗	Negative reaction – less opposition for some to local ads	Revenue aspect of interest to some

More details can be found in the Appendix. The development of the 'route map' concept by the community is described below.

Route Map - stage 1
During the initial workshop it was established there was strong support for a dynamic route map that shows the location of the train along the route, marked by a moving 'M'.

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The display of the journey time to the next stop and beyond was considered useful; although it was felt that this had to be genuinely real time (almost to the second). The community commented that if the train encountered delays the arrival times at stations along the route would need to reflect that. It shouldn't just be based on what the journey time was meant to be. It was suggested that the map would also need to be able to indicate any changes to the calling pattern of the train. So, if a train was to skip a stop, the stations that would no longer be served would need to be displayed in some way. One suggested improvement was for the next stop to be highlighted, either by colour or boldness.

Some commented that the route map was similar to that used on London Underground, so was relatively easy to understand. However, where the interchanges were shown there was a low level of concern that those unfamiliar with the network wouldn't know what they represented. Particularly where there were different destinations on the same line - would people appreciate it was one line?

It was suggested in some of the groups that the line maps should also use symbols to indicate that a station was near a local venue or point of interest such as Anfield. There was a question about whether distance (in time) to the next stop would also be relayed audibly. It was felt to be useful for those with visual impairments but there were concerns about how frequent such announcements would be.

Passengers wanted information on delays/problems on the line/connecting lines to be flagged up as early as possible.

There were a small number of comments that the location of the current maps required you to lean across fellow passengers to view them properly and that this should be avoided. Presumably this would be overcome by a larger text size and greater clarity of display. If the route maps were only above the door this would mean standing in the doorway – one of the problems the new trains were designed to fix.

One of the wheelchair users expressed some concern that in addition to the proposed screens there should also be an information display within easy sight of the wheelchair space. Standing passengers would likely mean that the proposed location of the screens, on the side of the carriage (above the seating) would not be suitable for those sat in the wheelchair space. The example of buses was given as to how not to do it; where info screens are often placed above the wheelchair space with the wheelchair user facing the opposite direction. It was suggested that the proposed destination screens at the end of each carriage could usefully be replaced by a multi-function larger screen.

Route map – second stage

The route map concept was taken forward from the initial discussion and three potential iterations were tested at a later workshop. Each of the three had been designed with the following criteria in mind:

- dynamic and able to meet the needs of customers
- wasn't too cluttered and prioritised the information that customers needed most (something that passengers indicated was a key factor to balance)
- provided additional key information such as interchange connectivity
- the underlying principle of the route map being to give passengers 'at-a-glance' information on where they were in terms of their journey.

Main findings

Across all three groups there was a strong preference for option 1 (showing whole route with 'M' to show progress of the train.

Option 1:

Option 2 (with larger text showing next stations) was well received, but it was very much felt that this should be in addition to option 1. So, only in combination. The

suggestion of 'toggling' between option 1 and 2 came up organically from the community discussion.

Option 2 was valued because of the bigger text size (making information about the next station, and the two beyond it more legible.

Option 2:

The groups also felt that there was more potential for this option to show additional detail about key facilities at upcoming stations. For example, toilets and lifts/accessibility provisions. Of these, showing lifts and especially if/when they are unavailable/out of order was considered most important.

Some in the community also wanted interchange information to be displayed on option 2 (as on option 1), which would ideally include 'time until the next train' on other lines.

There was no clear view on whether the train's destination was essential on this screen if it was already being shown on option 1. Some suggested removing it could free up more space for facilities and remove the need for the dotted line. Whilst some in each group understood what the dotted line was meant to indicate, all agreed that those unfamiliar with the network might not. Avoiding the confusion that the dotted line might create was seen as more important than any gain from having it.

Option 3:

Option 3 (where the route gradually whittled down as progress was made by the train) was not liked by any of the groups.

The second group taking part in the task proposed that option 1 should be the default on all screens, but with option 2 displayed when approaching (and potentially departing) stations. The third group also seemed to support this when asked.

There was some concern (both a mix of organic and prompted) about the legibility of option 1, especially when longer routes (with more stations) would need to fit on the screen. There were several suggestions to manage this:

- splitting across two pages - page 1 of 2, and page 2 of 2
- 'scrolling' along the route – though there was concern a lot of screen time would be spent on irrelevant information as the train got towards the end of the route (the stations the train had already called at)
- Splitting the route at key stations for example at Liverpool Central then using the additional screen space for advertising on the mock-up
- there was also a suggestion that a section of the route map could be magnified – as if a magnifying glass was being held over the 'M' logo and stations either side of it.

The recommendation from this second stage was therefore to explore in more detail the ideal combination/toggling between option 1 and option 2, and the best way of managing the legibility of option 1 (particularly on routes with most stations).

It is important to note that despite the concerns over legibility all of the groups spoke about the importance of being able to see the whole of the train's route. Even those

stations that had already been called at. It was felt that this helped give a sense of where the train was and the direction it was heading in.

Mereseytravel commentary

The community had a clear preference for a dynamic route map but emphasised that it needed to be real time. This has been provided, with an icon tracking the actual position of the train along with a localised route map on approach to the stations.

Station facilities and interchange information were important along with an aligned audio message, all of which have been provided. In addition, the new screens provide live CCTV images and non-intrusive advertising.

Live operational announcements are also to be provided in the event of change or disruption to a service.

8. The experience of the community

The experience of the community was an overwhelmingly positive one. At regular points during the course of the project they were asked for feedback on the workshops they attended and also had the opportunity to ask questions of Merseytravel on any topic they wished. Their knowledge and confidence grew over the space of the project and there was a palpable sense of pride amongst many. Particularly when the train mock-up was displayed at the end of the project for the general public in Lime Street to experience and comment on.

"Seeing the mock-up in September made me really proud of what we had been involved in and influenced, so I couldn't wait to show off to my family the train mock-up when it was in display at Lime Street."

"Having being part of the 'team' reviewing to design, we all know the time and trouble Merseyrail have taken to try to give the area the best trains possible whilst reviewing all issues that may be raised by passengers. There will always be compromises when dealing with so many issues, but it would appear from the customer feedback that the mock-up has been well received."

"I told people in my reading group about the mock-up. A few went and said they were impressed; they were also impressed that you included members of the public in your consultation. We are all looking forward to travelling on the new trains."

Initially, many expressed surprise at the size and representativeness of the panel, how engaged everyone was, and the quality of the discussions taking place. They found the background to the project and the rolling stock renewal/related considerations very interesting. This was not something they had been aware of previously. There was an appreciation voiced by some of the community of being

involved at a stage in the project where there was an opportunity to shape the final outcome.

"I found the whole day very interesting, learning about the inner workings of Merseyrail. The fact that Merseytravel have taken the time to listen to members of the community and act on their feedback is commendable."

"I often find myself at work frustratingly being asked for my opinion/help long after decisions have been made and a lot of money having already been spent on inadequate purchases. How refreshing it is to be involved so early on in a project."

"It was a refreshing change to attend a workshop where I really felt my views mattered."

As the panel continued its involvement, they could see their input coming to fruition and many expressed a sense that they were being listened to. Community members frequently articulated themselves with increasing confidence and knowledge. Being able to actually see the layout in the mock-ups and Virtual Reality was enlightening for many and key to forming opinions based on a real practical understanding. They also appreciated the openness of discussion with Merseytravel.

"You are turning me into a proper train geek. I now notice things I had never noticed before."

"I was surprised by the amount of work that had been applied to since the 1st workshop, and how much had been listened to. I enjoyed the whole day's layout too,

it was well thought out and clearly an enthusiastic group. I think seeing all the demos and constructions in person helped a great amount."

"I enjoyed the whole day, felt really included in the discussion, and felt my views were taken into consideration. All the staff running the group were helpful, friendly and really open to ideas."

At the end of the final workshop, there was a sense of satisfaction on seeing the mock-up train carriage, and the experience of being part of the panel overall was a positive one.

"It was a pleasure to be involved in the scheme and I was pleasantly surprised that all attendees showed great interest and knowledge of rail travel and offered really good views and observations."

"I really enjoyed our latest workshop and having the opportunity to try out the new train mock-up where we got to see so much of our input made reality made me feel really privileged. I'm really sad that our time working together on the trains upgrade is coming to a close!"

"Since the photos of the mock-up have been released to the public, my friends have stopped teasing me for being involved in the project and have even admitted they are slightly jealous."

"It's been really interesting and has given us all an insight into the complexities involved in the design of new trains."

Not everyone felt that all the issues they raised had been resolved and thought that there was more work to do. Although the need to compromise and to understand opinions was recognised as useful.

"For me, one of the most interesting things was that even though so much work has been put into trying to make our upgraded trains service accessible and 'user friendly' for a diverse range of customer base, there is still lots of additional features and enhancements that could still be made to make passenger experience even better. I had thought that we had considered and discussed most scenarios and needs, and we do have an amazing and much improved service that will be coming into effect. However hearing some of the comments and input made on the day of our workshop by my fellow panel members, it really brought home what a massive change is being undertaken and how there are still features that may need to be added to or tweaked once service rolls out, to make our new trains as amazing as we'd all hoped they would be!"

Transport Focus is the operating name of
the Passengers' Council

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