



Carriage Interior Design

Research report

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Background and Objectives



Background



Porterbrook wishes to refurbish to a high standard.

The refurbishment needs to take into account what is important to passengers – and by extension to the companies running the relevant services and leasing the trains from Porterbrook, in this case Southern, Gatwick Express and Great Northern.

Transport Focus, London TravelWatch and Porterbrook, commissioned this work to consult with passengers to ascertain passenger needs from rolling stock.

BVA BDRC conducted a qualitative research programme to understand these needs.

Research Objectives

The overarching objective was to understand passenger needs regarding the design or refurbishment of existing rolling stock. The findings will be used by Porterbrook to inform decisions regarding rolling stock refurbishments to improve the travel experience.

1



Passengers' views

What are their views about the design of existing rolling stock?

What are their views of enhancements for the design of refurbished rolling stock?

2



Design features

What are the design features that could be addressed during train refurbishment?

Which should be addressed?

The key focus is on-board screens and content

3



Passenger issues

The research needs to provide advice about the key passenger issues in respect of the specification of any refurbished trains and the relative importance of facilities to be provided on them

4



Priorities

Findings need to provide Porterbrook with a robust evidence base consisting of passenger opinions and priorities to inform the design specification and proposals for any rolling stock refurbishments

5



Compare & contrast

How do views and experiences compare by different passenger groups (age, disability) according to journey purpose (commuting, business, leisure) and distance (long or short, coastal)

Methodological approach

The qualitative research programme consisted of 4 main elements to capture the views of 387 passengers on Southern, Great Northern and Gatwick Express services (London to Brighton/Gatwick/ Cambridge):



Ethnographic element – part 1

Interviews with 6 passengers whilst on train journeys to capture thoughts, views and pictures and a short vox pops



Focus groups

6 Focus groups in London and Cambridge (7-8 in each group) which covered spontaneous thoughts and views on train interiors and improvements as well as gauging reaction to planned changes



Depth interviews

With disabled passengers to understand any specific needs. 3 mobility impaired (1 wheelchair and 2 other assistance) 1 hearing impairment and 1 profoundly blind



Ethnographic element – part 2

Further on train interviews with passengers to follow-up on key themes and enable points of specific elements to be included

Fieldwork was conducted during April and May 2019 by BVA BDRC moderators

Key summary



Key summary

Passengers are 'OK' with the train interiors, with only minor observations for potential changes. Encouragingly, needs are somewhat aligned with design changes.

Interior feature changes of most importance

Sockets with USB ports are a must, some preference for more convenient locations at each seat
Up to date **travel information**. Screens which show this practical information are therefore a good solution
Reliable **Wifi**

Features which are useful to have

Better **baggage storage** to reduce obstructions (utilising areas between and under seats)
More and better designed **bins**
More **grab poles** in aisles and by door
Tables to hold cups/ more space for laptops
Seating which offers more back comfort

Less requirement for

Some **screen information** which is of 'interest' as opposed to more useful factual information
Widening of entrance areas, although the benefit of this will inevitably be seen in practice and difficult to understand in theory. Retaining seat numbers is important, therefore flip up seats or bars are a preference where standard seating is removed.

Context



Context 1

Top of mind likes and improvements were discussed to understand the context for potential changes and how they fit

Positives



Wifi is available, which avoids using personal data allowances from mobile provider



Availability of **plug sockets** is good



Air conditioning and **heating** can be good



Some are positive about **seating** feeling its spacious and smart. Some likes of flip up seating and bars.

Improvements

Wifi doesn't always function and can be patchy

Would like **plugs** to include USB ports as well, positioning of plugs is not always liked (too low or less accessible from aisle seat)

Some passengers miss being able to open a window, the **temperature** in the carriage is not always that comfortable

Some others find **seats** too hard, the backs too upright for comfort, seats being worn/old fashioned, too close together with the tables too low

Context 2

Positives



Storage was adequate for some, with overhead being easiest to keep items nearby



Spacious **toilets**



Improvements

Conflicting space for bikes v luggage v buggies.
Some criticism of the overhead storage being too narrow, too difficult to haul heavier objects up high (with a lack of storage on floor level)

Toilets could be more spacious!
Better designed e.g. with manual lock not electronic, more colourful
Ensure water is always available in the toilet

Standing space is more limited with a narrow entrance area

Other minor comments covered bins not being big enough, more coat hooks, privacy issues with seating arrangements

Spontaneous carriage needs



Passenger recommendations on improvements – key themes 1

Specifically passengers were asked what changes they would like to see to train interiors to improve the environment, information, reduce worries, make it easier, make a journey more interesting, to feel more comfortable, keep updated or make them feel more secure. **Critically, ideas closely align with Porterbrook plans**

Most popular

Information

- Information about the journey
- Live updates when delayed
- Departure board information/real arrival times

TV / electronic display screens

- With news, sports, info

Charging ports

- Availability of charging ports including USB

Seat design

- More space at seats (wider, more legroom)
- Softer seats
- Some mentioning greater privacy (gaps between seats/ glass panels allow people behind to see through)

Ventilation

- By opening windows, more fresh air
- To avoid temperature discomfort and smells

Wifi availability

- More consistent
- Knowing how to use (older passengers)
- NB - Wifi is used predominantly for entertainment and work, not so much travel info

Passenger recommendations on improvements – key themes 2

Ideas mentioned a few times, but not 'voted' as the critical ones

Some popularity

Luggage storage

- Better storage for luggage and bikes (some Gatwick Express specific but across all journeys too)
- Under seat storage (for proximity)

Space

- Can feel quite cramped, particularly in aisles

Lighting

- Lighting can feel quite harsh, so softer lighting
- (Energy saving lighting is expected)

Cleanliness and bins

- Frequent cleaning to leave the carriages in a good state at turnaround, bins can get full easily due to design

Carriages for specific needs

- E.g. quiet carriage, designated for children, rowdier groups

Passenger recommendations on improvements – key themes 3

Other ideas mentioned by a minority

Minority mentions

Information

- Splitting of train info (Cambridge specific)
- Alternative routes
- Toilet location information
- Where spare seats are located
- More announcements (from a person)
- Twitter feed on monitors
- Audible announcements (at the right volume)

Carriage design

- More toilets
- Grab rails in the aisles/ at door
- Headphone jackpoint
- Flip over seats (like France)
- Ergonomic furniture (shaped headrests)
- Trays on seats to accommodate cups
- Replace First class with better disabled and baby facilities
- More colourful
- Bins with flip lids (to avoid contact)

Other services

- Availability of hand sanitiser
- Availability of fresh drinking water
- Vending machines
- Staff availability
- Entertainment console
- First aid
- Panic button/ help points
- Lockable storage
- Background music

Requirements for disabled people

Overall the focus is on the essential rather than the additional extras, thus needs are largely focused on boarding and alighting requirements

Physical ability to board and alight

Ramp works well when assistance is available, but could an automatic fold out ramp be available on some carriages or even a specific physical disability carriage so all needs are in one part of the train.

Sufficient room to turn a wheelchair around is important (and there is currently enough turning space)

Grab rails at doors to steady those with walking difficulties

Information to board and alight

For sight impaired, knowing when arrived at destination, which side to alight, which platform arrived on. Dependent on audio announcements, if not available, dependent on other passengers to provide information or guess!

Where the door opening button is, doesn't feel as though this is consistent and only available on one side

Views on screens



Screen information - overview

Passengers were shown a screen information reel and asked to comment on each screen

Overall the **screens were very well received** (hand claps in one group!) and respondents like the idea of having TV style screens on each carriage. Spontaneously, the issue of the smaller rolling screens was mentioned relatively positively, but also that there was limited information, so this new solution meets this need.

There was some minor concern over **screen placement** and whether passengers would be able to see it if placed in a facing wall at the end of a carriage

Overall **the factual information about the journey is liked best**, with other information like news and events being a nice to have for some, but superfluous.

The screen information would need to be **adjusted so that at times of disruption** the important information about delays, connections, etc. was prioritised and that there was less of the entertainment type information and more on updates and estimated real time of arrival

Some passengers are aware the information shown can be available elsewhere, e.g. via apps, but they all see the value in it being presented on board (regardless of whether they are attuned to information apps etc. via smartphones)

For profoundly blind passengers, the information shown on the screens is very useful for them to know. Ideally screen information should be able to be accessed via audio. A Bluetooth solution, or some method of obtaining audio of screen via a specific website to pick up via the passenger mobile device, would be an optimal solution

“

Its like Netflix for trains

If you're seeing stuff like this on the screens it stops you thinking about delays and things like that

In the morning everyone is half asleep, its like a zombie train. Something interesting will make it more fun

Gold star!

”

Screen information – journey progress and connections

Really want

Useful

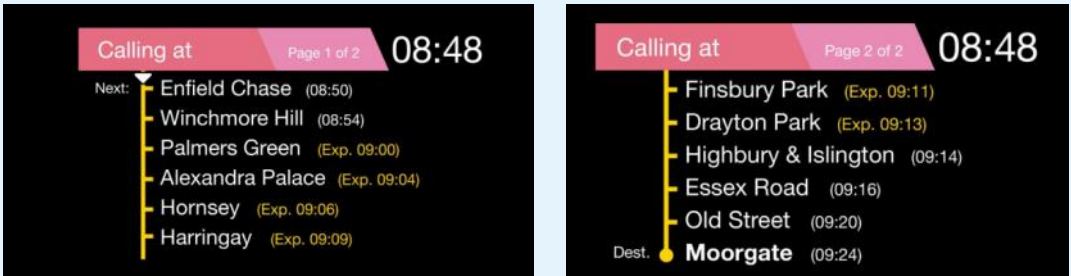
Not important

1

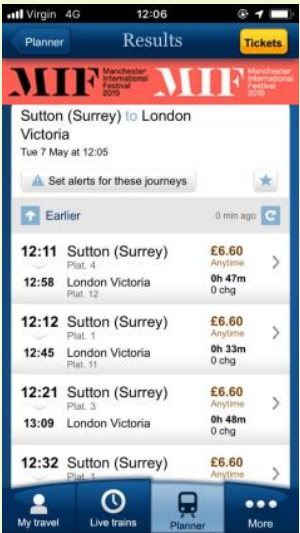
2

3

Fits well with passengers’ spontaneous needs
Yellow times in brackets work well and are easily understood as ‘adjusted’ times which deviate from the timetable.



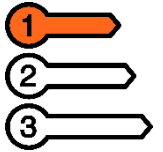
Overall view: very much liked and useful to have on board. Something that timetable apps like National Rail don’t have the updated arrival times on if delayed



This is familiar to passengers (via other networks/ stations) therefore instantly understandable and recognisable.

Passengers like this as it enables them to plan forward travel before they alight.

Screen information – service delays



Service update information is viewed as really useful. Passengers cited examples of not knowing what might be going on if the train has stopped or is slow moving and are dependent on an informative driver to provide updates or try and find information online. Most important is being given an estimate of the time delay (although appreciated that it wasn't always possible to have this)

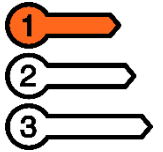


An exclamation mark and a bell were tested. The exclamation mark is felt to be too alarming for a minor delay of this nature, the bell is accepted.

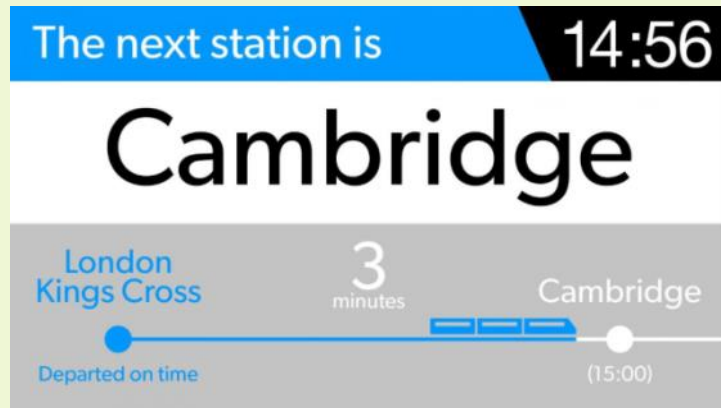


The exclamation mark is deemed appropriate for the more extreme service disruption. The use of the picture is seen as useful (it provides more detail). The Twitter address is also useful (although some recognition that some may not use Twitter).

Screen information – about arrival station



Passengers like this sort of information and it aligns with spontaneous thoughts on useful information whilst on board, either because they had seen it elsewhere, or genuinely something they need.

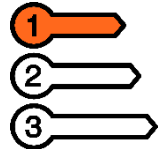


Pre-warning about station arrival is useful to prepare to alight. Specifically mentioned by blind passenger (guide dog on harness, collect bag, position at door).



Onward connections are recognised as useful, particularly for those who might be less familiar with journey.

Screen information – about arrival station



Cambridge Departures		14:59	
Due	Destinaton	Status	Plat
15:04	London Liverpool St	On time	2
15:09	Norwich	On time	5
15:11	Stansted Airport	On time	8
15:14	London Kings Cross	15:20	7
15:22	Cambridge North	On time	4
This train will arrive on Platform 1			

All the information on this screen is viewed as useful:

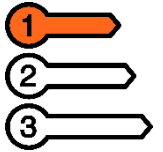
- Departing times planned and actual times are useful to know about making connections, particularly if the train they arrive on is delayed
- Knowing which platforms to go to ahead of alighting is useful otherwise they have to look for this on the platform (especially when there is limited time)
- Knowing which platform they arrive on is useful to plan where it is they need to go. Blind passengers find this information useful as they can then know what route they need to take to exit the station (e.g. straight off the platform or using stairs, etc.)



This screen also carried useful information:

- Knowing which side the doors open can be particularly useful (especially if on a crowded train or with luggage) and very useful for disabled passengers to know (although there is a tendency for physically impaired to 'hang back' and await others to alight first)
- Other signage about direction to exits or other platforms is useful but neither highly praised or criticised.

Screen information - capacity



Train loading information is very useful and sometimes seen on other services. However some mentioned it being useful to see before boarding as it can be difficult to move to emptier carriages when the train is very full and aisles are blocked by standing passengers.

Train Loading

10:25

You are here

Front

- Plenty of seats
- Carriage half-full
- Standing room only
- Carriage full

Live Capacity Update

10:25

Front

You are here

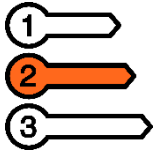
Predicted loading at next station:

- The information is instantly understood
- There is some desire to know where toilets are located and having this plotted on this type of visual (not necessarily alongside loading information) would be useful
- Some inquisitiveness about how this information is collated



“ This is another example of how busy the commuter train is and the limited space in the aisles has completely stopped people walking through ”

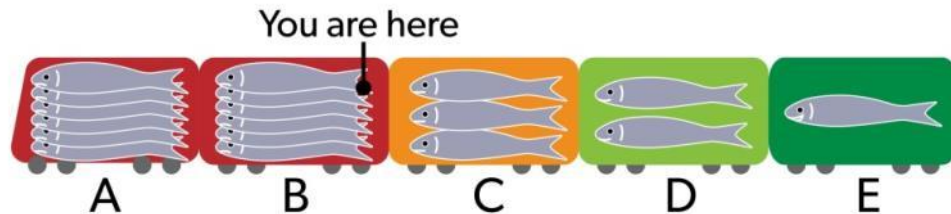
Screen information - capacity



Sardine-Meter

10:25

Don't play Sardines...



There's **lots** of room at the back of the train.

Many passengers found this infographic amusing.

They like a bit of personality and jokiness and feel more of this sort of communication would be welcome. Some cited 'good' train drivers who will make a joke or be jovial with announcements.

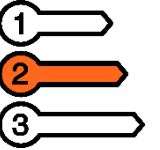
This sort of light heartedness needs to be appropriate to situation though (e.g. may not land as well with a severely crowded and delayed train).

“

*Sometimes you get very funny drivers 'Welcome aboard, its Friday!'
Its very good, they cheer you up*

”

Screen information - Wifi

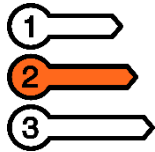


- Given Wifi is such an important feature of being on the train, having information about how to connect to Wifi is important
- It raises awareness that it is available – some people are unaware (e.g. older, leisure)
- It communicates that it's free
- It provides the details on how to connect
- On the negative side, there may be raised expectations on connectivity, so if connections are patchy this may create an issue



“It’s useful to know what services are available on the train especially if you are regular traveller. Good to know about Wifi because it used to be chargeable and generally was not very good.”

Screen information – service changes



Planning ahead information is useful to know, but not as essential as on the day travel information. It's not something they would need reminding about too much on a single journey. Nevertheless, its important to be informed about this type of information

**PLAN
AHEAD**

Planned engineering works today:

Buses replace late night trains
between Ely and Kings Lynn from
22:45 each night until Thursday.

More info @GNRailUK

10:25

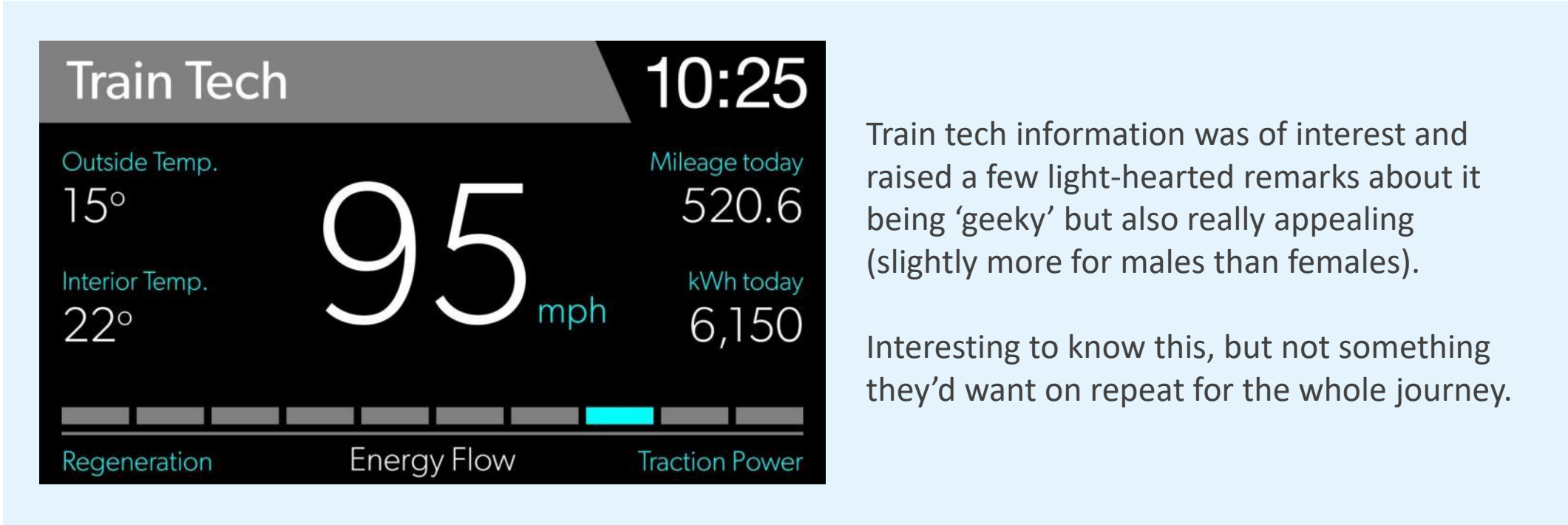
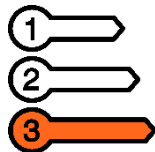
Our Christmas Service

10:25

Tuesday 24th	Wednesday 25th	Thursday 26th	Friday 27th	Saturday 28th
Reduced Service from 20:00	No Service	No Service	Amended Timetable	Amended Time

More info @SouthernRailUK

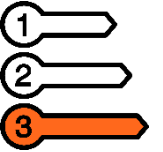
Screen information – train tech information



Train tech information was of interest and raised a few light-hearted remarks about it being 'geeky' but also really appealing (slightly more for males than females).

Interesting to know this, but not something they'd want on repeat for the whole journey.

Screen information – events information



Passengers had mixed reaction to this type of information:

- Some thought it was advertising which wasn't criticised, but they wouldn't want too much advertising. But was generally recognised as a potential revenue stream for the TOC.
- Some thought it was public announcement type information about what's on, which again was accepted.
- Others made the connection that it was to pre-warn that trains may be busier than usual which might help them re-plan future intended journeys.

10:25

PRIDE parade takes place in central London on Saturday 6th July.
Some trains may be busier than usual.

[Live updates @SouthernRailUK](#)

10:25

Springfest
- Alexandra Palace
GERMAN BIER FESTIVAL
GOOD FRIDAY 19th APRIL

The last train from Alexandra Palace is at 01:40
PROST!

[@GNRailUK](#)

Now arriving at 10:25

Arundel

Get off here for the Arundel Festival

Arundel Festival | 2019
16th–26th August

The station may be busier than usual.

Now arriving at 10:25

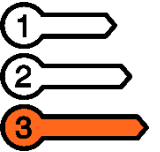
Arundel

The Arundel Festival is next week!

Arundel Festival | 2019
16th–26th August

Save when you buy event and train tickets at [greatnorthernrail.com](#)

Screen information – other non-journey related information



There were again some different views on what this type of information was:

- Useful to know what they were travelling past, a nice to know what was going on around them
- Advertising that was either of interest or indifference



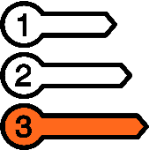
Mixed views with this type of 'seasonal' information:

Good to know as it's something you might forget and good that the TOC is engaging in this type of communication
...through to...

Not really necessary information

Overall viewed as superfluous

Screen information – news and weather



News and weather is OK for some, but others are indifferent or would rather get away from the news. Weather seems more accepted.



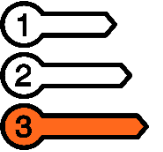
I am an advocate of news channels on screens. Its interesting to see what's going on. I would interlace them with the update stuff such as platforms, arrivals, etc.



Weather is fine, News no. It needs to be balanced with other information. I need to know about delays, departure, info about my journey etc. There is a priority order. Weather is not essential.



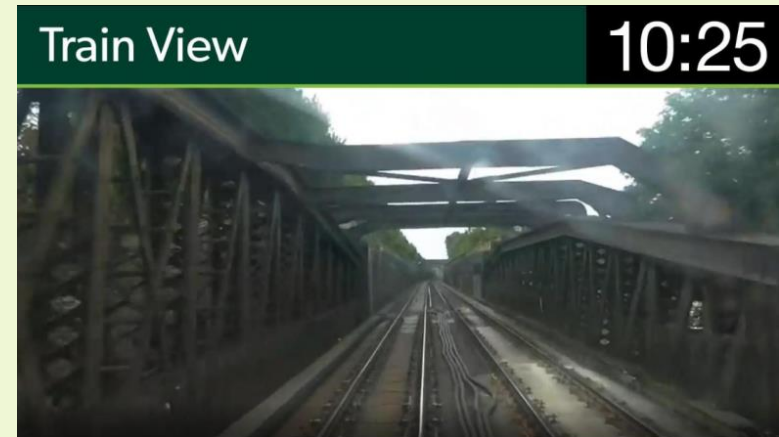
Screen information - CCTV



Whilst passengers can feel assured there is CCTV on board, few liked the idea of being able to see the CCTV images on the screen. It felt a bit 'creepy' for some and concern that if they were in a carriage with few people in it, it might make them more vulnerable (females in particular). However there were some differing views, older people felt more reassured. On balance it felt not showing this would be more widely acceptable

(CCTV) Its intrusive, it doesn't feel pleasant, feels like you're being watched

Seeing out of the train from a different perspective might be interesting, but mostly indifference, not something of importance



Views on other carriage improvements

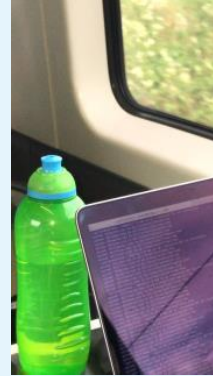


Other carriage improvements

Power Sockets

Power sockets at each double seating space with a USB are universally welcomed.

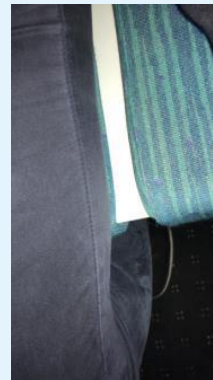
Positioning improvement: the socket is low down next to the window seat, so difficult/ awkward/ embarrassing for the aisle passenger to use. Better to have in-between or on the back of seats.



Having ports/plugs under window would be more convenient if drink spills weren't a risk.



Plug point is also at knee level so big Mac plugs get in the way and aren't popular.



I've seen USB ports retrofitted between the 2 seats, avoids having to ask your neighbour to plug in/out ... as that can be awkward.

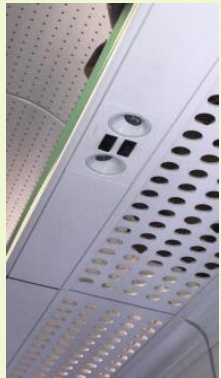
Other carriage improvements

Lighting

Lighting improvements were explained to passengers as an example of lessening environmental impact (by using a lower energy approach). This was welcomed.

Some concern over the harshness of LED lights over other lighting and some preference for softer lighting.

On the whole lighting seems about right.



Some discussion on the overhead lights, which seemed rarely used and some concern that when they are used they are left turned on (not energy efficient)

Don't really recall people using overhead lights very often. Screens often negate the need.

“



Strip lights in aisles generally sufficient.

It would be better if the lighting was warmer, like a traditional bulb

”

Other carriage improvements

Coat hooks

Coat hooks were mentioned as useful by some passengers but others had some minor criticism when asked:

- Positioning is only over one seat and not the other, so awkward to use
- Security concern if not stood/ sat near it
- Wet coats/ bike clothing can be good to hand up, but equally can drip on other people.

“



Aisle coat hook near head rest might work if didn't hamper aisles

Ventilation

Improved ventilation was explained to passengers in terms of temperature being adjusted according to passenger loading (some difficulty in comprehending this straight away).

Overall some passengers miss being able to open windows when required and give examples of being too hot or too cold. Also overhead airplane style ventilation was mentioned to make it more customised (we are all different).

The train is now a bit cold and I have my coat on still

*It gets hot and sweaty and smells of bodies
Not everyone is the same, some people feel cold
because of health reasons, or the other way
around*

”

Other carriage improvements

Litter and bins

Notably few mentions of littering. Some comments on bins:

- More bins (e.g. behind seats, not just by doors)
- Bins too narrow so can't accommodate rubbish that well
- Preference for a bin that eliminates the need to touch it (hygiene being the reason for this – minor mention)

“



There is a bin by the doors as you enter/ leave the train but as you can see perhaps not suitable for coffee cups as the bin was actually empty and cups get stuck at the top

Grab poles

Some preference for grab poles in other areas on the carriage:

- In aisles
- Next to doors so can steady self when exiting (e.g. with a more minor physical impairment)

I'm afraid of losing my balance

Have the rails (by the doors) vertically, not horizontally on the inside to pull yourself in

”

Other carriage improvements

Seating, tables and upkeep

Seating improvements:

- Some criticism of seats being hard
- Some mentions of the seats being too upright and hard backed which gives little lumbar support
- Some preference for more padding around the head and back for comfort (...when napping!)
- Armrests are liked for creating personal space, so movable armrests on both sides for this purpose



Also some wear and tear noticed



The train is rather dirty, for example there are many stains on the seats.



Table improvements:

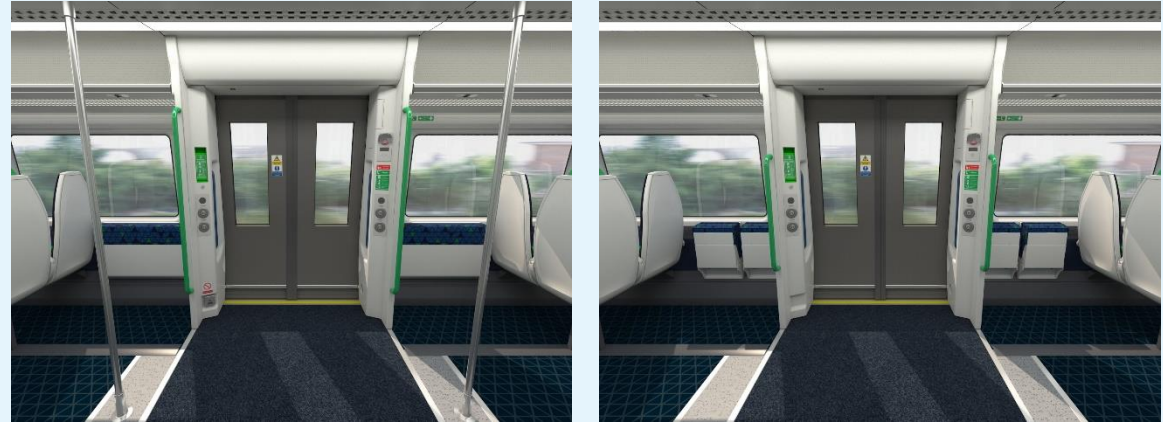
- Some mentions of tables being improved such as incorporating cup holder and widening of tables to accommodate (multiple) laptops

Other carriage improvements

Widening of entrance and exit areas

The widening of the areas by the doors was explained to passengers (i.e. removal of row of seats and replaced with fold up or lean bars). Mixed preference for the fold up seats or the bars.

Generally there was little push-back on this provided there were the same amount of seats, at busier times finding seating can be a problem. This change is viewed by passengers as meeting extra standing space, not recognised as allowing more space for boarding and alighting.



“

It's a perception thing. If you have the same number of seats but a wider area as well, it will be better perceived by people

We're not cattle...

”

Other carriage improvements

Toilets

Toilets had some mixed comments but on the whole not a huge area for improvement. Some observation that there is good wayfinding although mixed views on this.

Improvements included:

- Some concern over locking mechanism and preference for a manual rather than button press lock (in case it fails!)
- Some mention of odour and avoiding sitting near toilets
- Ensuring that water is topped up so avoids running out (for flushing/washing hands)
- Some minor preference for sterilising hand gel (generally on the train or even on the platform, not necessarily restricted to just the toilet)



Good directions to facilities

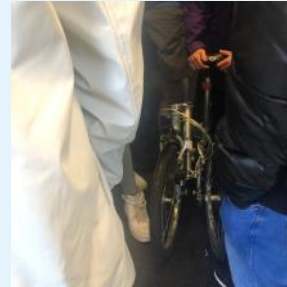
Other carriage improvements

Luggage and Cycle Storage

Luggage and cycle storage on-board was mentioned spontaneously

Luggage on all trains (not just Gatwick Express) was raised as a concern by some:

- Overhead racks are good but the racks are a little narrow for some luggage. Also difficult to place heavier bags up high
- Floor and shelf racks at the end of seat rows are good, but can sometimes be used as extra seating and can get full
- When luggage racks are full then the space around door ways becomes congested
- Conflicting needs arise when buggy and cycle space is required
- A minor mention of inadequate cycle provision where bikes can fall over



It seems like the 'no bikes on peak service' rule is not upheld; this makes getting in and out of the train hard

“

There is loads of space in some parts of the train, but no suitcase rack. I think having one will be helpful to avoid traffic in the lanes and people needing to use the seats.

”

Conclusions and Recommendations



Conclusions and recommendations

Overall reaction to the changes

Passengers do not have any overwhelming issues with train interiors, if anything just minor grumbles, therefore wholesale changes are not required.

However, there is alignment between planned changes and thoughts and feelings passengers have about train interiors, this indicates the planned changes will be welcomed. In addition a few other adjustments are on the passenger 'wish list'

Sockets

USBs are almost universally wanted. If possible putting sockets in a more accessible place per seat location would be preferred

On-board information

Screens were not necessarily thought about by passengers, but once described are very welcomed. On-board information is wanted spontaneously, therefore the screen provides the medium to do this (as opposed to the more limited overhead scrolling screens currently in carriages)

Priorities

Conclusions and recommendations

Type of information required

Practical travel information is a priority as opposed to entertainment. Although some travel information will be available elsewhere, there seems to be a need for this information to be pushed to passengers; passengers are not necessarily always on the look-out for information so are comfortable and welcome receiving information passively via a screen.

Wifi

Wifi is used often by nearly all passengers, with a preference to use train provided Wifi to limit their personal data use. Having reliable Wifi is therefore an important aspect of their travel experience. Having information about how to access Wifi is particularly useful for older or those using less often (e.g. leisure users)

Main Priority

Conclusions and recommendations

Storage

Storage is always a constant issue where users with different needs compete for space. The passenger identified solution is to address space on the train for **baggage storage**. Whilst overhead storage is largely seen as good, floor storage for heavier, bulkier baggage is more limited, causing issues with blocking aisles and doorways. Solutions suggested are for greater use to be made of space under or between seats.

Coat hooks were also discussed as a more minor issue. Coat hooks in the current location seem under utilised and alternative places for them (such as back of seats) may offer great opportunity to store items like coats more conveniently.

Lighting

Lighting is not a area for huge concern, if anything could be less harsh. The concept of energy saving lighting is naturally welcomed, but is unlikely to be noticed in practice. Passengers seemed to like to know about it's environmental impact so perhaps a fact that could be conveyed in some way once implemented.

Main Priority

Medium

Conclusions and recommendations

Bins

More bins situated in aisles would be welcomed, although passengers did not comment extensively on rubbish accumulating as a result of bins only placed near doors.

The shape of the bin was discussed in terms of the neck being too narrow for bulkier items such as coffee cups.

Grab poles/ handles

Some desire for more grab poles, in the aisles. Also mentioned for those less sturdy on their feet is a grab handle near the door to steady when alighting or to pull on when boarding

Seat comfort

Some criticism of seating, particularly the upright and hard back rest. Softer seat with lumbar and/or head support is preferable.

Medium Priority

Conclusions and recommendations

Widening of entrance areas

The widening of doors was perceived as providing a feeling of more space, but this was coupled with concern over the loss of seats which didn't feel like an overall gain for the passenger. Notably there was little connection made between the widening of the entrance area and therefore easing alighting and boarding.

Passengers largely preferred the fold up seat or lean to bar solution as opposed to removal of seats.

In practice, passengers may find further positives about this change, but couldn't make the connection to this when discussed theoretically.

Tables space

Minor mentions of the tables being cramped for laptop usage (particularly at commuting periods).

A minor suggestion for fold down tables to be able to accommodate a cup holder or similar.

Low priority

Conclusions and recommendations

Advice for operators – what is the ideal approach to utilising screens?

Do

...**Communicate factual and up to date travel information** such as warning about next stop, time of arrival of next stop, next station information including alighting side, arrival platform number and information about connections (and which direction these platforms are in)

Provide train loading information, where possible give this information platform side to allow planning before boarding

Do provide **delay information** and adjust the frequency and style of information at points of disruption so that the more factual information can be seen quickly and 'entertainment' information is reduced. Use infographics to distinguish between a serious and minor delay

Show personality, passengers like jovial personal communications from the driver, do this with screens, but remain appropriate to situation

Don't

...Show lots of **event information**, the message gets lost in terms of conveying useful service information and can be portrayed as advertising. Although advertising on the screens was not necessarily rejected, just not a priority.

...show the **news and weather**, or if shown, very sporadically.

...don't show **CCTV images**, passengers like to know there is CCTV on board, but don't want to see carriage images