



# Changing trains versus direct trains

Passenger views  
November 2022

**T**his report summarises the findings of our new qualitative research, undertaken in partnership with Network Rail. It provides insight into passengers' experiences of changing trains and their views about how this part of journey experience could be improved.

Our other objective was to better understand how passengers – and potential passengers – prioritise different types of timetable model and the resulting service. This is important because rail capacity is a limited resource and timetables often involve trade-offs. Would passengers prefer direct trains to their destination, or a higher frequency service, which should be more reliable – but which means having to change trains to reach their destination? This research was not about testing 'real world' timetable options. It used hypothetical examples to help understand passengers' views.

The research confirms that passengers prioritise the reliability of their service. Despite this focus on reliability, it also illustrates that passengers do not all agree on the optimum service design, as direct services remain highly valued. The strength of view often depends on individual needs and the purpose of a journey, reiterating the importance of the railway understanding its customers and the market.

The establishment of Great British Railways will create a new 'guiding mind', tasked with planning and running the network and setting the timetable. We will use this insight to help ensure passengers' views on the design of services is built into the railway's long-term planning. It is important that the railway continues to focus on how it can best meet passengers' needs now and in the future.

**Guy Dangerfield**

Head of strategy, Transport Focus



# Research objectives

The central objective of this research, undertaken in partnership with Network Rail, was to explore passengers' views on the advantages and disadvantages of different types of rail service design. Rail capacity is limited and different types of timetable or service design can use that capacity to deliver different outcomes and benefits.

In particular we wanted to understand if, on balance, passengers prefer trains which run direct to their destination but less frequently, or prefer higher frequency and more reliable services which require a change of train to reach their destination.



**Central to the research we looked at a 'core dilemma'  
– that is the trade-off between two hypothetical service modes**



**Higher frequency  
but more changes**



**Lower frequency  
but more direct trains**

**Tension  
around what  
to prioritise**

We explored:

- how passengers think about and prioritise the different elements which must be balanced by those who design train timetables
- passengers' thoughts about and experiences of changing trains.
- how the experience of changing trains could be improved.
- what kind of service design would make travelling by train more appealing to those who could use the railway, but don't currently choose to do so.

For the benefit of research participants the research used the example of train services running through Preston so that the hypothetical nature of the issues at stake could be related to people's day-to-day experience. It is recognised that the views of passengers elsewhere might be different in some ways, or that the structure of the timetable which was described might not be suitable elsewhere.

## A methodological challenge

Because the research concerned the way in which train services might be designed to run *hypothetically*, and because the issues central to these discussions were in many ways highly technical in nature, there was a methodological challenge in the research. Specifically, how could the research make the issues accessible to regular train users who, unlike those designing train timetables, have not previously considered the issues in depth?

To address this challenge we tried to ground the theoretical nature of the research within passengers' actual experiences. This was done, first, by recruiting participants to the research who were either using or

had access to rail lines passing through Preston. And second by applying the different potential models of timetable design to services around this location. Preston was chosen as it represents a major hub on the West Coast Main Line at which trains to many destinations are available or pass through.

Before attending discussion groups, research participants were given some examples and asked to think about their initial preferences so that these could be unpacked during discussions. These examples were separated for those usually travelling through Preston on a **direct service** and those who usually **change from one train to another** at Preston station.

### Initial options for passengers that have...



#### ...direct services now

- A** In this option, trains on your route to/from Preston:
- **would be more frequent than they are now** (for example if they are currently every hour, they could be every 30 minutes)
  - **would be more punctual and reliable than now** (on time more often and fewer cancellations)
  - **would require a change of train** to reach your destination.

or

- B** In this option, trains on your route to/from Preston:
- **would be less frequent than they are now** (for example if they are currently every 30 minutes, they could be every hour)
  - **would be the same as now in terms of delays and cancellations**
  - **would offer direct services through Preston as they do now, but would offer additional direct services to more destinations**, for example, as well as direct services to Manchester there would be additional direct services to Liverpool.



#### ...to change trains now

- C** In this option, trains on your route to/from Preston:
- **would be less frequent than now** (for example if they are currently every 30 minutes, they could be every hour)
  - **would be the same as now in terms of the level of delays and cancellations**
  - **would offer a direct service with no need to change trains** to reach your destination.

or

- D** In this option, trains on your route to/from Preston:
- **would be more frequent than now** (for example if they are currently every hour, they could be every 30 minutes)
  - **would be more punctual and reliable than now** (on time more often and fewer cancellations)
  - **would still require a change of train** to reach your destination.



During discussion groups research participants were provided with information about the key considerations which impact the design of train services and timetables. This information included:

- how potential 'bottlenecks' and congestion on lines and at stations is managed
- the impact of running fast and stopping trains on the same tracks
- how rail services can be more reliable if they run over shorter, 'self-contained' routes with fewer interactions with other services – though this can mean that passengers need to change trains to reach their destinations.

During the discussions participants were given two different hypothetical models of timetable design which they were asked to consider against the service currently provided at Preston station. The three models were presented to participants in the form of a map and written summary which they were then asked to apply to their own journeys.

Finally, participants were also asked to work on the basis that additional carriages could be added to trains in future to add more seats for passengers if necessary. This was intended to help them set to one side questions about how crowded the trains might be when considering each of the hypothetical timetable models.

## Key findings

### – reactions to different models of timetable design

#### The different models of timetable design tended to be evaluated against current service levels

Perhaps unsurprisingly, participants tended to evaluate the different hypothetical models of train service and timetable design against the service that they currently receive in their local area. Participants' initial reactions to the options they were given before attending group discussions tended to depend on their current experience. Those who were already making changes between trains on their journeys tended to be more open to the possibility of changing trains in the future, while those with direct services tended to want to keep them. Current service frequency was also influential – those with one or two services each hour were concerned about what a less frequent service would look like, while those with a frequent service were more open to a reduced frequency if it gave them more direct trains.

When, during group discussions, participants considered how trains run in and around Preston currently, most participants indicated that they found the service to be acceptable and suitable to their needs. Very few felt the current service was inadequate, though many indicated that they would like to see a more frequent and more direct service.

Discussions with potential train users indicated that in areas with less frequent trains the current service was unlikely to encourage them to switch to using the train.

*"C works best for me and my mobility, I don't mind about frequency, it's the directness of [the trains] that is essential."*

Disabled passenger

*"I said option B. For me it's the direct trains. When I was able-bodied I did do a change once, when I went to a concert and it was horrific because of the crowds. Normally I'd expect it to be fine or at least better but now it's not really an option."*

Disabled passenger

## Lower frequency/more direct service models were preferred by some, but less so by commuters

A service design which featured trains running direct to more destinations, but at a reduced overall frequency, appealed more to those making leisure journeys. It also appealed to those whose journeys were planned far enough in advance that as long as there is one train that will work for them, that is acceptable. Leisure travellers also more often liked the idea of being able to reach destinations directly, while this was less important to commuters who are just making the same journey regularly.

In each of the groups, when the lower frequency/more direct services model was discussed, participants raised

questions about how long they might have to wait if they missed their train. Similarly, commuters were concerned about the way in which the model reduced the range of alternative trains which could be used to reach their destination in the event of disruption.

Those with only two to three trains per hour from their destination were understandably concerned if trains on their route would be reduced to one per hour. Those with four to six trains per hour currently were more relaxed about this reducing, but only if the benefits of having more direct trains turned out to be 'real'.

## Higher frequency/more interchange models created interest for many, but needed to clearly demonstrate the potential benefits in practice

While many expressed some dissatisfaction with the increased need to change trains in the high frequency/more interchange model, when the potential benefits were understood it became of greater interest and prompted lots of discussion. Nevertheless, few passengers changed their minds about whether this was a better option. Across all the groups passengers expressed a general dislike of having to change trains, though having a larger range of options for reaching destinations from connecting stations did counter this starting position to some extent. After consideration, passengers begin to understand that improved reliability could be a key benefit of a model which limits the potential for knock-on delays when things go wrong. However, this concept is not immediately obvious to passengers and would need to be explained and demonstrated in practice to be more widely accepted.

Disabled passengers and those travelling with luggage and/or small children were less likely to find the high

frequency/more interchange model appealing despite the potential benefits. Conversely, commuters and those familiar and confident with using trains were less likely to be concerned about making a change and therefore this model held some appeal for them. Within the group that expressed an interest in this model, ideally there would still be only one, or for longer journeys at most two, changes on a journey, otherwise it started to feel like 'too much hassle'.

*"I quite like the current model; it doesn't affect me that much. One or two delays here or there, but I quite like the current model, the way it is."*

Disabled passenger





## Current model

Thinking about the frequency of trains on these routes at the moment, you can see from the map that currently:

- station A has at least 4 trains per hour:
- 1 train per hour to Station B
- 2 trains per hour to Station C
- 1 train per hour to Station D
- and a train to Station E less frequently than hourly.

All 5 trains from Station A run through Preston. There are approximately 12 trains per hour through Preston that could be connected to.

*"[The current model] sounds good in principle, just because Manchester is a hot-spot to go to Blackpool and vice versa. Liverpool as well. They are both places that are popular for leisure and for work."*

Commuter



## Model 2: Lower frequency, more direct services

In this example, Station A has 3 or 4 trains per hour:

- 1 train per hour to either Station B or Station C (alternate hours)
- 1 train per hour to either Station D or Station E (alternate hours) - A train to Station F less frequently than hourly
- a train to Station F less frequently than hourly (the train to Station F alternates each hour between Station A and Station G)
- a train to Station H less frequently than hourly (the train to Station H alternates each hour between Station A and Station G).

All trains from Station A run through Preston to other destinations. There are approximately 10 trains per hour through Preston that could be connected to, but with more destinations than in the current service.

*"[Model 2] is the one for me. I see changing as an inconvenience so even if I had options for more trains or faster trains, I'd pick the direct one."*

Leisure passenger



## Model 3: Higher frequency, more changes

In this example, Station A has at least 6 trains per hour:

- 1 train per hour to Station B
- 1 train per hour to Station C
- 2 trains per hour to Station D
- 2 trains per hour to Station E
- and a train to Station F less frequently than hourly.

4 trains per hour run through Preston to other destinations and 2 per hour terminate at Preston. There are approximately 16 services per hour from Preston that could be connected to.

*"A train every 10 minutes, all you need to know is when the train is leaving Preston. It is a lot easier to plan your journey with the frequent trains."*

Current non-train user

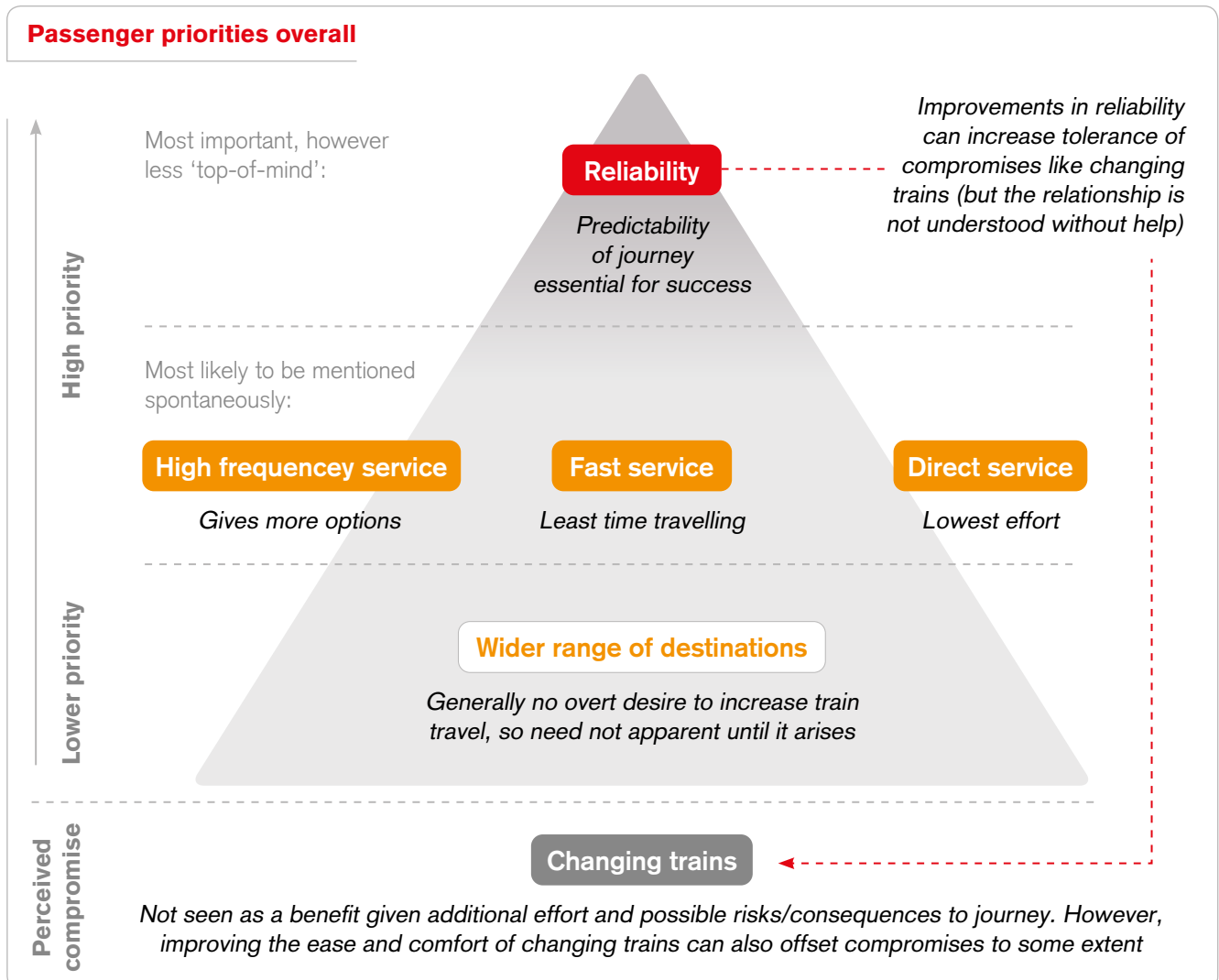
## Passenger priorities when evaluating train services

When rail passengers evaluate different models of train service and timetable design, their priorities are broadly consistent. Overall, passengers consider it important to have trains which run at a high frequency; trains which offer competitive journey times; and trains which run directly to places that they want to go to. Most importantly, however, passengers prioritise the reliability of trains in terms of the predictability of the journey, though they do so less consciously than they do the other aspects of train services.

For passengers generally, while there is little clamour to have direct trains from their starting station to new destinations, needing to change train during a journey is nevertheless seen as a compromise which is best avoided. Despite this, the undesirability of making a change can be mitigated if it can be done with relative ease and in comfort, and if it can be shown that the need to make a change can benefit the reliability of the train service overall.

Within broadly consistent passenger priorities some differences exist, depending on the type of train users. High frequency services are most favoured by commuters or those travelling for business as it gives them more options if they need to work late, or if travel plans change. High frequency of trains is less of a concern to leisure travellers and disabled passengers who are more likely to plan journeys in advance.

Having a direct service to destinations is the highest priority for passengers with a disability and for leisure travellers, particularly those travelling with luggage and/or young children. Having access to direct services is also a high priority for potential train users in terms of the way in which using a train compares with the ease, convenience, and directness of using a car.





## Attitudes to changing train

For most passengers changing trains on a journey is just something that must occasionally be done. However, there is a spread of overall attitudes towards, and tolerance of, changing trains among different types of passenger. The most experienced train users see that sometimes there can be advantages to changing trains, such as being able to transfer to quicker services, or connecting to services which are less busy. Though this is the case, even these passengers do not want to make multiple changes in a single journey.

Some less confident passengers will use different strategies to avoid having to change trains and will plan journeys in advance to avoid having to do so. Such strategies include changing the departure station to catch a direct train, or even using a different mode of transport altogether. Across all the discussion groups which involved those who currently have direct services to their

preferred destinations, there was some concern about how they would feel if they suddenly needed to change trains to make these journeys. Even after further discussion about the way in which higher frequency/more interchange models of timetable design could improve the reliability of services, some were still against the idea of changing trains as it felt like a reduction in the overall quality of the service.

Discussions with passengers about the experience of changing trains indicated that this could be impacted by multiple factors, including:

- who they are travelling with
- the time allowed for making a change at the interchange station
- the size and complexity of the interchange station
- the station facilities, lighting and security at the interchange station
- weather and time of day that the change of trains is made.

*"For me the changing is impractical with young kids, I've got to carry them, make sure I don't forget things... I could do without all that."*

Leisure

*"There's no benefit to changing train, it's a necessary evil but it doesn't cause a massive issue to my day."*

Commuter

## Can the experience of making a change of train be improved?

Passengers think the experience can be improved. One important way to do so is reducing the need to change platforms. In an ideal situation the connecting train would depart from the same platform as the first train had arrived – get off one, get on the next. If this ideal cannot be achieved, then passengers consider the next best option to be 'island' platforms where passengers simply need to move from one side of the platform to the other to reach the connecting service. In general passengers noted that if they need to change trains, ideally the time available to make this interchange would allow them to get to the next platform without needing to rush, but not require them to wait for more than 20 minutes.

The size and complexity of the station where the change is to be made, alongside the facilities that the station offers, is of key importance. Whether the station is large or small confers some degree of mitigation when a change of trains become necessary. Smaller stations are generally easier to navigate and are less busy and confusing, but they can offer limited facilities and often few staff who can provide reassurance to passengers. Conversely larger stations offer more staff to assist and other amenities, but they can be harder to navigate,

busier and generally more confusing for those who are changing trains.

*"If it's a bigger station, you might be able to get some help if you're struggling to get back. At a smaller one sometimes there's no one there, and if there's delays and cancellations you might not know what's going on. Especially vulnerable people."*

Commuter

When it is necessary to ask passengers to change trains during their journey, finding ways to ensure that they feel reassured and comfortable is essential to mitigate the negative aspects of this experience. Helping passengers feel comfortable is partly about providing facilities such as toilets, seating, covered areas which provide warmth and shelter and a place to buy food and hot drinks. These

## Passenger views on changing trains versus direct trains

facilities are particularly important when passengers are required to wait for some time before their connecting service departs.

*"Shelter over the platform itself so if it's raining, you're not getting soaked."*

Commuter

Alongside a sense of comfort, how passengers feel about their personal security can have a significant impact on how they feel about changing trains. It can be intimidating for passengers – particularly women – to have to change trains alone, outside rush hours at small or unfamiliar stations. Good platform lighting and security cameras can help reassure those who need to make changes in such circumstances, but the presence of staff is ideal. While there are likely to be staff and other people at larger stations, passengers also note that such places can be intimidating – particularly on Friday and Saturday evenings when they feel that there is a greater potential for anti-social behaviour.

*"If I was travelling in the evening or early morning and I had to change ... I would probably rather wait longer and use a different station or drive instead... there are certain stations where I just wouldn't feel safe, some at night, some at any time of day."*

Commuter

*"As a woman, sometimes if you're alone at a larger station late at night there can be crowds of drunk people - especially on the weekends. That can be quite intimidating."*

Leisure passenger

*"There's also more staff at big ones, which is good if you need to know something, I don't know it just feels better knowing people are there."*

Leisure passenger

Providing useful information is the best way to provide reassurance to passengers and to make them feel comfortable about the need to change trains on their journey. As a minimum, passengers ask that on trains and at stations they are provided with information regarding when the connecting service is expected to depart and the platform from which it will leave. Similarly, this type of real-time information is considered useful on apps and in online journey planners that passengers might use.

*"When you use Uber in Manchester, in the year 2022 I'd be expecting some form of app that runs with trains so you can see where they are, that tells you where they're coming from and where they're going to. You should be able to log on at a train station and see where your train is and when it will reach you using a tracker."*

Commuter

*"By the time you get to the station it's irrelevant because you're getting on anyway - but maybe they could show on the app how busy trains are at various times so you can take that into account when you're planning."*

Leisure passenger

*"For me, I don't like these phone apps, so in my personal opinion I wouldn't use an app. I would not download any app on my phone, I only download apps if I really, really need them."*

Disabled passenger

While most passengers are comfortable with accessing online information at the time that they are travelling, some don't use smartphones or say that mobile data is not available to them all the time. The ideal situation on trains and on platforms is to have staff available who can provide train service information and direct passengers to the platforms where they can make their connection.

# Conclusions

Despite some nuances between different types of train user, there exists a great deal of consistency in terms of how passengers think about and assess the different factors which relate to timetable design. Overall, passengers prioritise the reliability of the service, even if this can initially be a less ‘top of mind’ consideration than frequency, journey time or direct services.

Passengers tend to accept the train service which is currently available to them. Passengers who currently use direct trains to get to the places that they want to go, tend not to want to lose this benefit in favour of more frequent services. This also means that those who currently need to make a change of train on their journey tend to be happy to continue to do so, in preference to the frequency of their service being reduced but no longer needing to change.

It is clear from the research that no single model of service design will suit all passengers all the time. There are significant numbers of passengers who want

(or need) a particular type of train service. For example, disabled passengers who find changing trains difficult will almost always prefer a model which favours direct trains, while commuters and those familiar with the rail network will often prefer a service which favours frequency and reliability. Nevertheless, the railway has to try to balance these competing requirements and all types of service, including the current design, involve compromises.

Although some passengers are keen not to change trains on their journey under any circumstances, many more would be open to doing so if the experience met their ideal. For passengers the ideal experience of changing between trains is stress-free, where there is appropriate information concerning when trains are leaving and where from, just the right amount of time to make the change, staff available to help and a clear and straightforward route to take through the station to reach the connecting service.

# How we did this research

In February 2022 Transport Focus commissioned the independent research company Define to undertake qualitative research which explored train passengers’ views of different types of train timetable design. Between 10 and 22 March 2022 Define spoke to 84 research participants during 90-minute sessions by either online video calls or telephone. These discussions were undertaken in the format of 24 ‘trios’ (discussions involving

groups of three participants) with different types of train users and potential train users, and 12 ‘in-depth’ interviews with disabled train users.

Participants in the research either made journeys on direct trains that pass through Preston or usually changed from one train to another at Preston. The table below shows how research participants were divided between the different groups included in the research.

Routes travelled on, including intermediate stations, via Preston	Journey / passenger type				
	Potential users (6 trios)	Commuters (8 trios)	Business (2 trios)	Leisure users (8 trios)	Disabled people (12 depths)
Blackpool North	1 x trio	1-2 x trio	2 x trios	1-2 x trio	2 x depth
Blackpool South	1 x trio	1-2 x trio		1-2 x trio	2 x depth
Liverpool Lime Street	1 x trio	1-2 x trio		1-2 x trio	2 x depth
Blackburn	1 x trio	1-2 x trio		1-2 x trio	2 x depth
Manchester (via Bolton)	1 x trio	1-2 x trio		1-2 x trio	2 x depth
Lancaster	1 x trio	1-2 x trio		1-2 x trio	2 x depth
<b>Total respondents</b>	<b>18</b>	<b>24</b>	<b>6</b>	<b>24</b>	<b>12</b>
84 respondents					

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