



What rail passengers need during extreme heat

Customer experience and communications

June 2023

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0. The Transport Focus remit from the Extreme Heat Task Force

Customer experience and communications

This workstream aims to ensure passenger needs are considered when making decisions on what service to provide when extreme heat is forecast. It then reviews how users are provided with the information they need to make their journeys (or decide not to travel) when the service is at risk of disruption or cancellation.

It therefore will provide recommendations to Network Rail on:

- balancing the need for people to travel with the significant disruption and poor journey experience that could result, including the use of 'do not travel' and similar messaging even though much of the railway is operating.
- providing information that enables informed choice, beforehand, on the day and in the aftermath, recognising that the need to travel and risk appetite for disruption and crowding varies.
- determining a fair refund and compensation policy for extreme weather events that gives passengers the confidence to stay at home when it is better for them and the industry that they do.
- good practice in similar situations from other transport modes, other sectors, and railways abroad.

Network Rail appointed Transport Focus chief executive Anthony Smith to its Extreme Heat Task Force. This was set up to examine how it communicates with passengers and manages their experience in the run-up to and during periods of extreme weather, as well as in its planning for these disruptive events.

1. Introduction

Disruption on the railway is nothing new. Passengers have too often been inconvenienced by incidents arising from wind, rain, snow and leaves, as well as train breakdowns, staff unavailability and bridge strikes, for example.

However, the experiences of summer 2022 were unprecedented. Temperatures not previously experienced in the UK led to chaos on the railway. The impacts of the climate emergency are now gathering rapid pace and worryingly, these challenges will be seen more often. The consequences for rail passengers must be considered and addressed.

Other contributions from the Network Rail Extreme Heat Task Force (EHTF) will set out meteorological, engineering and operational implications and recommendations. In this report we will explore the impacts on passengers and consider how planning, processes, actions and communications ensure that customer experience is better protected. Passengers must not again be subjected to the degraded levels of service endured in 2022.

2. Summary and key recommendations

The railway must keep at the forefront of its operation and delivery, that it exists to allow people to travel.

Inevitably, extreme heat poses significant challenges. However, the railway must guard against thinking that it is a painless option to ask passengers to stay away when things are operationally

tough. Not everybody can – and others may find the temptation to head to the beach a strong draw. A fair-weather railway cannot be the default of a service that aspires to be the backbone of Britain’s transport system. So the desired outcome, whenever and wherever possible, is to run train services.

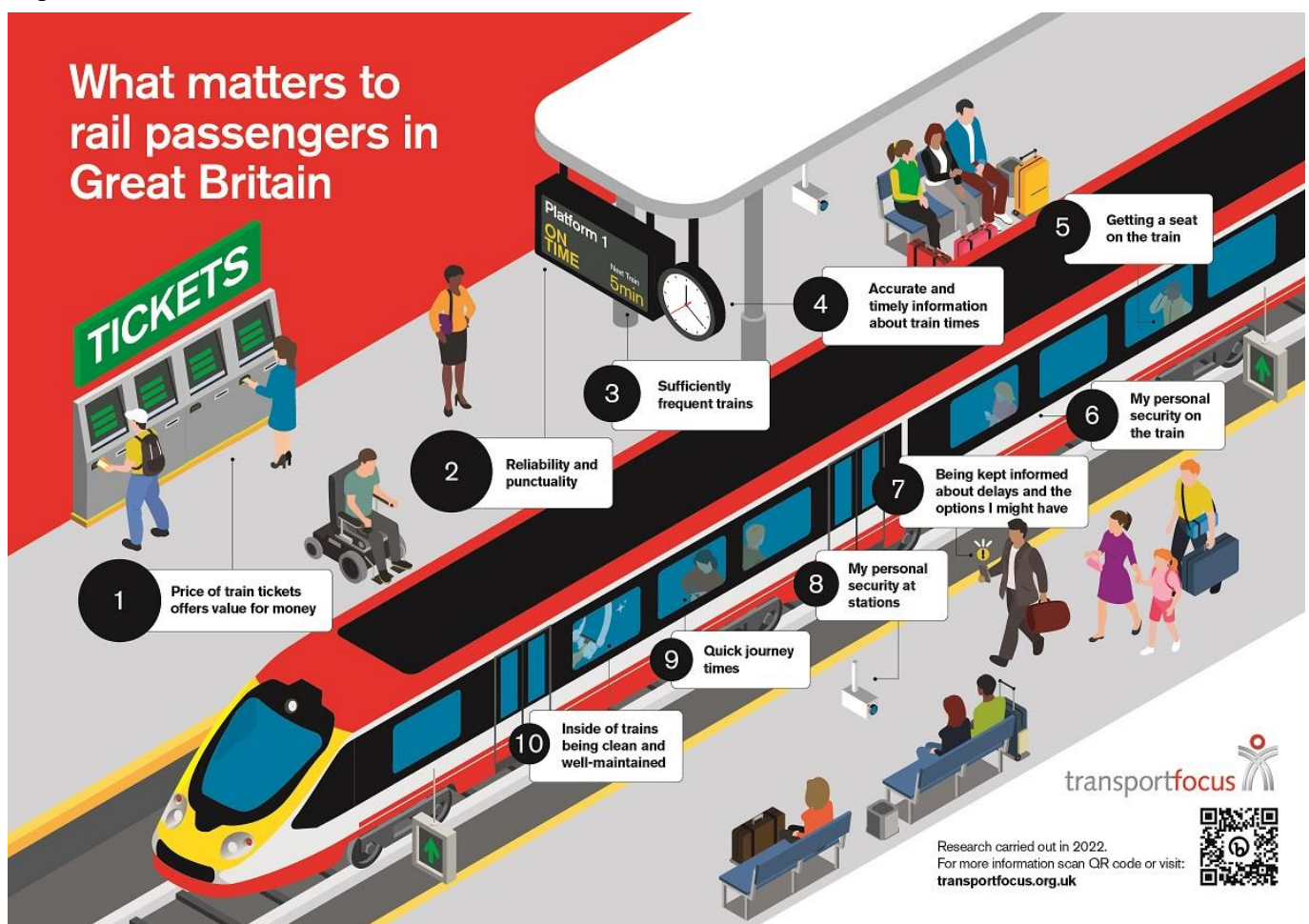
Where extreme heat causes problems that disrupt services then there are key actions to help customers:

- ensure there is accurate, clear and useful information to enable passengers to make appropriate decisions about whether or how to undertake their journey.
- make clear how and why extreme heat impacts the railway and why journeys are more difficult.
- if they decide to travel, support them to complete their trip in the easiest, least stressful way.
- if they decide not to travel, provide easy access to a refund (automating this to the greatest extent possible), ensuring that if services are removed from the timetable eligibility to claim is not compromised.

3. What matters to passengers?

Working with Network Rail, in 2022 we updated our research on the factors of greatest importance to passengers when making a rail journey¹.

Figure 1



¹ Britain’s railway: what matters to passengers, Transport Focus 2022

Figure 1 shows that the key factors are reliability and punctuality, along with value for money. This is consistent with findings of similar research undertaken in 2020. It also chimes with our understanding of the drivers of passenger satisfaction.

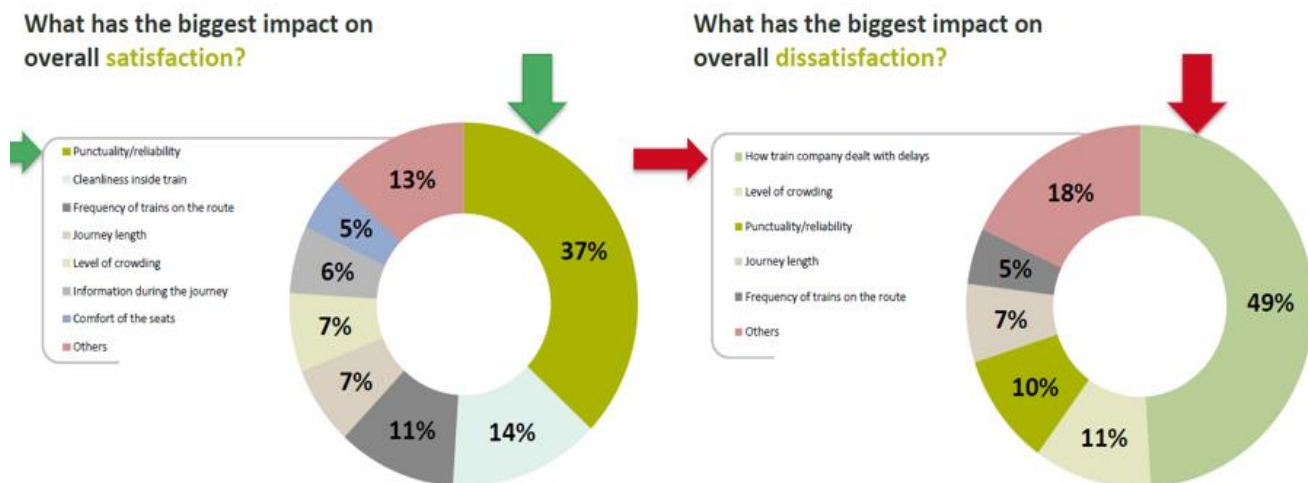
Over many years of analysis of the National Rail Passenger Survey (NRPS), punctuality/reliability has been the standout factor influencing overall satisfaction. Conversely, dealing with delays has been the biggest driver of dissatisfaction (see Figure 2). A recent assessment using Rail User Weekly Survey results confirms punctuality/reliability continues to have the greatest impact on passengers' overall satisfaction (see Appendix 1).

The best way to deliver a positive passenger experience is to provide rail services that are punctual and reliable. If there are problems, ensure that there is accurate, clear and useful information for passengers to make decisions about whether or how to undertake their journey. If they do travel, provide support so they can complete their journey in an easy and least stressful way.

Transport Focus understands that the assessments and recommendations from other EHTF workstreams - focussing on meteorology, engineering and operations - will identify what is needed to produce a step change in the railway's ability to forecast and act during extreme heat and other challenging weather scenarios. They will enable the management of a more resilient infrastructure and the delivery of services through improved operational functionality. For practical and reputational reasons, it is important that the proposed solutions are implemented swiftly. Where this cannot be done immediately, a clear plan must be put in place to achieve the necessary changes in a timely manner.

It is also notable that the eleventh highest passenger priority (Figure 1), ranking above the 'average', is a railway that can cope with adverse weather events. Appendix 2 shows this and other environmental aspects in the context of other expectations.

Figure 2 Passengers: key driver analysis, NRPS Spring 2020



4. Turning the dial on disruption

4.1. Extreme heat as a subset of a wider range of disruption challenges

From a passenger perspective, any disruption to rail journeys is an annoyance. For a traveller there is little to differentiate the immediate effects arising from various causes of disruption. In general, the principles of managing disruption and supporting passengers through the impacts will also be relevant to disturbances arising from extreme heat.

However, while much of the disruption experience, and the need for timely resolution, will be the same, there are potential additional challenges:

- Safety risks – is there more of a safety risk from, say, buckled rails or lineside fires? Or risks as severe as, for example, a collapsed embankment from heavy rain, flying debris from high wind or skidding caused by leaf-related low adhesion to the rails in autumn?
- Health risks – while neither freezing temperatures nor very hot conditions are comfortable, are there greater risks to passengers from overheating? Is it harder for people to manage their situation should the rise in mercury become dangerous? How should the railway address this?

We expect that these risks and their management and mitigation will be assessed in the meteorological, engineering and operational reports. This should include consideration of the efficacy of cooling/ventilation systems on trains, providing appropriate shelter and waiting environments at stations and ensuring there are a range of communication channels enabling messages to be rapidly sent out.

4.2. Understanding the problem and assessing implications for customer experience

Clear understanding of impending weather events, and the consequences of extreme heat on infrastructure and operations, is critical. The more granularity that can be gained from forecasts, both in terms of geography and timescales, the better predictions can be made, and mitigations put in place. Where possible, passengers will want to make their journey by train as planned and so the desired outcome whenever and wherever feasible is to run train services.

Some other organisations seem to have better weather forecasting insights than that previously available to Network Rail. Others take a less sweeping approach to service changes. For example, advising passengers to travel very early or much later in the day can avoid the worst of the heat impact. Although, for later travel there may be some risk that problems arising from the highest temperatures of the day could have knock-on effects.

Careful management of the timetable would seem appropriate during periods of extreme heat. It may be that it is sensible to use similar approaches to those adopted for the leaf fall season in autumn, including time added into the schedule to allow for slower running. Thinning out the service pattern at critical times may also allow for more predictable operations and keep things moving if disruption starts.

If these options are prepared for implementation they might speed up the process for introducing and communicating contingency arrangements quickly. Careful adjustment of the timetable may allow the railway to offer more certainty to passengers.

These issues are fully explored in the reports on meteorology, engineering and operations. If passenger experience is to be improved then the necessary enhancements in these areas need to be understood and implemented. Ensuring forecasting capability is adequate seems an obvious first step. It will then be safer to rely on this to make engineering and operational decisions.

At times of extreme heat, the coach industry offers a better than usual availability of vehicles for rail use. This is because, while the road network tends to be resilient to heat impacts, hot weather leads to bookings for private hire trips and outings to be cancelled in advance. This leaves vehicles and drivers available for any rail passenger needs. Exploratory discussions with coach operators would enable development of plans that could be implemented when these circumstances occur.

4.3. When disruption is anticipated and occurs – effective information and communication

As shown in figure 1, passengers place high priority on ‘accurate and timely information about train times’ and ‘being kept informed about delays and the options I might have.’ Our report into passengers’ experiences during the heatwave in July 2022 emphasised the importance of accurate and timely information in these circumstances².

Recognising that the handling of disruption is a key driver of passenger dissatisfaction, Transport Focus has conducted extensive work on this issue. We have identified many factors that need to be addressed by the railway to minimise the impact on passengers and improve experience when problems occur.

Passengers understand that delays will happen on the railway. The key to managing this is the ability to provide personalised, accurate and timely information³. This requires onboard screens, staff announcements and, if the information is to be pushed direct to passengers’ mobile phones, the provision of good Wi-Fi or phone reception.

Passengers need to know what is happening, how long is the delay, and what alternatives there might be, so they can make other plans if necessary. They want personalised information - ‘what does the delay mean to me’ - so that they can for example rearrange meetings and alert family members.

Information needs to be up-to-the-minute, as out of date or lack of information contributes to stress and a sense of powerlessness. We know that passengers can notice delays within just a few minutes⁴ so making announcements as rapidly as possible is important.

Our research shows a clear link between passengers’ overall view of disruption handling and the information they received. The speed with which information is provided and the amount, the frequency of updates and ability for passengers to find out more, all show as areas in need of improvement.

There is scope for enhanced systems for alerting passengers if trains are not running or are severely delayed *before* they leave home or work, saving them a potentially wasted journey. The earlier the awareness of the problems the more opportunity the person will have to alter their journey plans. The emphasis should be on empowering passengers to make informed choices.

4.4. Key considerations

1. Passengers’ information needs are not complicated. Ultimately, they want answers to two basic questions: ‘what’s happening’ and ‘what does this mean for me’. Sense check what’s being said/displayed to make sure it’s answering those questions. Ensure that all channels are providing consistent information.
2. Provide as much notice as possible ahead of expected extreme heat events. Plenty of detail will allow people to consider the impacts on their journey and make decisions about their travel at the earliest opportunity.

² [Extreme heat: the passenger experience, Transport Focus July 2022:](#)

³ [Passenger information when trains are disrupted, Transport Focus 2014](#)

⁴ [Punctuality: the passenger perspective, Transport Focus 2015](#)

3. Be clear about what is and isn't going to run – and if you don't know yet, be clear about when the information will be available. Keep this updated and accurate as the situation evolves. Be ready to reinstate services, gradually if needed, and as soon as circumstances allow.
4. There will always be an interval between a decision to alter the timetable and journey planners showing those changes. Be clear in that interval that the planners will show inaccurate information and tell passengers when they should check back for the correct information. If there are other ways to provide the information more rapidly – whiteboards, announcements, news channels, social media and so on – use these. National Rail Enquiries, train operators and ticket retailers should get the warning triangle into journey planners at the first opportunity.
5. Help passengers make an informed choice about what they do. If there is an alternative, such as a different route or catching a bus, point people to the options. Don't abandon them to work out what to do.

Figure 3 Tone and content of communications

Communications: what do passengers want?

Passengers say:

- Treat me with respect
- Recognise my plight
- Help me avoid the problem in the first place
- You got me into this, help get me out
- Act joined up

"Female conductor made manual PA announcements and was honest about cause of delays outside Manchester & Liverpool rather than relying on automated announcements. She also sounded genuinely sorry."
5 – 10 minutes delay, very satisfied

"Whenever the 'reason' for the disruption changes – as it so often does it only convinces us that we're being lied to & the operator is not concerned about giving us correct information. The famous & very large 'Train Book of Excuses'!"

Passengers want the information to be:

- Accurate
- Honest
- Clear, in plain language
- Personal to them
- Useful – in particular at helping them decide what to do

"Very professionally managed by a conscientious conductor. First Class compartment declassified, compensation forms given out, regular PA announcements explaining the reasons for delay and providing updated ETAs in addition to regularly passing through the train, maintaining high levels of visibility, reassuring passengers and providing help/advice with connections".
16 – 30 minutes delay, very satisfied.

There has been considerable effort by the rail industry to improve passenger information during disruption but more needs to be done. Deficiencies in passenger information during disruption seem to persist in a way that would not be tolerated if they concerned operational or safety failures. Our challenge to the industry is to deliver culture change in this area. Measuring performance will drive improvement.

5. Improving 'do not travel' messaging

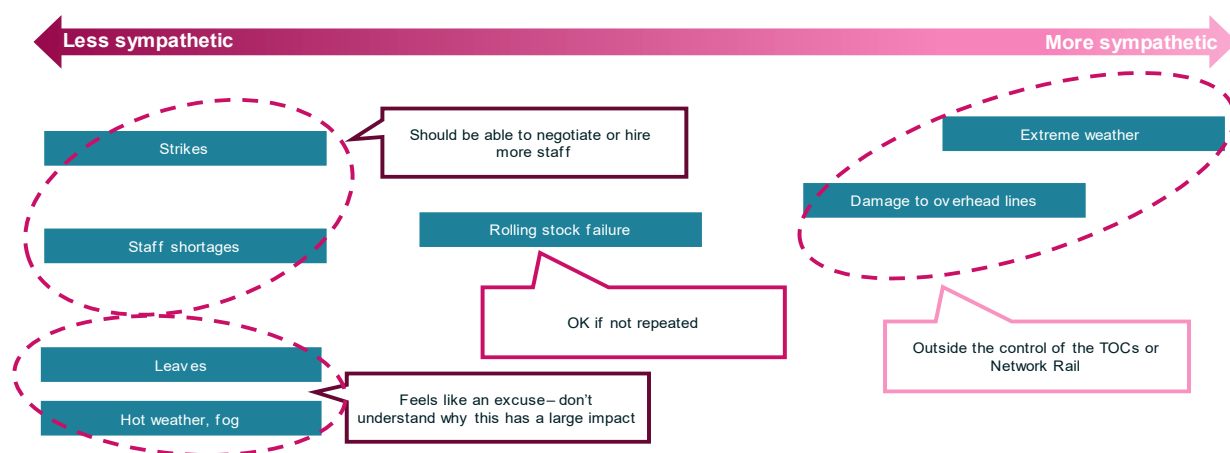
Transport Focus has recently worked with the Rail Delivery Group to research passenger understanding of, and reactions to, 'do not travel' messaging. Findings from our research report are shared here to help inform planning and practice during extreme heat.

As noted, the railway exists to allow people to travel, and 'do not travel' messaging must be the last resort. Passenger views about such messages should be taken into account, as many struggle with the notion that the railway runs trains but tells people not to use them. Many find it baffling and not how a normal business would behave. Their responses are frustration – at being told not to use a train that is running - and irritation – feeling that the railway has no right to tell people, in effect, to stay at home.

Our research shows that passenger sympathies for hot weather disruption are less than for other circumstances - see figure 4. This suggests that more work is needed to explain hot weather impacts and why this causes disruption not readily resolved while temperatures remain high.

Figure 4 Passenger attitudes to causes of disruption.

Train passengers are naturally more sympathetic to some reasons for disruption than others



Infrequent Leisure and Occasional Business passengers are slightly more likely to be sympathetic overall. Most frequent passengers who experience more reasons over time are less likely to differentiate- it's all just another inconvenience that cumulatively affects how they feel about train travel.

5.1. Several factors determine the immediate reaction to a message not to travel by rail

Being told that you should not make a journey by train because of disruption is clearly a frustrating experience. However, a person's reaction, and the likelihood to make the journey anyway is influenced by three key factors.

1. The stage at which the passenger is planning or making the journey when they receive the 'do not travel' message. If they are at home they are more able and likely to re-plan the journey or cancel it altogether. Conversely, if someone has left or needs to return home, they are less likely to defer a trip.
2. The availability of other options for their journey influences how passengers react to 'do not travel' messaging by train operators. Access to alternatives includes being able to use a different rail route or a different mode of transport. Those without access to a car or other public transport can be most affected by 'do not travel' messages.
3. How essential a person considers their journey to be can influence their reaction to 'do not travel' messaging. Whether a journey is for work or leisure is important, but within these journey definitions there is a wide range of attitudes about how important reaching a destination is for the passenger and if they have the autonomy to make this decision.

The purpose of the journey a passenger is making, or plans to make, has impact on their response to a 'do not travel' message. However, the circumstances of the passenger and their motive to travel is a more important factor in determining if they attempt to travel.

5.2 General attitude to the railway is also influential

The level of experience of using trains influences the degree of sympathy that people have when reasons for disruption are communicated in a 'do not travel' message. If they appear to be outside the control of the rail operator, such as extreme weather (which to many passengers does not include hot conditions), it can elicit sympathy. Issues seen as preventable but are repeat occurrences generate the greatest annoyance. Disruption caused by low adhesion because of leaves, hot weather, or fog, cause frustration and are seen as excuses by passengers who use trains more regularly.

Much of this frustration arises from a lack of understanding by passengers who don't see why these things cause trains not to run.

Overall, occasional travellers for leisure or business are slightly more sympathetic than frequent users of rail. Hearing reasons for disruption repeated over many journeys simply adds to cynicism and distrust of rail. The impact on trust means regular passengers tend to need more information before accepting advice that they shouldn't make their journey.

Distrust and cynicism towards rail companies, combined with views that individuals have the right to make their own choices, means that a number of passengers do not think that train companies should be telling them not to travel if a service is being provided. For many this attitude is driven by the view that train operating companies don't 'have the right' to tell people how to act unless there is a material risk to personal safety.

This means that care is needed with the language used. There is an assumption among some passengers that 'do not travel' means (or should mean) there are no trains running at all. Others, particularly when the message includes reference to 'significant disruption', interpret the same message to mean trains are running but do not use them. This raises questions among train users - why would trains run, but people be told not to use them?

Passengers with a disability are more likely to comply with 'do not travel' messaging. While reasons for the journey provide similar motivations, the desire of these travellers is to avoid the consequences of disruption, particularly if it exacerbates their disability. For example, wheelchair users might want to avoid having to use replacement transport, overcrowding, or last-minute platform changes.

Figure 5

Whether they would defer their journey on receipt of a DNT message is down to personal circumstance



Disabled passengers with booked assistance require early contact to confirm if their journey remains possible and that assistance will be provided. These passengers also need an understanding of what the travelling experience is likely to be if they make their planned journey.

5.3 Passengers feel that current 'do not travel' messaging lacks key details

The research clearly indicates that different journey scenarios and attitudes to rail create different needs when it comes to 'do not travel' messages. It shows that matching the content and tone of the message to the needs of the passenger is crucial in helping them decide what their next steps should be.

Passengers reported that where messaging lacks detail about the disruption incident they needed to do their own research to solve their travel issues and to decide how they should act. To obtain this information, passengers searched local news channels, train company websites, apps or they had spoken to other passengers.

Passengers say they need to understand what is happening, how long the disruption is expected to last, and what their travel options might be. On this point, it has been noted that National Rail Enquiries and other messages saying no public transport is available are not helpful when coaches are largely operating without problem. Why deter people from other travel choices that may be better placed to allow them to make the journey they want?

Passengers indicate that if they receive a 'do not travel' message while at home they are likely to spend more time checking if it is or isn't possible to make their journey than if they receive it on the way to the station.

Passengers already on the train tend to be more invested in completing their journey and their information needs are different. These passengers, while reporting that they may look online for additional information, say that they are more reliant on announcements on the train or at stations. They say they can't rely on having the signal or battery life required to go online to find the information that they need. This emphasises the need to ensure staff have the best available information to give to passengers.

5.4 Suggestions for developing 'do not travel' messaging

5.4.1 Make the reasons for the disruption clear

Passengers feel that the types of 'do not travel' message currently used on the rail network are helpful in providing them with the information needed when there is severe disruption. However, there are some areas for improvement.

The messaging needs to resolve the confusion/frustration that some passengers feel when they are being told not to use trains that are in fact running, and to effectively dissuade a small, determined group of passengers who tend to hope for the best and try to make their journey.

The research showed that the reason given for the disruption can have a significant impact on how a person will act. There are some situations where passengers don't fully understand the reason given for suspending services. In these circumstances passengers begin to distrust the messages and try to travel anyway.

Passengers indicate that the more open the reason for issuing a 'do not travel' message, the more likely it is to convince them to accept the advice.

The reasons given for the disruption can also be less effective if seen as precautionary, for example 'forecast of heavy snow', rather than something that has happened or is occurring.

Typically, passengers believe that forecasts can be wrong and messaging of this type can introduce doubt that there will be a problem.

5.4.2 Appeal to passengers' sense of social responsibility

When thinking about the contradiction between being told not to use trains and the fact a service is available, passengers do not always consider that trains are running for those who genuinely need to travel. Messages that are explicit may help to reduce confusion, increasing the likelihood of people deferring their journeys and generating a sense of goodwill.

Similarly, the 'do not travel' messaging currently used lacks the sense that if you make a journey that could be deferred there may be negative effects on others. For example using up capacity on a skeleton service that isn't then available for somebody making an essential journey. Communicating this using the 'right' tone to invoke a sense of social responsibility could help to discourage some from making journeys when there is disruption and make 'do not to travel' messaging more effective.

There is a preference among passengers to be told only to travel 'if essential' rather than 'if necessary'. They feel that the term 'essential' is more serious and offers slightly less room for choice or flexibility than 'necessary'. It is the nuances of the language used in 'do not travel' messaging that are important and determine the way passengers will act.

5.4.3 Tell passengers what the experience of travelling will actually be like and what the consequences may be

The research indicated that outlining the potential consequences of attempting to make a journey when there is severe disruption, or communicating what the experience is likely to be, can reinforce messages about the impact of disruption and encourage more passengers not to travel. The potential to become stranded, for instance, is not spontaneously considered by passengers. Making it clear that a train company cannot guarantee that you will get to your destination, by train or any other means, or that you may not be able to make the return leg of a trip, could act as a deterrent.

Clear messaging that says if you decide to travel during disruption you are likely to have an uncomfortable experience, can work to deter some people from making journeys. Notably, passengers indicated that they would be more likely not to travel if they were warned of the possibility of overcrowding, severe delay or becoming stranded. Using adjectives such as 'serious', 'severe', or 'major' can emphasise the extent of the disruption and cause people to rethink their need to make a journey. However, telling people that travelling by train is not 'recommended' or 'advised' softens the tone and is welcomed by some given that the final decision about whether to attempt to travel is up to them.

Passengers say that adding a message which indicates that if they attempt to travel it will be 'at their own risk' could be effective if the risks are transparent.

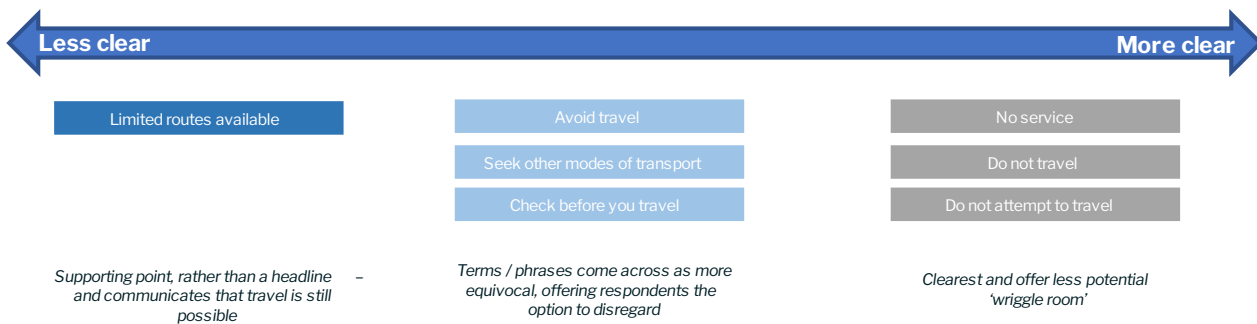
5.4.4 The language used is of key importance

Overall the research shows that the exact nature of the language used in a 'do not travel' message is key in determining how a passenger feels they should act at a time of disruption.

Passengers told us that terms which work best do not rely on a knowledge of the industry and are closer to clear instruction than to 'advice'. For instance, saying that there are 'limited routes available' is not helpful as it is vague and suggests that there are still trains running, while phrases like 'avoid travel' or 'check before you travel' come across as less equivocal and less easy to disregard.

Figure 6

Do Not Travel – industry terms vary in perceived clarity regardless of previous experience of DNT messaging or not



In general, the clearest are those that give unambiguous instruction, ideally supplemented by sufficient information to be most effective. Once words like 'avoid' or 'seek' are used there is more permission to disregard the message for those who feel less willing to comply.

6. Further potential steps for raising the game on extreme heat communications and influencing behaviours

The Smarter Information Smarter Journeys programme continues to work with all partners in the rail industry to take the lessons learnt from the ‘do not travel’ research and embed improvements in future messaging. Network Rail must ensure it remains fully engaged with this activity. Additionally, given that hot weather is regarded by passengers less sympathetically as a reason for suggesting not to travel, comprehensive messages and materials need to be developed. These need to enhance the understanding of the impacts of extreme heat and provide education about the challenges experienced on a railway which was not designed or built to cope with extremely high temperatures.

Options to consider could include using respected national or regional figureheads to deliver independent and authoritative communications on the challenges extreme heat presents for the railway. Influencers with popular appeal, such as BBC Radio 2’s Sally (Boazman) or BBC Breakfast’s Carol (Kirkwood) might help share non-technical messages credibly to a wider audience.

Similarly could an extreme heat ‘mascot’ or icon be added to messages provide a quick code for understanding that, at some temperatures, it can no longer be business as usual on the railway and passengers might consider their travel decisions in this context?

An outreach campaign to engage major employers, business organisations, trade unions, leisure and hospitality operators should also be undertaken. This could promote increased understanding of the challenges of operating during extreme heat and seek support for reinforcing do not travel messages and encouraging staff, visitors, and guests to defer travel.

Generally, steps should be taken to broaden engagement with a range of community, media, and other channels to encourage the broadcast of extreme heat messages as widely as possible. The Civil Aviation Authority finds its links with the cross-government ‘basecamp’ digital group are useful in widening the reach of its social media messaging and suggests this might be a useful channel for rail too.

Community organisations, youth services and Community Rail Partnerships might support educational initiatives and might there be collaboration with exam boards and/or educational establishments? The impact of climate change and extreme heat, as well as other impacts, might make for a relevant and interesting module for geography or science. Combined with information about mitigations for infrastructure and operations could this be a tool to promote interest in engineering and railway careers as well?

It might be worth exploring how a potential role for behavioural science and ‘nudge’ initiatives could drive changes in passenger responses to extreme heat messaging. ‘Semiotic’ analysis (examining what signs and symbols mean) could also be used to explore underlying symbols and codes associated with heat and travel and provide an understanding of how messages might be framed and understood.

Consideration was given to identifying and defining categories of priority travellers. However, with so many factors to consider we have concluded that this would be overly complex and unlikely to be fruitful.

7. Taking care of passengers when extreme heat impacts journeys

The railway must take care of passengers who do travel. This is particularly important during temperature extremes that can cause distress or severe impacts on health.

Care should be taken to ensure that cooling/ventilation systems on trains are tested, serviced and in good running order ahead of periods when their use will be essential.

Similarly, a review of shelter and waiting environments at stations should be undertaken. This should include establishing that effective cooling systems can be deployed in permanent structures and the extent of shelter that can provide cover from hot sun on exposed platforms. This assessment should take account of the number of people who may be waiting at any given time.

Water is obviously important to aid hydration. The provision of water fountains at stations for refilling bottles is positive and environmentally appropriate. There may be a case to extend these facilities more widely.

Passengers should be encouraged to bring cool drinks with them when travelling in heat. There should be consideration of the tone of communications; encouragement, not instruction, seems appropriate. And using language that is supportive and even humorous but not patronising will help avoid suggestions of a ‘nanny’ state or industry.

Not all people will have sufficient drinks with them and stocks of water should be available to be handed out when required. This is a positive gesture indicating that the industry cares – it is also important in helping people stay hydrated and avoid negative health consequences.

Care should be taken to consider what provisions may be needed for disabled or vulnerable passengers. Advice taken in advance from relevant groups will help plan for resourcing and any assessments or action that may be required.

The needs of any animals or pets on the network at times of extreme heat should also be considered.

There may be opportunities for other provisions or give-away items to help address the heat. Could mini-fans, reusable water bottles, or parasols be made available, possibly printed with educational or thank-you messages on these or other care items?

Staff will have an even more important role when conditions are adverse. Passengers on disrupted journeys have greater reliance on information provided by knowledgeable and helpful people. Staff may also be able to spot passengers showing signs of heat impacts and act to assist them as needed.

As part of wider communications plans for extreme heat, the provision of specific messages and alerts should be considered. Passengers should be offered the opportunity to sign up for these as well as having a strategy in place for proactively pushing alerts out through multiple communications channels. Given that there will be prior notice of impending heat situations, these communications should be provided in advance and repeated in the days and hours leading up to expected events. This allows passengers to rethink the timing of their journeys or come prepared for what may be in store.

It should also be remembered that most journeys do not stop at the station. People may need support or advice about their onward travel.

8. Dealing with consequences: refunds, exchanges, compensation, complaints, and goodwill

8.1 Refunds, exchanges, and compensation

It is essential there is clear, timely advice when 'do not travel' messages are issued, confirming all tickets are eligible for a refund and how to make a claim, with consistency of messaging across different retailers. In our research on the July 2022 heatwave, we found inconsistent information being provided on websites⁵.

To encourage people to avoid travel during extreme heat it needs to be as easy as possible for tickets to be refunded or exchanged in advance, or on the day of travel. This should be fee-free, with usual administration charges 'turned off' for 'do not travel' events. Incentivising people to make an early decision to not travel or to defer journeys during the affected period may also be effective – such as offering a credit towards purchase of a future rail ticket, a voucher for a cold drink or some other token. Encouraging people to be part of the solution when disruption is expected, and providing a thank you for doing so, will engender goodwill and potentially inform behaviours for the future.

Mechanisms must be in place to ensure that services cancelled ahead of time, including those removed the evening before they are due to run, remain in systems used to verify Delay Repay claims and for other customer relations reasons. It is not acceptable that passengers have to jump through additional hoops to obtain recompense when the industry makes changes to the timetable at the last minute⁶.

It will also make more sense to passengers to be able to claim a straightforward refund by simply stating the reason for their change of plan. It can seem nonsensical for season ticket holders to claim using the Delay Repay system when there has been no attempt to travel. So, if Delay Repay is to be used it will be essential that it is well signposted and communicated.

There must also be a specific category in the 'reasons for delay' menu for bad weather/do not

⁵ [Extreme heat: the passenger experience, Transport Focus 2022](#)

⁶ We understand that, in contrast to many other operators, TransPennine Express is able to retain this information and match claims to the originally scheduled services despite removal from the day's timetable.

travel days. This could be similar to the 'strike' option some operators currently use for industrial action.

It is important that the railway displays flexibility on refunds, especially when advising passengers not to travel. This can be a grey area, but passengers do not expect a distinction between 'do not travel' for which a refund must be offered and advice to not travel which, if heeded, should also entitle passengers to a refund.

In our report on industrial action in 2022 we outlined three main recommendations that would be applicable to extreme heat circumstances too⁷:

- compensate season ticket holders who do not travel on non-strike days because of a late start to the service or do travel on a strike day (or the day following) but arrive significantly later than normal as a result of a late start to the service
- give weekly season ticket holders the same rights to compensation as monthly and annual ticket holders who do not travel on a strike day
- clarify in the National Rail Conditions of Travel that if a passenger is entitled to a refund for their unused outward ticket, they can also have their money back on the ticket for their return leg (or vice versa).

As with other forms of disruption, passengers who are delayed by circumstances arising from extreme heat need a good, easy-to-use compensation mechanism. This can take some of the sting out of delays and help rebuild trust between passengers and the rail industry.

Our research on compensation shows that many passengers do not claim compensation for delays when they are entitled to do so⁸. The main reasons were that they did not know they were entitled, or how to claim it.

In some instances, passengers are denied the opportunity to claim even though they have been inconvenienced by cancellations. Changes made to a timetable before 10pm the night before travel - so called 'P-Code' cancellations - result in trains being removed from the system entirely. Compensation is payable against the 'timetable of the day', so if the train you were due to catch has been P-Coded then you have no obvious rights to compensation for the delay. As noted this is a nonsensical situation and unfair to passengers.

This is not an argument about P-Coding in principle. It can be for the benefit of passengers; for example if there is bad weather or a line is blocked, then it is better for passengers to see what is running rather than a list of cancellations. Passengers who bought a ticket and made plans based on the timetable in place at that time, need to know they are entitled to compensation when that timetable changes at short notice.

We have made a number of recommendations to the rail industry about making it easier for passengers to claim. We would like to see progress in the following areas:

- increasing awareness:
 - providing information on compensation when making announcements about delays on board trains and at stations

⁷ National rail strikes: the passenger experience – August update, Transport Focus 2022

⁸ Make Delay Pay: improving compensation for rail passengers, Transport Focus 2020

- raise awareness of Delay Repay, including the minimum qualifying delay length, on the homepage of websites
 - every train company should offer Delay Repay 15 to bring consistency to compensation across the network.
 - display clear guidance on when you can and cannot claim - cover different scenarios such as travelling with more than one operator, when using a combination of tickets (split tickets), and when there has been a late change to the published timetable. This should be consistent across all train companies.
- persuading passengers that claiming is worthwhile:
 - consider schemes designed to overcome indifference, such as a wallet function that allows smaller payments to accumulate and be redeemed at a later point, the option to 'swap' compensation for complimentary tickets or for other offers or rewards (such as a free coffee), and the ability to donate compensation directly to charity.
 - making it easier to claim:
 - more automation: using smart-ticketing 'tap-in' data, seat reservations or stored 'usual journeys' to identify when you may have been delayed and prompt (by text or email) to confirm your delay and submit a pre-populated claim form.
 - standardisation and simplification of claim forms: this would provide greater clarity for passengers and help to reduce the volume of rejected claims.

8.2 Complaint handling and goodwill

In any business things can go wrong at times and customers will have a reason to complain. These circumstances may well arise during times when extreme heat impacts the railway and impairs the overall passenger experience.

How a complaint is dealt with can make a real difference to the passenger and their future relationship with the railway.

Passengers want their complaint to be taken seriously whether this be via post, email, social media or in person – it can be frustrating to receive a generic response that does not answer all the questions or issues raised.

We recommend the following issues should be addressed:

- empower front-line staff to deal with complaints on the spot, with processes in place to provide goodwill gestures there and then
- make it easy for passengers to get in contact by providing a variety of contact methods and by being proactive when things go wrong
- empower customer service advisors to apply 'natural justice' when dealing with poor passenger experiences and allow redress to go beyond the minimum levels of the Passenger Charter or National Rail Conditions of Travel
- ensure a clear and well-communicated escalation process is in place for complaints handling, including referral to the Rail Ombudsman - this should comply with Office of Rail and Road guidance on complaints handling procedures
- ensure that contingency plans are in place to deal with spikes in workload and clear backlogs if they occur.

There will be instances where passengers who heed advice to not travel will be out of pocket where they have incurred costs for tickets, accommodation, or other expenses. While we recognise there will be limits to the amount of money available to meet requests for reimbursement, discretion should be applied when responding to these situations.

We suggest that this discretionary consideration should be applied to any disruption irrespective of cause, not just extreme heat, which is simply a subset of a wider disruption challenges. We do not think it is feasible or appropriate to implement different mechanisms for compensation and goodwill to those applied to other interruptions to passenger journeys.

Journey experience does not end once a passenger has arrived at their destination. Focusing on aftercare provides an opportunity to build trust and a relationship through a strong customer service ethos and culture.

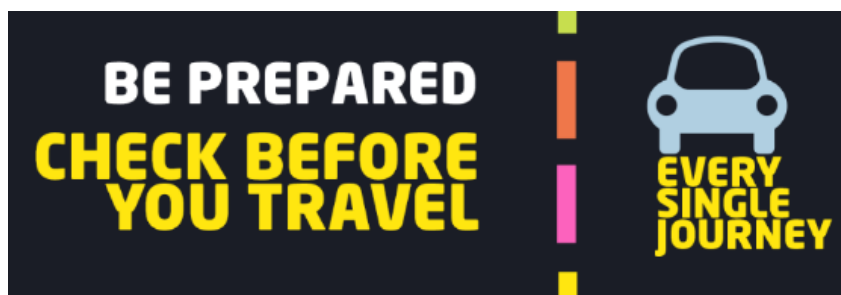
Ultimately, the railway needs to treat passengers as valued customers and demonstrate, through actions and communications at all stages of the journey and its aftermath, that they want them to return and use their services again.

9. Examples and learning from other modes, other sectors, and railways abroad

9.1 Communication – getting messages out widely

9.1.1 Kent Resilience Forum (KRF)

One of the major challenges the Kent Resilience Forum periodically faces is managing gridlocked situations on the county's roads, if cross-channel services are not flowing smoothly. Through the Kent County Council website, it promotes a campaign to encourage road users to think carefully about their journey and provide advice and information to support this⁹.



The Kent Resilience Forum emphasises the value of working with a wide range of partners. Messages are disseminated through their channels and cascaded to a range of groups to extend the reach into the community, including to recognised influencers.

It also provides 'talking heads' to appear on traditional media outlets and illustrates the challenges and risks with interviews at locations where problems can be seen.

⁹ <https://www.kent.gov.uk/roads-and-travel/travelling-around-kent/check-before-you-travel>

9.1.2 Civil Aviation Authority (CAA)

When there is significant disruption to air travel, the Civil Aviation Authority (CAA) works to amplify passenger messaging, supporting efforts to extend the reach of air industry communications. It has a range of pre-prepared messages for different scenarios and can rapidly deploy these through various channels. Social media posts are tagged to incidents which it aims to embed into news stories, especially Press Association coverage which goes out widely.

The CAA has worked to establish constructive relationships with key influencers and has developed links with various media presenters. This helps the CAA explain messages and improve understanding when some situations become sensationalised.

The CAA notes that airlines have highly effective means to reach customers. However, it is important for the regulator to highlight and promote consumer rights. To reach impacted consumers, it promotes messages using targeted postcode data. In circumstances of significant disruption, the CAA will also request other Government departments to amplify social media messages via the cross-government 'basecamp' digital group.

One suggestion for Network Rail and the industry to explore is joining this cross-government group for social media messaging. Parts of the civil service, arms-length bodies and local authorities work together as appropriate to help amplify relevant stories. It is suggested that the Department of Transport (DfT) should be able to facilitate this membership, if needed.

9.1.3 National Highways

National Highways can face challenging impacts from extreme weather. It works closely with the Met Office and other providers and has around 250 weather stations to help monitor conditions, including road temperatures, at the local level.

Met Office forecasts are used as the basis to trigger communications on preparation and advice for approaching weather. The Government-owned company has reviewed its communications approach to strengthen how far in advance drivers are informed about weather events that could impact England's motorways and major 'A' roads. National Highways uses a range of communication channels to ensure that road users view it as a trusted, responsible organisation, prepared for poor weather conditions. When weather impacts, the conditions are communicated to inform and support road users to make decisions and appropriate preparations for travel.

Communications are prepared for different circumstances and bespoke advice, such as for Storm Eunice, is posted on the website¹⁰. However, National Highways operates an open access network, and everything is done to keep it open and available to use. A decision to close roads would be taken only for safety reasons, in collaboration with key stakeholders such as the police. Decisions on use are considered to be an individual choice. National Highways does, if weather impacts on roads are forecast, recommend that drivers in the affected areas consider if their journey is essential and go prepared.

9.2 Increasing comfort of passengers and compensating when systems fail

9.2.1 Renfe

In Spain, Renfe cleans and checks air conditioning systems on trains each spring to guarantee they are in working order. On long-distance high-speed services, Renfe policy is to provide a

¹⁰ <https://nationalhighways.co.uk/about-us/severe-weather-warnings-issued-as-storm-eunice-approaches/>

partial refund to passengers if the air conditioning is not working properly and a full refund if it fails completely.

9.2.2 megabus

megabus operates intercity long-distance scheduled coach services. Since the 'Beast from the East' storm in 2018, megabus has followed Met Office advice and weather warnings as a tool for making decisions about whether to operate services. It sees the Met Office as a source of independent advice, well placed to understand the risks from weather conditions. It notes the value of detail within the maps which allows informed decision-making.

With safety as the number one consideration, megabus dynamically assesses risks for customers, employees, and other road users. It considers the operational consequences before deciding to enter or pass through an area subject to weather warnings. For example, when the red warning for heat was in place in 2022, operations continued on the basis that the environment within a vehicle can be controlled. However, during storm-based red weather warnings, coaches will not typically enter those geographical areas due to other risk factors.

If circumstances mean coaches are in locations subject to red warnings, it assesses the appropriate actions which could be 'stay put' or 'get off road', using police and local authority advice to inform decisions. Messages are conveyed to drivers who can then make announcements to customers to explain the situation. Customers and employees are cared for as much as possible, with a central control team arranging emergency accommodation, for example.

megabus implements dynamic scheduling and may start or end services either side of red warning areas. This enables services to be provided to customers wherever possible. In heatwave situations, contracted maintenance teams are asked to ensure air conditioning is serviced and functional before departure. Resourcing for control, customer services and other key roles is amended to optimise cover for the duration of the event.

megabus displays live tracking for virtually all services on its website. If operations are disrupted social media updates are provided, alongside a customer contact centre available for phone calls, live chat, and email. With 99 per cent of customers booking online, megabus can deliver proactive communications via digital means. It also works with third party retailers to contact non-direct purchasers.

Where there is a known disruption to a service, megabus makes an immediate rebooking, moving passengers on to the adjacent service. If this is unsuitable there is a fee-free option to amend this or request a refund. For any delays of more than two hours, customers are eligible for a full-fare refund.

9.2.3 National Express

National Express tracks real-time temperatures within its coaches. Data is sent every two minutes when the ignition is on, with alerts displayed for the network control team if temperatures exceed agreed parameters. In 2022 temperatures reached 35 degrees Centigrade which is too hot to run vehicles. One tactic used was to swap vehicles on route to enable journeys to continue in greater comfort. Lower capacities were also implemented on some vehicles.

9.3 Transport for London – multi-disciplinary, multi-modal planning and communications and cross-organisational working

Transport for London (TfL) has a multi-disciplinary, multi-modal approach to considering and managing challenging weather, including responses to extreme heat. The TfL operations network management and control centre, and London Underground control centre take a lead role in determining the actions required and the service impacts that need to be considered, based on twice-daily five-day forecasts, including risk thresholds, provided by MetDesk weather services.

TfL's command, control and communications (C3) team provides the overall leadership framework and guidance for all the different transport modes, including active travel. Plans are implemented and refined over a five-day period, with additional focus in the last three days before any event. A suite of plans is maintained, with each mode having a bespoke plan ready to adapt and implement for the anticipated event. Conference calls share situational awareness and support the provision of a holistic response. The communications team is wrapped into all the response planning and tailors a range of messages for the individual circumstances of each situation.

The TfL communications strategy focuses on developing a consistent, single source of the truth, high-level awareness raising message that is used across all external channels from customer to stakeholder to media outlets. In July 2022, following the red warning for extreme heat from the Met Office, people were asked only to travel if essential. That key communication was broadcast across all TfL channels and synthesised with London Resilience, Network Rail, Rail Delivery Group, DfT and all the other operators in London to make sure customers heard the same message.

Below this, more bespoke messaging is developed based on different modal impacts which is sent out via numerous TfL customer channels to target specific audiences.

Overall, the key strategy of the communications plan is to alert people to the fact that things are different and encourage them to use the real-time information channels. These are automated and fed by front line operations which in turn feed into a range of tools used by customers such as Google Maps and Citymapper. The aim is to give travellers a clear picture of the situation and likely outcomes and enable them to make informed choices about what they can do in response.

Alongside this service-focused approach to specific incidents, TfL also has a sustainability and corporate environment team looking at the strategic aspects of environmental management. This team works closely with the transport strategy and policy team on climate change and adaptation, including green infrastructure and biodiversity. Together, these teams consider detailed risk assessments for climate change impacts and the effects on the various modes. They also consider mitigations and produce practical plans for the business that can be implemented in the next years.

Positively, the transport strategy and policy team report close links with Network Rail through the TfL transport adaptation steering group, infrastructure operators' adaptation forum, and the RSSB climate change adaptation working group. TfL has provided input to inform the RSSB Sustainable Rail Blueprint and work by the Great British Railways Transition Team on adaptation.

9.4 Managing weather events in central Japan

The Central Japan Railway Company (JR Central) was privatised in 1987. Our discussions concentrated on the Shinkansen high speed services – or bullet trains – that operate between Tokyo and Osaka, largely along the coastal area. The railway is vertically integrated with the company managing both trains and infrastructure.

There are other private rail companies in Japan which operate according to their own policies.

There has been only one recent incident of extreme heat that disrupted operations for JR Central in 2018, and this was managed according to pre-established rules around the maximum temperatures for operations. At a threshold level services were slowed down, and on reaching a specified temperature services were stopped. Services only resumed after temperatures dropped and engineering inspections of the track confirmed it was safe to restart.

In Japan disruption from typhoons, with strong winds and heavy rain, is a more common occurrence. When a major typhoon is forecast services will be halted in advance to avoid danger. Media and news channels highlight the situation, as well as the rail operator. Typhoon experience is well-recognised in Japan, and this means there is an understanding and acceptance of the decisions being made.

Twitter is the primary means of communicating with passengers, and there are information screens at stations and on trains. The operator recognises the need to provide explanations for the disruption and advice about when services will resume.

Refunds

For travel on Shinkansen/limited express trains, passengers need to buy a limited express ticket valid for their specific train, in addition to the basic fare ticket. The full price of the limited express ticket is refunded if a limited express or express train is more than two hours late for its scheduled arrival time¹¹. However, with the average annual delay standing at less than one minute, this is an infrequent situation.

9.5 SNCF webpage

European contacts provided a link to an SNCF webpage on rail travel and extreme heat. It introduces key points in an open and informative way:

<https://www.sncf.com/en/itinerary-booking/traffic-info/report/summer-heat>

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Central Japan Railway Company (JR Central)

- Ms Emma Nakazato, communications manager

¹¹ <https://global.jr-central.co.jp/en/tickets/accident/>

- Mr Naoyuki Ueno, general manager
- Mr Kyotaro Yoshino, manager.

Civil Aviation Authority

- Rob Bishton, interim joint chief executive
- Andrew McConnell, head of media and external affairs.

Confederation of Passenger Transport

- Keith McNally, operations director.

European Passengers' Federation

- Christopher Irwin, Transport Focus delegate.

Kent Resilience Forum

- Sacha Taylor, communications and engagement officer, Kent Fire and Rescue Service
- Ellis Stephenson, press officer, Kent County Council.

Keeble Brown

- Spencer Neal, director.

megabus and Scottish Citylink Coaches Ltd

- Mark Venables, managing director.

Meteorological Office

- Professor Paul Davies, chief meteorologist.

National Express coaches

- Ian Williams, coach systems and data manager.

National Highways

- Stuart Thompson, senior communications manager
- Darren Clark, severe weather resilience manager.

Network Rail Extreme Heat Task Force members

- Dame Julia Slingo, FRS
- Oliver Bratton
- Simon Lane.

Rail Delivery Group

- Jason Webb, customer information director.

Renfe, Spain

- Two representatives from the international business team.

Stagecoach Group

- Joe Parrish, customer experience manager.

Transport Focus

- Guy Dangerfield, head of strategy.

Transport for London

- Christian Van Der Nest - operations, resilience and partnership lead, network management control centre
- Gareth Bek, strategic planning and delivery manager, network management control centre
- Helen Wrigley, travel demand team, communications
- Monika Kiss, environment manager, sustainability and corporate environment team
- Katherine Drayson, strategy and planning manager, transport strategy and policy team.

11. Transport Focus research into passenger experiences of disruption

Punctuality-the passenger perspective 2015- dependability, trust, right time

Punctuality/reliability - high frequency routes 2020 - expectations on these routes

Passenger information when trains are disrupted 2014 - information needs - all journey

Announcements on trains 2021 - views/experiences of on train announcements.

12. Further information

For further information about this report or our work on the Network Rail Extreme Heat Task Force, please contact:

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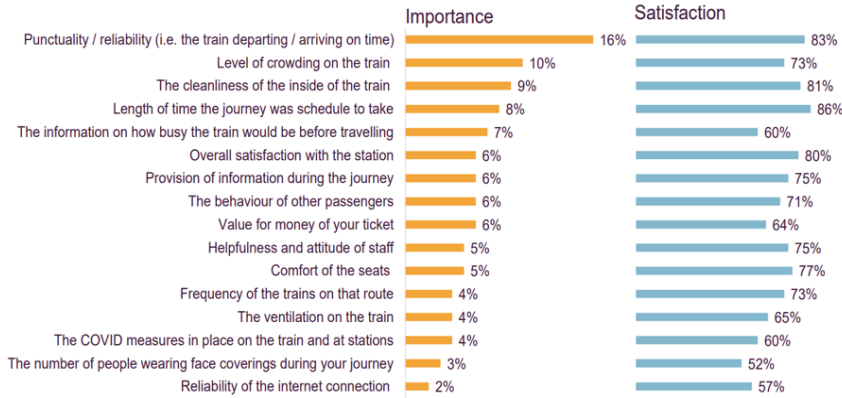
Appendix 1

Analysis from Rail User Weekly Survey

20 October – 14 November 2022

Importance of all sixteen aspects asked in the survey

'Punctuality/reliability' has the most impact on overall satisfaction, followed by level of crowding and cleanliness inside the train.



Key drivers of overall journey satisfaction report accompanying the 8-12 December 2021 report. Base size: Rail n = 1932

Appendix 2 - What matters to passengers

How features contribute to the passenger experience



Sample size **12,565**

* A railway that can cope with adverse weather events for example snow, wind, flooding and extreme heat

** Trains and stations easily accessible by older and disabled people and those with pushchairs, bicycles, luggage.

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