

# What RSSB is doing to attract passengers back to rail?

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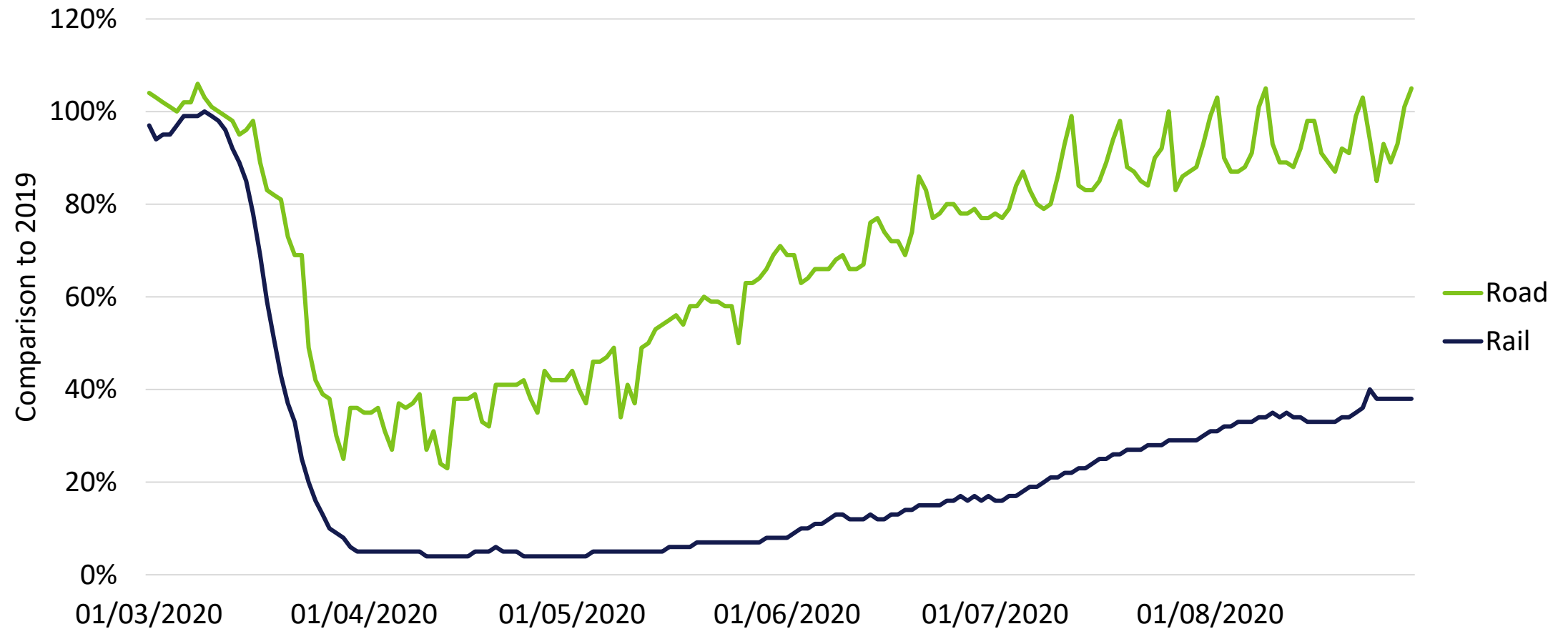
**Railfuture “Attracting passengers back to rail” webinar**

**Saturday 3 October 2020**

This presentation can be viewed from  
[www.railfuture.org.uk/conferences](http://www.railfuture.org.uk/conferences)



# Rail travel in context



# Risk areas supported by RSSB expertise



- Social distancing in stations, trains and platforms



- Platform safety
- Train dispatch
- Visors for platform staff



- Remote learning
- Competence assessment of safety critical staff
- In cab training bubbles
- Train driver psychometric assessment

# Staff mental wellbeing

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## What we have done

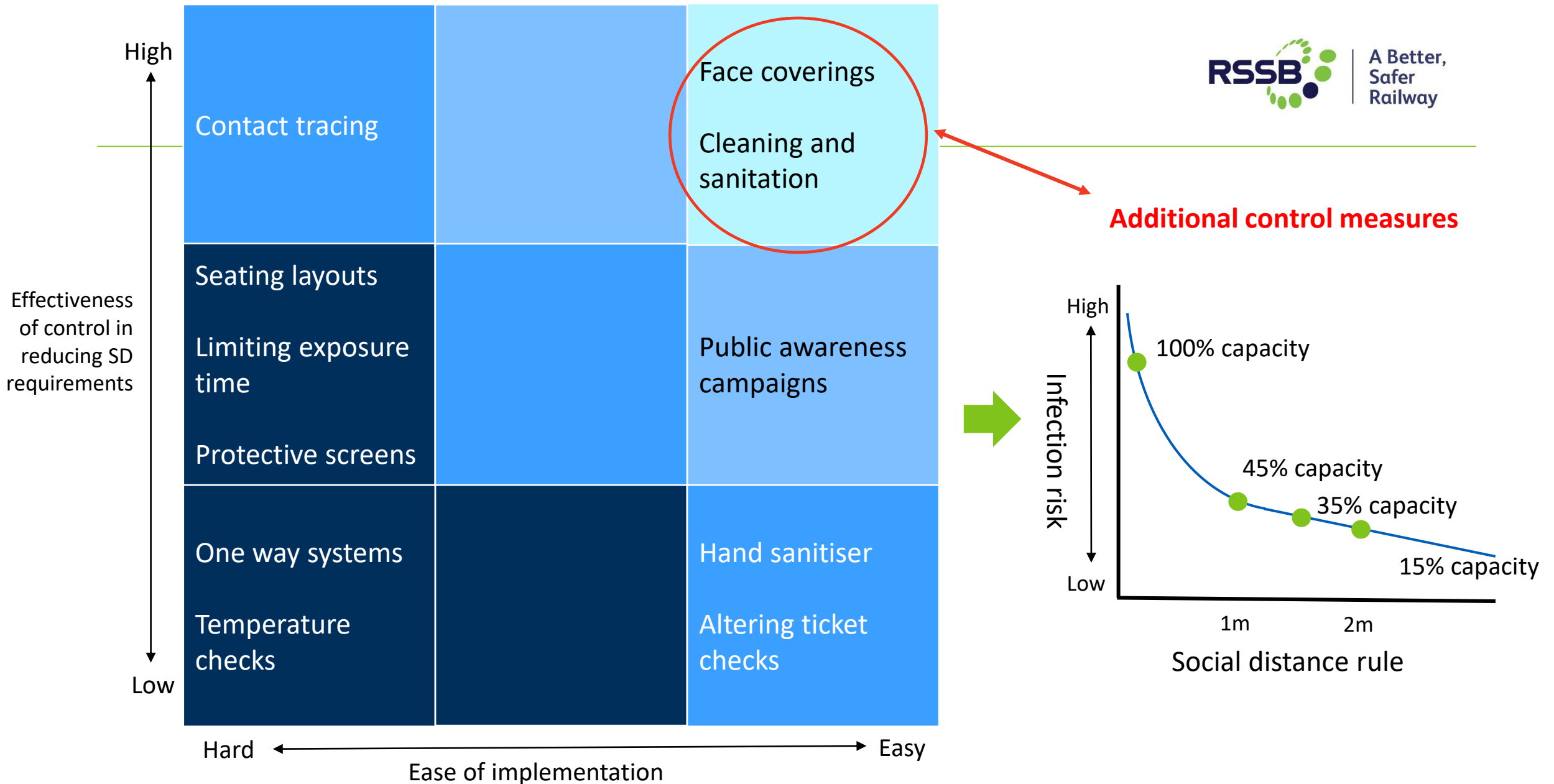
- Briefing note on addressing the mental wellbeing and psychosocial aspects of **COVID-19** outbreak
- Podcast on mental wellbeing and **COVID**
- Guidance on supporting staff following the **death of a colleague**
- Bespoke virtual training to support staff on **return to work**

## What we are working on

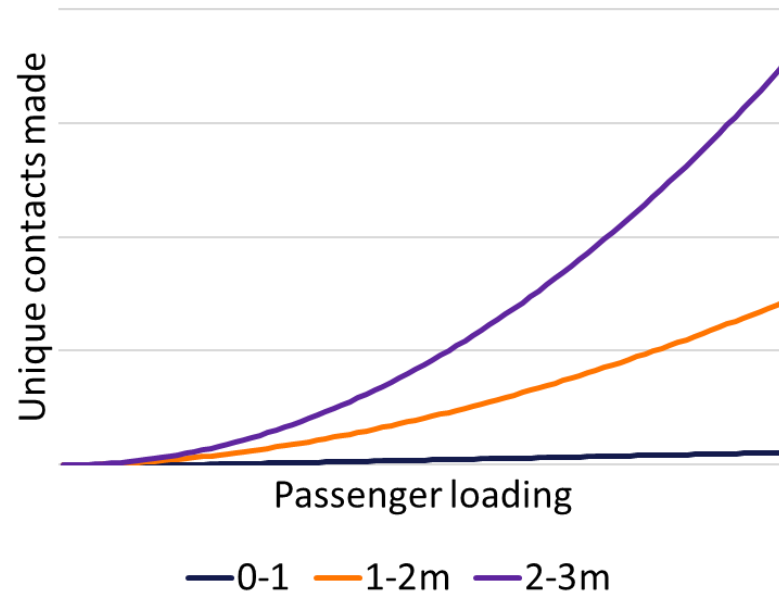
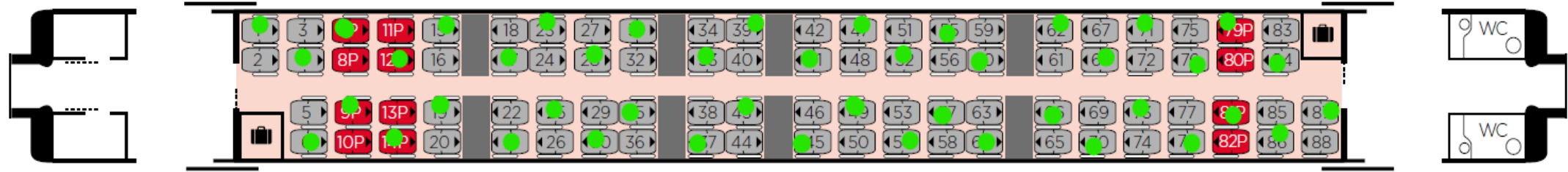
Understanding the health, safety and wellbeing risks and impacts of **lone working** to rail staff

Identifying measures to prevent customer-on-staff **work-related violence** in the UK rail industry

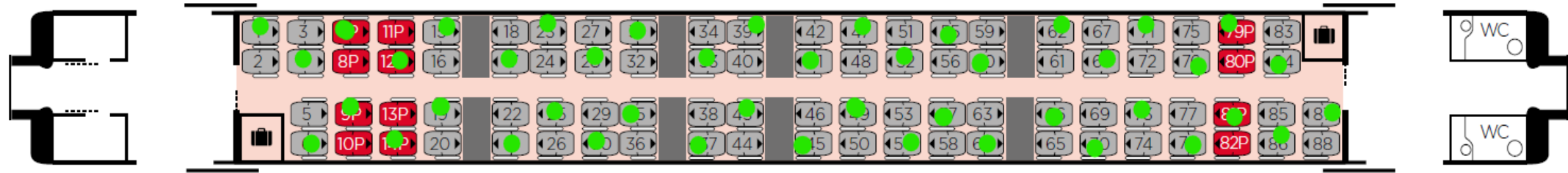
**Job design** for mental wellbeing in rail



# Infection modelling



# Sample results – long distance journey



## Contact time from demo journey

Distance range	0-1m	1-2m	2-3m
Time within distance range with any other person (minutes)	49.62	227.18	251.70

## Infection risk per passenger

	Risk of infection per average passenger journey (based on demo model)	1 infection per # journeys
Without masks	9.03E-05	11068
With masks	5.06E-05	19765

# Communicating the risk

Traveller fatality risk for different transport modes (relative to rail)



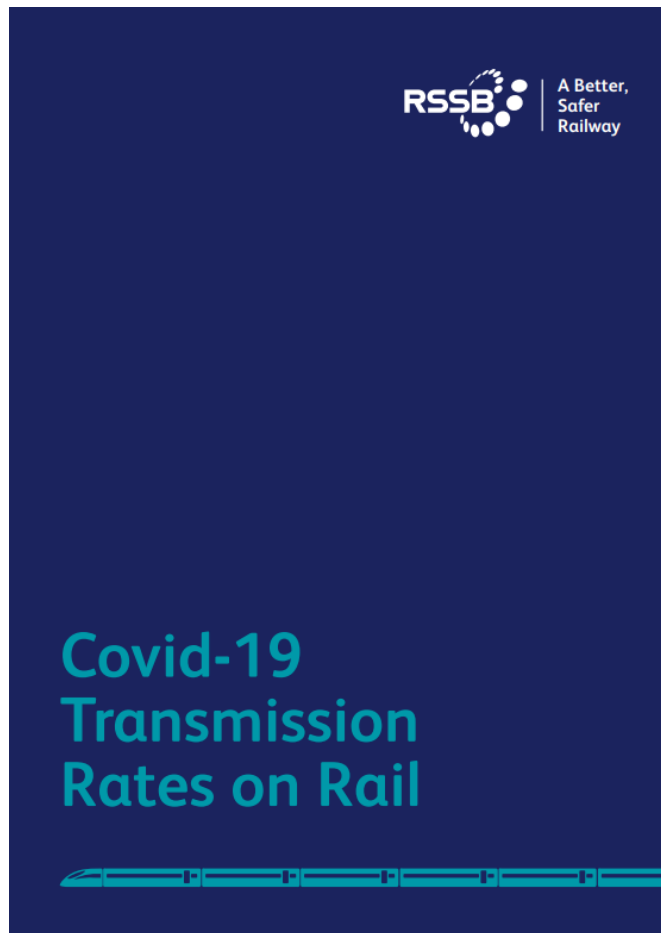
Data source: SRMv8.5 for rail (based on data to Feb 2017), DfT for other modes (based on data from 2018).

- The risk of travelling by rail during Covid-19 assumes the use of face coverings and an infection rate at approximately 1 in 20,000 passenger journeys.
- The risk of travelling by road is based on a combined average from the following modes: pedestrian, pedal cyclists, motorcycle users, car occupants, bus and coach occupants, goods vehicle occupants and other vehicle occupants, and normalised by passenger km. The road risk figure does not take account of Covid-19 so any risk of exposure or transmission (for example car sharing) is not accounted for here, and means the risk could be higher.
- An average rail passenger journey is taken as 38km.
- The probability of a fatality following an infection on a train takes into account the frequency of travel by different age groups and the infection:fatality ratio for those age groups.
- It is assumed that those in the vulnerable age bracket (60+) are not using the railway.
- Covid-19 fatality risk only includes the risk to those travelling, not knock-on risk to others in the community.



## Where to find out more

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<https://www.rssb.co.uk/what-we-do/the-coronavirus-pandemic-how-we-can-help-you/infection-risks>



The following are extra slides that were not shown during the Railfuture webinar



## RateSetter - Recent application to COVID-19

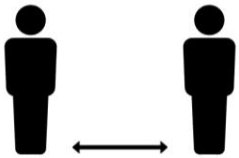
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The RateSetter modelling is being pushed into new areas. It can give us insight and help develop advice and has been ‘sanity checked’ at RSSB before dissemination.



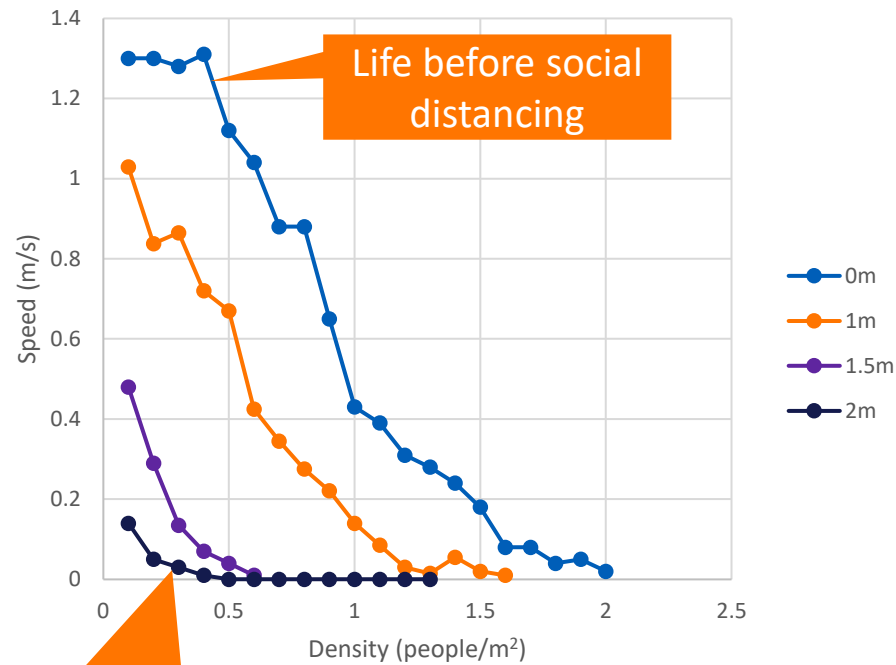
Longer term the work will require validation to increase confidence in the predictions. At this time, please use it as input to COVID-19 planning alongside all other information available to you.



When work commenced Social Distancing in the UK was set at 2 metres. From the 4<sup>th</sup> of July that was updated to be 1 metre plus, in England only. Analysis had already been run for this scenario.

# Data extraction and analysis for Corridors

## Speed Vs Passenger Density

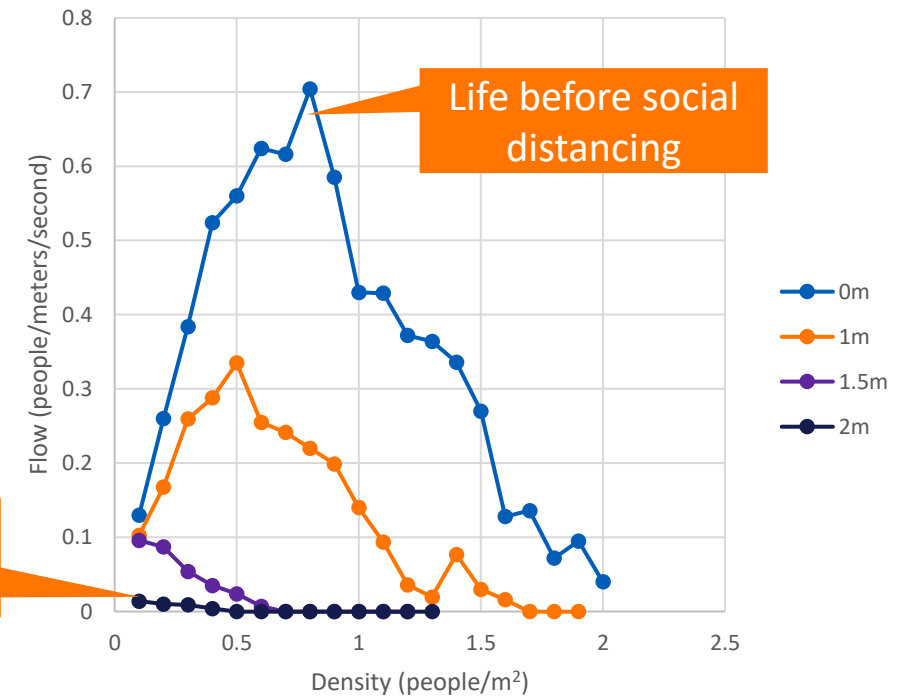


Life before social distancing

Original government guidance

Greater throughput is achieved with 1m+ distancing if...  
congestion is managed

## Flow Vs Passenger Density

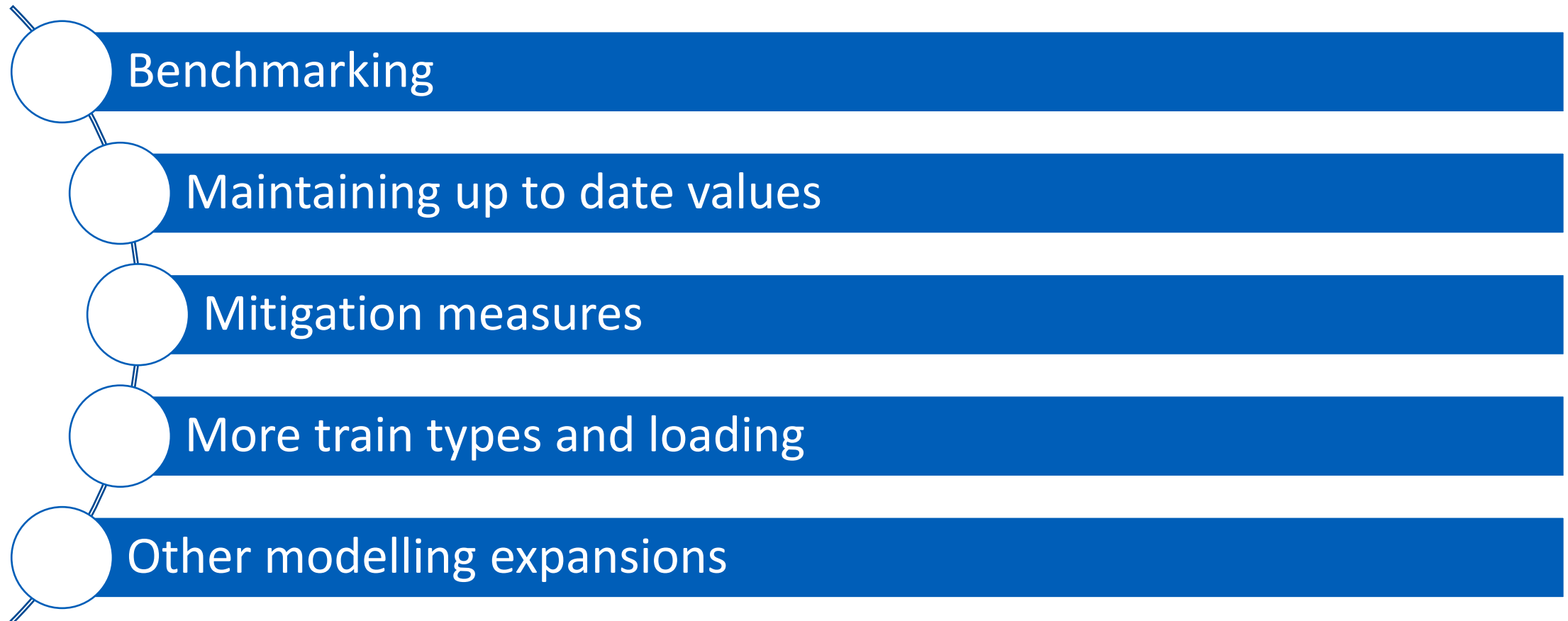


Life before social distancing

Original government guidance

## Next steps

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Thank you

