

A view from the Bridge



Eur Ing **Nick Millington** B Eng (Hons) C Eng MAPM ChPP FICE FPWI



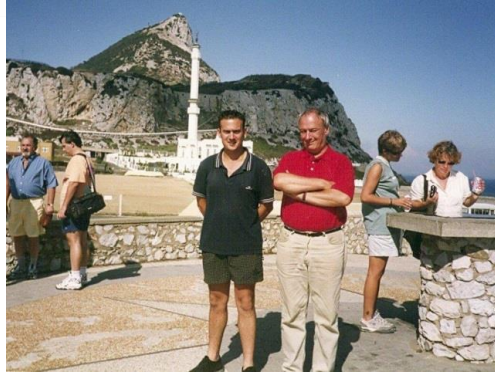
What did you want to do when you left School?



"I want to be a Chartered Accountant....."



What did my Dad want me to do...?



- 1990 leave School: 9 GCSE's; a few A's, B's, C's etc;

"Son, your off to University...."

- Meanwhile, my Brother was struggling at Uni in the Midlands.....



What did I do?





10 years before Uni..... 1990 - 2000



- Left School and home at 16.....
- 4 years as a Mechanical and Electrical Apprentice;
- 6 years as a Technician Grade;
 - Setting out, Design, etc;
 - Lots of hours;
 - Career prospects....?
- HND: Mech, Elec;
- HNC: Civil.



3 years at Uni at Plymouth.... 2000 - 2003



- BEng (Hons) Accredited with ICE;
- Hydraulics with Les;
- Geotechnics with Feti;
- Structures with Dr Rafiq!!
- More structures with Dave Easterbook etc;
- Design with Mike Foulkes;
- Law with (can't remember);
- Maths (can't remember);
- Etc



Graduate to C Eng.....

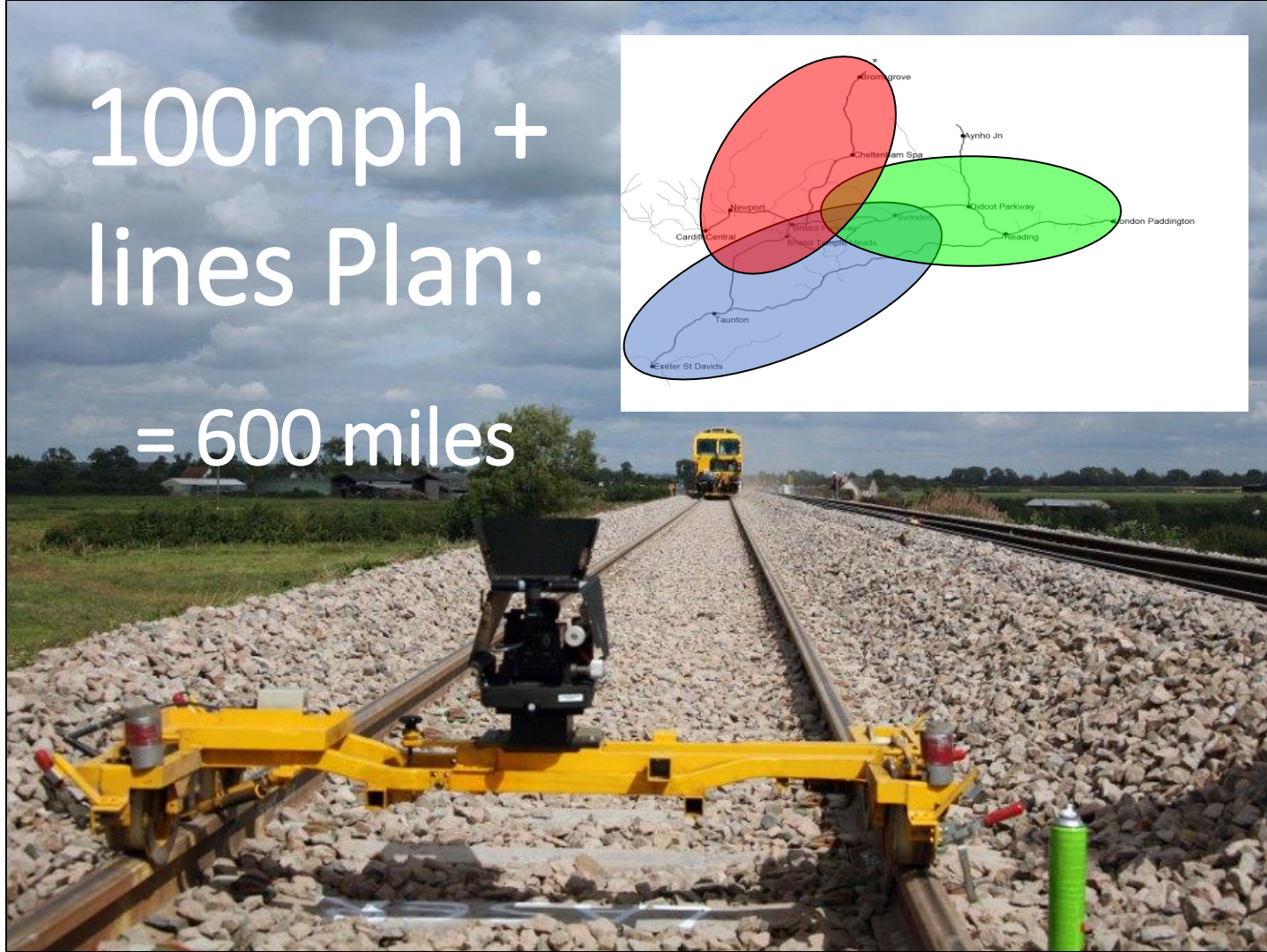
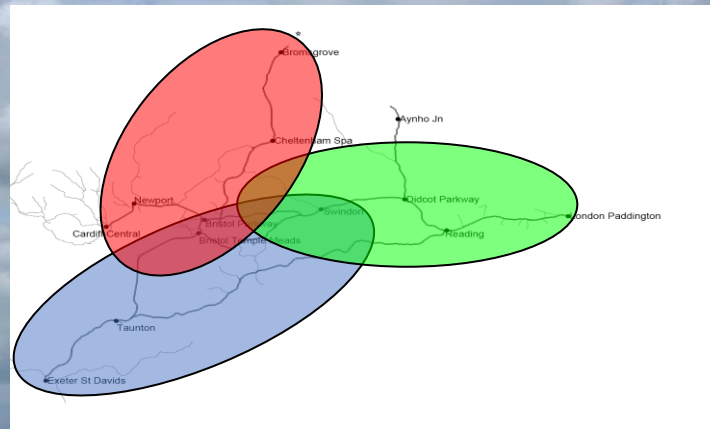
3 to 4 years



SCE for ICE + Trainee Reviewer.

Support ICE (inc SW), Universities etc – Plymouth Uni

100mph +
lines Plan:
= 600 miles



Purchase £100m of Sophisticated plant



Develop the Reading Station Scheme

£1bn, complete 2015





OFFICIAL



1. Safety and Assurance Director. 2. Client Director, Track Renewals



Balfour Beatty



COLAS RAIL

amey COLAS



Chief of Staff, Network Rail - 2016



- Assist NR CEO;
- Implement recommendations of 'Shaw Report';
- Assist with DfT and ORR and Rail Delivery Group relationships;
- Observe Board and Executive;
- Special Projects;
- Political Landscape:
 - Brexit Vote;
 - Scottish Devolution



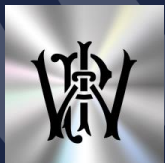
Maintenance Director, Western



1. Fellow of the ICE & PWI, Registered Project Professional;
2. 'Head of Maintenance', Network Rail Western Route;
 - 2200 miles of NR Infrastructure to run daily – Multi-disciplinary;
 - £110m per annum spend;
 - Lead a team of 1500 people;
 - Electrify the Great Western Main Line;
 - Introduce new rolling stock;
 - Modernise signalling system;
 - Modernise maintenance practices.



What challenges do the PWI need to rise to??





The Safety Task Force.... Are you doing enough?

OFFICIAL

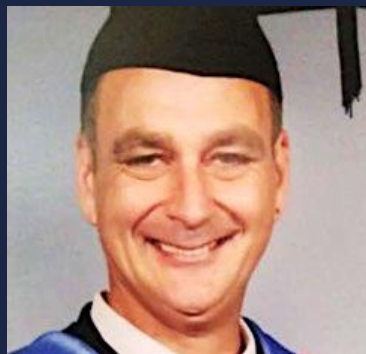
NetworkRail

On 3 July 2019, at 09:52 the driver of a Great Western Railway train reported that the train had struck three people working on the South Wales Main Line track.

Our colleagues **Gareth Delbridge** and **Michael 'Spike' Lewis** were fatally injured. Another colleague escaped by inches.



Aden Ashurst lost his life on 8 April 2020 at Roade Northamptonshire. An AmcoGriffen employee, Aden was fatally struck while on the track.

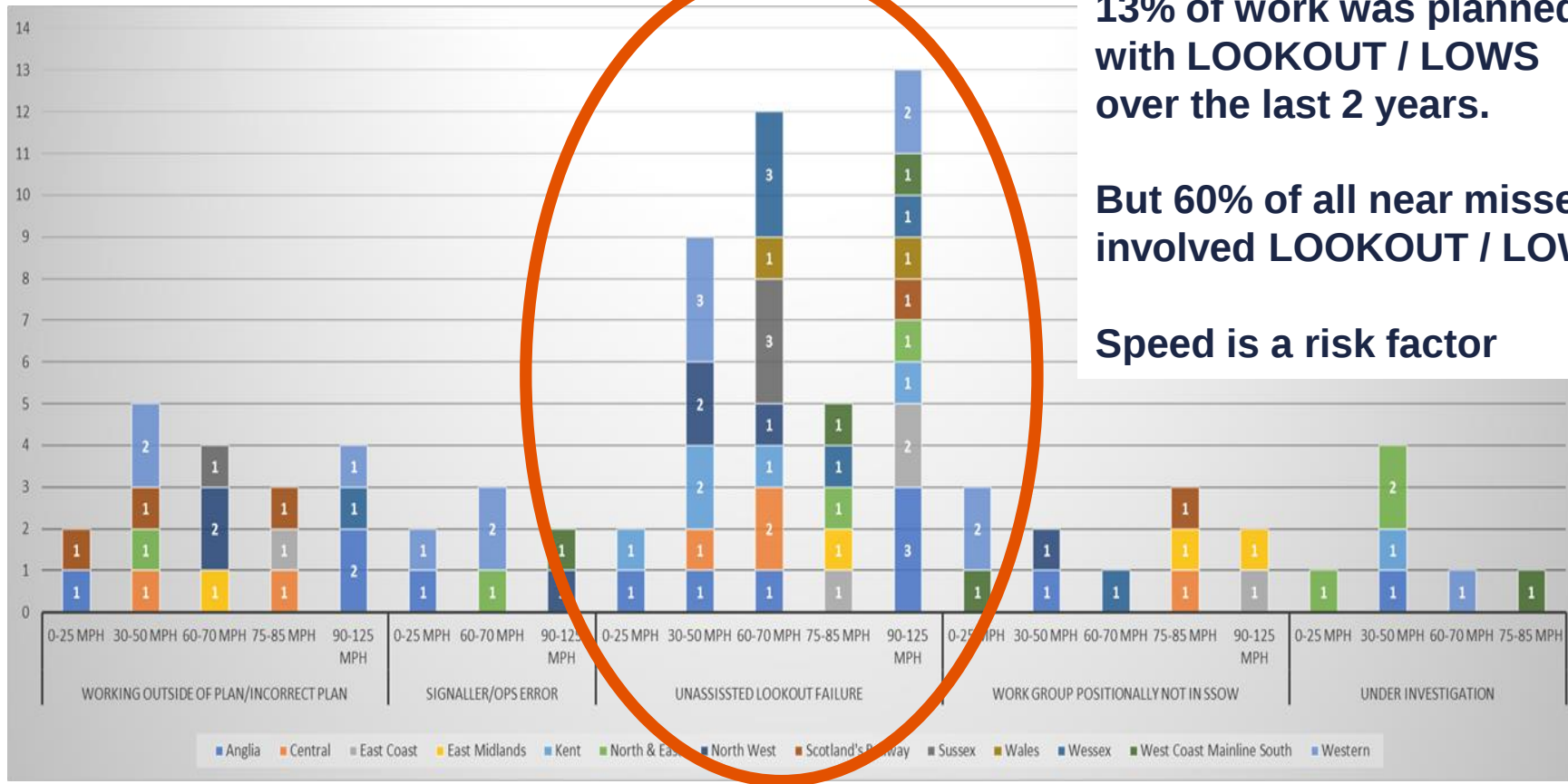


Tyler Byrne was killed on 9 February, 2021, at only 30 years of age. He was struck by a train on the tracks near Surbiton station, in Surrey.





'Near Miss' causation since April 2019



13% of work was planned with LOOKOUT / LOWS over the last 2 years.

But 60% of all near misses involved LOOKOUT / LOWS

Speed is a risk factor



PROTECTING TRACK WORKERS – BIGGEST OPPORTUNITIES

NetworkRail



NO MORE
'LOOKOUTS'



100% Additional
protection / train
activated warning



100% COMPLIANCE WITH
**019 SAFE WORKING
PRACTICES**



How do you drive sustainable change at the front line? We can not stay as we were.....



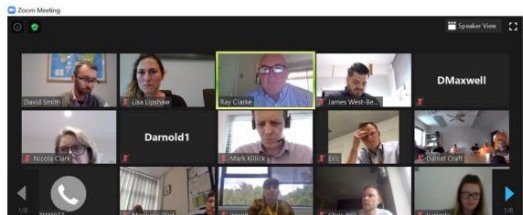
Posted in Southern Region

Lipshaw Lisa
Thu at 6:56 AM • @9

2 shares • Seen by 64

Wow, what a great turnout yesterday at our second Track Worker Safety call! Thanks to those who joined us - over 200 of you. We'll be having our final call at 22:00 tonight to catch those of you we've missed.

Special thanks to **West-Beard James** and **Maxwell Douglas** for telling us why maintenance teams must get involved with this once-in-a-generation programme.



Contents

Hello from the TWS team
Spotlight on 2021
What we have completed so far

Meet the team



New members will be joining the team shortly

Hello from the TWS team

Welcome to your first Track Worker Safety (TWS) programme newsletter.

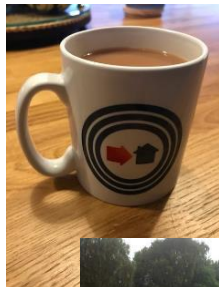
The programme will help us provide the safest environment for our track workers by reducing the need for us to go on track. It's also ensuring that, when we do need to, that we're using the safest method by:

- 1 Make it easier to plan work into possessions and line blockages
- 2 Making all warning methods and line blockages safer

We know we must do better to make ourselves safer whilst working on the railway. In the last year alone, we've had over 700 people exposed through operational close calls and near-misses. This is unacceptable and across Network Rail, wide-ranging plans are underway to reduce these incidents and near-misses.

This programme is part of those plans with a once in a generation opportunity to plan and deliver our trackside work differently. It's going to be more ambitious than anything we've done before in this area, and we're rising to the challenge with the right team and with your support.

We'll reduce the single point of failure that exists too often in our work - we need to stop relying on one person, whether that's a track worker or a signaller further away. That's why we want to achieve 0% unassisted bailout working. We're going to use the latest technology, such as Plan Line Possession Recognition (the trainborne track measurement equipment), Remote Condition Monitoring and reliability-oriented maintenance of signalling equipment (ROMO) to reduce the number of times we need to go trackside. We'll also be reviewing our workbooks to ensure we have sufficient safe access to deliver our work and in August we're going to request additional access that meets our needs - we're completely overhauling the way we plan our work so more of it can go into possessions and line blockages.





OFFICIAL

We are sorting some basics and you must too.....



CASTLEFORD GREENWAY – IN PROGRESS 





OFFICIAL

New technology helps keep boots off ballast and customers happy. What's next?



Eddy Current technology in use



Plain Line Pattern Recognition camera



Remote condition monitoring,
without the need for track access

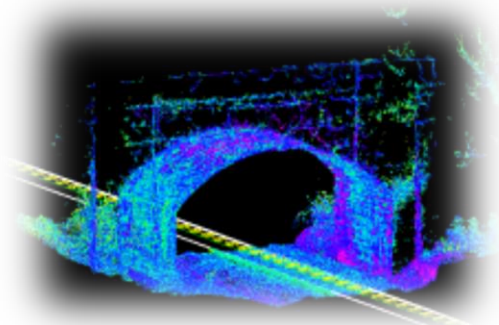




OFFICIAL



New technology helps keep boots off ballast and customers happy. What's next?



UAV / Drone Trials

Automated Surveying (RILA)



Geofence technology: Can it be used to protect our trackworkers?

- Since Margam, there have been over 200 recorded incidents where staff have unknowingly entered or encroached towards an open line, e.g. either to place protection/isolation equipment or tools and materials such as trolleys etc as part of their normal maintenance or projects tasks.

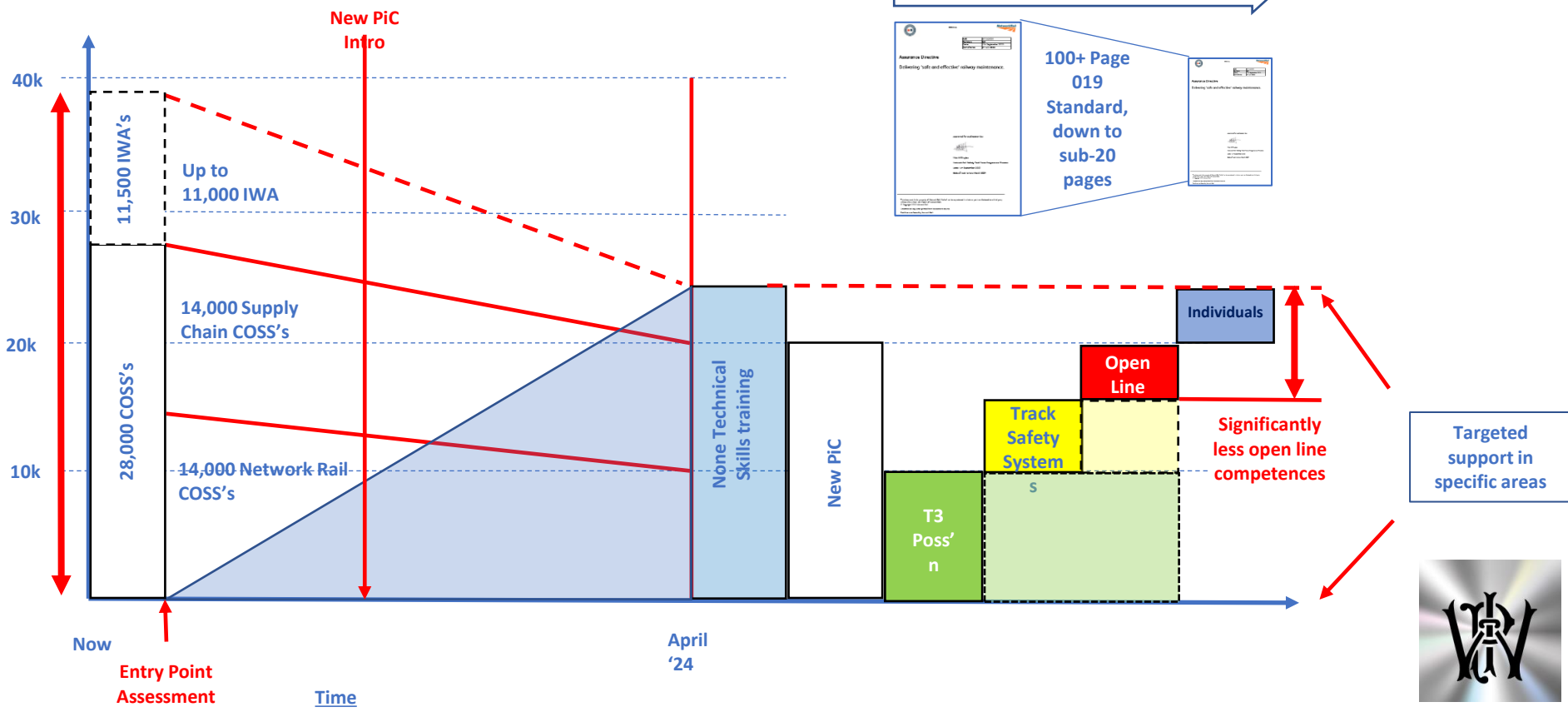


Track Tracker	Onwave	Tended

Next steps: User trials with route teams in Anglia, North East, Wessex and Western commencing end of April '21 for approx. 9 months



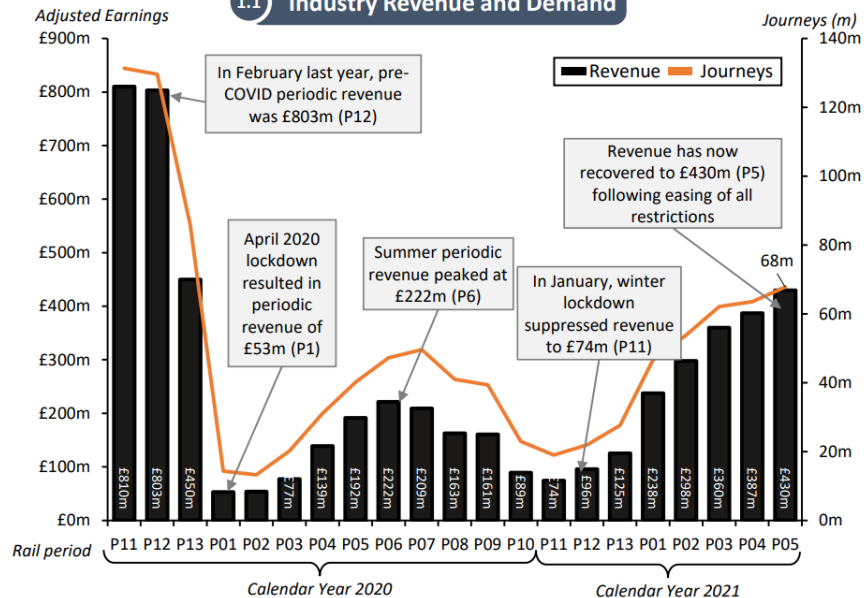
Reducing the amount of people with permission and competence to work on open railway lines AND simplifying standard 019.....





Industry Revenue. And Recovery?

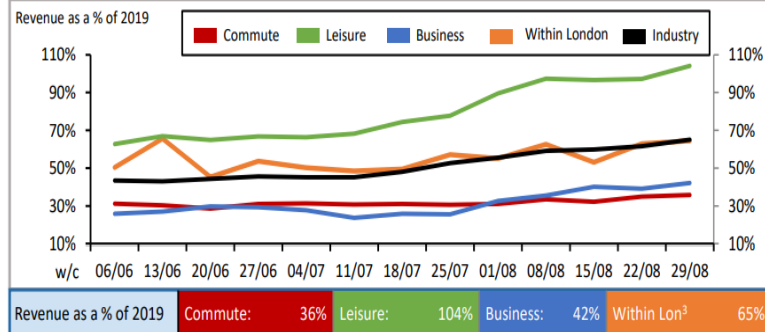
1.1 Industry Revenue and Demand



Shortfall versus 2019

w/c	YTD from
29 th August	1 st April
£60m	£2,581m

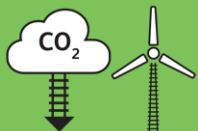
3 Recovery by Journey Purpose



Leisure already
over 100%.....
Opportunity?



To serve the nation with the greenest, cleanest mass transport



A low-emission
railway



Improved
biodiversity of
plants and wildlife



A reliable railway
service resilient to
climate change



Minimal waste
and the use of
materials





A Decarbonised Railway...?

- At least 30 years of work on offer (500k per annum minimum);
- We must address the poor cost and programme management (seen in CP5);
- For 60 years the railway has moved to become a passenger railway that regards freight as marginal, that balance must change;
- These are governmental, corporate and cultural challenges
- Electrification, battery or hydrogen (and the infrastructure to support);





What do our Leaders say the PWI should think about?

Do P Way engineers balance operational risk properly when applying TSRs? If you do, prove it 😊 (RSSB Risk model use).

Can you innovate more so that we are less constrained by (numerous) standards?

The railway needs to be more attractive than ever before. How can you delight through designing, procuring, installing and maintaining a much more reliable railway?

Please remember why we are in business..... Every hour we shut the railway we have zero revenue but most of the same fixed costs. We should be passionate about how we manage access. Not to stop reasonable access but to use it wisely and preciously.

I have only just started asking, so expect this to grow.....



OFFICIAL

We want your ideas



Safetytaskforce@networkrail.co.uk



Nick Millington | LinkedIn

