



The Re-instatement of Derbyshire's Strategic North / South Rail Link

"Re-Connecting all of Derbyshire directly to the North West, to and through the Peak District National Park"

*"Levelling Up"
In the Midlands and the North*

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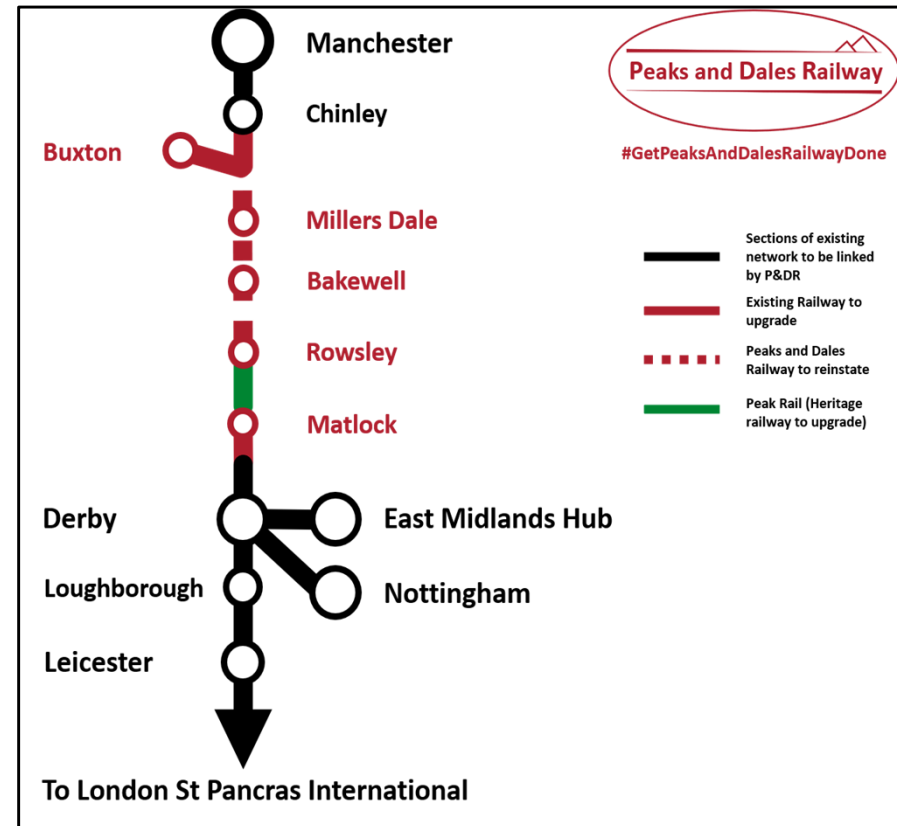
MEMRAP

"Build Back Better"

10th March 2021 - A Presentation by Stephen Chaytow
CEO, Manchester and East Midlands Rail Action Partnership Ltd

Contents

Background/Status
The Case
Strategy
Green Credentials
COVID Implications
Benefits
Next Steps



36 miles of Double Track Railway: 13 miles for re-instatement, 23 miles to be upgraded

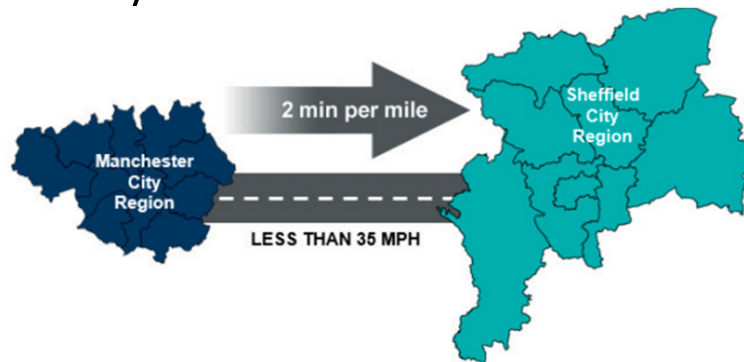
Fractured N to S Spine, Levelled Down

Peaks and Dales line closed in 1968:

- Monsal Trail now occupies 8.5 miles of track bed;

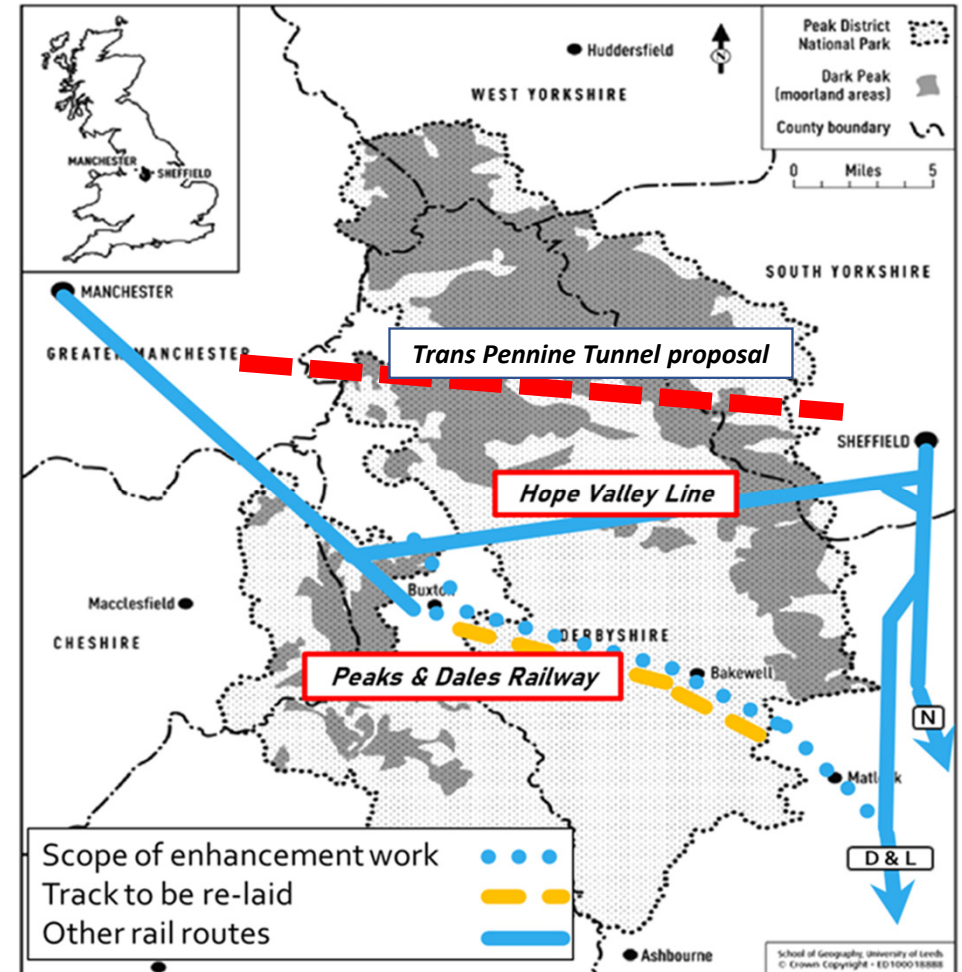
Manchester via Hope Valley line:

- Sole east/west South Pennines rail link;



- To Yorkshire & East Midlands is slow, congested;
- Aggregates and cement freight (30mph) conflicts with express passenger (90mph);

Buxton: Southbound mostly via Macclesfield



Cancellation of the TPT – What Next?

- "The existing road link across the Pennines is notoriously below par. It's regularly congested, and is closed for an average of 70 days a year due to bad weather.
- "Whilst a tunnelled dual carriageway may not be the answer, we've expressed our view to government that more work should be done to look at environmentally sustainable solutions for both road and rail across the Pennines."

Peter Molyneux – Transport for the North, January 2021



For Rail: Peaks and Dales Railway unlocks Hope Valley improvements too, less environmentally intrusive

PDNPA Planning Director says: *"This is likely to shift focus back to rail"*

Road versus Rail Journey Times Derby to Manchester (centre)

1) Road via eastern route:
(A38 / M1 / A628)

2) Road via western route:
(A50 / M6 / M56)

ROAD: Average 2 – 2.5 hours,
depending on traffic conditions

3) Peaks and Dales line:
(Derby/Stockport/Manchester)

RAIL: 1962/3 British Rail Timetable:
75 minutes

Time saving: from 45 minutes upwards



East Midlands Infrastructure Investment, compared to West Midlands and North West

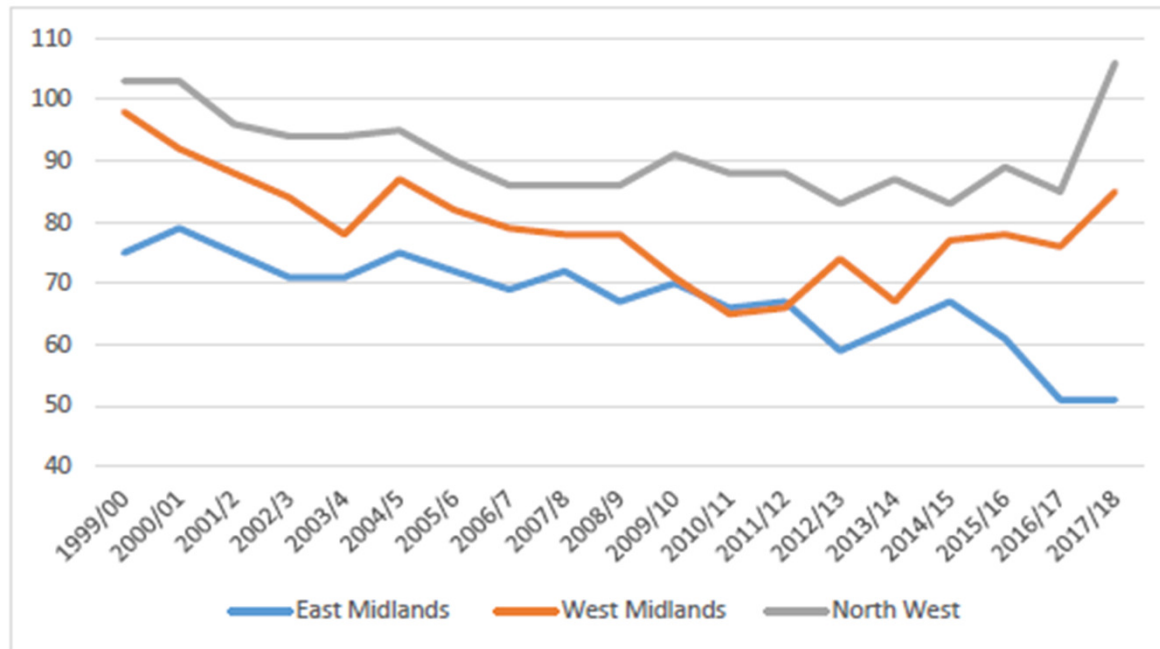


Figure 2: Transport spend per head compared to UK average time series (UK = 100). Source: PESA

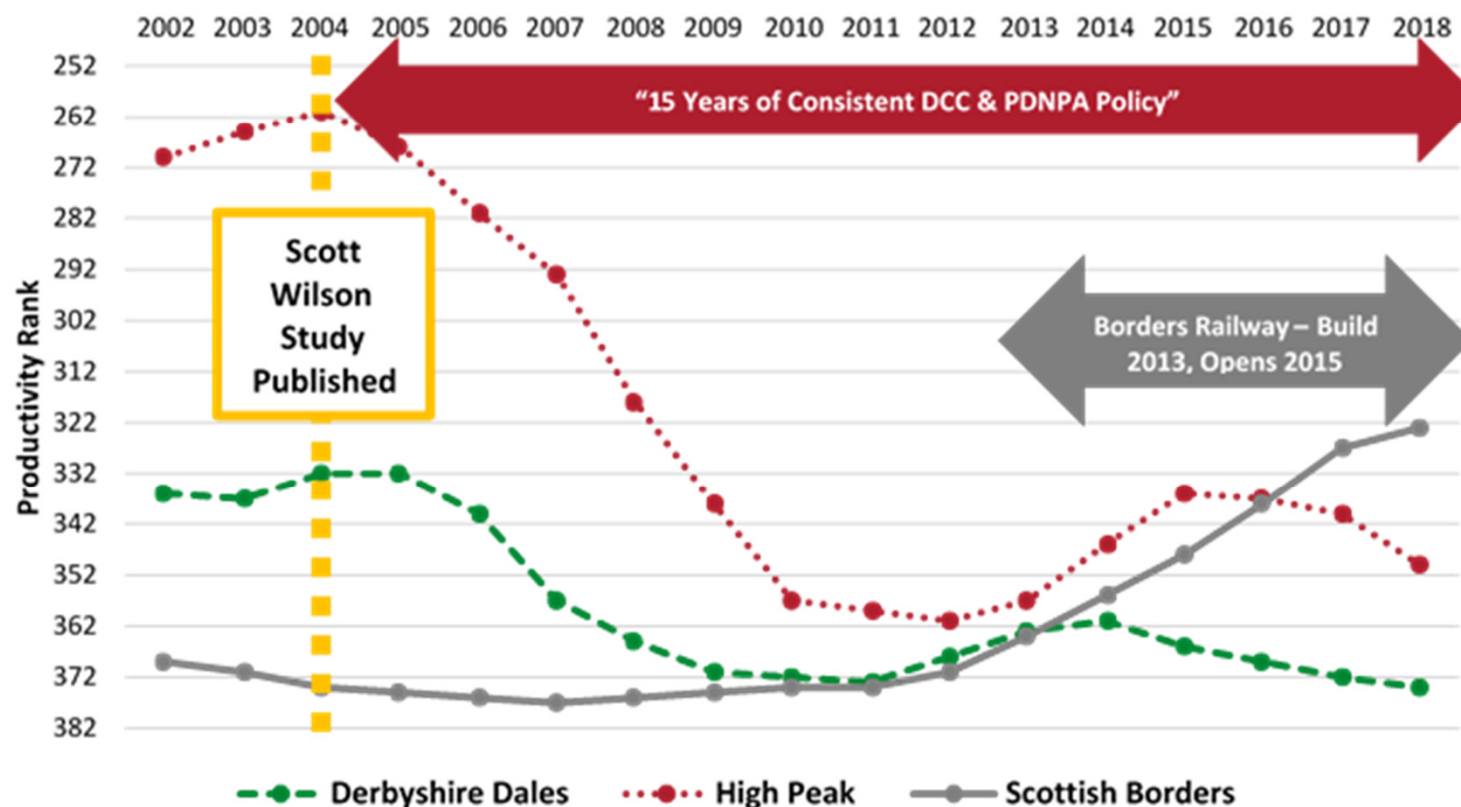
⁴⁴ PESA Statistics, HMT 2019 <https://www.gov.uk/government/statistics/public-expenditure-statistical-analyses-2019>

- East Midlands infrastructure investment is:
 - bottom of the regional table at £245 per person
 - less than 50% of average for English regions

• Why is this important?

Comparative GVA Productivity Rankings for Peaks and Dales Line & Borders Railway (Rankings out of 382 UK Local Authority Districts)

Source: ONS



Gross Value Add
(GVA) Productivity

Consequences
flowing from
similar
Scott Wilson
Outcomes

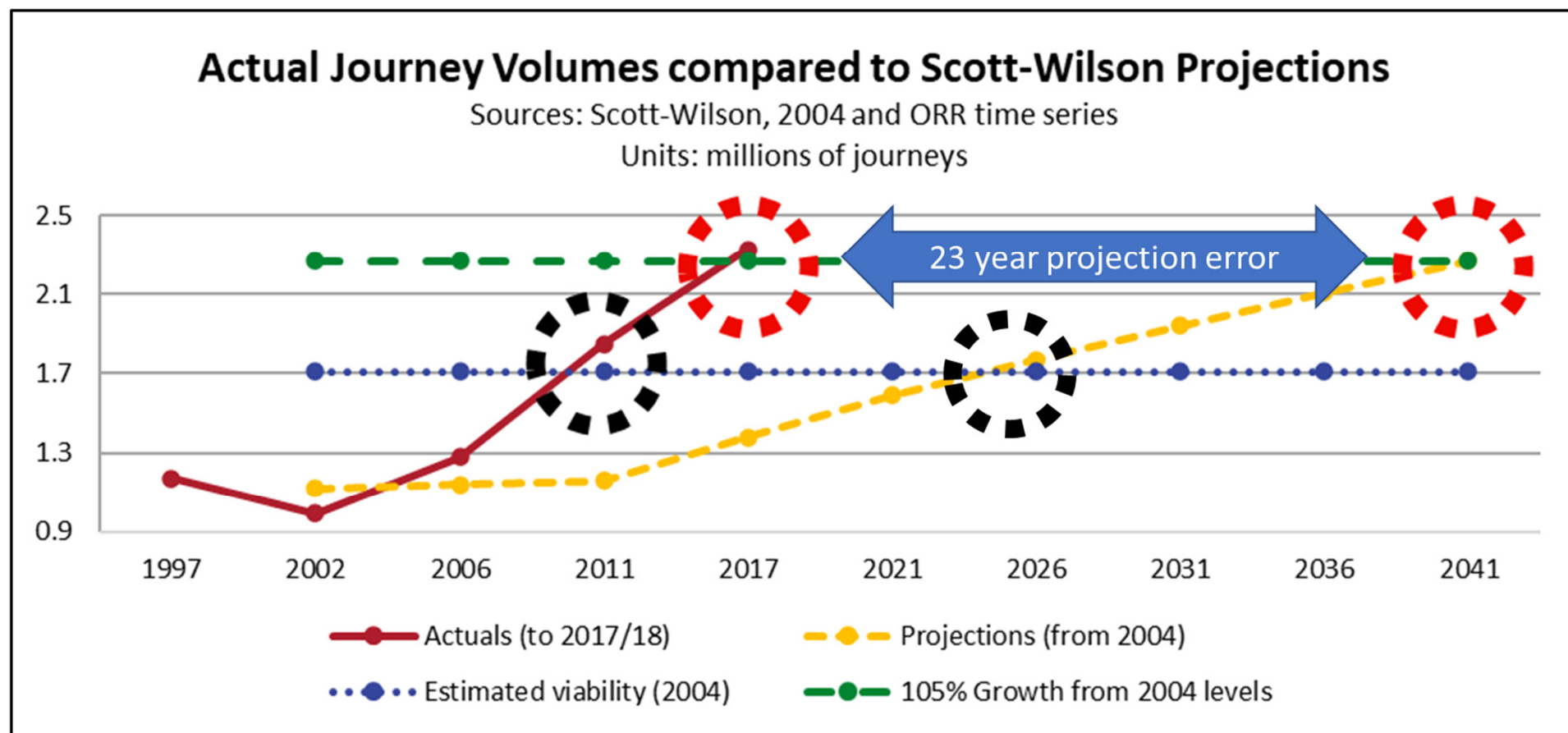
In Derbyshire and
Scotland

Peaks and Dales: “The Ninth Line”

To reconnect a disconnected Derbyshire and the East Midlands to the North West

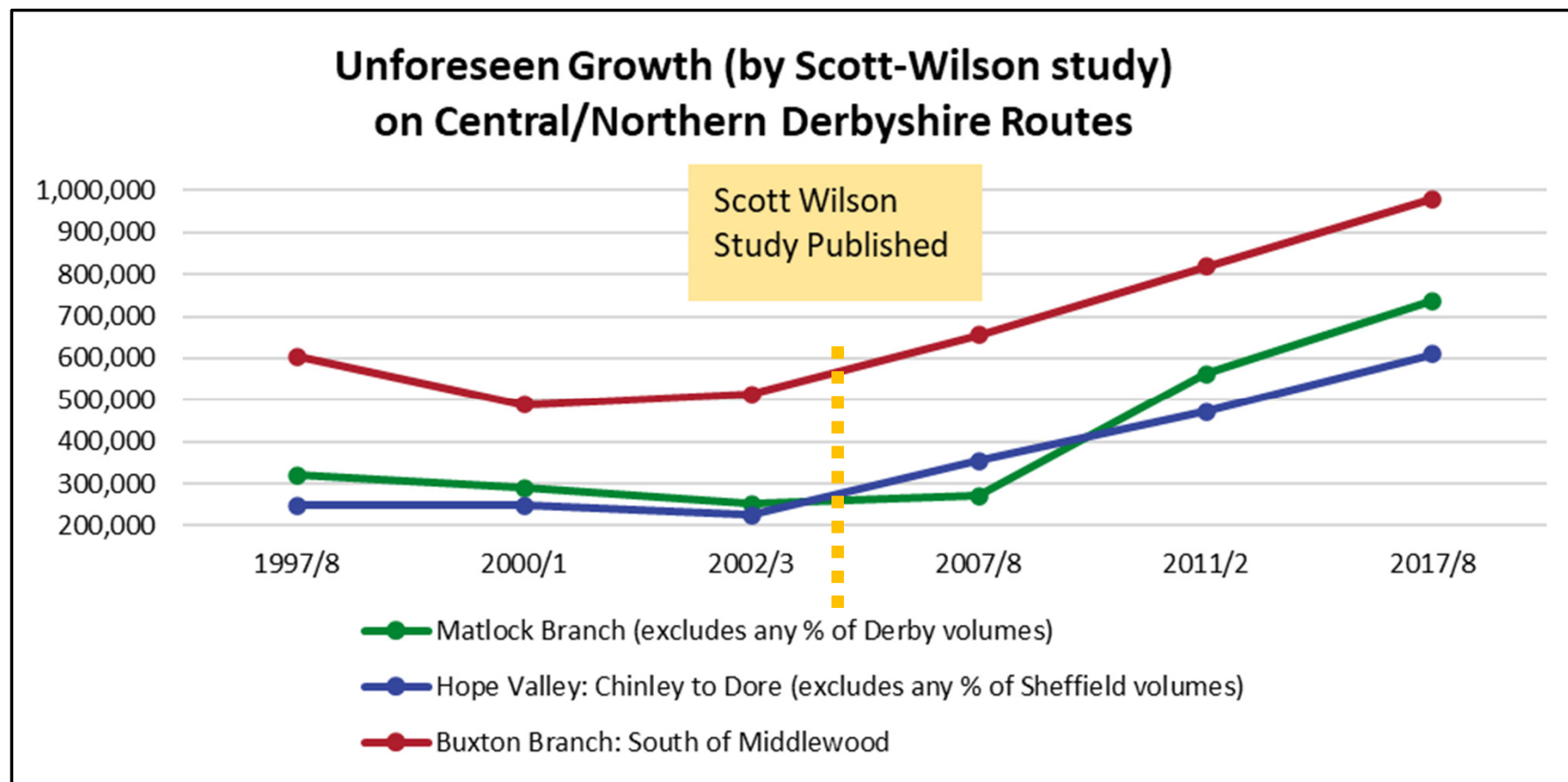
- National Infrastructure Commission (Rail Needs Assessment – Dec 2020)
 - NIC named ***eight*** critical routes linking the economies of the Midlands and North
 - But NIC was silent on the gap of EM to NW inter-regional connectivity
 - When we wrote to him, Sir John Armitt said Peaks and Dales line was out of scope
- Peaks and Dales Line – Transforming NW/EM Inter-Regional Connectivity
 - ***The Peaks and Dales line*** is the ninth NIC route
 - By catchment population, Peaks and Dales ranks 4th of the nine
 - Leicester / Derby / Belper / Matlock again linked direct to Stockport / Manchester
 - The project has a key role in realising Sheffield’s connectivity aspirations

The Scott- Wilson 23 Year Projection Error



Based on combined volumes for Buxton, Matlock branches plus Hope Valley

20 Years' Rail Growth until COVID



Parallel Growth Curves for Buxton, Matlock branches plus Hope Valley

The Peaks and Dales Case: Catchment Population

- Poorly Connected Core Cities (OECD Report, shows UK lags 2020):

- Manchester plus:

- Derby/Nottingham 5 million

- East Midlands 7 million of which:

- Left behind in Central Derbyshire : 150,000

- Congested: SE Manchester, A6 Corridor : 400,000

- Add Sheffield** 9 million

- 90% of PDNP visitors by car or coach: 13.25m “day visits” annually (STEAM 2018)

- 20m live within an hour’s drive of the National Park (PDNPA website)

** 2017 guidance from Network Rail to include benefits to Hope Valley and Sheffield in our reinstatement case

Top Objections, Regularly Raised (See MEMRAP website FAQs too)

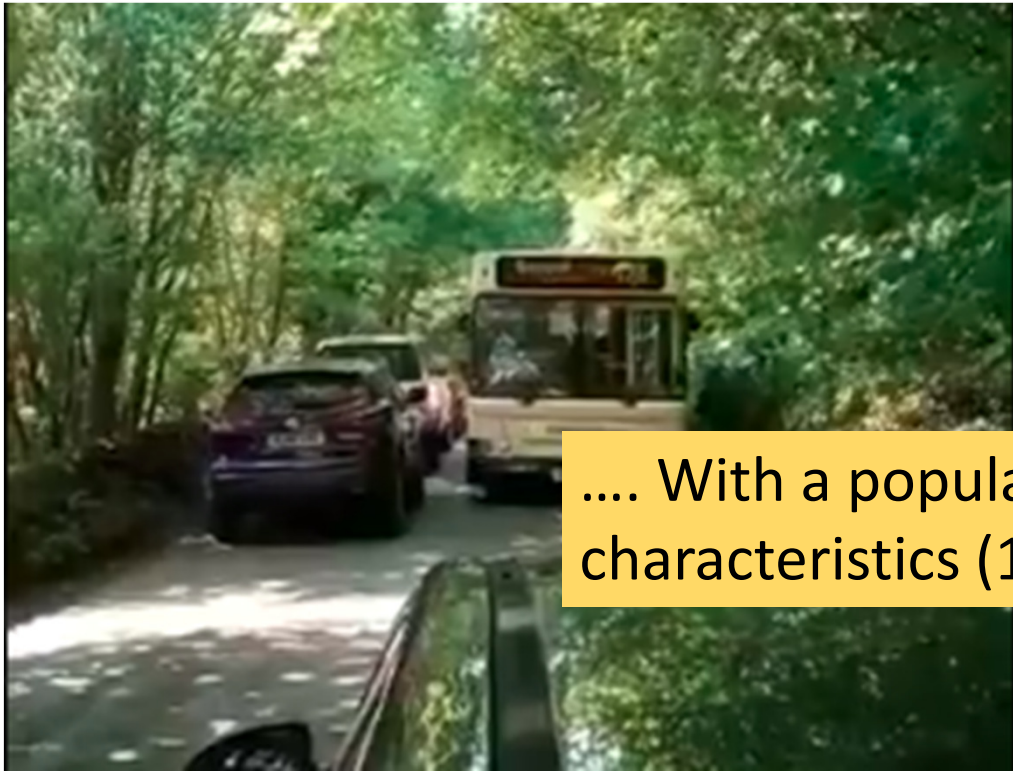
- Monsal Trail – who will come here if we “lose it”?
- The 2004 study said this line could never make money
- The quarries are really the ones behind this project – it’s really for freight
 - (No: **Full public service**: express / semi-fast / stopping / bike carriages / heritage)
- Biodiversity will be under threat from the railway

The Project Consents Manager comments:

“ The comprehensive environmental impact assessment process, laid down by statute is likely to spend most time on issues related to noise and ecology”

The Peak District Paradox

Exquisite landscapes and biodiversity (Edale)....



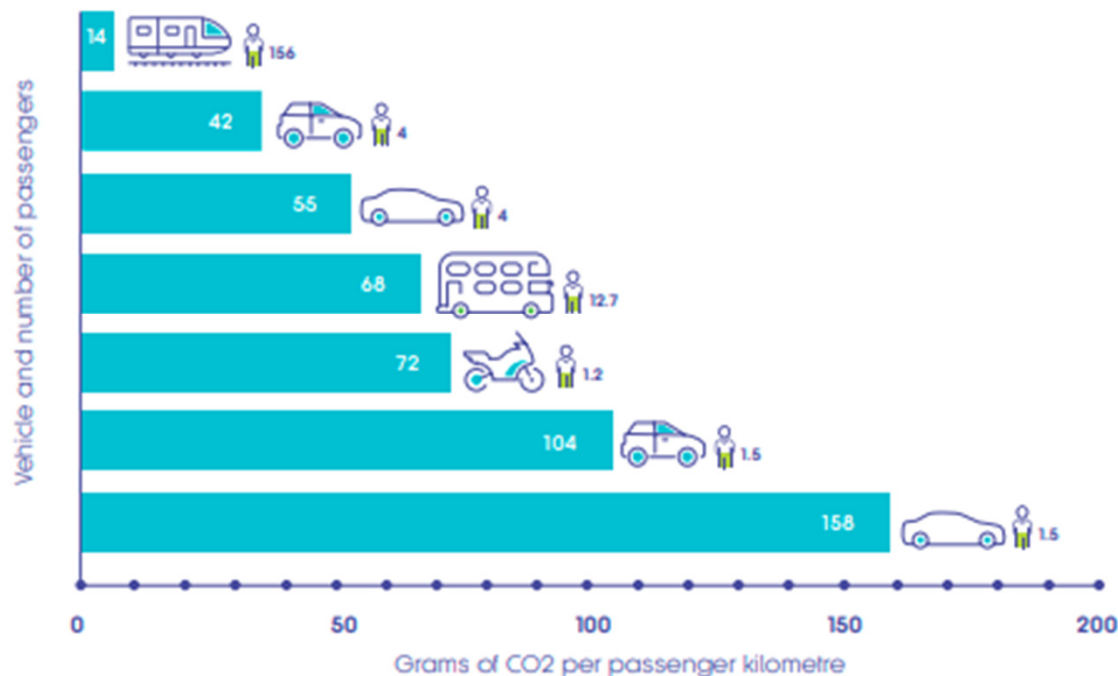
.... With a popularity causing it to display urban traffic characteristics (178 - Bakewell circular route)



"Nine out of ten visitors currently arrive in the Lakes, Peak District and New Forest by car and this is simply unsustainable." Chair, PDNPA – April 2020

Benefits of Rail in the Race to Zero Carbon

CO₂ emissions from passenger transport¹⁴⁹



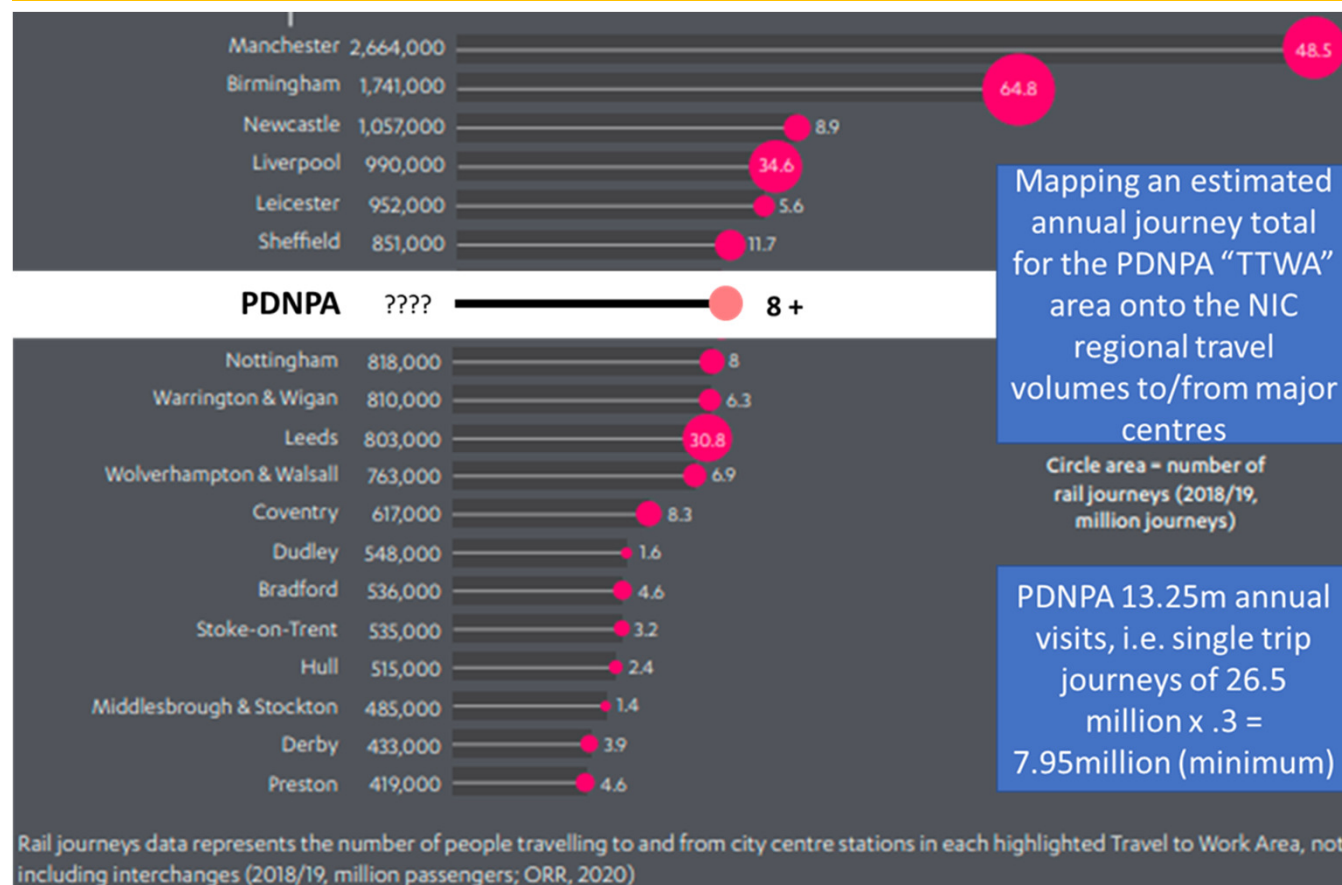
Source: EEA Report Term 2014

Rail emits far less carbon per person, even better when integrated with:

- Public transport last mile connection plus
- Active transport:
 - Secure cycle hubs
 - Cycle carriages (15-20 bikes)
 - Cycle hire
- NB – even when we have “EVs” congestion still remains

That Popularity – in a Rail Enabled Context

The Peaks and Dales line opens the way to minimum 30% modal shift to rail – opens a path to #NetZero



Using PDNP's own data:

a reinstated Peaks and Dales

enables:

an upgraded Hope Valley

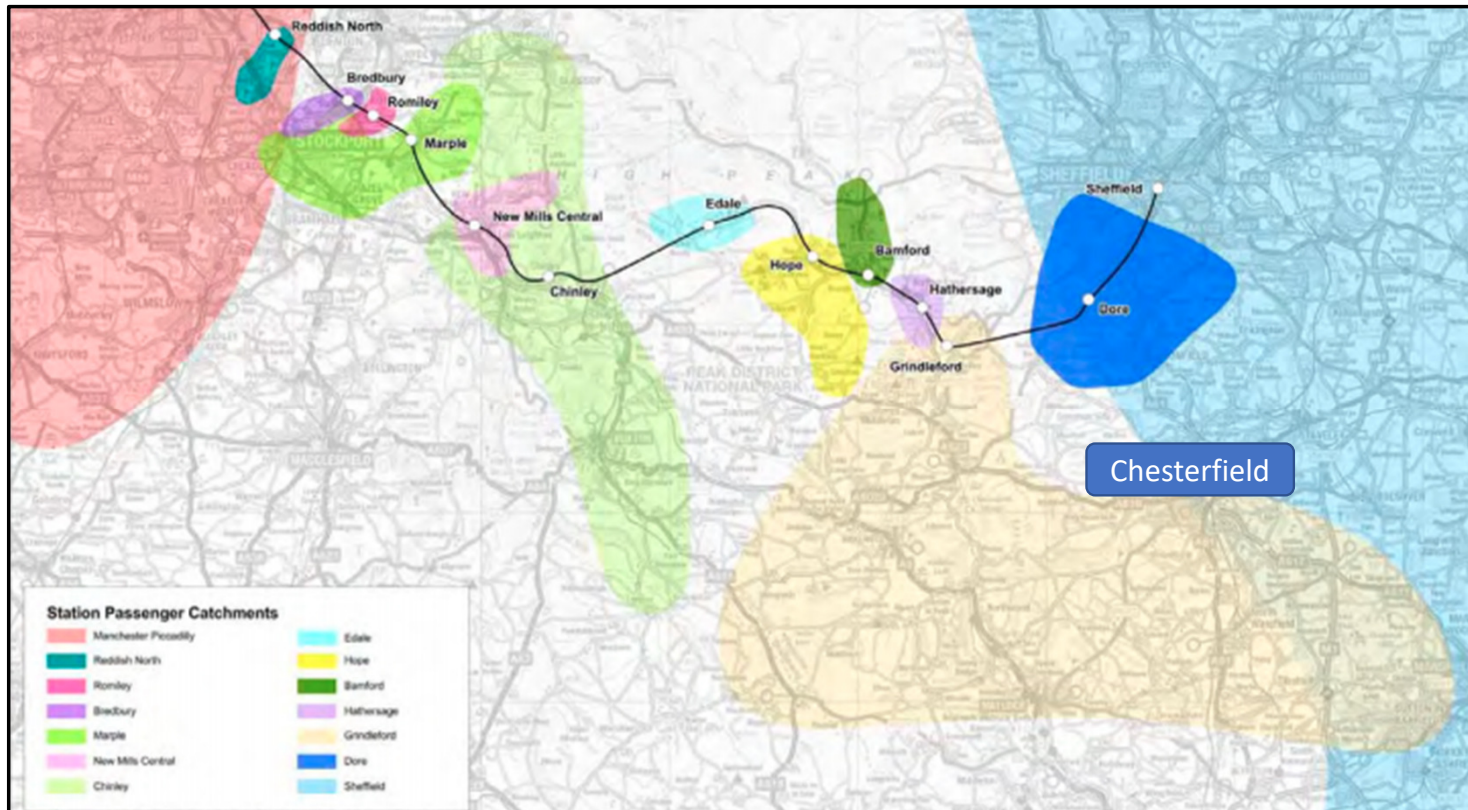
which together move > 8 million visitor journeys from road to rail

1/3rd of annual single journeys to / from PDNP
26.5 million (2018 STEAM)

**Estimates derived from
2014 PDNP survey data**

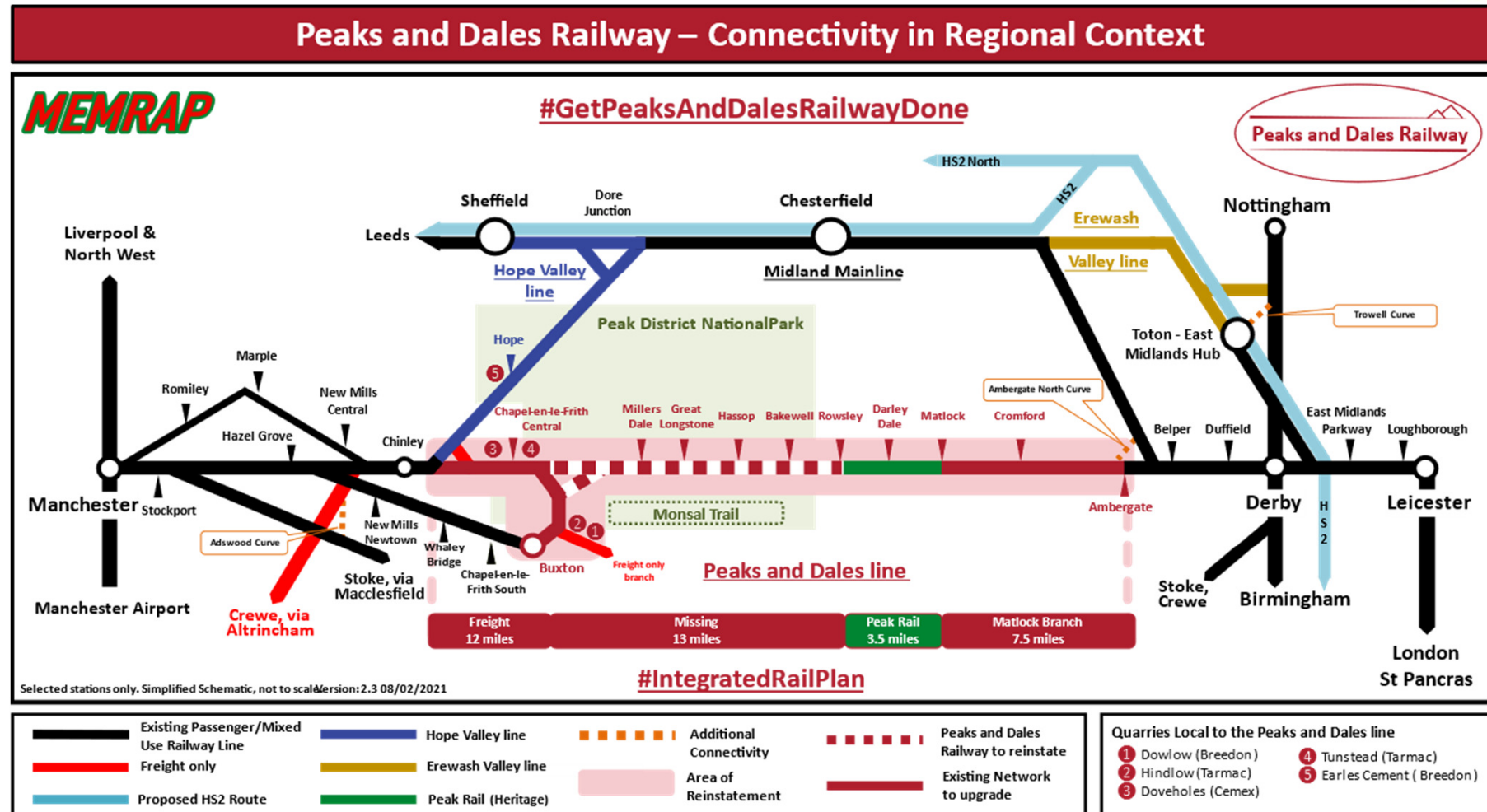
“Railheading”: Environmental Consequences

With poor or missing rail links to NW, Chesterfield, Matlock and many other Derbyshire commuters drive via the National Park, typically to Grindleford (for rail) or Manchester



Source 2014 Atkins: https://www.highpeak.gov.uk/media/1620/MQ3-A6_Corridor-Study-Final-Report-2014/pdf/MQ3_A6_Corridor_Study_Final_Report_2014.pdf?m=1481798856703

Project Schematic



Two Lines Linked together – a Four Track Strategic Crossing of the South Pennines

“Build Back Better”

Transformed NW / EM connectivity – relieving Hope Valley congestion

Hope Valley – Tracks 1 and 2

via Dore Triangle enabling express services for Sheffield and Derby

Unable to upgrade enough as a single line

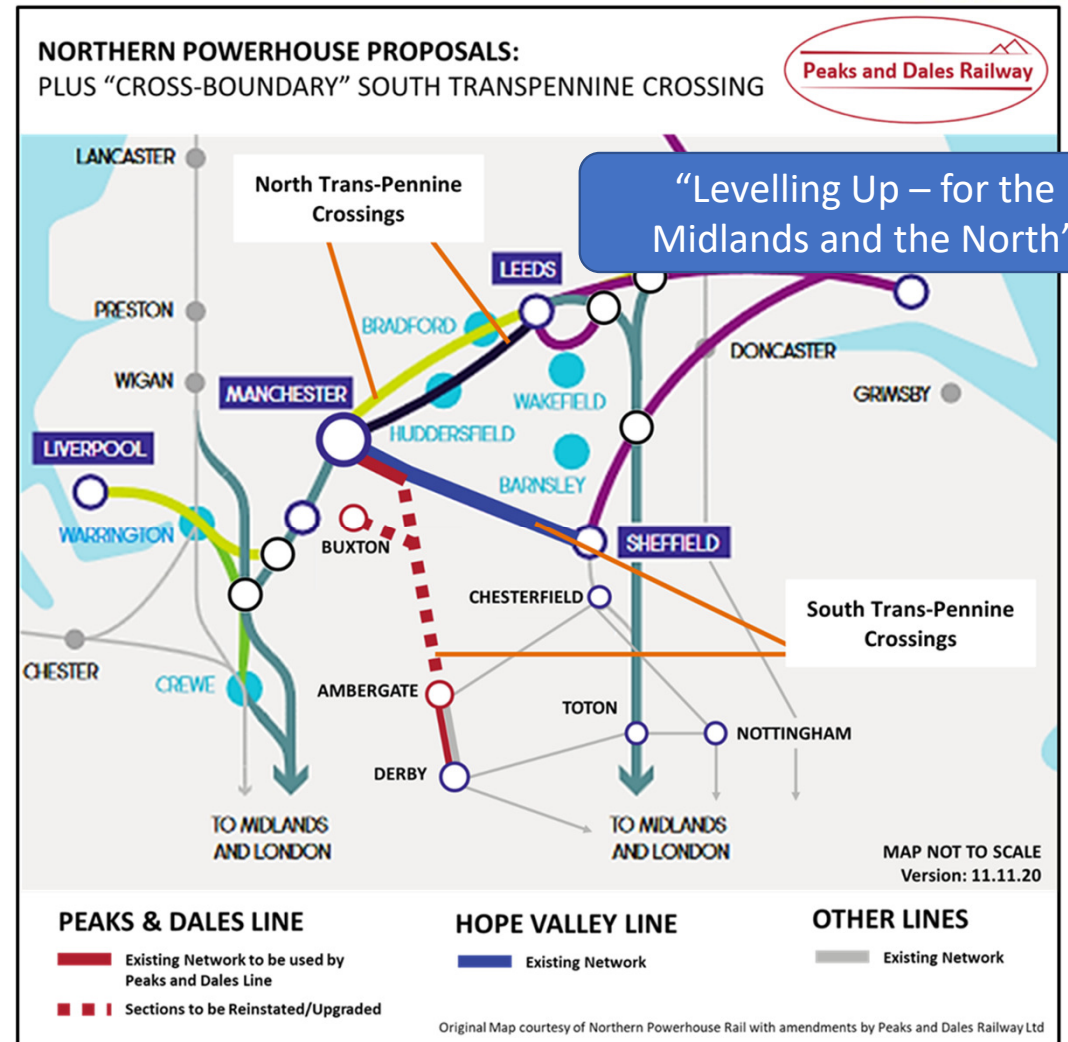
Peaks and Dales – Tracks 3 and 4

via Matlock: semi-fast, all stations, re-routed freight, excursion and heritage, with revival of Buxton branch

Higher intensity usage by better segregation of traffic and speeds

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Our Environmental Response: Partnering with the Peak District National Park

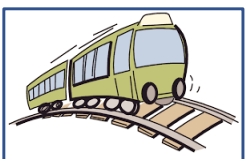
- **Nottingham University projects:**

- **Modal Shift modelling:** The level of freight and passenger modal shift required to achieve the National Park goal, set in 2019, of achieving net zero carbon by 2050:
 - Heavy Rail
 - Bus Shuttles
 - Other
- **Protecting Rail Infrastructure:** Access to university networks and Network Rail
- **Nature Recovery Networks:** Researching into sites of Special Scientific Interest and Special Areas of Conservation within 5km of Monsal Trail, to identify potential for future NRN sites

- **Derby University engineering students:**

- **Monsal Trail:** Our associates the Buxton Town Team using students to resolve gradient issues and design crossings for the reprovisioning proposals

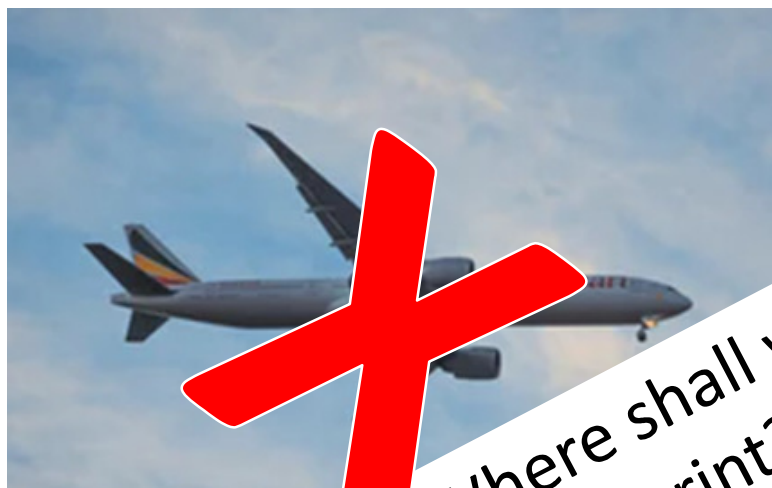
Greening the A6 Corridor Emissions Study



Derby University's Low Carbon Unit (March 2019):

- 38 round trips of stone trains per week of via Matlock, save >40% of current emissions, or 150,000kg of CO₂, versus current hilly Edale / Dore route.
- This ongoing saving worth weekly planting of 15,000 trees (1m/year)
- Passenger modal shift to rail save at least 50% of road based CO₂ emissions, often more, doubling the saved emissions
- Bike carriages will encourage leisure users to leave cars at home

COVID curtainraiser – a slide from 2019



Where shall we go instead? Low CO2 footprint? Near at hand? DON'T DRIVE, but take bikes?

Question: Which national park is within 60 minutes journey for 20 million people?

Post COVID Implications

- REDUCED: Commuter traffic: mixed with work from home
- INCREASED: Leisure: Low carbon footprint destinations, close at hand
- UNCHANGED:
 - Business travel like to return to pre-COVID levels
 - Locally, 150,000 disconnected / poorly connected in Central Derbyshire
 - Strategic gap in NIC thinking re connectivity for NW / EM (8 strategic links)
 - The importance of Peaks and Dales as a “ninth line” for NIC regional strategy
 - Ability of Peaks and Dales to unlock Hope Valley improvements these benefits should accrue to the reinstatement case – per Network Rail (2017)
 - Continued interaction with transport sub-national bodies

Gross Value Added (GVA) economic benefits from rail investment

GVA Results Summary

The table below illustrates the potential GVA value of new services accessing HS2 via Toton in £m discounted over 60 years. The strongest cases are illustrated in green.

	Leeds	York	Sheffield & Manchester
Nottingham	£70	£30	£349
Derby	£64	£26	£332
St Pancras	£642	£148	£1,051
Reading	£873	£217	N/A

These GVA uplifts result from the transformation of journey time from these proposed new services across a whole range of origins and destinations connecting cities and towns throughout the East Midlands, South Midlands and Thames Valley with destinations in the North West and North East. Most of these links would be c. one hour faster than is achievable by current rail services or by existing car journeys.

This was an HS2 study, but principles still apply to Peaks and Dales Railway

Source: SLC Rail for East Midlands Councils and Leicestershire County Council (2016)

	Current (C= Change; R= Reverse.)	Stage 1 (Change at Stockport)	Stage 2: Northern Powerhouse Rail Relief (Direct)
RAIL, TO MANCHESTER PICCADILLY (minutes), FROM:			
Derby	108 — C — 74 — 32% — 68		
Leicester	150 — C — 95 — 37% — 89		
Nottingham	130 — R — 94 — 28% — 88		
Chesterfield	92 — R — 61 — 34% — 55		
Loughborough	138 — C — 105 — 24% — 99		
Matlock	160 — C — 64 — 60% — 58		
Belper	122 — C — 108 — 33% — 108		
Bakewell	128 — Inc. Bus — 55 — 57% — 49		

The Benefits: Time Savings throughout the East Midlands:

- For Peaks and Dales users in Derbyshire and East Midlands travelling to the North West
- Benefits stretch beyond Peaks and Dales line, e.g. Nottingham and Chesterfield services no longer reverse via Sheffield
- Sheffield / Hope Valley connectivity also enhanced
- Savings may be even better

Benefits for High Peak

- Access to the south by rail for the first time since 1968:
 - Services via Matlock, Derby and onwards, from stations to include some of:
 - Chapel-en-le-Frith (Central), Peak Forest, Cheedale, Millers Dale and Buxton
- Transformed connectivity to support long term regeneration:
 - Tourism and especially Buxton Crescent project to benefit
 - Derby University might revisit the issue of a campus in Buxton
 - Increased inward investment, work and social mobility
- Unique opportunity to reduce carbon footprint towards #NetZero
 - Long term strengthened, sustainable public transport
 - Relieves congestion, aids carbon targets: A6 and National Park

Next Steps: Partnered with Peak District National Park Authority

1. “Do Nothing”: 13.25m annual visitors increase, still 90% by car and coach;
2. PDNPA favoured option: Develop Matlock and Buxton railhead use with shuttle bus connectivity into the Park;
3. Non-heavy rail solutions: DfT requires some consideration of these;
4. Reinstatement: Maximises economic, social, environmental benefits, accepting of PDNPA policy constraints;

Peaks and Dales contributes strongly to PDNPA and DCC #NetZero targets

Builds on indicated benefits from University of Derby, March 2019 study

Next Steps: Partnered with Buxton Town Team Safer Walk and Ride Network – Monsal Trail

1. Assess feasibility

- Engage with key stakeholder organisations
- Assess possible impact on designated conservation areas
- Explore technical solutions for protection and enhancement

2. Scoping and consultation

- Investigate land ownership and open discussions
- Explore potential spurs from the 'spine' to link more villages

3. Financing

- Preliminary estimate of costs
- Seek funding



Next Steps with Restoring Your Railway

- Round 3 submissions closed on 5th March 2021
- Results of bid to DfT / Restoring Your Railway – “early summer”
- DfT told us that this is the “Final Round” under the RYR scheme
- Studies, environmental assessment and legislation to make the scheme “shovel ready” within 5 years
- First train could run within 10 years