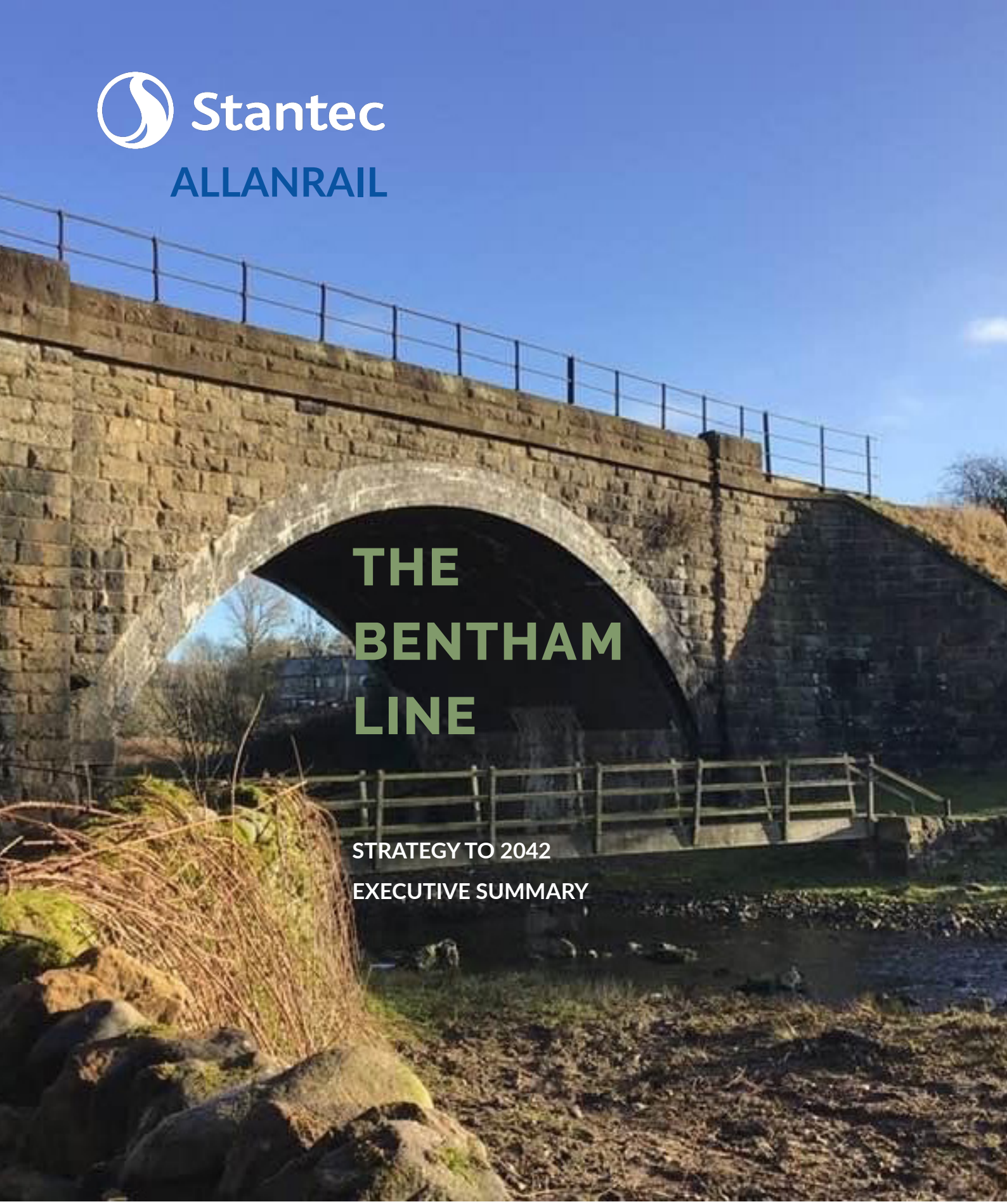
Stantec

ALLANRAIL



THE BENTHAM LINE

STRATEGY TO 2042

EXECUTIVE SUMMARY

the Bentham line

LEEDS - MORECAMBE COMMUNITY RAIL PARTNERSHIP

Community Rail Accredited Partnership 2021-22

NORTHERN

SEED-CORN FUND

Community Rail Network FUNDED

David William Alder
1st December 1946 - 8th April 2022



David had been a director and treasurer of the Leeds-Morecambe Community Rail Partnership since its formation in April 2006. He assisted with the formal service designation for the route by the Department for Transport, on behalf of the Partnership, in 2012, and contributed extensively to the accreditation of the partnership, by the DfT, from 2019 onwards.

David had a keen interest in railways and was a font of knowledge on the subject. He had a particular affection for the Leeds to Heysham Port route, the Bentham Line, which was also echoed in his volunteer work as treasurer and committee member of the Lancaster and Skipton Rail User Group.

He was eager to explore all possibilities to develop the Bentham Line and recently worked at length on the preparation of the Invitation to Tender documents which led to the Bentham Line Development Study taking place in 2021/22.

This executive summary is dedicated to David in recognition of his continued determination to raise the profile of the line, to see the line recognised as an important lifeline for local communities as well as a scenic trans-Pennine route, to develop the line's timetable and to secure a positive future for the route.

Gerald Townson

Chairman, Leeds-Morecambe Community Rail Partnership



THE STRATEGY IN A PAGE

What?

A 20-year Strategy setting out the Leeds – Morecambe Community Rail Partnership's (LMCRP) aspirations for the Bentham Line between Leeds and Lancaster / Morecambe / Heysham Port

Why?

To promote and make the case for interventions and stimulate community input into the line's development, from a bottom-up rather than an industry-led, top-down perspective

Who?

The Leeds-Morecambe Community Rail Partnership (LMCRP) is a DfT accredited partnership now in its sixteenth year of working with communities, stakeholders and the railway industry to support the development of the Bentham Line. The Partnership consists of officers and representatives from North Yorkshire County Council, Lancashire County Council, Lancaster City Council, Craven District Council, Northern Trains, Network Rail, Community Rail Network, the line's Rail User Groups and tourism organisations

What is the LMCRP trying to achieve?

Through the Strategy, the LMCRP has defined **eight Strategy Objectives** to guide the future development of the Bentham Line:

- Increase service **frequency** and **length of operating day** on the Bentham Line
- Improve **passenger awareness of fare levels and products**
- Reduce **journey times** on the Bentham Line
- Improve the range of **destinations directly served** from the Bentham Line stations
- Reduce **interchange times** between Bentham Line services and services on other lines
- Improve the **reliability** of Bentham Line services
- Improve **connectivity for all to / from stations** on the Bentham Line
- Improve the **facilities, amenities and customer experience for all at Bentham Line stations**

How will the LMCRP achieve this?

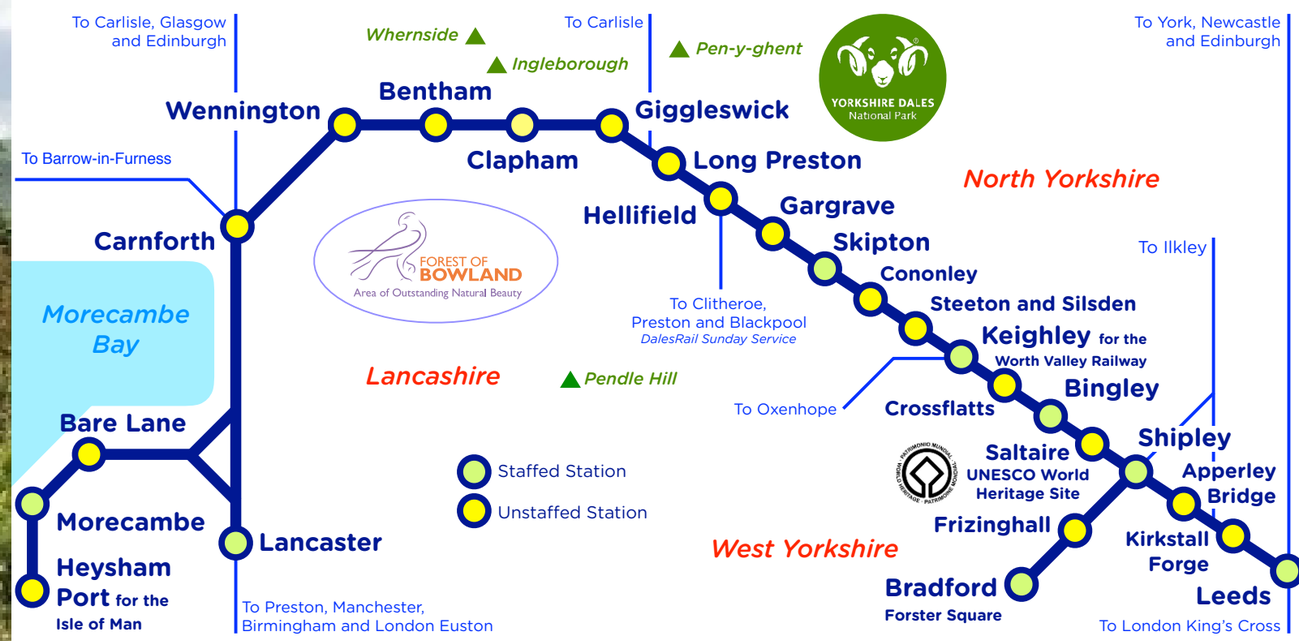
- **21 options – 6 options** in each of **Stations, Services and Infrastructure** and **3 options** in **Developing the Market**
- An **Outline Action Plan** covering **'Communicating the Strategy Findings' (6 actions)** and **'Progressing the Short-Term Options' (9 actions)**
- Medium to **longer-term options** will be progressed, but kept under review and updated in periodic refreshes of the Strategy
- Separately, an outline 'bottom-up' proposal has been developed to deliver the **early decarbonisation of the Bentham Line**, consisting of the deployment of **Battery Electric Multiple Units (BEMUs) on the Bentham Line** and the **low-cost electrification of the Morecambe branch**
- The LMCRP will work closely with local communities, partner CRPs, local authorities, sub-regional transport bodies and the railway industry towards the delivery of an integrated package of options which maximises the benefits for passengers and freight users through delivering optimum output and benefit from the network



THE BENTHAM LINE

LEEDS-MORECAMBE / HEYSHAM PORT VIA SKIPTON,BENTHAM, & LANCASTER

A UNIQUE RAILWAY LINKING LEEDS, LANCASTER AND MORECAMBE, WITH BEAUTIFUL VIEWS OF RIVER VALLEYS, PENNINE PEAKS AND FOREST.



INTRODUCTION

The Bentham Line is one of the earliest railway lines in Great Britain and is often referred to as the '*Little North Western*', traversing a 75-mile route between Leeds in the east and Lancaster, Morecambe and Heysham in the west. The line can be broken down into four sections:

- Leeds / Bradford Forster Square – Skipton
- Skipton – Giggleswick (and Settle)
- Giggleswick – Carnforth / Lancaster
- Lancaster – Morecambe / Heysham Port

IIn each section, the Bentham Line Leeds – Morecambe services interact with other services such as the high frequency **Airedale electrics** (Leeds / Bradford Forster Square – Skipton); the **Settle & Carlisle Line** (Leeds – Settle Junction); the **West Coast Mainline** and **Furness Line** (Carnforth – Lancaster); and the **Morecambe branch shuttle services**. Therefore, whilst Bentham Line services travel end-to-end between Leeds and Lancaster, Morecambe and Heysham Port (later Sunday only), they have to be planned alongside other local and long-distance passenger services as well as freight and charter services.

In 2019, the number of services operating in each direction on the Bentham Line increased to an all-time high of eight trains per day. Nonetheless, it is a line which has otherwise seen little investment over the years and is not achieving its full potential. Recognising this, the **Leeds-Morecambe Community Rail Partnership (LMCRP)** commissioned Stantec and partner AllanRail to develop a Bentham Line Strategy to 2042 and Outline Delivery Plan.

WHO ARE THE LMCRP?

Community Rail Partnerships bring together local groups, local authorities and partners from the railway industry to deliver a wide range of rail-based activities. What originally developed as a grassroots movement to protect, promote and develop neglected or at-risk parts of the network, has evolved into an active community that has levered time-based and financial investment in the railway. The LMCRP is a DfT accredited partnership now in its sixteenth year of working with communities, stakeholders and the railway industry to support the development of the Bentham Line. A company limited by guarantee and governed by a board of directors, the LMCRP has a management group that meets quarterly. This group consists of officers and representatives from North Yorkshire County Council, Lancashire County Council, Lancaster City Council, Craven District Council, Northern Trains, Network Rail, Community Rail Network, the line's Rail User Groups and tourism organisations.



WHAT IS THE PURPOSE OF THE STRATEGY?



The objectives of this Strategy are threefold, to:

- Develop a coherent and clearly articulated **'Case for Change'**, which makes an evidence-based case for investing in services and infrastructure on the Bentham Line
- Establish a set of desired **'outcomes' – expressed as Strategy Objectives**, for the Bentham Line
- Generate, **develop and appraise a list of short, medium, and long-term options** which could deliver these outcomes, providing an Outline Delivery Plan for the Bentham Line

- This Strategy is somewhat unusual in that, for most options, the LMCRP will not be the funding or delivery body. Its role, therefore, is as a **leader to promote and make the case for interventions and stimulate local input into the development of the line, approaching this from a bottom-up rather than an industry-led, top-down perspective**. The Strategy is not therefore setting out a fully costed and programmed set of deliverables, rather it is identifying desired outcomes and conceptual solutions for further development which could deliver against these outcomes.
- The Strategy has been informed by a programme of desk-based research, stakeholder engagement and resident survey, which obtained **506** responses.

HOW IS THE BENTHAM LINE OPERATED TODAY?

There is currently an all-time high of eight Bentham Line services per day Monday to Saturday, with five on a Sunday, as per the timetable below:

Leeds	**Dep**			0819	1018	1218	1418	1726	1918
Skipton	**Dep**	0522	0725	0856	1057	1258	1458	1810	2000
Lancaster	**Arr**	0631	0826 (Carnforth)	1006	1211	1409	1608	1924	2115
Morecambe				1027	1225	1423	1633	1951	
Morecambe	**Dep**			1031	1232	1432	1731	2006	
Lancaster	**Dep**	0648	0941	1046	1245	1448	1745	2030	2131
Skipton	**Arr**	0802	1055	1157	1356	1558	1858	2141	2244
Leeds	**Arr**	0841	1140	1238	1437	1638	1939	2222	

The Bentham Line is operated by Newcastle-based Class 158 Diesel Multiple Units (DMUs), which inter-work with several other lines, including the Settle & Carlisle Line. Despite the historically high levels of service at present, the line suffers from several significant operational constraints which impact on the level of service that can be offered to passengers, including:

- At the **Leeds end**, services need to fit between the intensive regular interval Airedale electric services between Skipton and Leeds and be pathed through the congested Armley Junction on the western approaches to Leeds station, whilst sharing the route with Settle & Carlisle Line passenger and freight services
- At the **western end** of the line, Bentham Line services must fit between the local and long-distance passenger services and long-distance freight services which run between Carnforth and Lancaster on the West Coast Mainline
- **Line speeds** on the Bentham Line are also relatively slow, particularly between Settle Junction and Carnforth and at Morecambe and Lancaster North junctions where the line interacts with the West Coast Mainline
- The section of line between **Settle Junction and Carnforth Station signal boxes is the longest double track block section** (the section of track between two signals) in the UK, thus limiting the capacity of the line as only one train in each direction can be in that section at any time

The Strategy considers options for improving services within the current infrastructure envelope as well as options to address the constraints imposed by the infrastructure.

WHAT IS THE PURPOSE OF THE BENTHAM LINE?

THE BENTHAM LINE IS MAKING MODERN-DAY HISTORY AS THE FIRST RAILWAY TO ACTIVELY SUPPORT THE JOURNEYS OF PEOPLE LIVING WITH DEMENTIA

The use of the Bentham Line grew strongly over a long period prior to the COVID-19 pandemic, particularly in the rural section between Skipton and Carnforth, where much of the growth has been driven by housing development, at Gargrave and Hellifield for example. This strong growth has not however been universal, with the Morecambe branch carryings largely flatlining.

Whilst there has been growing use of the line, particularly for commuting into Leeds, the Bentham Line is predominantly a trans-Pennine passenger route, connecting West Yorkshire to Lancaster and beyond. However, it provides important local connections for the rural settlements along the line, particularly to the Leeds City Region. Indeed, 59% of all outbound Bentham Line journeys are to Leeds and 91% of journeys which start on the Bentham Line are to Skipton and points east (i.e., within the Leeds City Region (which also incorporates Bradford)). There is very little 'local-to-line' traffic between Carnforth and Skipton (fewer than 1% of all journeys), with the majority of trips being longer distance to the major centres, particularly Leeds. The Morecambe branch, whilst an integral part of the Bentham Line, is predominantly used as a local shuttle to Lancaster and for onward connections to the North-West and beyond.

As is common for a long-distance cross-country route of this nature, the Bentham Line serves several different markets, including:

- **Commuting**, particularly to Leeds and Bradford and between Morecambe and Lancaster / wider North-West
- Travel for **personal business and leisure**, particularly amongst Craven residents, for which Leeds is their main service centre
- **Tourism**, including daytrips (to e.g., Leeds, Morecambe and visitor attractions such as Saltaire and the Yorkshire Dales National Park) and short holidays
- As a **connection on longer distance journeys**, such as Cumbria / the Lake District to Leeds or for cross-Leeds services (e.g., Skipton to London)



WHAT COULD THE FUTURE LOOK LIKE?

The transport industry will undergo a degree of **structural change** in the next two decades not seen since the 1960s – this includes:

- **Decarbonisation,** with the government committed to reducing CO2 emissions by 78% by 2035 compared to 1990 levels and achieving net zero by 2050. This has two implications: (i) **the railway network itself will need to be decarbonised**, which will include the progressive phasing-out of older diesel stock used on the Bentham Line; and, perhaps more significantly (ii) **the cost and the basis of charging for driving will have to fundamentally change**
- **The COVID-19 pandemic** has led to a significant reduction in total rail demand in the short-term and **may lead to a longer-term structural change in both the volume and type of demand**. Early indications suggest that peak commuting volumes will be reduced, but less regular commuting associated with hybrid working and leisure-based travel may grow
- **Technological change**, which is enabling the growth of 'shared mobility' concepts such as Mobility-as-a-Service (MaaS) and, potentially in the longer-term, connected and autonomous vehicles (CAV)
- **Long-term societal change** – there has been a long-term decline in trips per person in the UK, which has only been offset by population growth. If continued, and indeed accelerated by COVID-19, it may lead to reduced peak hour travel in particular, which would imply that the transport system may need to be less 'peak' orientated

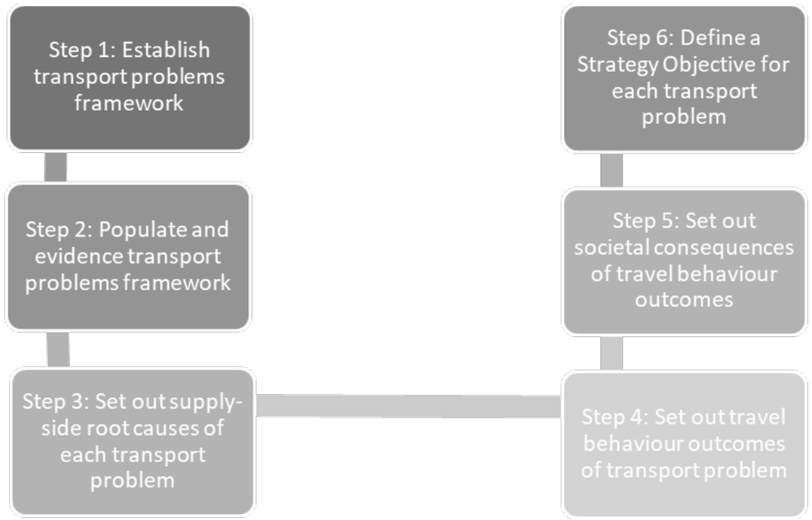
There is of course significant uncertainty over how these policy, behavioural and technological changes will play out. However, from the perspective of the Bentham Line, they present several opportunities:

- It is possible that the peak-orientated planning of the railway industry, whilst still prominent, will take on a lesser importance than it has in the past, creating an **opportunity for new leisure and personal business orientated services** to be developed
- With the **connection between the home and workplace significantly weakened, and for some people broken entirely**, the necessity of living close to an urban centre may diminish for 'location independent' employees. The rural stretch of the Bentham Line between Skipton and Carnforth is bounded by many communities which would be attractive places to live, but which have at times struggled to attract families because the travel time to their workplace(s) is too long / the services are too infrequent for daily commuting. The hybrid working model or full home working may however make living in such places more viable, where commuting is only required 2-3 days per week if at all. There is evidence from across the UK that the demand for rural property increased significantly during the pandemic, and this may support **long-term growth of patronage on the Bentham Line if a non-daily commuter market grows in areas where such demand is currently very low**
- In the longer-term, **developments in vehicle technology may make the provision of connecting bus services less expensive**, thus improving the reach of the railway, albeit there will be an increased risk of competition from the bus industry

These macro policy, behavioural and technological changes will be supplemented by local developments close to the line which will encourage its use. The most significant of these is the £125 million **Eden Project North** development on Morecambe seafront, which was granted planning permission in January 2022, and is expected to attract one million visitors per annum.

WHAT OUTCOMES IS THE STRATEGY SEEKING TO ACHIEVE?

Eight 'Strategy Objectives' have been developed – these objectives define the **'outcomes'** which the Strategy is seeking to deliver, thus providing the basis for the subsequent option generation, development, and appraisal. The Strategy Objectives have been defined through a structured six-step process, as follows:



The Strategy Objectives and the problems to which they relate (which were identified through the desk-based research and engagement) are summarised in the table below:

Transport Problem	Strategy Objectives
*The train service is **infrequent**, and the **operating hours** do not permit me to pursue certain activities by train travel*	• Increase service **frequency** and **length of operating day** on the Bentham Line
*I find the train is often **more expensive** than travelling by car / bus*	• Improve **passenger awareness of fare levels and products**
*I find the journey time by train is **too long***	• Reduce **journey times** on the Bentham Line
*I need to **change trains** to get to where I want to go to / the train **does not take me where I want to go***	• Improve the range of **destinations directly served** from the Bentham Line stations • Reduce **interchange times** between Bentham Line services and services on other lines
*My train frequently **runs late** or is **cancelled***	• Improve the **reliability** of Bentham Line services
***Connectivity** to / from my local rail station is poor*	• Improve **connectivity for all to / from stations** on the Bentham Line
*There is a **lack of facilities / amenities** at my local station to make it accessible for all*	• Improve the **facilities, amenities, and customer experience for all at Bentham Line stations**

WHAT ARE THE OPTIONS?



Typically, a Strategy does not contain references to uncommitted specific named projects (particularly capital projects) as these will often not have been through an appraisal / business case process significant enough to justify action. This is further complicated in this context because, for most options, the LMCRP will not be the funding or delivery body, and thus its role will be to **promote and make the case for interventions and stimulate local input into the development of the line, approaching this from a bottom-up rather than an industry-led top-down perspective.** To this end, the options set out in this report are high-level (e.g., Skipton – Carnforth line speed upgrades), but include a scoping of relevant issues to be considered and a recommendation as to how the option should be progressed (or otherwise).

It is also important to note that the **option generation and development exercise has been approached from an entirely fresh perspective** rather than starting from existing pre-conceived solutions. Several of the options presented could have impacts on the operation or aspirations of other CRPs and industry stakeholders, for example new services or amended service patterns west of Skipton. The objective of this Strategy process is to generate ideas for further consideration and challenge existing thinking rather than define detailed options for implementation. As will be noted towards the end of this summary, an immediate action will be to work with stakeholders and partner CRPs to explain and develop these conceptual options and ensure an integrated package of options which maximises the benefits for passengers, freight users and the wider network through delivering the maximum output from the network.

Options are grouped into four categories:

- Stations
- Services
- Infrastructure
- Developing the market

A summary of the options and their appraisal against the Strategy Objectives is provided in the table on pages 14-15.

Option	Increase service frequency on the Bentham Line	Improve passenger awareness of fare levels and products	Reduce journey times on the Bentham Line	Improve the range of destinations directly served from the Bentham Line stations	Reduce interchange times between Bentham Line services and services on other lines	Improve the reliability of Bentham Line services	Improve connectivity for all / to from stations on the Bentham Line	Improve facilities, amenities, and customer experience for all at Bentham Line Stations
Station Options								
1 - Stations audit and action plan	O	√	O	O	O	O	√	√
2 - Hellifield Station Access Plan	O	O	O	O	O	O	√	O
3 - Creating an Eden North Gateway – Morecambe Masterplan	O	O	O	O	O	O	√	√
4 - Lancaster Station improvements	O	O	O	O	O	O	√	√
5 - New station at Kildwick & Crosshills	O	O	X	√	O	O	√	√
6 - 'Settle Stations' group in journey planners	√	√	√	√	√	O	√	O
Service Options								
1 - Minimum two-hourly Leeds-Lancaster/Morecambe service	√	O	O	O	√	O	O	O
2 – Late evening Leeds – Ribblehead services	√	O	O	O	√	O	O	O
3 – Late evening Morecambe / Lancaster – Leeds services	√	O	O	O	√	O	O	O
4 – Early morning Ribblehead to Leeds service	√	O	O	O	O	O	O	O
5 – Improved Sunday services	√	O	O	O	√	O	O	O
6 - Splitting and joining services at Skipton	O	O	X	O	O	O	O	O
7 – Skipton, eastern terminus of the Bentham Line	O	O	X	X	X	√	O	O
8 – Carnforth, western terminus of the Bentham Line	O	O	X	X	X	√	O	O
9 – Lancaster, western terminus of the Bentham Line	O	O	X	X	X	√	O	O
10 - New Leeds – Windermere service	O	√	O	√	O	O	O	O
11 - New Glasgow Central – Leeds via Carnforth service	√	O	O	√	√	O	O	O
12 - Cross-Leeds services	O	O	O	√	O	X	O	O
Infrastructure Options								
1 - Skipton – Carnforth line speed upgrades	O	O	√	O	O	√	O	O
2 - Carnforth – Lancaster and Lancaster – Morecambe line speed upgrades	O	O	√	O	O	√	O	O
3 - Intermediate block signals between Settle Junction and Carnforth	√	O	√	O	O	O	O	O
4 - Heysham branch upgrade business case	√	O	√	√	O	O	√	O
5 - Bi-directional working between Morecambe South Junction and Lancaster Station	O	O	√	O	O	√	O	O
6 - Morecambe Triangle West Coast Mainline freight loop	O	O	O	O	O	√	O	O
Market Options								
1 – Increase awareness of the Bentham Line to support post-COVID-19 recovery	O	√	O	O	O	O	O	O
2 – Rail-based tourism research	O	O	O	O	O	O	O	O
3 – Supporting tourism growth on the Bentham Line	O	√	O	O	O	O	O	O

DISCOUNTED OPTIONS

From the performance of the options against the Strategy Objectives, six options have been discounted from further consideration. These are:

- **Option Services 3:** Late evening Morecambe/ Lancaster – Leeds services – discounted as little benefit in these services, although local improvements on the Morecambe branch should be considered
- **Option Services 6:** Splitting and joining services at Skipton – discounted as this option would significantly diminish the Bentham Line service for a marginal capacity benefit in the Skipton-Leeds corridor, albeit there would be a cost saving. It would also extend journey times and introduce other performance risks
- **Option Services 7:** Skipton – eastern terminus of the Bentham Line – discounted as this option would significantly diminish the Bentham Line service for a marginal capacity benefit in the Skipton-Leeds corridor, albeit there would be a cost saving. It would also reduce the Bentham Line to more of a token service, yet still with the high infrastructure costs
- **Option Services 8:** Carnforth – western terminus of the Bentham Line – discounted as this option would significantly diminish the Bentham Line service for a marginal reliability benefit in the Carnforth - Lancaster section. Again, this option would diminish the Bentham Line service but retain the infrastructure costs associated with operating it
- **Option Services 9:** Lancaster – western terminus of the Bentham Line – discounted given loss of Morecambe connection, particularly with aspirations to improve Morecambe services to support Eden North
- **Option Services 12:** Cross Leeds Services – discounted given the high-quality interchange opportunities at Leeds and the reliability risks associated with extending services across the city

WHICH OPTIONS SHOULD LMCRP SUPPORT?

After discounting the above six options from the process, 21 options remain. It is recommended that the LMCRP support the further exploration of each of these options beyond the high-level appraisal undertaken within this strategy document – the means by which to do this is summarised in the **Outline Action Plan**. The table below provides an overview of the remaining options and their respective expected cost bracket and delivery horizon period.

Options	Cost Range[1]				Delivery Horizon[2]		
	Very Low	Low	Moderate	High	Short-term	Medium-term	Long-term
Station Options							
1 - Stations audit and action plan	■				■		
2 - Hellifield Station Access Plan	■				■		
3 - Creating an Eden North Gateway – Morecambe Masterplan			■			■	
4 - Lancaster Station improvements			■		■		
5 - New station at Kildwick/Crosshills				■			■
6 - 'Settle Stations' group	■				■		
Service Options							
1 - Minimum two-hourly Leeds-Lancaster/Morecambe service		■			■		
2 – Late evening Leeds – Ribblehead services		■			■		
4 – Early morning Ribblehead to Leeds service		■			■		
5 – Improved Sunday services		■			■		
10 - New Leeds – Windermere service			■			■	
11 - New Glasgow Central – Leeds via Carnforth service			■			■	
Infrastructure Options							
1 - Skipton – Carnforth line speed upgrades			■			■	
2 - Carnforth – Lancaster and Lancaster – Morecambe line speed upgrades			■			■	
3 - Intermediate block between Settle Junction and Carnforth			■				■
4 - Heysham branch upgrade business case				■			
5 - Bi-directional working between Morecambe South Junction and Lancaster Station			■			■	
6 - Morecambe Triangle WCML freight loop			■				■
Developing the Market							
1 – Increase awareness of the Bentham Line to support post-COV-ID-19 recovery	■				■		
2 – Rail-based tourism research	■				■		
3 – Supporting tourism growth on the Bentham Line	■				■		

1 Very low = up to £1m; Low = £1m-£10m; Moderate = £11m-£30m; and High = £30m+
2 Short-term = by 2025; Medium-term (by 2026-2030); Long-term (2031-2042)

HOW CAN THE BENTHAM LINE BE DECARBONISED?

Decarbonisation is an over-arching requirement for the future of the entire UK railway network. This is clearly a much bigger question than the Bentham Line alone, and a network-wide view was established in the Network Rail Traction Decarbonisation Network Strategy – Interim Programme Business Case (NRTDNS), which was published on 31st July 2020. However, the NRTDNS is a strategic study and it rightly does not define a precise solution for every route – indeed, it specifically notes that bottom-up development may demonstrate a different solution if changes to operational outputs are acceptable. Given the rural nature of much of the Bentham Line and its low number of trains compared with the length of the route, it is **unlikely to be an early priority for further solution development work, and thus this Strategy allows for this gap to be plugged in the short to medium-term**. An initial suggested decarbonisation approach for the Bentham Line is set out below, which may also assist in the development of other route decarbonisation strategies, such as for the Settle & Carlisle Line.

Our initial analysis has identified a suggested two-pronged approached to the **early decarbonising** of the Bentham Line, as follows:

- Deployment of **Battery Electric Multiple Units (BEMUs)** to operate the route from **Leeds to Morecambe**
- **Low cost-electrification of the Morecambe branch**

Whilst these are early thoughts which would need to be worked up in more detail in a business case, their delivery would also create **new service opportunities**, including:

- **Extension of the current Airedale Line services through to Lancaster and / or Morecambe**, reducing the number of trains in the congested Shipley – Leeds corridor, alleviating platform congestion at Leeds, improving performance by reducing the level of reactionary delay through fewer trains both to be delayed and to further propagate delay, reducing operating costs and increasing direct connectivity
- Potential development of a **regular Settle – Leeds service**, although this option would require a turnback / reversal facility to be provided at either Settle or Horton-in-Ribblesdale
- Operation of **through electric services between Morecambe and Manchester or Liverpool**, better connecting Morecambe into the main North-West conurbations

WHAT ARE THE BENEFITS OF DELIVERING THE STRATEGY?

The transport 'problems' associated with the Bentham Line are contributing towards negative **travel behaviour outcomes and consequential societal impacts**. The logic-based approach adopted suggests that, if options are delivered in support of the Strategy Objectives (which are the inverse of the problems), they will in-turn generate positive changes in travel behaviour and thus benefits for society at large.

As a Strategy, the options presented in this document remain conceptual and are designed to stimulate discussion and debate and therefore require: (i) further technical development; and (ii) to be placed within an appropriate wider context such as a business case, timetable setting engagement process etc. The type, scale and spatial distribution of benefits will therefore ultimately depend on which options are delivered and when. The following sections therefore focus on a more general commentary on the potential benefits which will be delivered through the realisation of the Strategy.

TRAVEL BEHAVIOUR OUTCOMES

The transport 'problems' associated with the Bentham Line have a consequence in terms of travel behaviour – they either:

- **add cost or inconvenience to a journey** – adding to the cost of travel, journey time / journey time reliability and / or impacting on health and wellbeing
- mean that people **travel by a different (often less sustainable) mode than rail**
- **choose not to make journeys that they otherwise would have**, with a range of consequences for the individual and society more generally

The Strategy options are all intended to support improved travel opportunities on the Bentham Line through e.g, increasing frequency and the length of the operating day, reducing journey times, creating new destinations, improving connectivity to stations and improving the station environment. By implementing these options over time (or a subset thereof), the Bentham Line will become a more attractive journey option, generating **positive travel behaviour outcomes**, i.e, travel on the Bentham Line will:

- become **more convenient** for those currently using it
- become **more attractive as a mode of travel**, particularly relative to the private car
- support **economically and socially beneficial journeys** that are not currently being made

SOCIETAL IMPACTS

As travel is a 'derived demand' – that is, people almost always make a journey for a reason other than for the journey itself – options which promote positive travel behaviour outcomes will in turn support **positive societal impacts.** The types of impacts which could be realised are set out below:

- Positive contribution **climate change and net zero targets**
  - » Delivery of the early decarbonisation of the Bentham Line, making a positive short-term contribution to realising national targets
  - » Supporting a genuine alternative to the private car for many journeys, thus reducing 'avoidable' vehicle kilometres and car tailpipe emissions.
- **Improved demographics** in terms of: **(i) maintaining and growing the population; (ii) ensuring a more balanced population age profile**
- Improvements to the Bentham Line could also support **land-use development** in terms of:
  - » Improving the **commercial viability** of sites
  - » Ensuring that any development which is progressed is as **public transport orientated** as possible
  - » Supporting **balanced spatial development**
- From an **employment perspective**, improved rail services give rise to three potential effects - supporting:
  - » **unemployed** people to **enter the workforce**
  - » uptake of **higher-paid jobs**
  - » people **working more hours**
- Improved Bentham Line services would also **strengthen established commuting links throughout the corridor and increase the number and type of jobs available to residents**. This would therefore contribute to the **'levelling-up' agenda** through strengthening connections between settlements and allowing labour markets to function more effectively
- The other side of the coin from employment is business productivity, which requires the **effective matching of jobs-to-labour**, otherwise there will be skills mismatches or unfilled vacancies, both of which act as a drag on productivity
  - » In **West Yorkshire overall** therefore, there is a two-way need for travel to connect people-to-jobs – whilst there are far fewer jobs overall in the rural section, there are still not enough economically active people to fill them. Improvements to Bentham Line services, whilst only having a marginal impact between Skipton – Leeds / Bradford, do provide an opportunity to support better matching of labour to employment, particularly for the rural areas
  - » The local employment market in the Lancaster City Council area is not large enough to accommodate the labour pool. This makes travel essential if unemployment / population out-migration is to be minimised and highlights the need for **Morecambe and Heysham** in particular to be better connected into the north-west economy
- Lancaster, Bradford and Leeds are all university cities, whilst Craven College is based in Skipton. The provision of improved connectivity to these settlements in the Carnforth – Skipton section of the Bentham Line would **facilitate improved access to education**. Moreover, it would also reduce the **cost of living** for any student who chooses to remain at home rather than move into accommodation, which may make the difference between continuing with education or remaining in lower skilled work.
- Implementation of the Strategy would also support **tourism and leisure**, a key growth sector in the area – opportunities include:
  - » Expanding the **Leeds / Bradford leisure market catchment** through increased service frequency and the introduction of later last trains west of Skipton. This would support the two cities, but also the wide range of **other attractions in West Yorkshire**, such as the **Saltaire World Heritage Site** and the **Keighley & Worth Valley Heritage Railway**
  - » Improving opportunities to access the **Yorkshire Dales National Park** and the **Forest of Bowland AONB**, both through an improved rail service and station facilities and better onward connections to the main trip attractors such as walking routes and settlements such as Ingleton
  - » Improving access to and facilities at **Morecambe (and Lancaster)**, with a particular focus on ensuring that travel to Eden North is as public transport orientated as possible, in keeping with its environmental objectives and credentials
  - » Developing **longer distance multi-route rail-based tourism**
  - » Potentially developing **new markets, such as West Yorkshire – Cumbria.**
- Enhancements to the Bentham Line would assist communities in the Craven area to better access the

Airedale Hospital, particularly if a new station at **Kildwick & Crosshills** could ultimately be realised. This would also reduce 'avoidable' car kilometres associated with driving to the hospital and offer potential to reduce pressure on health service patient transport resources

- Improved services on the Bentham Line have a role to play in tackling **geographic inequalities** in terms of access to work, education, leisure opportunities etc. However, it could also help in tackling **non-geographic inequalities,** such as:
- Providing improved **access to stations and trains for Persons of Reduced Mobility or those with a non-physical disability**
  - » Addressing the **negative transport impacts** (known as 'externalities'), imposed by the dominance of the private car, particularly in tourist honeypots such as Clapham and busy market towns like Skipton. These include, for example, **poor quality public realm, severance, noise, poor air quality, road safety risks, 'rat running' etc**
  - » From an **equalities** perspective, in heavily car dependent areas such as that between Skipton and Carnforth, the extent of social exclusion for those without access to a car can be higher. Moreover, some households feel compelled to own one or more cars – **i.e., forced car ownership** – because public transport services do not meet their needs.

As can be seen from the above, there are a wide-ranging set of benefits that could be realised through improvements to the Bentham Line. The extent of these benefits will depend on the extent and timing of the options progressed.





HOW CAN THE LMCRP SUPPORT STRATEGY DELIVERY?

OUTLINE ACTION PLAN

The Strategy outlines an extensive and wide-ranging set of options which could be further developed to improve Bentham Line services and the interface with the communities that the line serves. As a Strategy is a long-term document, it will have to be kept under regular review and thus the **Outline Action Plan** is focused on delivering the shorter-term options, whilst continuing to promote and seek opportunities to develop the longer-term options.

There are two immediate actions arising from the completion of the Strategy:

- **Communicating the findings** of the Strategy to the relevant parties
- **Progressing** several of the **'short-term' options**

COMMUNICATING THE FINDINGS

The immediate communication actions which should be adopted are summarised in the table below, together with an indication of who the 'owner(s)' of the action is:

Action	Description	Owners(s)				
		LMCRP	North Yorkshire County Council	Lancashire County Council	Craven DC	Community Rail Lancashire
1	Ahead of publication, engage with other parties who may be affected by the Strategy to explain the approach and outcomes. This would include but not be limited to the **Settle & Carlisle Development Company, Friends of the Settle & Carlisle Line, Community Rail Cumbria, Ribble Valley Borough Council and Lancaster City Council**	√	√	√		√
2	Publicise / present the Strategy outcomes in summary form to **local communities** along the line[1]	√				√
3	Present the Strategy outcomes to the **Elected Members** of the relevant local authorities		√	√[2]	√	
4	Present the Strategy to **local Members of Parliament** to raise political awareness of the findings	√	√	√		√
5	**Submit the Strategy to West Yorkshire Combined Authority, Transport for the North, DfT, Network Rail, Northern Trains and TransPennine**. This should include a covering letter highlighting the options relevant to each party	√	√	√		
6	Organise a launch / publication event for the Strategy at suitable location on the Bentham Line	√	√	√		

1 This would be a particularly valuable action in terms of demonstrating to those that took part in the engagement and filled in the survey how their responses have been used.
2 The Strategy should also ideally be presented to Lancaster City Council

PROGRESSING THE SHORT-TERM OPTIONS

The table below summarises the short-term options to be progressed, the owner(s) of the actions and the Strategy option(s) to which they relate. It should be noted that, whilst they are not part of the Steering Group, the LMCRP should seek support for their aspirations from Transport for the North as the sub-national transport body responsible for the north of England and the Department for Transport.

Action	Description	Owner(s)					Strategy Options
		LMCRP	North Yorkshire County Council	Lancashire County Council	Craven DC	Community Rail Lancashire	
1	Submit the outline decarbonisation plan to Network Rail and Northern Trains for consideration	**Lead**	Support	Support			
2	Undertake stations audit and develop action plan	**Lead**	Support	Support	Support	Support	- Stations Option 1
3	Scope and commission Hellifield Station access plan	Support	**Lead**		Support		- Stations Option 2
4	Scope and commission a Morecambe and Heysham SOBC. ***As well as the options emerging from this Strategy, such an SOBC should consider bus and active travel connections and the full range of rail options on the Morecambe / Heysham Port branch outwith those solely related to the Bentham Line***	Support		**Lead**			- Decarbonisation / low-cost electrification - Stations Option 3 - Stations Option 4 - Infrastructure Option 2 - Infrastructure Option 4 - Infrastructure Option 5 - Infrastructure Option 6[1]
5	Scope and commission a 'West of Skipton Lines' market review study / SOBC		**Lead**				- Services Option 8 - Services Option 9
6	Feed in short-term timetable improvement options to the next Northern Trains timetable setting consultation	**Lead**	Support	Support	Support	Support	- Services Option 1 - Services Option 2 - Services Option 4 - Services Option 5
7	Request that Northern Trains promote the creation of a 'Settle Stations Group' to the Rail Development Group and Office of Rail and Road	**Lead**	Support	Support		Support	- Stations Option 6
8	Seek the introduction of a 'Sprinter' differential speed between Settle Junction and Carnforth.	**Lead**	Support	Support			- Infrastructure Option 1 (partial early intervention)
9	Lead on the further refinement and implementation of the 'Developing the Market' options	**Lead**	Support	Support	Support	Support	- Developing the Market Options 1-3

1 Infrastructure Options 5 (Bi-directional working between Morecambe South Junction and Lancaster Station) and 6 (Morecambe Triangle WCML freight loop) would not be considered as specific options in a Morecambe and Heysham SOBC, but could be presented as wider opportunities for the management of the WMCL and the planned ETCS based resignalling project

Beyond submitting the Strategy to the relevant bodies, the medium to longer-term options such as line speed upgrades, breaking the single block between Skipton and Carnforth and the promotion of Kildwick & Crosshills Station should be kept under review and fed into industry planning processes as these arise. Specific actions include:

- Engaging with the railway industry planning processes to promote potential longer-term improvements to the Bentham Line, particularly where such improvements are likely to be driven by wider considerations than those for the Bentham Line alone. For example:
  - The proposal for bi-directional working between Morecambe South Junction and Lancaster Station would be part of the wider Preston Power Box re-signalling planning and would thus need to feed into this scheme
  - Line speed improvements may arise from planned track and / or structure renewals
- Promoting the actions and options from this Strategy to Transport for the North and Lancashire and North Yorkshire County Councils for inclusion in their own strategy development and delivery planning processes (e.g., evolving and refreshing policies and Local Transport Plans). This would include rail-based options such as journey time reductions (which are the justification for line speed upgrades) but also wider options associated with e.g., bus and active travel connections to stations, integrated ticketing, information provision etc
- From a planning perspective, the LMCRP offers a strong local link to ensure that the railway is able to play its full part in the communities that it serves. The Partnership should therefore engage proactively in the planning process, in particular responding to Local Plan consultations to ensure that:
  - On the railway side, land for new stations, additional car parking etc is protected through the planning process
  - On the demand side, the location and type of housing and commercial development is alongside or connected to the railway, ensuring good walk-in / active travel catchments. Any impacts on level crossings from new development should also be highlighted and understood





THE BENTHAM LINE

STRATEGY TO 2042

MARCH 2022

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