

Poacher Line

Strategic Outline Case Refresh



Project Aims:

A set of pragmatic and affordable enhancements to the rail corridor between Nottingham and Grantham which would:

- Allow for additional stops and reduced end-to-end journey times for services which do not stop.
- Improve accessibility of residents to opportunities and services in Grantham, Nottingham, and beyond.
- Unlock the significant growth proposals along the corridors, complementing the place-based investment in their Neighbourhood Plans and Masterplans.
- Reduces environmental impact, including reduced car dependency, and promotes equitable access for all, particularly those without a car available to them.

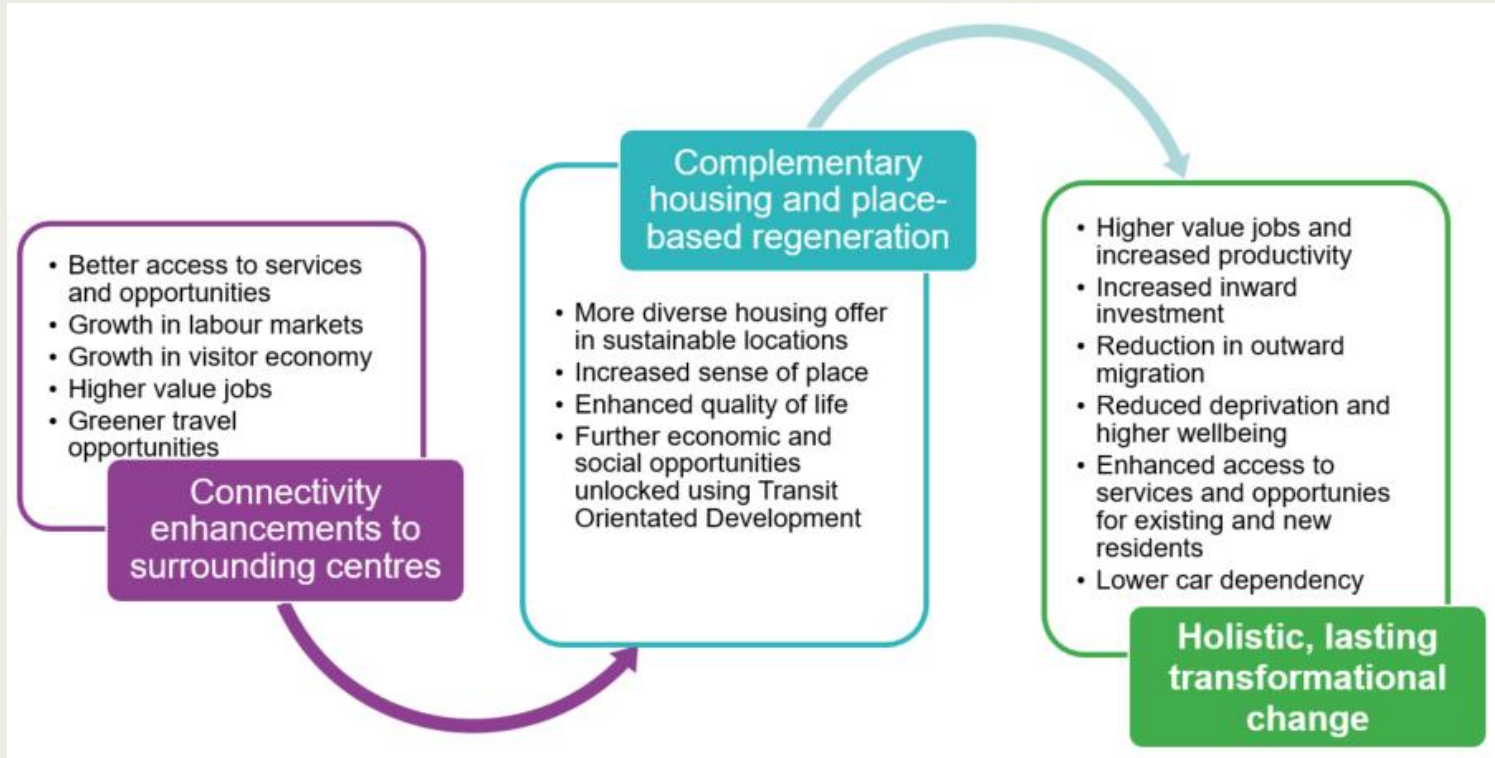
The proposals for enhancements to accessibility to the Poacher Corridor are a long-term aspiration for local authorities along the route and their regional partners

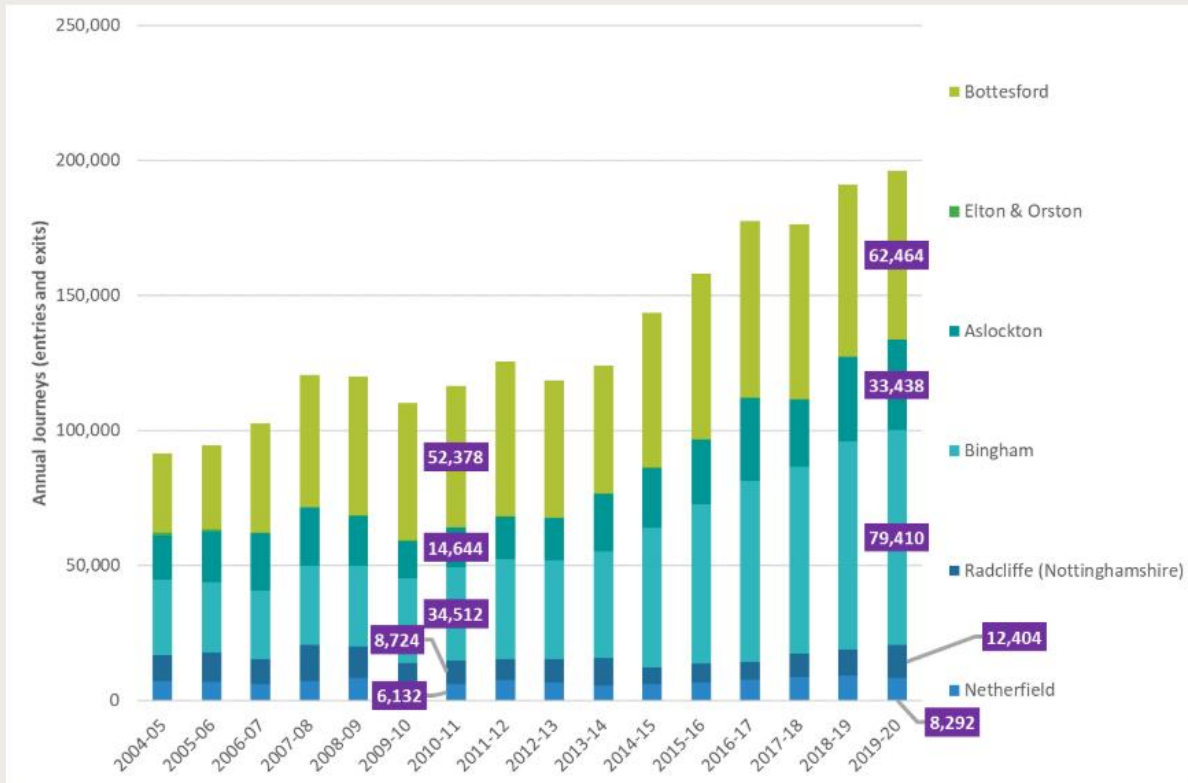
In 2017 an initial Strategic Outline Business Case (SOBC) was produced in advance of the re-franchising for East Midlands Railway (EMR) operations.

This Strategic Outline Case (SOC) updates the 2017 analysis, with relevance to:

- 2017 findings
- UK Government priorities and guidance around business cases
- The local context for the places along the corridor
- Transport conditions and services along the corridor
- The national context for funding and financing enhancements

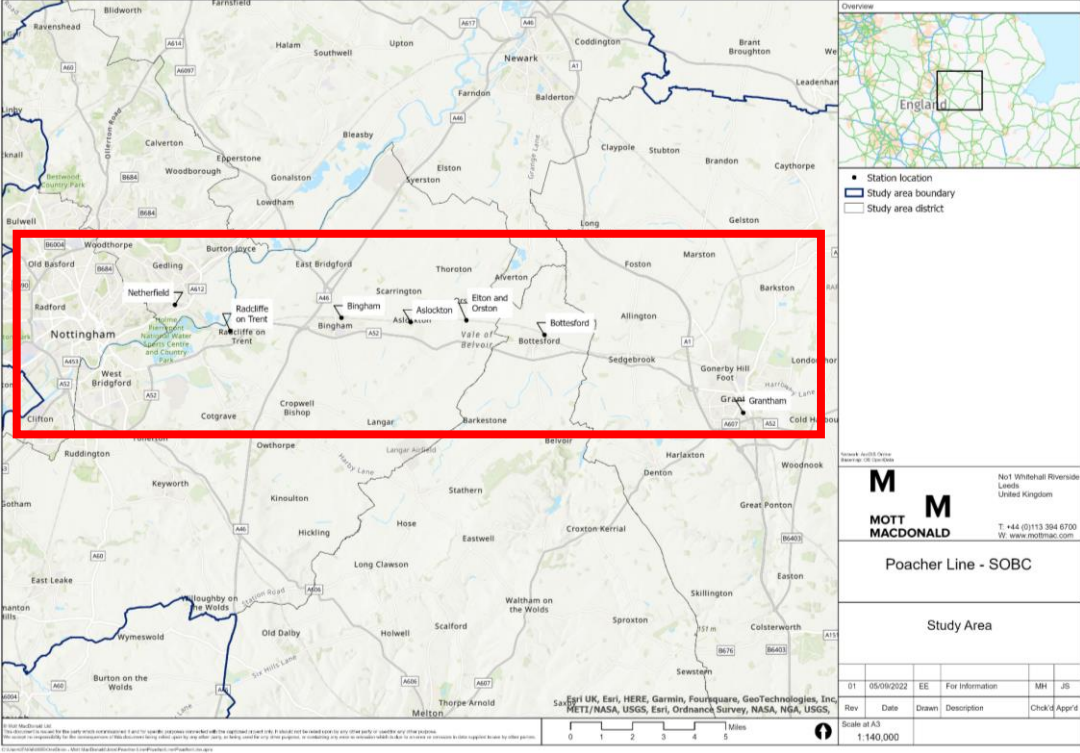
Economic Growth	<ul style="list-style-type: none">• Additional capacity for development delivered in a sustainable manner• Better connections for places along the corridor to HS2 at Nottingham and the East Coast Mainline (ECML) at Grantham
Levelling Up	<ul style="list-style-type: none">• Enhanced levels of services in the east of Nottingham, assisting with regeneration of places such as Netherfield• Better access to opportunities and services for those without access to a car
User Needs	<ul style="list-style-type: none">• A more efficient and attractive service offer• A step change in access to the opportunities and services in places such as Grantham and Nottingham
The Environment	<ul style="list-style-type: none">• More attractive sustainable travel options which reduce the need for car travel• Contributions to carbon neutrality and clean air goals





The Poacher corridor connecting Nottingham and Grantham is home to approximately 90,000 people, excluding the City of Nottingham (c.340,000 people).

Over 36,000 jobs are located within the corridor (excluding Nottingham), which is served, by the A52 highway, the Poacher Line railway, and local bus services for some of its extent.





Netherfield & Carlton

- Twin centres in Gedling borough
- 35,000 residents approx.
- Significant employment sectors, development proposals and pockets of significant deprivation exist



Radcliffe-on-Trent

- Historic village in Rushcliffe borough, 8km east of Nottingham
- Home to 9,500 people
- Established centre
- Low jobs per head of population with dependence on out commuting



Bingham

- Market town, approx. 10,500 residents
- Significant urban extension proposals
- Low jobs per head of population with dependence on out commuting
- Local economic specialisms in health and construction



Aslockton

- Village within Rushcliffe borough, approx. 17km east of Nottingham
- Approximately 3,000 residents within the immediate catchment
- Home to HMP Whatton

Eton & Orston

- Two villages with a catchment population of over 2,000 people
- Largely rural with small dispersed settlements, each with selected amenities and services

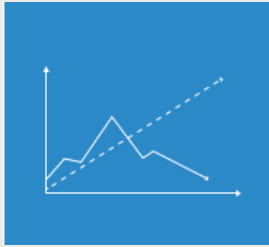
Bottesford

- Historic village in Melton borough, Leicestershire
- Resident population of circa 3,500 people
- Local economic specialism in manufacturing

Grantham

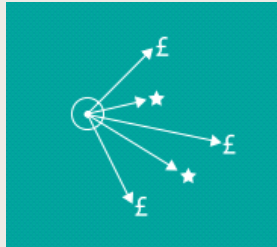
- Growing market town of 30,000 people in South Kesteven district – 21% growth in last decade
- Additional development proposals
- Significant Future High Streets Fund investment of circa £6 million in the centre around station
- Retail, health, and manufacturing hub
- On ECML and near the A1(M)

The places along the Poacher corridor offer a diverse set of small to medium sized employers with specialisms across the industrial sector.



A growing productivity gap

East Midlands productivity is below the national average, and lower values in Rushcliffe, South Kesteven, and Gedling contribute to the trend. Nottingham, by contrast, has exceeded the English and UK average GVA per head for the last 20 years.



Access to labour

Local and regional economic growth is being held back by a lack of access to labour for businesses and to opportunities for existing, and potential, residents. Travel-to-work and accessibility mapping show the limitations that poor access places on businesses and people, constraining the attractiveness of the area as place to live, work, and invest.



Deprivation

There are significant pockets of deprivation in Grantham and Gedling borough, west of Nottingham. These contain areas among the most 20% deprived nationally.



Inward investment

Local authorities have developed plans for housing and other mixed use development but capacity and road traffic congestion are likely to be a 'brake' on these plans. These is already evidence of how road traffic congestion, and lack of viable alternatives to the car, hold back inward investment proposals.



Skills

Local residents struggle to access the education and training opportunities in the main centres of Grantham and Nottingham. This means they struggle to make an increased contribution to the regional economy. This, in tandem with a constrained labour market, holds back productivity and inward investment, contributing to observed socio-economic outcomes.

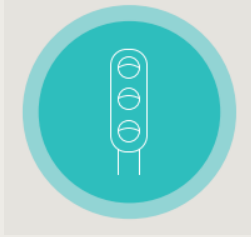
To identify the preferred way forward for the project and deliver greatest value for Money (VfM), an option assessment and appraisal sifted a 'long list' of multi-modal alternatives down to a 'short list'.

Service options for rail enhancements were developed and appraised in more detail, allowing the proposal to be optimised across multiple criteria. The rail options focus on the desired output of an increase in frequency of service at intermediary stations, ideally supported by a line speed enhancement to support the additional calls and deliver wider benefits to through travellers.



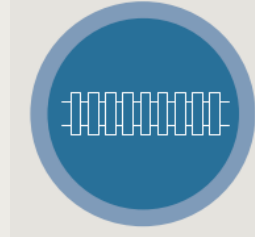
Services

A regular hourly service at Aslockton, Bingham, Bottesford, and Radcliffe, and enhanced frequencies at Elton & Orston, and Netherfield. Creation of a 'clockface' timetable with regular departures and arrivals at all stations.



Signalling

Works could involve upgrades to the signalling system to allow trains to run 'faster' and/or closer together.



Track works

Works could involve works to the permanent way to raise permissible line speeds. These are likely to focus on the section between Bottesford and Grantham.

DS1

Optimisation of May 2021 timetable

- Assuming no infrastructure upgrade, additional stops have been included to provide a more regular and frequent service to all stations
- Each station will have an hourly service all day, with the exception of Elton and Orston (one train every two hours) and Netherfield (hourly during the peak, one train every two hours off peak)
- These stations will skip-stop within a two-hourly cycle to retain similar end-to-end running times.
- Liverpool-Norwich services will call at Bingham during the AM Peak

DS2

A 3 minute saving in journey time

- Assuming a 3 minute journey time improvement could be made between Grantham and Bottesford for all services in order to counter the additional stopping time required in DS1
- The Nottingham end remains fixed, with the three minute time saving affecting Grantham and onward calls
- The 3 minute journey time affects both the 'stopping' and 'interurban' service
- No operational consideration for onward stations south and east of Grantham, assume that trips would start three minutes later/arrive 3 minutes earlier

DS3

Additional Radcliffe services

- Additional stops at Radcliffe to provide a half hourly peak and hourly inter-peak and off-peak level of service
- Requires changes made to the 'interurban' service to achieve peak provision.
- The Nottingham end remains fixed, with the three minute time saving affecting Grantham and onward calls
- Assumes no additional infrastructure required to deliver this timetable.

DS4

Additional Radcliffe plus 3 minute journey time saving

- Same impact as DS2, but using DS3 as the basis for the timetable.
- The Nottingham end remains fixed, with the three minute time saving affecting Grantham and onward calls
- The 3 minute journey time affects both the 'stopping' and 'interurban' service
- No operational consideration for onward stations south and east of Grantham, assume that trips would start three minutes later/arrive 3 minutes earlier

Option	DS1	DS2	DS3	DS4
Present Value of Benefits (PVB)	+14,520	+35,860	-600	+21,330
Present Value of Costs (PVC) – revenue and OpEx only	-5,300	-17,180	+780	-11,740
Available investment cost for JT improvement (upfront and whole life), 2022 prices				
BCR	DS1	DS2	DS3	DS4
1.0	N/A	£56,000	N/A	£35,000
1.2		£50,000		£31,000
1.5		£43,000		£27,000
2.0		£37,000		£24,000

- £000s in 2010 present values and prices
- DS3 impacts are net negative
- Circa 60% are time savings to rail users
- 30% of remainder is from highway decongestion
- Other 10% from accidents, GHG emissions et al from reductions in car-kms
- Loss of HMT receipts from indirect taxes

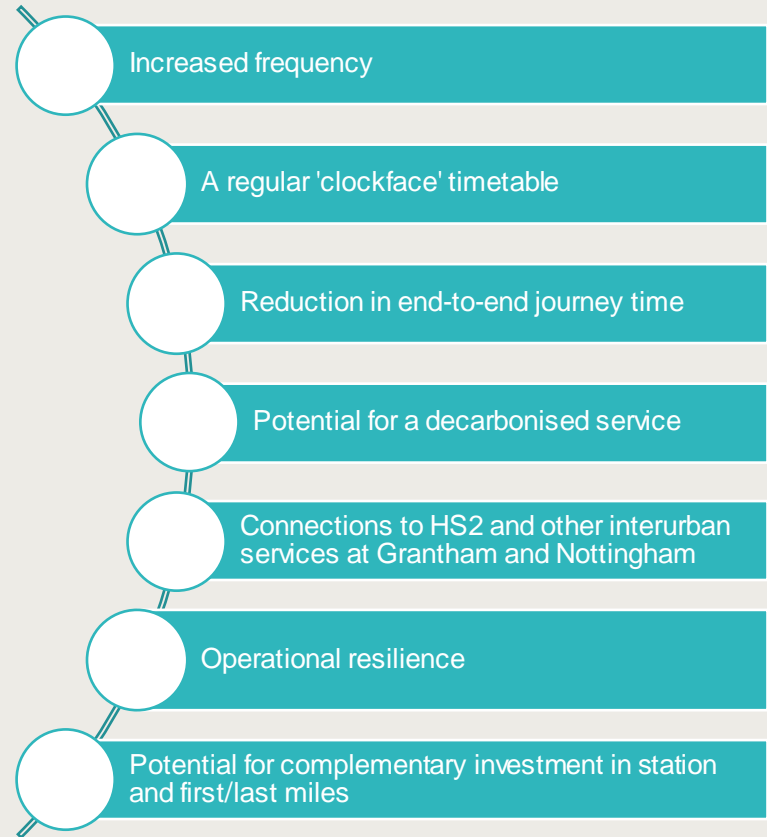
- Radcliffe to Nottingham benefits delivered are similar for options 2 and 4.
- More benefits provided to the region through DS2.
- Fewer disbenefits from additional journey time from Poacher stations to Nottingham observed in DS2.

Radcliffe is optimally served in DS2, while other locations also gain due to the enhanced timetable. The additional provision in DS4 (over DS2) does not significantly increase benefits for Radcliffe, and does not provide the same regional benefits.

	DS2 Demand	DS2 Benefits (mins)	DS4 Demand	DS4 Benefits (mins)
Nottingham-Radcliffe	3,000	120,000	3,000	120,000
Other Benefits	70,000	6,580,000	32,000	3,580,000
Other Disbenefits	- 6,000	- 570,000	- 7,000	- 720,000
Total	67,000	6,130,000	28,000	2,980,000

Depending on the package of enhancements taken forward for the Poacher corridor, the project could deliver the following:

- Options could add 125,000 additional trips
- Net UK benefits of circa £36 million (2010 present values and prices), consisting of:
 - Economic efficiency gains for commuters, business users, and other users, including road decongestion due to mode shift;
 - Reductions in road traffic accidents and noise due to mode shift;
 - Cuts in Greenhouse Gas (GHG) emissions and local air pollutants;
 - Increases in physical activity leading to reductions in mortality and absenteeism; and
 - A Net Present Value (NPV) of circa £53 million, inclusive of the increase in rail revenue, but currently exclusive of the capital investment.
- Impacts for the local places, which support the regeneration programme of the multiple authorities long the corridor, consisting of:
 - Additional GVA, jobs, and inward investment
 - Support for the FHSF allocations in Grantham and Nottingham



The proposed investment will directly address hyperlocal, local, regional, and national priorities for the economy, society, and the environment:

Economic growth

- Catalyst for investment in housing and economic development along the corridor
- Growth in productivity and economic activity
- Promote the area as a place to live, work, invest, and visit, maximising opportunities for investment

Levelling up

- Improved economic standing of smaller communities
- Better access for those residents without a car available
- Assistance with place-based regeneration programmes, included committed complementary investment

Meeting user needs

- A more attractive and efficient level of service
- Improved customer satisfaction for public transport trips in the corridor, increasing the use of sustainable modes

The environment

- Mode shift from road to public transport, and reduction in adverse environmental externalities, including carbon emissions
- Increased active travel as part of first and last mile journeys, further reducing the impact of travel
- Protection of the natural environment and 'sense of place' by greater use of existing assets



Thank you

