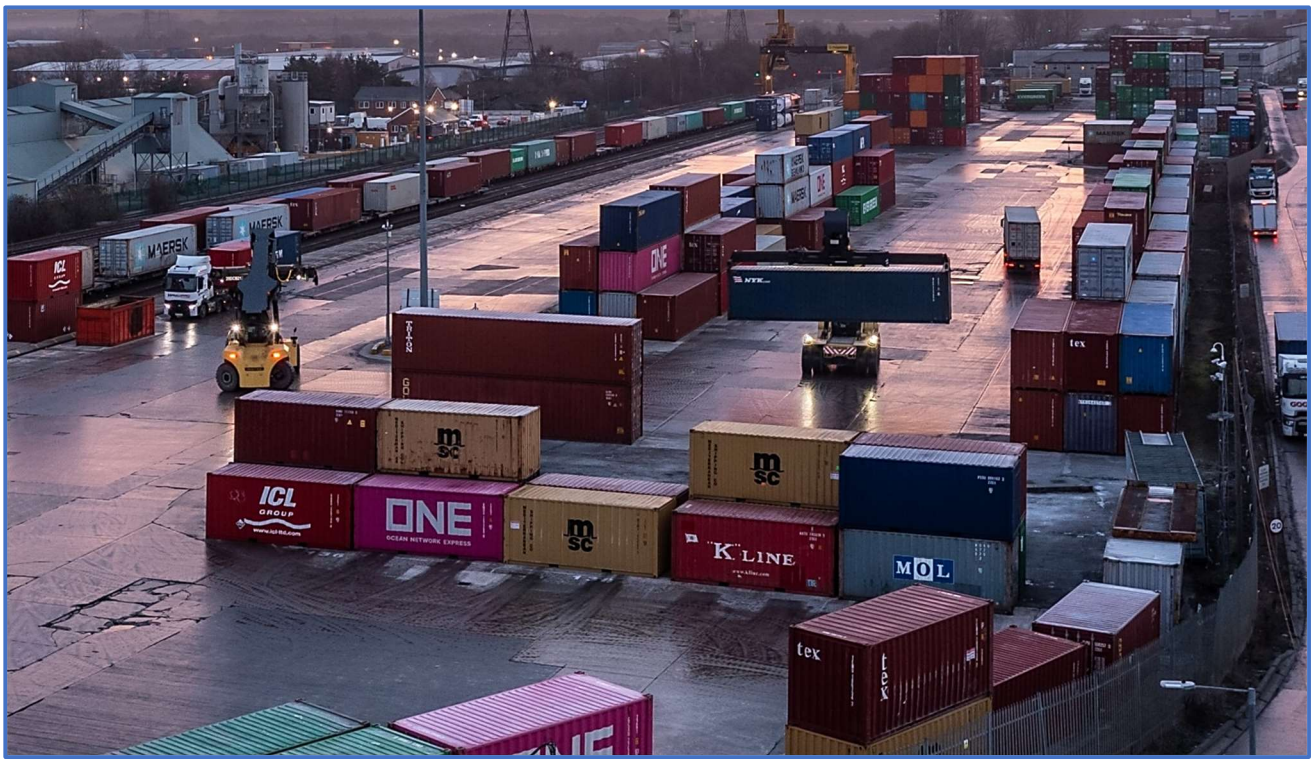
Intermodal Rail Freight Interchange Study

Report



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Executive summary

Background

Recognising the critical role of freight and logistics in the region's economic success, TfSE published its Freight Logistics and Gateways Strategy in 2022. This comprehensive strategy outlines how strategic planning and policy development, including investment decisions, can enable the sector to support sustainable growth.

A key component of this strategy is increasing the volume of freight moved by rail by improving integration between different modes of freight. To address the potential for this, the Strategy includes a measure to undertake a detailed review into the potential for intermodal rail freight interchanges in the TfSE area.

This Intermodal Rail Freight Interchange Study was therefore commissioned by TfSE and prepared by Steer and Intermodality. The Study assesses the potential demand for freight currently moved entirely by road to and from the TfSE area, some of which could be moved by rail freight if the infrastructure was there to support commercially viable services.

Objectives

Within this context, the objectives of the Intermodal Rail Freight Interchange Study are to:

- Identify and assess the potential scale of future demand for intermodal rail freight to, from and within the TfSE area.
- Identify and assess the potential requirements for intermodal rail freight interchanges to facilitate freight movements by rail.
- Identify and assess existing and potential sites for interchanges to be developed.
- Understand stakeholder perspectives from local authorities and industry on the opportunities and barriers to delivering and operating interchanges in the area.
- Develop recommendations to support increased intermodal transfer between road and rail networks within TfSE's wider strategy for delivering sustainable freight to stimulate economic growth.

Approach

The study comprised four main phases of work:

- An initial phase of work principally involving desktop research to understand the market prospects for intermodal freight in the South East, examining the relationship between current intermodal rail services and existing freight interchanges. This phase built upon research carried out for the former Great British Railways Transition Team (GBRTT) in 2022, including an analysis of key regional indicators such as population, warehousing capacity and freight traffic patterns[1].

[1] Included in the 'Intermodal rail freight interchanges: levelling up regional provision, Market Assessment Report', Intermodality, 2022. A copy of this report can be made available by TfSE on request.

GBRTT has now completed its initial remit and will be replaced by a new Great British Railways (GBR) organisational structure and associated legislative framework in 2026.

- An assessment phase evaluating existing and potential intermodal rail freight interchange sites in and around the TfSE area, examining their proximity to warehousing and rail-linked facilities. This assessment aimed to identify opportunities to increase throughput at existing sites and develop a pipeline of potential new facilities where current capacity is insufficient.
- A stakeholder engagement phase, involving online surveys and discussions with industry representatives, to better understand the opportunities and barriers associated with intermodal rail freight interchanges, and to validate initial research findings against real-world experience.
- A final synthesis phase developing the final study report, combining market analysis, site assessment and stakeholder insights into comprehensive findings and recommendations.

Scope

There are different types of rail freight interchange in use, with this Study focussing on Intermodal Rail Freight Interchanges (IRFI) primarily with consideration of Strategic Rail Freight Interchanges (SRFI) as relevant.

Structure of this report

The remainder of the report is structured as follows:

- Chapter 2 sets out the context for rail freight and its role, structure, opportunities and benefits of rail freight services within the wider freight market, with a focus on the intermodal sector and the particular role played by interchanges in helping generate growth.
- Chapter 3 estimates the potential scale of opportunity for intermodal rail freight services and interchange facilities within the South East region/TfSE area.
- Chapter 4 considers ways to address barriers to and support growth in the intermodal sector, particularly in the South East region/TfSE area, considering both rail network capacity and capability, as well as the planning challenges facing promoters of new interchanges. This includes references to case studies from which to identify tangible actions which could be considered to help improve planning and delivery.
- Chapter 5 reviews potential opportunity areas for new or reinstated Intermodal or Strategic Rail Freight Interchanges in and around the TfSE area, including key criteria for identifying and shortlisting sites.
- Chapter 6 summarises the stakeholder engagement activity across meetings and survey findings, highlighting challenges and opportunities.
- Chapter 7 sets out closing conclusions, recommendations for delivery and next steps.

Role of rail freight in the UK economy

The UK logistics sector provides critical support for the rest of the economy, as well as being a significant component of the economy in its own right. In 2023, the sector

generated over £1.2 trillion in revenue, contributing £170 billion to the UK economy and generating £24.3 billion for the Exchequer in fuel duties alone, with 2.7 million employees representing 8% of the UK workforce.[2]

The transport of domestic freight across Great Britain is dominated by road haulage, with 81% of domestic freight moved by road, 12% by water and 8% by rail[3]. Road freight has consistently accounted for the largest share of domestic freight movement in the UK, followed by goods transported by water, with rail freight representing the smallest proportion.

However, rail freight traffic increased following privatisation and the opening of the Channel Tunnel in the mid-1990s and has largely managed to maintain traffic levels to date. Globalisation has led to increased movement of deep-sea containers by rail from the major ports, whilst construction traffic has also increased. The rail freight market is now dominated by services for intermodal (containers) and construction traffic, at 43% and 33% respectively[4].

Currently, in running around 680 trains per day across the network, the rail freight industry also supports companies such as British Steel, Danone, Drax, Jaguar Land Rover and Tesco, who rely on rail transport within their supply chains, helping keep the lights on and the shelves stocked.

Rail transport provides a more efficient and lower carbon alternative to road haulage for the movement of materials at scale. For example:

- trains can carry up to 3,200 tonnes per train, the equivalent of 110 articulated heavy goods vehicles[5];
- trains for mail, parcels and other light goods can travel at high speeds of up to 100mph[6], which is far higher than the legal speed limit for heavy goods vehicles; and
- rail transport has the equivalent of 71%[7] less emissions per tonne-km than road haulage.

The ambition to grow rail freight volumes

Government policy has for many years sought a greater role in freight for rail transport, to help reduce the burden on the highway network and support the decarbonisation of the transport industry. In 2023 the then Conservative government announced a target

[2] The Logistics Report Summary 2025, Logistics UK
[3] Transport Statistics Great Britain: 2023 Freight, Department for Transport
[4] Freight rail usage and performance April 2024 to March 2025, Office of Rail and Road
[5] The role and value of rail freight in the UK, Deloitte report for the Rail Delivery Group, 2021
[6] For example, InterCity Rail Freight services run by Great Western Railway and East Midlands Railway since 2017
[7] UK Government GHG Conversion Factors for Company Reporting 2023, emissions for rail freight against all HGVs with average payload

of 75% growth in rail freight by 2050[8], the equivalent of around 500 extra freight trains per day[9] or around 8,000 articulated HGV loads removed from the road network.[10]

In order to achieve this, the capacity and capability of the rail network and operations will need to significantly improve, not least in the provision of access points onto the network, the majority of which were lost in the post-war period leading up to privatisation. In addition, without additional and/or expanded rail freight interchanges, particularly but not exclusively for the intermodal sector (movement of shipping containers), prospects for growth will be limited.

Intermodal rail in the South East

Within the UK, the South East region accounts for 14% of Gross Value Added[11] and 14% of population[12], 15% of warehousing[13] and 11% of road freight traffic.[14] However, unlike regions such as the West and East Midlands, Yorkshire & Humberside and the North West, which have much lower shares of GVA and population and similar levels of warehousing and road freight, the South East has no inland intermodal rail freight interchanges, either operational or seeking planning consent.

Furthermore, the South East provides the gateway for rail freight services linking the port of Southampton and the Channel Tunnel with the rest of the country. These rail services relieve the regional road network (particularly the M2, M3, M20, M25, M26, A2, A20 and A34) of up to 1,300 HGV loads per day.[15] The region therefore benefits from the operation of these rail freight services and the inland interchanges which they serve but currently has no means to load or unload non-port traffic to and from the region itself.

Issues for rail freight and interchanges in the South East

Feedback from the freight and logistics sector[16] indicates that the current planning approach frequently falls short for supporting interchanges and other freight-related infrastructure (e.g. warehousing, lorry parking). Specific challenges include:

- Land allocation conflicts: optimal sites are often lost to competing uses - such as housing development or other higher-value projects – leaving freight operators with limited options for developing consolidated hubs near rail networks.
- Insufficient recognition of the role of interchanges: there is a limited understanding among planners of the strategic importance of interchanges in creating efficient supply chains. The planning framework tends to focus narrowly on traditional land

[8] Rail freight growth target, Department for Transport, 2023
[9] Estimated assuming 75% growth in number of trains run over present (195,000 per annum source ORR equating to 680 per day)
[10] Average train payload 350 tonnes (source ORR) divided by average HGV payload 16 tonnes (source DfT) equates to 16 HGV loads per train x 500 extra trains
[11] Regional gross value added (balanced) by industry: all International Territorial Level (ITL) regions (2024), Office for National Statistics, 2025
[12] 2021 Census, Office for National Statistics
[13] Savills' assessment for the TfSE Warehousing Study, 2025
[14] Department for Transport Road freight statistics 2022
[15] Intermodality analysis
[16] National Infrastructure Commission (2018), Freight Study Call for Evidence

use considerations rather than recognising the broader infrastructural benefits that interchanges provide, such as enabling multi-modal integration and supporting regional economic development.
- Lack of inter-authority co-operation: effective planning for interchanges requires co-ordination beyond local boundaries. Yet, the current system does not adequately facilitate co-operation between local authorities, resulting in fragmented planning that fails to address the needs of a regional freight network.

Main findings of the study

The opportunity for additional rail freight interchanges in the South East and TfSE area

Analysis of GBRTT's research in 2022 suggests that if the current national share of total road and rail freight tonne-km accounted for by intermodal rail services (3.6%) were applied to the South East, the equivalent of eight trains per day each way could be generated by the South East. This could remove over 700 long-distance HGV loads from the road network. This could be achieved if rail services were able to target the longer-distance flows from the South East to the North West, Yorkshire & Humber, Midlands and Wales, and excluded the container traffic moved by road to and from the port of Southampton.

This would represent a do-minimum/worst case scenario, or one-third the level of potential traffic identified in the GBRTT/Intermodality study. In terms of interchange capacity, eight trains per day would equate to at least two IRFI and/or SRFI.

The development of SRFI not only represents opportunities to encourage intermodal rail freight and decarbonisation by improving access to rail transport services and networks, but also to secure investment and employment. Examples in other regions have shown that SFRI could generate an average of 4.2 million sq. feet of warehousing, 4,100 jobs and at least £500m of local investment, therefore increasing the accessibility for local business to the rail network and contributing to the logistics needs of consumers.

Potential opportunity areas

The study, which builds on an earlier national study undertaken by Great British Railways Transition Team (GBRTT) has shown that it may be possible to deliver more interchanges in these areas, identifying potential opportunity areas as set out below. The colour-coding of site titles to a green, amber or red classification describes the relative deliverability of sites, including factors such as land conditions and classifications, and the ease of connectivity to, and capability of, road and rail networks.

- **Northfleet** (Gravesham)
- **Salfords** (Reigate and Banstead)
- **Crawley Goods Yard** (Crawley)
- **South Godstone** (Tandridge)
- **Theale** (West Berkshire)
- **Thorney Mill** (Buckinghamshire)
- **Oxfordshire SRFI** (Oxfordshire)
- **Barking** (Barking & Dagenham)

- **London Gateway** (Thurrock)
- **Thames Enterprise Park** (Thurrock)

There are other areas which may also offer potential, either for:

- non-intermodal traffic e.g. existing rail-linked sites at Andover, Crawley, Fratton, Micheldever and Newhaven for aggregates, waste, parcels; or
- for larger SRFI developments of 60 Ha or more at strategic road/rail network intersections suitable for larger regional distribution centres, involving new main line and trunk road connections and associated warehousing development.

However, it should be noted that the areas identified are purely for illustrative purposes only and do not confirm or imply feasibility, or alignment with any local planning policy. Any site-specific proposal would be subject to full environmental and business case appraisal and associated planning consent(s).

Challenges for additional rail freight interchange provision in the South East and TfSE area

The need for more rail freight interchanges in the South East is primarily because planning policy, land availability or distribution space demand/value has not supported the developer-led SRFI model in the past. It does not reflect a lack of private investment or customer interest. It is more focussed on:

- the scarcity of land and road / rail network capacity (as recognised in Network Rail's forecasts for 75% growth);
- the lack of suitable locations where road and rail networks meet in order to provide an interchange;
- the lack of sites where both road and rail networks provide suitable capacity and capability for freight haulage and interchange services and where the development of the land needed for these facilities align with local community and local authority aspirations;
- the lack of awareness within local authorities of the needs of rail freight and the potential of SRFI/IRFIs and the lack of engagement between local planning authorities; and
- local opposition to proposals where they have been put forward.

This means that national and regional need and benefits have tended to be overshadowed by a focus on local issues. As observed by the local authorities consulted as part of this study, local authorities are not resourced or structured to gain insights into the nature, opportunities and challenges facing the freight sector. This is despite its role in supporting the wider economy and as a major component of economic activity in its own right. This means that there is not enough understanding of the needs of rail freight and the potential of IRFI/SRFI in particular.

Conclusion, recommendations and next steps

Conclusion

In order to achieve the government's 75% rail freight growth target, the capacity and capability of the rail network and operations will need to significantly improve, not least in the provision of access points onto the network.

In addition, without additional and/or expanded rail freight interchanges, particularly but not exclusively for the intermodal sector prospects for growth will be limited.

The National Networks National Policy Statement and a study for GBRTT in 2022 have both shown that there are not sufficient intermodal rail freight interchanges in the TfSE or its surrounding area to support this growth.

The other key risks of not finding suitable locations for IRFI or SRFI in the TfSE area will be the increasing difficulty of being able to deliver goods and services without the continued reliance on road transport and the highway network. In turn this will also mean using distribution sites which may never offer scope for rail access. If this is not addressed, it could also result in the missed opportunities to generate local investment and employment as outlined above.

Recommendations

Despite the lack of resources faced by local authorities to support the development of intermodal rail freight interchanges in the TfSE area, there could be scope to improve outcomes through relatively low-intensity interventions by or with local authorities. These include:

- Seeking the use of designated officer(s) with freight-related issues that have been actively developed as part of their role, backed by Continuous Professional Development (CPD) to improve knowledge of the freight sector. It might be possible to appoint a jointly funded cross-boundary officer to make best use of resources.
- Gaining a greater understanding of the nature of logistics and the challenges faced by the sector through the ongoing Freight Awareness work programme. This is being developed by TfSE, England's Economic Heartland and Transport East.
- Joint working between officers during local plan development through jointly requesting site consultations. This could mean that land-use, economic development and transport planners collectively encourage and engage with potential SFRI/IRFI site owners/promoters, as well as with Network Rail and National Highways.
- Making a commitment to supporting the use of rail freight in relevant strategies and plans. For example, East Sussex County Council have committed to ensuring rail routes and supporting infrastructure support the growth of rail freight in their draft Freight Strategy.
- Making best use of the planning and delivery tools available, for example, using the Permitted Development route working with Network Rail and other railway undertakings for smaller RFI. For larger, and often more contentious SRFI, using the Development Consent Order could provide an alternative to the Town & Country Planning Act, to speed up the process and reduce the cost to the local authority.

In addition, TfSE will:

- Work with Network Rail, GBR once established, other potential delivery partners and our partner local authorities to review the opportunities this study offers.
- Explore working with central government to support the further strengthening of planning policy and guidance to ensure that these facilities are considered as critical components of regional infrastructure and as an enabler of employment and housing delivery.
- Explore alternative methods for determining 'the scale of need'. This would enable local authorities to better account for the role of these facilities in enabling efficient supply chains and their role in supporting more efficient distribution to and servicing of population centres.
- Work with the DfT and others to enhance the availability and utilisation of data on trends, demand, supply, and performance to facilitate more informed planning decisions.

Next steps

In order to gain further momentum for the provision of rail freight interchange facilities and services for the TfSE area, TfSE will share the report with its partner local authorities, the Wider South East Freight Forum (WSEFF), freight operators, developers of interchange facilities, Network Rail, other Sub National Transport Bodies, the Wider South East Rail Partnership and the Department for Transport.

It may also be worth considering holding a round table event to gain a clearer understanding of the current level of interest in addressing the shortfall of interchange and network capacity in the TfSE area. Potential attendees could include representatives from Network Rail alongside potential developers, interchange operators, freight operators, end users e.g. retail and aggregate companies and those local authorities who have already shown an interest in developing RFIs.

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Glossary of terms

Term	Description
CAZ	Clean Air Zones
DCO	Development Consent Order, a process for applying to the Planning Inspectorate for planning consent for SRFI and other Nationally Significant Infrastructure Projects set out in the Planning Act 2008
DfT	Department for Transport, Government body with responsibility for the English transport network and other non-devolved transport matters in Scotland, Wales & Northern Ireland
DIRFT	Daventry International Rail Freight Interchange, an existing SRFI near Rugby
E	East of England Region
EM	East Midlands Region
GB	Great Britain
GBR	Great British Railways, a new organisation proposed to integrate Network Rail and passenger train operator franchises
GBRTT	Great British Railways Transition Team, an interim organisation set up to plan a future structure for Great British Railways
GVA	Gross Value Added, a measure of economic activity
Ha	Hectare
HGV	Heavy Goods Vehicle, defined by the DfT as any goods-carrying vehicle in excess of 3.5 tonnes
iPort Doncaster	A Strategic Rail Freight Interchange located near Doncaster
IRFI	Intermodal Rail Freight Interchange, a type of rail freight interchange operated as a standalone facility without the associated warehousing found on Strategic Rail Freight Interchanges
KIG	Kent International Gateway, a proposed SRFI
km	Kilometres
LEZ	Low Emission Zones
LIFE	London International Freight Exchange, a proposed SRFI
Loading gauge	The maximum cross-sectional area of a railway vehicle and its payload permitted to operate along a given section of route, defined in Great Britain by a series of W (for wagon) profiles ranging from W6A (smallest) to W12 (largest)
LUK	Logistics UK a trade association formerly known as the Freight Transport Association
m	Metre
mph	Miles per hour
NDC	National Distribution Centre, a warehouse which distributes goods across the entire country, either to other Regional Distribution Centres or direct to customers
NE	North East Region
NNNPS	National Networks National Policy Statement
NPPF	National Planning Policy Framework

NR	Network Rail, licensed to operate the national rail network in Great Britain
NW	North West Region
ORR	Office of Rail & Road, a non-ministerial government department responsible for the economic and safety regulation of Britain's railways, and the economic monitoring of National Highways
PD	Permitted Development rights
RA	Route Availability, a measure of the permitted axle load applied to a section of railway, from RA1 to RA10
RDC	Regional Distribution Centre, a warehouse which distributes goods to customers within a defined regional catchment area
RFG	Rail Freight Group, a trade association which represents rail freight users and operators
RFI	Rail Freight Interchange, typically smaller in size and/or catchment areas than SRFI, but which can operate with and alongside SRFI as part of an intermodal shipment
RHA	Road Haulage Industry, a trade association
SE	South East Region
SEEDA	Former South East Economic Development Agency
SFN	Strategic Freight Network, a core network of strategic main line routes identified by the DfT and NR to cater for 775m length trains operating within W10/12 loading gauge, linking with inland SRFI and RFI, ports and the Channel Tunnel
SIFE	Slough International Freight Exchange, a proposed SRFI
sq ft	Square feet
sq m	Square metres
SRA	Former Strategic Rail Authority
SRFI	Strategic Rail Freight Interchange, a class of Nationally Significant Infrastructure Project as defined in the Planning Act 2008
SW	South West Region
TCPA	Town & Country Planning Act
TfSE	Transport for the South East
tonne-km	tonne-kilometres, a measure of freight movement
TSWG	Transport Strategy Working Group
UK	United Kingdom
WM	West Midlands Region
WSEFF	Wider South East Freight Forum
WYCA	West Yorkshire Combined Authority
Y&H	Yorkshire & Humberside Region

1 Introduction

1.1 Introduction to the study

Steer has been commissioned by Transport for the South East (TfSE), the sub-national transport body for the South East of England, to undertake the Intermodal Rail Freight Interchange Study to:

- Gain a clearer understanding of and identify the current and potential for increased intermodal transfer of freight between road and rail networks within the TfSE area.
- Examine the current and future potential for Intermodal Rail Freight Interchanges (IRFI) in the TfSE area through market analysis, site assessment, stakeholder engagement.
- Develop recommendations to enhance intermodal freight movements and support wider socio-economic and environmental goals.

Steer has been supported in this work by Intermodality who have led the market analysis and assessment of potential sites for interchanges and supported stakeholder engagement and recommendations.

1.2 Study context

1.2.1 Transport for the South East's Transport Strategy

TfSE's existing 2020 Transport Strategy envisions the area's growth and transformation through to 2050, aiming for the South East of England to become a leading global hub for net zero carbon with sustainable economic growth.

The 2020 Transport Strategy is in the process of being refreshed, with a new Draft Transport Strategy 2024 (covering the period 2025 to 2050) consulted on in late 2024 to early 2025. The refreshed Transport Strategy sets out a bold vision for a more sustainable, inclusive and resilient transport system. It is structured around five core missions:

- Improving strategic connectivity between major urban areas and with international gateways, especially by public transport, which is crucial for economic growth.
- Improving the resilience of the network, so that it offers reliable journeys and can respond to current and future risks to its operation.
- Tackling the inclusion and integration challenges facing communities, such as transport-related social exclusion and providing a joined-up transport network to enhance connectivity and improve people's lives.
- Decarbonising the surface transport network, essential for meeting climate change goals.
- Achieving sustainable growth through planned housing and employment growth which has sustainable transport at its heart.

1.2.2 Transport for the South East's Freight Logistics and Gateways Strategy

Recognising the importance of the freight and logistics sector's activities, success and wider impacts to the realisation of the Transport Strategy, TfSE published its Freight Logistics and Gateways Strategy in 2022. The Freight Logistics and Gateways Strategy is an in-depth exploration of how the freight and logistics sector can be enabled, through strategic planning and policy development, including investment decisions, to support sustainable economic growth and play a full and active role in delivering on the vision.

The Freight and Logistics Gateways Strategy has seven strategic objectives across economic, social and environmental themes, four of which relate directly to the importance of increasing the network's capacity for rail freight, including the provision of intermodal facilities. These are:

1. To improve the capacity, and operational efficiency of the freight and logistics sector in the TfSE area through:
    - improved reliability and capacity for freight on the transport network;
    - improved integration between different modes of freight transport; and
    - increased land availability for current and future freight and logistics activities.
2. To enhance the contribution of the freight and logistics sector as an important industrial sector as an important industrial sector and employer in the TfSE area through:
    - improved freight and logistics skills and job opportunities; and
    - support for inward investment and innovation best practice.
3. To improve connectivity to the international gateways in the TfSE area through:
    - infrastructure provision to meet changing patterns of demand.
4. To reduce the impact of freight on communities, through reductions in noise and air quality impacts, intermodal transfers, and informal overnight lorry parking.

In relation to supporting mode shift from road to rail and rail freight growth in general, the lack of suitable intermodal facilities in the region is identified as a particular issue:

- "There are relatively few intermodal freight transfer sites in or near the South East, except for those provided at deep seaports (e.g. Southampton and London Gateway/Tilbury) with supply chains linked to national distribution centres located across other parts of the UK."[17]
- "Although rail freight terminals for construction materials, especially at ports and wharves on the Thames, are well placed for moving additional volumes of traffic, a shortage of intermodal terminals is one of the most significant constraints to mode shift across the Transport for the South East region."[18]

Three main issues are identified with regards to rail freight capacity in the area:

[17] Freight, Logistics and Gateways Strategy, TfSE, 2022, paragraph 3.19 page 26
[18] Freight, Logistics and Gateways Strategy, TfSE, 2022, paragraph 3.31 page 32

- Capacity on major rail corridors being shared with passenger services.
- Shortage of interchanges for intermodal transfer of freight.
- Limited extent of rail height clearances (loading gauge) for taller shipping containers.

The Freight and Logistics Gateways Strategy therefore identifies the importance of Intermodal Rail Freight Interchanges (IRFI) in enabling efficient, cost-effective and low-carbon supply chains. These facilities play a crucial role in transferring containerised goods and bulk materials between road and rail networks. Where there is inadequate provision of suitable IRFI, operators will then continue to rely on road haulage, with associated lost opportunities for reducing emissions and road congestion.

Planning authorities can facilitate the development of IRFI in strategic locations by recognising areas with greater potential for intermodal freight transfer and designating sufficient land for future development. They can also protect suitable rail-connected sites from development for other purposes such as housing or retail, where there is an opportunity and need to do so, but this requires knowledge of, and engagement with the freight sector across users, operators and developers.

The Freight and Logistics Gateways Strategy includes a strategic action to support the transfer of freight from road haulage to cleaner alternatives, which includes a short-term action to produce guidance on road to rail modal shift. There is a further strategic action to review the existing provision of intermodal terminal facilities. This study seeks to respond to these strategic actions.

1.3 Objectives of the study

Within this context, the objectives of the Intermodal Rail Freight Interchange Study are to:

- Identify and assess the potential future demand for intermodal rail freight to, from and within the TfSE area.
- Identify and assess the potential requirement for intermodal rail freight interchanges to facilitate freight movements by rail.
- Identify and assess existing and potential sites for intermodal rail freight interchange development.
- Understand stakeholder perspectives from local authorities, the rail freight and logistics sector, businesses and end-users on the opportunities and barriers to delivering and operating rail freight interchanges in the area,
- Develop recommendations to support increased intermodal transfer between road and rail networks within TfSE's work on delivering sustainable freight to stimulate economic growth.

1.4 Approach to delivering the study

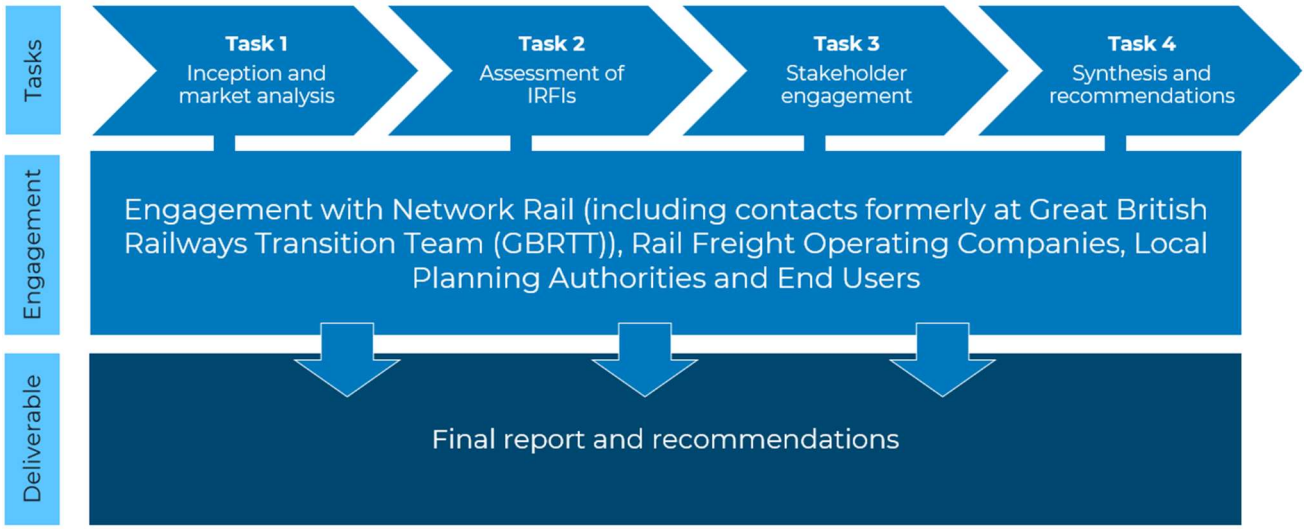
The study comprised four main phases of work:

1. An initial phase of work principally involving desktop research to understand the market prospects for intermodal freight in the South East, examining the relationship between current intermodal rail services and existing freight interchanges. This phase built upon previous work by the former Great British

Railways Transition Team (GBRTT) and included analysis of key regional indicators such as population, warehousing capacity and freight traffic patterns.[19] This work was presented in a report called Intermodal Rail Freight Interchanges: levelling up regional provision, Market Assessment Report carried out by Intermodality for GBRTT in 2022. GBRTT has now completed its initial remit and is now being replaced by a new Great British Railways (GBR) organisational structure and associated legislative framework.

2. An assessment phase evaluating existing and potential Intermodal Rail Freight Interchanges (IRFI) sites in and around the TfSE area, examining their proximity to warehousing, logistics spaces and rail-linked facilities. This assessment aimed to identify opportunities to increase throughput at existing sites and develop a pipeline of potential new facilities where current capacity is insufficient.
3. A stakeholder engagement phase with local authority transport and spatial planners and economic development practitioners in the TfSE area, along with industry representatives (including Network Rail, contacts formerly at GBRTT, the Rail Freight Group and intermodal logistics operators Freightliner and Maritime Transport), to understand perceived opportunities and barriers to using rail freight interchanges, and to validate initial research findings against real-world expertise. This was to support TfSE in understanding the nature and extent of the challenges and opportunities, and the local level of interest in intermodal rail freight interchanges.
4. A synthesis phase developing the final study report, combining market analysis, site assessment and stakeholder insights into comprehensive findings and recommendations. This included analysis of how associated warehousing development can help offset infrastructure costs and consideration of critical mass requirements for viable new interchange facilities.

Figure 1-1 Summary of study tasks, engagement and output



[19] Included in the 'Intermodal rail freight interchanges: levelling up regional provision, Market Assessment Report', Intermodality, 2022

1.5 Structure of this report

The remainder of the report is structured as follows:

- Chapter 2 sets out the context for rail freight and its role, structure, opportunities and benefits of rail freight services within the wider freight market, with a focus on the intermodal sector and the particular role played by interchanges in helping generate growth.
- Chapter 3 estimates the potential scale of opportunity for intermodal rail freight services and interchange facilities within the South East region/TfSE area.
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- Chapter 5 reviews potential opportunity areas for new or reinstated Intermodal or Strategic Rail Freight Interchanges in and around the TfSE area, including key criteria for identifying and shortlisting sites.
- Chapter 6 summarises the stakeholder engagement activity across meetings and survey findings, highlighting challenges and opportunities.
- Chapter 7 sets out closing conclusions, recommendations for delivery and next steps.

2 The role of rail freight services and interchanges

This chapter sets out the general context for rail freight and the role, structure, opportunities and benefits of rail freight services within the wider freight market, with a focus on the intermodal sector and the particular role played by interchanges in helping generate growth. Chapter 3 then, with reference to this context, focuses on the specific opportunities for intermodal rail freight services and interchange facilities in the South East.

2.1 Logistics and the role of rail freight

The UK logistics sector provides critical support for the rest of the economy, as well as being a significant component of the economy in its own right. In 2023, the sector generated over £1.2 trillion in revenue, contributing £170 billion to the UK economy and generating £24.3 billion for the Exchequer in fuel duties alone, with 2.7 million employees representing 8% of the UK workforce.[20]

The transport of domestic freight across Great Britain is dominated by road haulage, with 81% of domestic freight moved by road, 12% by water and 8% by rail.[21] Road freight has consistently accounted for the largest share of domestic freight movement in the UK, followed by goods transported by water, with rail freight representing the smallest proportion. Despite fluctuations in overall trends, the relative proportions of these modes of transport have remained stable since data comparisons began in 2000.[22]

Rail transport can provide a more efficient alternative to road haulage for the movement of materials at scale (up to 3,200 tonnes per train, the equivalent of 110 articulated Heavy Goods Vehicles or HGVs [23]) or which can travel at high speeds (up to 120mph[24]), which is far higher than the legal speed limit for heavy goods vehicles and, per tonne-km, 71% less emissions.[25] Running around 680 trains per day across the network, the rail freight industry supports companies such as British Steel, Danone, Drax, Jaguar Land Rover and Tesco, who rely on rail transport within their supply chains, helping keep the lights on and the shelves stocked.

Rail freight traffic surged following privatisation and the opening of the Channel Tunnel in the mid-1990's and has largely managed to maintain traffic levels in the face of the near elimination of coal traffic, which accounted for up to a third of the railway's traditional traffic base. Globalisation has led to increased movement of deep-sea containers by rail from the major ports, whilst construction traffic has also increased to

[20] The Logistics Report Summary 2025, Logistics UK
[21] Transport Statistics Great Britain: 2023 Freight, Department for Transport
[22] Transport Statistics Great Britain: 2023 Freight, Department for Transport
[23] The role and value of rail freight in the UK, Deloitte report for the Rail Delivery Group, 2021
[24] For example, InterCity Rail Freight services run by Great Western Railway and East Midlands Railway since 2017
[25] UK Government GHG Conversion Factors for Company Reporting 2023, emissions for rail freight against all HGVs with average payload

the point where the rail freight market is now dominated by services for intermodal (containers) and construction traffic, at 43% and 33% respectively[26].

Alongside renewed interest from business in using rail transport following privatisation and the Channel Tunnel opening, government policy has for many years sought a greater role in freight for rail transport, to help reduce the burden on the highway network and help with decarbonisation of the transport industry. In 2023 the then Conservative government announced a target of 75% growth in rail freight by 2050[27], the equivalent of around 500 extra freight trains per day[28] or around 8,000 articulated HGV loads removed from the road network.[29]

In order to achieve this, the capacity and capability of the rail network and operations will need to significantly improve, not least in the provision of access points onto the network, the majority of which were lost in the post-war period leading up to privatisation. Without additional and/or expanded rail freight interchanges, particularly but not exclusively for the intermodal sector, prospects for growth will be limited.

2.2 National policy context for rail freight and interchange infrastructure

Volumes of intermodal traffic moved by rail have increased since 1998[30], reflecting both the substantial private-sector and public-sector investment, as well as the evolving public policy framework. Since the late 1990s, successive governments have recognised the important role of rail freight in transport, economic development and environmental terms, and the need to support rail freight through the provision of interchange infrastructure. The public policy context has created conditions favourable to the planning and development of rail freight services and infrastructure, to which industry has responded with further investment and traffic captured to rail.

2.2.1 The Williams-Shapps Plan for Rail, 2021

In 2021, the then Conservative government published the Williams-Shapps Plan for Rail, which outlined a major reform of the UK rail system, aiming to bring track and passenger train operations together through a new integrated Great British Railways (GBR) organisation.

Rail freight operators, apart from Direct Rail Services, would remain outside of government ownership under the GBR model. The Plan for Rail identified that the railways should support a shift away from planes, cars and HGVs for long-distance travel. For freight, this would mean improving connectivity through interchanges and creating

[26] Freight rail usage and performance April 2024 to March 2025, Office of Rail and Road
[27] Rail freight growth target, Department for Transport, 2023
[28] Estimated assuming 75% growth in number of trains run over present (195,000 per annum source ORR equating to 680 per day)
[29] Average train payload 350 tonnes (source ORR) divided by average HGV payload 16 tonnes (source DfT) equates to 16 HGV loads per train x 500 extra trains
[30] Freight moved by commodity, Great Britain, April 1982 to March 2025, Office of Rail and Road

links with freeports. The Plan made a commitment to set a rail freight growth target (see below).

The Great British Railways Transition Team (GBRTT), formed to commence high-level work on creating Great British Railways as a unified structure for Network Rail and state-managed passenger train operations, included freight within its remit.

2.2.2 The Future of Freight: A Long Term Plan, 2022

In 2022, the Department for Transport (DfT) published The Future of Freight: A Long Term Plan. The Plan is currently being updated and a new version is anticipated in late 2025. The 2022 version of the Plan, published under the then Conservative government, set out how government and industry would work together towards a freight sector that is cost-efficient, reliable, resilient, environmentally sustainable and valued by society. The Plan notes that:

- Rail freight was estimated to have resulted in 6.4 million fewer lorry journeys in 2019/20, reducing congestion on the road.
- A cross-modal approach to freight was most visible in work to facilitate modal shift through investment in rail freight interchanges.
- Strategic Rail Freight Interchanges (SRFI) have been built across the country and not only meet the needs of the freight sector but also support wider government objectives around decarbonisation and congestion. However, the lack of awareness of the value of end-to-end freight journeys has also made it harder for vital warehousing and distribution centres and rail freight interchanges to get through local planning systems.

The Plan was therefore aimed at ensuring that the planning system provides appropriate support to enable logistics developers seeking to grow operations in all regions of the country to locate them where they need to be – near to the strategic road and rail network and close to an employment market.

2.2.3 Rail freight growth target, 2023

As stated above, the Williams-Shapps Plan for Rail (2021) committed government to establish a rail freight growth target. GBRTT was commissioned by the DfT to develop a range of options for the growth target. In 2023, following GBRTT's call for evidence and own analysis, the Conservative government announced a rail freight growth target for at least 75% growth in freight moved by rail by 2050[31]. It was noted that the achievement of the target would be dependent on the full industry, as well as Network Rail and the future GBR, playing a full role, collaborating where appropriate and taking the necessary steps to deliver rail freight growth.

The announcement of the rail freight growth target included a clarification that it was expected that the primary facilitator of growth would be through identifying network efficiencies and terminal (interchange) development, with additional services on the key main lines primarily accommodated within existing freight paths/opportunities. It was stated that government departments (transport and planning) would continue to

[31] Rail freight growth target, Department for Transport, 2023

collaborate so that the enhanced evidence base could help to underpin any new or amended planning policies and guidance to ensure sufficient land is allocated to service the needs of freight and logistics.

2.2.4 National Networks National Policy Statement (NNNPS), 2024

The NNNPS, published by DfT in 2024, reiterates the importance of Strategic Rail Freight Interchanges (SRFI) and the compelling need to create an expanded network. These aspects of the NNNPS are of particular relevance to this study:

- Recognition that Intermodal Rail Freight Interchanges (IRFI) and rail-connected warehousing in London and the South East is typically on a smaller scale than facilities in the Midlands and the North, but that such smaller scale (and even poorly located) rail-connected facilities can continue to play an important role in delivering modal shift – and so effort should be made to ensure such facilities are upgraded and improved to maximise their value alongside any proposals for new SRFI.
- The assessment that SRFI capacity needs to be provided at a wide range of locations, both in regions where they are currently located and, more broadly, to provide the flexibility needed to match the changing demands of the market, possibly with traffic moving from existing Rail Freight Interchanges to new larger facilities.
- Recognition that there is a particular challenge in expanding rail freight interchanges serving London and the South East. The Policy Statement says that consideration should be given to existing SRFI locations when making an application, to ensure that SRFI are strategically located and thus enable a more extensive cross-country network which unlocks the full range of benefits that an expanded network of SRFI can provide. Further, it is stated that particular consideration should be given to proposals for SRFI in areas where there is currently lesser provision (e.g. the South East).

2.2.5 National Planning Policy Framework, 2024

The National Planning Policy Framework (NPPF) sets out the government's planning policies for England and states how these should be applied to the planning process. The NPPF provides a framework within which locally prepared plans can provide for housing and other development in a sustainable manner.

Overall, there is limited direct reference made to freight or logistics within the document. However, references to logistics facilities are made in terms of planning for warehousing in order to support the objective of establishing a robust and competitive economy, which outlines the following:

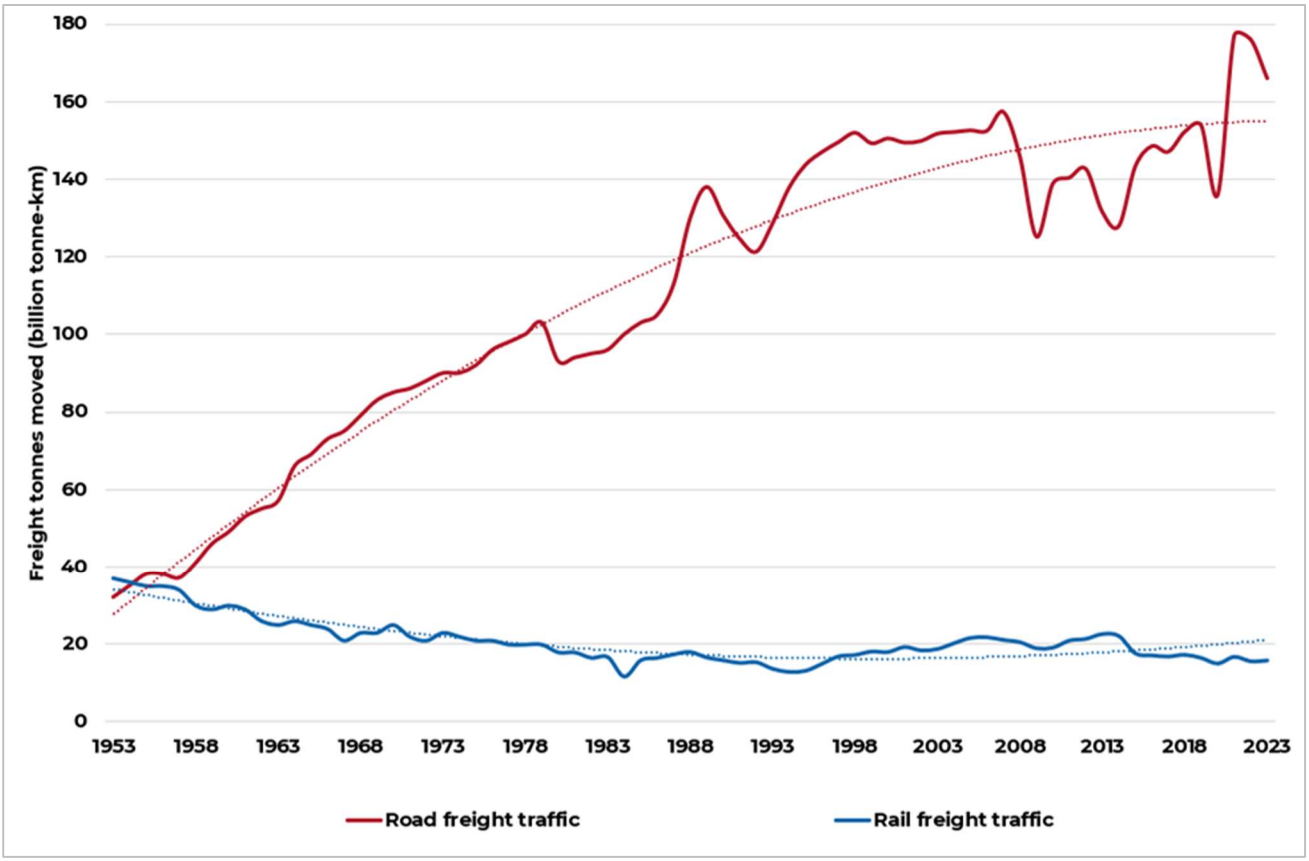
- planning policies should "pay particular regard to facilitating development to meet the needs of a modern economy, including by identifying suitable locations for uses such as laboratories, gigafactories, data centres, digital infrastructure, freight and logistics;" (NPPF, paragraph 86c) and;
- planning policies and decisions should recognise and address the specific locational requirements of different sectors, including "provision for storage and distribution operations at a variety of scales and in suitably accessible locations that allow for the efficient and reliable handling of goods, especially where this is needed to support the supply chain, transport innovation and decarbonisation." (NPPF, paragraph 87b).

2.3 Opportunities and challenges for rail in logistics supply chains

Modern freight and logistics distribution services operate across a sequence of transport links in the supply chain, with the nodes between each link being represented by an interchange between different transport modes or vehicles (e.g. articulated lorry to rigid lorry, or ship to train), sometimes with intermediate storage at these interchange points.

Figure 2-1 below shows the changing fortunes of road and rail freight transport during the post-war period. Road haulage has grown from a 50% share of surface freight in the 1950s to a position of dominance today at 81%, a reflection of the greater flexibility of, and investment in, road transport and the highway network. Rail's declining share to 8% over the same period reflects the corresponding lack of investment in modernising the rail network, which has shrunk by 50% in length,[32] along with a decrease in the numbers of most of the former rail freight interchanges and rail-served industrial sites.

Figure 2-1 Road and rail freight moved, 1953 to 2023



Source: Department for Transport/Office of Rail & Road

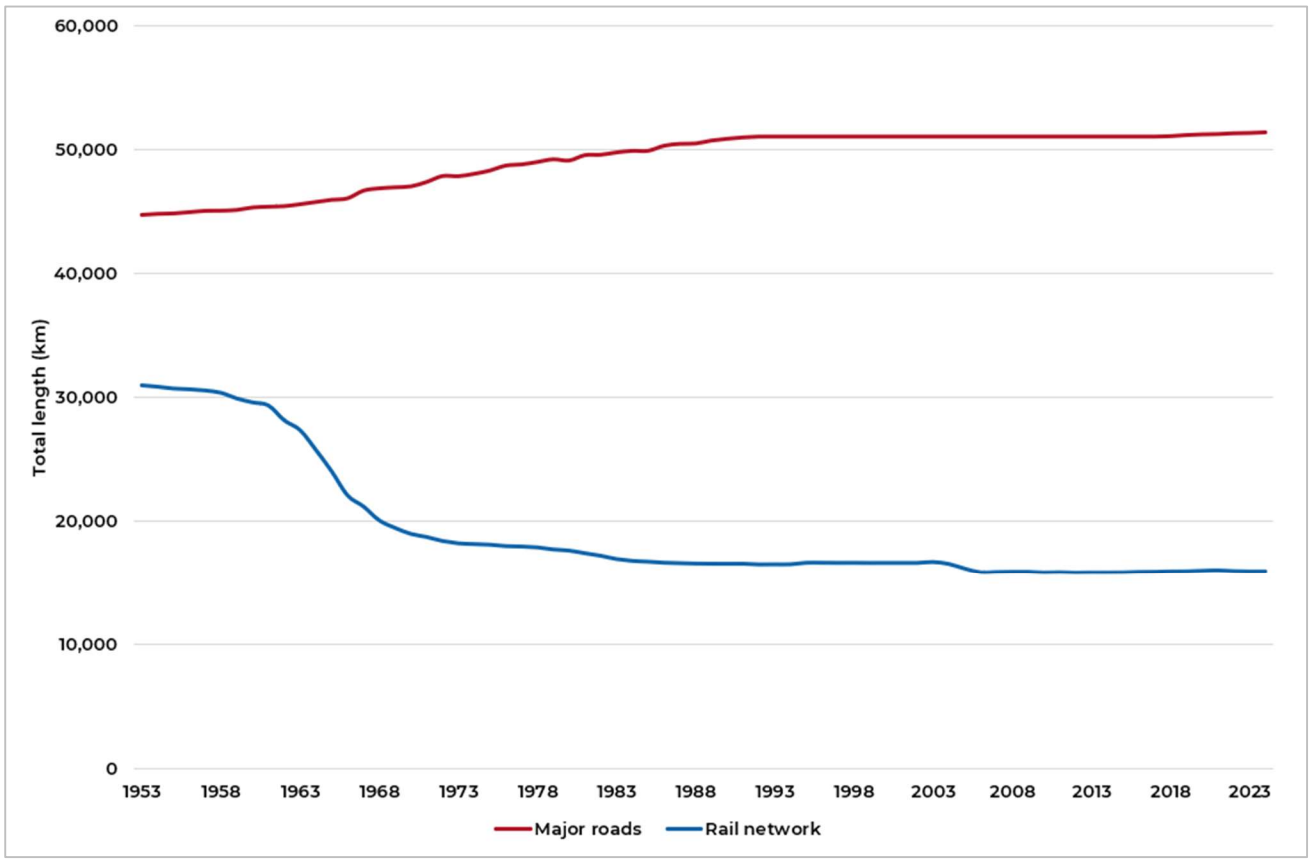
Yet the road haulage industry is now facing its own set of challenges, from cost pressures driven by labour and fuel, traffic congestion and labour shortages.

Figure 2-2 shows the comparative size and growth of the major road network and the rail network from 1953 to date, and whilst the two networks have seen contrasting

[32] Transport Statistics Great Britain, Department for Transport, Office of Rail & Road

fortunes between the 1960s and 1990s, both have now levelled out. As the primary infrastructure for movement of freight, the road network may therefore increasingly struggle by itself to cater for additional growth in traffic.

Figure 2-2 Major road and National Rail network length UK



Source: Department for Transport/Office of Rail & Road

There is also a demographic challenge approaching the road haulage industry. A 2025 report from the Road Haulage Association (RHA) warns that the UK's logistics industry will require 40,000 new HGV drivers annually for the next five years to meet growing demand and to avoid any potential future driver shortages. RHA notes significant structural issues with the driving labour force including driver retention, narrow diversity and an ageing workforce. In the case of the latter, the average age of HGV drivers in the UK is 51, and 55% of drivers are between 50 and 65. This means many experienced HGV drivers could retire in the short term, leading to a sharp decline in the driver pool.[33]

Given these challenges, government and business therefore wish to see more freight moved by rail, as well as to reduce the overall level of emissions produced by transport, reduce congestion on the road network and relieve the pressure on road haulage services.

[33] Lorry drivers – the vital link – attracting, training and retaining key workers in the UK supply chain, RHA 2025

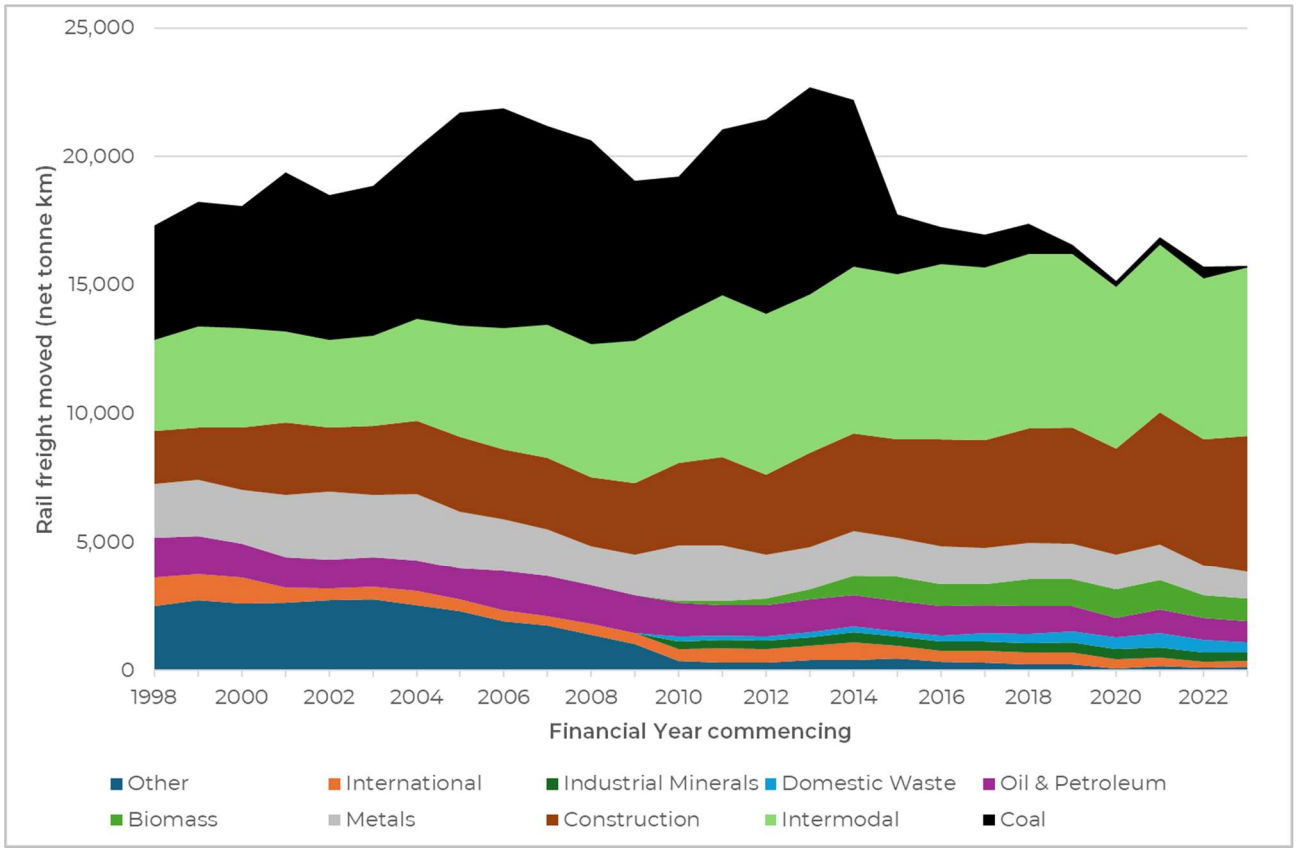
This represents an opportunity for Network Rail, rail freight operators, logistics companies and infrastructure developers to respond with new facilities and services. In so doing, there are challenges which the rail freight sector collectively, and the TfSE region particularly, would have to address, including:

- Constraints on network capacity and capability, such as competition for space with passenger trains, limits on height and width (loading gauge) for carrying containers and limits on train length and weight.
- Funding and delivering major new infrastructure projects which could address some of these constraints.
- Critically, a lack of access points for end users onto the rail network, the result of decades of rationalisation and the redevelopment of former rail freight facilities from the 1960s to the 1990s.

2.4 Rail freight market structure and growth potential

The market for rail freight has changed considerably over recent years (Figure 2-3) on the following page, in particular the elimination of coal traffic which had previously accounted for a third of all freight moved by rail. This was the result of government policy to decarbonise the electricity supply industry, combined with structural decline in heavy industry.

Figure 2-3 Rail freight tonnes moved 1998-2024



Source: Office of Rail & Road

The rail sector has compensated for the decline in coal and other industrial traffic by capturing a higher level of intermodal (containerised) traffic through the ports in response to globalisation of trade, together with increased use of rail for construction traffic and, to a lesser extent, biomass and domestic waste feedstock for power stations

Intermodal traffic is now the largest single sector of traffic moved by rail, from 29% in 2011 to around 40% in 2024, tonnes moved increasing by 14% from 5.51 to 6.26 billion net tonne-km over the same period.

The current government supports the ambitious growth target for Network Rail and the train operators of 75% in tonnes moved by rail between 2023 and 2050. It is expecting this to be taken forward by the new Great British Railways (GBR) organisation that is charged with managing the rail network infrastructure and most of the passenger rail services from 2027 onwards.

A series of preceding 'unconstrained'[34] growth targets set since privatisation by industry and/or previous governments have been missed by a considerable margin, but the more recent range of forecasts produced by DfT and Network Rail[35] have sought to account for the impact of various market, industry and infrastructure constraints (including slow progress with expanding interchange capacity) and, as such, align more closely to the current trajectory of around 15% growth anticipated by 2050[36]. Network Rail has stated the following in relation to its most recent forecasts (which predated the 75% growth target being announced):

> "Industry established and endorsed forecasts by the consultants MDS Transmodal (MDST) indicate that very strong long-term growth in demand for rail freight services should be expected between now and 2043/44, even when allowing for a wide range of possible market scenarios. These scenarios included factors that favour, and disfavour rail compared to road and considered both low and high market growth. The study forecast the tonnage of rail freight per commodity sector for 2033/34 and 2043/44, using 2016/17 as the baseline year… All modelled scenarios depict growth in the rail freight sector. However, the MDST study found that the two most considerable growth markets for rail freight are Intermodal and Construction materials…
>
> Established rail freight forecasts were developed prior to the 2019 legislation (on GHG [Greenhouse Gas] targets) and therefore do not account for this impact. This only adds to the expectations of growth, as a step change in rail's modal share of surface freight appears essential for the net-zero commitment to be upheld.

[34] 'Unconstrained' is a term used by Network Rail in forecasting. In rail forecasting terms, it means that the forecasts are not restricted or limited by market, industry and infrastructure constraints, including the network's capacity.
[35] Rail Freight Strategy: Moving Britain Ahead (Table 1), Department for Transport, 2016; Freight & National Passenger Operators Route Strategic Plan (Page 61), Network Rail, 2019; Rail freight forecasts: Scenarios for 2033/34 & 2043/44, MDS Transmodal for Network Rail, 2019; Freight Strategy (Section 9), Final Report, Network Rail, 2021
[36] Intermodality 'business as usual' projection based on last 20 years of rail freight traffic outturn data

> The forecasts depict unconstrained rail freight growth and provide a useful starting point for understanding the requirement for daily trains and hourly paths on any given section of railway geography. However, a forecasting model will never be able to precisely reflect actual traffic volumes and all the market opportunities or changing consumer trends that will impact the rail freight sector. The GB Freight Model, used in the MDST forecast report, did not capture entirely new market entrants, traffic derived from significant civil engineering schemes or the impact new terminal developments may have on future traffic flows. As well as changing consumer trends and expectations, these all represent opportunities to realise rail freight growth beyond what is displayed in the industry endorsed forecasts." [37]

In practice, a number of factors will determine the future trajectory of rail freight traffic, not least the competitive position relative to road haulage, international trade, network capability and accessibility. In the case of the latter, this includes the number, location, capability and capacity of rail freight interchanges relative to sources of demand.

As the biggest single source of rail freight traffic at present, and as the focus for this study, intermodal services carry the widest range of products amongst all the sectors of the rail freight market. Intermodal rail services operate over an average distance of around 360km[38] each way between origins and destinations (e.g. Southampton to Doncaster 390km, Port of Felixstowe to Leeds 320km), together with relatively short collection and delivery trips by road at either end.

To set the scale of the potential "addressable market" for rail, Table 2-1 below shows a breakdown of the current road freight market by commodity and average length of haul, against the equivalent for all rail freight and for intermodal rail freight.

[37] Source: Network Rail Freight Strategy 2021
[38] Timetable analysis

Table 2-1 Tonnes moved in GB-registered road vehicles, 2023

Commodity	Tonnes moved (billion net tonne-km)	Average length of haul (km)
Groupage (hauliers combining small loads into full-truck loads)	48.1	122
Food products, including beverages and tobacco	30.2	138
Metal ore and other mining and quarrying	15.8	68
Waste related products	12.6	65
Empty containers, pallets and other packaging	11.1	128
Agricultural products	9.7	118
Glass, cement and other non-metallic mineral products	6.7	74
Chemical products	5.3	151
Coke and refined petroleum products	4.6	105
Wood products	4.3	139
Metal products	3.9	133
Transport equipment	3.5	132
Mail and parcels	3.1	181
Household and office removals and other non-market goods	2.5	73
Machinery and equipment	2.3	120
Unidentifiable goods	1.1	164
Furniture and other manufactured goods	1.0	157
Textiles and textiles products, leather and leather products	0.8	139
Coal and lignite	0.2	152
Other goods not elsewhere classified	0.1	108
All commodities (GB-registered road vehicles)	**167**	**107**
Rail freight (all commodities)	***15***	***160***
Rail freight (intermodal)	***6***	***340***

Source: Domestic road freight statistics, Department for Transport, 2023

Table 2-1 indicates that tonnes moved by road haulage is over 11 times greater than that moved by rail, and 28 times greater than that moved by intermodal rail services. The road haulage market also operates over an average length of haul which is less than half that of all rail freight, and less than a third that of intermodal rail freight.

At first sight, this would suggest only limited prospects for capturing more freight from road haulage to intermodal rail services, particularly within the South East where the average length of haul is shorter due to the proximity of several major ports. However,

the 360km average length of haul for intermodal rail services reflects the current mix of traffic and network of inland SRFI and IRFI (see Figure 2-3, page 29 below), rather than a fixed breakeven distance. In practice, intermodal rail services currently operate over distances as short as 160km (e.g. DIRFT[39] to Tilbury, iPort Doncaster[40] to Teesport), bringing much of the current road haulage market (77% or 129 billion tonne-km from Table 2-1) within the commercially viable range of rail services. While the distance over which goods need to be transported is an important factor in determining whether rail freight is viable for the intermodal market, there are other factors which can combine to make a strong case for the use of rail freight.

2.5 Role of interchanges in delivering rail freight growth

Interchanges between the rail network and road transport (or sea transport at ports) address one of the challenges for rail freight referred to in section 2.3 earlier, in providing access to the rail network.

Most freight and logistics operators do not generate sufficient volumes of freight per day or week to warrant their own dedicated rail freight services, and even if they could, most do not have factories or warehouses adjacent to existing rail freight interchanges which could facilitate movement by rail. This then creates two major challenges in trying to encourage use of rail for freight movement:

- Firstly, road haulage is usually still needed to make trips at either or both ends of the rail haul. The road haulage adds cost and time to that of the rail haulage, which together may then constrain the size of the freight market where a competitive alternative exists to traditional “door-to-door” road haulage.
- Secondly, a “critical mass” of freight volume is needed to make rail freight services competitive against door-to-door road haulage (typically in excess of 30 x 40’ container loads per intermodal train in each direction). Without this level of regular business, trains then either cannot be operated commercially, or have to run less frequently (i.e. weekly rather than daily), to allow volumes to build up to trainload quantities). A less frequent service may then be less desirable to an end user, particularly one relying on daily replenishment for a production line or store network.

For rail to maximise its competitiveness, the time/distance of road haulage needed at one or both ends of the rail haul needs to be minimised, and/or the volume of freight available every day for movement by rail needs to be maximised. Interchanges are therefore critical to addressing these challenges, where these can be provided in the right locations and with suitable facilities.

Within the intermodal (containerised) sector of the rail freight market, as the largest sector and where most of the 75% growth in traffic is anticipated to come from, two types of interchange are used:

[39] Daventry International Rail Freight Terminal, the largest SRFI by floorspace and rail traffic, developed in three main phases since the 1990s – see Figure 2-3
[40] SRFI developed in Doncaster from 2009 onwards – see Figure 2-3

- Intermodal Rail Freight Interchanges (IRFI), which tend to be standalone self-supporting facilities using mainly existing rail-linked sites, serving a wide range of individual customers in the surrounding hinterland.
- Strategic Rail Freight Interchanges (SRFI), which tend to be greenfield or brownfield developer-driven regional distribution parks integrating warehousing, road and rail interchange facilities into a single site. The existing IRFI facilities tend to serve major occupiers based on site (e.g. Tesco at Daventry International Rail Freight Terminal (DIRFT)) but also serve other businesses in the hinterland. SRFI have not only provide a catalyst for generating rail freight traffic, but also for generating sufficient value from the land and warehousing to fund the significant costs of the rail and road connections to the transport network.

Interchange developments help consolidate local freight traffic activity into the critical mass needed to make trainload rail services, bringing together traffic from on-site occupiers and/or other local companies in the hinterland who may not wish to relocate to site, but still want access to rail services.

Figure 2-3 below shows the current geographical locations of IRFI, SRFI and ports. As shown, over half of the nine established SRFI in Great Britain are all based in the Midlands, reflecting the concentration of National Distribution Centres (NDCs) and optimal geographic position for such activities towards the centre of the country. This also highlights the lack of inland facilities within the South East and, hence, the need for new facilities to support the 75% rail freight growth target.

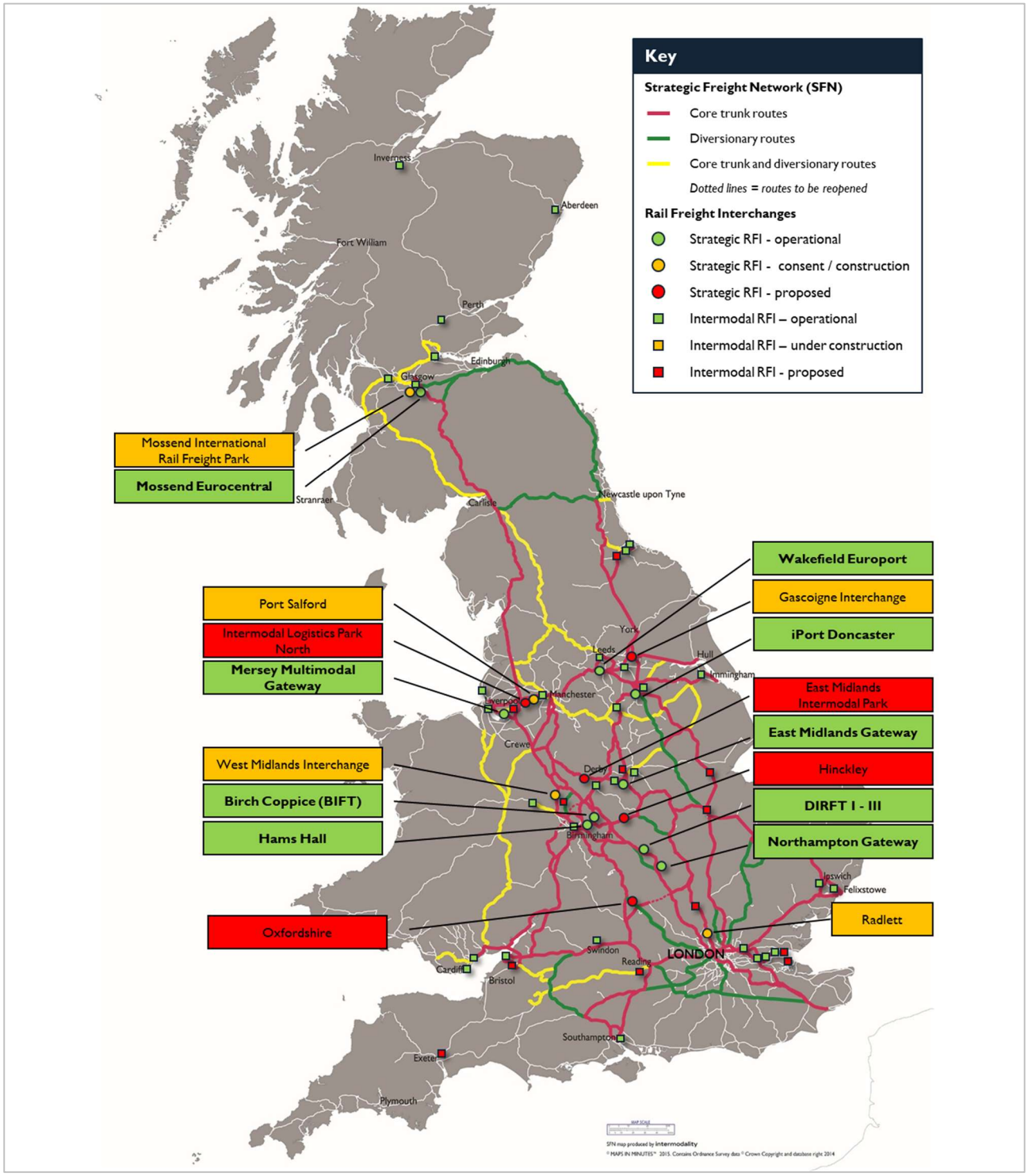
The remaining SRFI are based in Scotland and the North of England, providing locations more tailored towards that region's distribution network and associated Regional Distribution Centres (RDC). The expanding network of SRFI (see the additional sites consented or under construction in Figure 2-3) therefore includes sites with national and/or regional distribution activities. In addition, three other SRFI are under development in the North West at Port Salford (two million sq. ft), in the Midlands at West Midlands Interchange (8 million sq. ft) and at Radlett in the East of England (3.3 million sq. ft).

Some of the IRFI/SRFI sites co-exist in relatively close proximity, including (I for IRFI and S for SRFI):

- Garston (I) and Ditton (S)
- Leeds Stourton (I) and Wakefield Europort (S)
- Doncaster Railport (I) and iPort (Inland Port) Doncaster (S)
- Birch Coppice Intermodal Freight Terminal (BIFT) (S) and Hams Hall (S)
- Hams Hall (S) and Lawley Street (I)
- DIRFT (S) and Northampton Gateway (S)

These pairings are all within 16 km of each other. In addition, sites such as Trafford Park (I) and DIRFT (S) each have two to three interchanges co-located, each having distinct groups of rail services and customers.

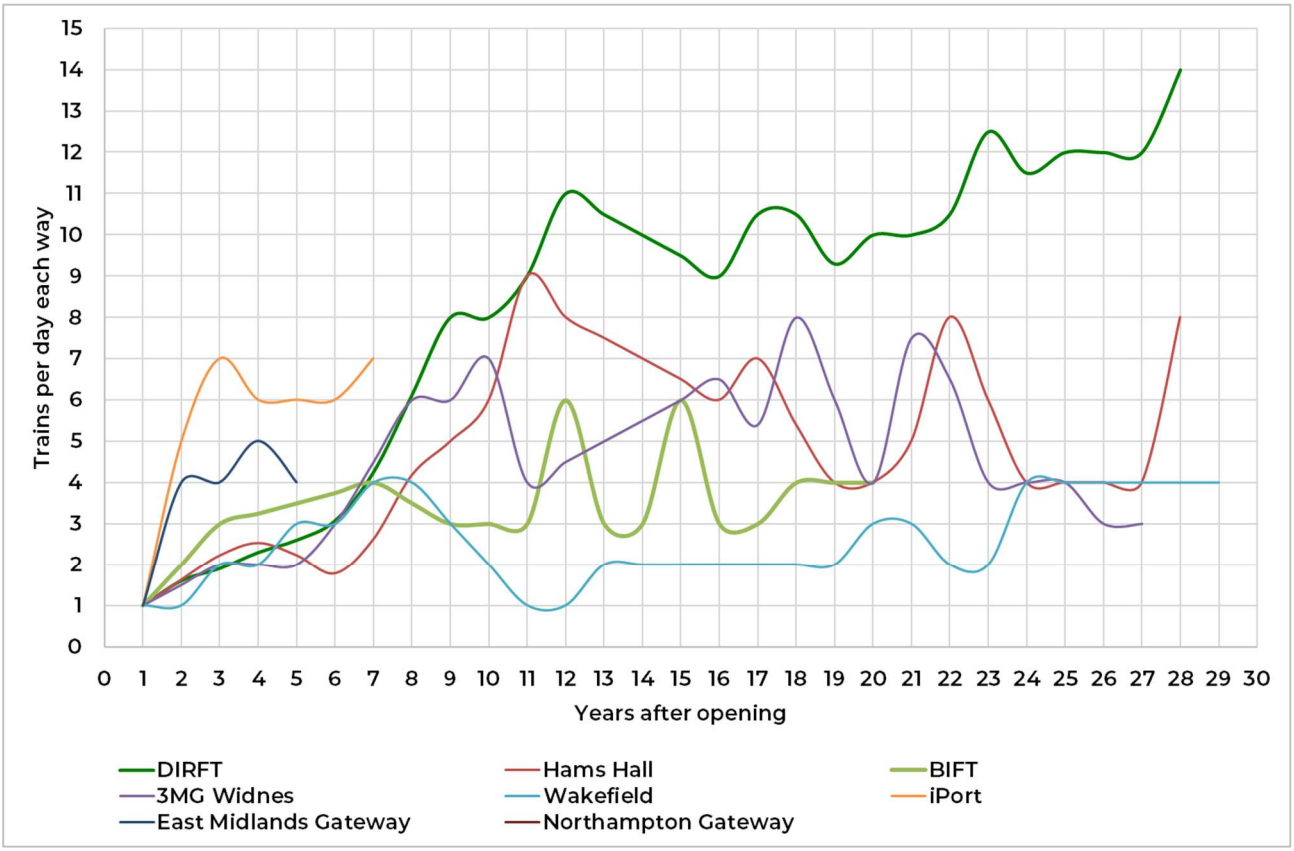
Figure 2-3 Map of intermodal rail freight interchanges



Source: Intermodality, 2025

Figure 2-4 below shows the growth in traffic from each of the operational SRFI in England from year of opening. It is notable that the most recent SRFI at iPort and East Midlands Gateway have seen much faster growth in the years following opening than the older, first-generation SRFI. This suggests increasing penetration of intermodal rail services into the wider freight market, with less initial inertia in converting users to rail.

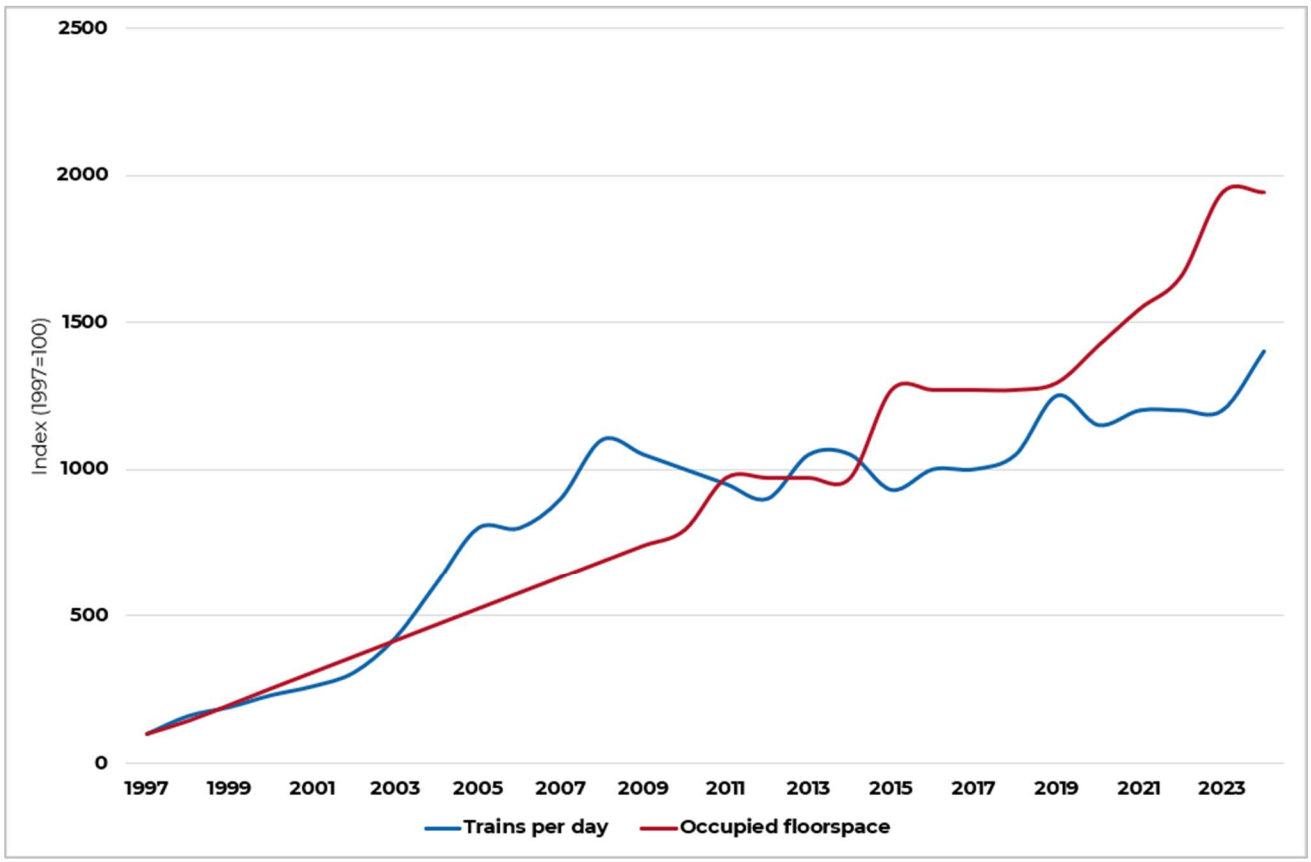
Figure 2-4 Evolution of rail traffic through operational SRFI in England



Source: Intermodality, 2025

Traffic growth from SRFI also reflects the level of associated floorspace within the immediate hinterland of the site. This is particularly the case with DIRFT, which has latterly achieved up to 14 trains per day, primarily in domestic traffic (the site originally conceived for Channel Tunnel services) but also in maritime and continental traffic. Figure 2-5 below shows how rail traffic and floorspace have grown in parallel.

Figure 2-5 Growth in floorspace and rail freight traffic at DIRFT



Source: Intermodality, 2025

The occupiers at these established SRFI include logistics companies and retailers who would otherwise locate at road-served distribution parks. As anticipated by government policy over two decades ago,[41] the first companies to occupy warehouses included those with little or no use of or exposure to rail freight services (e.g. Eddie Stobart and Tesco at the SRFI at DIRFT). Over time, an increasing number of occupiers on site and in the surrounding hinterland have started using rail on a regular basis. Rail services are used to connect SRFI to the ports and mainland Europe, as well as between SRFI and IRFI.

The customer catchment areas of SRFI and IRFI can vary considerably. Traffic survey evidence from Prologis, the developer and operator of the SRFI at DIRFT, suggested most traffic delivered by rail is destined for users within a relatively small catchment area (25 km).[42] This is because the further the destination of the goods is by road from a rail freight interchange, the less competitive the rail element of the journey becomes.

[41] Strategic Rail Freight Interchange Policy, Strategic Rail Authority March 2004, NNNPS 2014/24
[42] DIRFT III Development Consent Order Application, Need Report, Lichfields for Prologis 2012

Discussions with Maritime Transport at the East Midlands Gateway SRFI suggest the catchment area was initially up to 100 km but has since decreased below 30km. As the new rail-based services and associated economics have become established, so customers closer to the site are able to benefit from a more competitive service compared to those further away – the latter then either reverting to road haulage or (where available) switching to another closer rail freight interchange.

In terms of the role of SRFI in supporting future growth, each new SRFI generates an average of six new trains per day to and from the sites (i.e. 12 train movements). This represents around 5% growth based on the current level of intermodal rail traffic (260 trains per day). IRFI each generate around 4.5 new trains (nine train movements), representing 3% growth in intermodal rail traffic.

2.5.1 Role of additional interchanges in delivering the government's rail freight growth target

Setting this in further context, the government's 75% growth target would represent an increase in traffic from 680 to 1,190 trains per day. With around half of the extra 510 trains expected to be generated by intermodal traffic through SRFI and IRFI, this suggests the equivalent of 21 new SRFI or 28 new IRFI delivered across Great Britain over the next 25 years, assuming no further growth was achieved through existing SRFI and IRFI.

To consider further the role and growth potential of IRFI/SRFI, GBRTT commissioned a national study on identifying the role and potential for IRFI in 2022.[43] This suggested that there is a relationship between IRFI/SRFI provision and regional indices population, warehousing, road freight traffic as was demonstrated in regions with well-developed IRFI/SRFI provision e.g. the Midlands, North West and Yorkshire & Humberside. Using these examples, the remaining regions with little or no interchange provision (including the South East) could, in comparison generate around 100 extra intermodal trains per day each way through the development of about 22 IRFI or 14 SRFI in the "undiscovered" regions. This could amount to an estimated 75% growth over the current level of traffic towards achieving the government's growth target for 2050.

2.6 Wider benefits of rail freight and rail freight interchanges

Efficient freight and logistics have long been recognised as key drivers of economic growth. Public policy initiatives have sought to create favourable conditions for the planning and development of rail freight services and infrastructure. In response, the freight industry (users, operators, developers, Network Rail) has increased investment and shifted more traffic to rail.

The NNNPS[44] reinforces the need for additional rail freight interchanges to stimulate growth in rail freight traffic, stating the "compelling case" for rail freight interchange expansion. This reflects the wider role that interchanges perform beyond simply providing transfer points between different modes of transport. To date the relatively

[43] Included in the 'Intermodal rail freight interchanges: levelling up regional provision, Market Assessment Report', Intermodality for GBRTT, 2022
[44] See Section 2.2.4

small number of SRFI built to date (nine) have not only generated 45 trains each way per day of new-to-rail business (around 3,400 long-distance lorry loads removed from the road network) but have also created over 34 million sq. ft of floorspace and employment in the order of over 33,000 employees.[45] Each site represents between £0.5 billion and £1 billion of initial investment, into local economies during construction and once operational (including developer contributions and occupier business rates).

However, the NNNPS specifically references London and the South East as a challenge for expanding rail freight interchange capacity, for the reasons explained later in this report, primarily related to securing planning consent.

Table 2-2 shows the relatively lower capture of benefits in the South East compared to other regions, which can be attributed to the current rail service patterns which in turn reflect the limited availability of rail freight interchanges and associated rail-served warehousing. Key regional concentrations of benefits are currently observed in:

- Power stations and industrial centres in Yorkshire and the Humber and NW England;
- Logistics and manufacturing hubs in the Midlands and Wales; and
- Container traffic flowing from deep-sea ports to inland domestic terminals across the country, from the ports of South/East England to the Central Belt of Scotland.

Table 2-2 Rail freight economic contribution across the UK

Region	Total benefits (£m, 2018/19)	% share (of total)	User benefits (£m, 2018/19)	Social benefits (£m, 2018/19)
North East	100	4%	65	35
North West	225	9%	125	100
Yorkshire & Humber	860	35%	735	125
East Midlands	375	15%	300	75
West Midlands	95	4%	35	60
East of England	190	8%	45	145
London	75	3%	35	40
South East[46]	**120**	**5%**	**45**	**75**
South West	45	2%	10	35
Wales	260	11%	200	60
Scotland	105	4%	45	60

Source: Assessing the Value of Rail Freight, Deloitte for Rail Delivery Group, April 2021

[45] Based on 1 employee per 1009 sq. ft (1 per 95 sq. metres), Critical Infrastructure: Driving Employment Growth Within The UK's Logistics Sector, Prologis 2023
[46] TfSE area plus Buckinghamshire and Oxfordshire

3 Rail freight growth and the South East

This chapter explores the potential for intermodal rail freight in the South East, an area that currently lacks any operational or proposed Intermodal Rail Freight Interchanges (IRFI) or Strategic Rail Freight Interchanges (SRFI). Drawing on data from Network Rail and the Great British Railways Transition Team (GBRTT), the opportunity for modal shift from road to rail in the South East is quantified, and the potential benefits of new interchange capacity in the area are explored. Chapter 4 then considers ways to address barriers to and support growth in the intermodal sector in the context of the overall opportunity.

3.1 The scale of opportunity

As noted earlier in section 2.1.1, the National Networks National Policy Statement (NNNPS) highlights the particular challenges associated with delivering enhanced interchange capacity in the South East. These include constraints on land availability, competing demands for land use, and a lack of political or community support for larger SRFI developments (see case studies in Section 4.3).

Within the UK, the South East region accounts for 14% of Gross Value Added[47] and 14% of population[48], 15% of warehousing[49] and 11% of road freight traffic.[50] However, unlike regions such as the West and East Midlands, Yorkshire & Humberside and the North West, which have much lower shares of GVA and population and similar levels of warehousing and road freight, the South East has no IRFI or SRFI, either operational or seeking planning consent.

Network Rail has provided TfSE with a breakdown of current rail freight services operated to, from and within Network Rail's Southern Region. Although this differs in geographic extent to the TfSE area, it still provides a useful proxy. Of the 800 million tonne-km generated in 2023/4 (excluding Network Rail's internal engineering traffic), intermodal traffic accounted for 38% of the total, slightly lower than the 41% share of national traffic. Of the remainder, 49% is accounted for by construction traffic, considerably higher than the equivalent 34% share of national traffic.

Network Rail has also supplied illustrative forecasts as to how current rail freight flows might change if the 75% growth target was achieved by 2050. The forecasts are not constrained by network capacity for the additional trains and, for intermodal services, assume the availability of suitable loading gauge clearances.

Currently, rail freight services linking the port of Southampton and the Channel Tunnel with the rest of the country transit across the South East. These services relieve the regional road network (particularly the M2, M3, M20, M25, M26, A2, A20 and A34) of up to 1,300 HGV loads per day. The region therefore benefits in terms of highway relief from

[47] Regional gross value added (balanced) by industry: all International Territorial Level (ITL) regions (2024), Office for National Statistics, 2025
[48] 2021 Census, Office for National Statistics
[49] Savills' assessment for the TfSE Warehousing Study, 2025
[50] Department for Transport

the operation of these rail freight services and the inland interchanges which they serve elsewhere in the country, but for companies based within the South East (excluding those based on the Port of Southampton) there are currently no means to access the rail network with containerised goods.

Around three-quarters of all intermodal services travel to and from the ports in the "Greater South East," i.e. the South East, London and the East of England through ports on the Solent, Thames and Haven. Much of this port-related traffic, particularly from the Solent and Thames, would arguably not warrant being moved by rail to any new interchanges in the South East itself. There are, however, exceptions to the perception about where rail freight can be competitive, one notable example being the daily rail freight service which directly links the ports of Southampton and London Gateway by rail (190km each way) rather than by sea or road.

Sources of demand for intermodal rail freight from companies based in or delivering to the TfSE area could include:

- Deep-sea and shortsea ports with established rail services, which are sufficiently distant to make rail freight services more competitive against road haulage, such as Felixstowe (>160km), Liverpool Seaforth (>300km) and Teesport (>320km).
- Inland IRFI and SRFI typically more than 160km distant, connecting National Distribution Centres in the Midlands and beyond with Regional Distribution Centres in and around the TfSE area. Examples include Birch Coppice SRFI (>160km), West Midlands Interchange SRFI (>180km), East Midlands Gateway SRFI (>200km), iPort Doncaster (>300km).
- Mainland Europe via the Channel Tunnel, linking areas latterly generating rail traffic to/from GB e.g. the Ruhr (>500km), Northern Italy (>1,100km) and Spain (>1,600km).

To quantify the potential scale of the opportunity, the study by GBRTT in 2022[51] was undertaken. It indicated that, based on intermodal traffic in regions with more established IRFI/SRFI provision, the South East should generate around 27 trains per day each way when measured proportionately against the same indices of population, warehousing, road freight traffic and intermodal rail services.

To further refine this high-level estimate, reference can be made to existing road freight traffic between the South East and the rest of the country (the addressable market). At present the South East generates around 231 million tonnes of road freight traffic to and from the rest of Great Britain, the equivalent of 25 billion tonne-km and an average length of haul of 110km.[52] Whilst the average length of haul is relatively short by comparison with current rail freight services, if this is broken down further by region a different picture emerges, as set out below in Table 3-1.

[51] Included in the 'Intermodal rail freight interchanges: levelling up regional provision, Market Assessment Report', Intermodality, 2022
[52] Road Freight Statistics, Department for Transport 2024

Table 3-1 Regional road freight to/from the South East 2023

Region	Million tonnes	Million tonne-km	Average length of haul km
North East	No data	No data	-
North West	1,545	5	309
Yorkshire & Humber	1,391	5	278
East Midlands	3,165	16	198
West Midlands	2,947	14	211
East of England	3,332	28	119
London	1,573	24	66
South West	2,953	19	155
Wales	3,611	6	602
Scotland	No data	No data	-

Source: Road Freight Statistics, Department for Transport 2024

If the current national share of total road and rail freight tonne-km accounted for by intermodal rail services (3.6%) were applied to the South East, the equivalent of eight trains per day each way could be generated by the South East. This could remove over 700 long-distance HGV loads from the road network. This could be achieved if rail services were able to target the longer-distance flows from the South East to the North West, Yorkshire & Humber, Midlands and Wales, and excluded the container traffic moved by road to and from the port of Southampton.

This would represent a do-minimum/worst case scenario, or one-third the level of potential traffic identified in the GBRTT study. In terms of interchange capacity, eight trains per day would equate to at least one IRFI and/or SRFI, the latter generating an average of 4.2 million sq. feet of warehousing and 4,100 jobs, or two IRFI, increasing the accessibility for businesses to the rail network.

3.2 Main findings

IRFI and SRFI provide a critical catalyst for growing intermodal rail traffic, now the largest part of the rail freight market. They can provide more than simple transfer points between modes, by helping signpost and attract business, floorspace and employment, as well as reducing growth in long-distance HGV traffic and associated contribution to emissions[53], congestion[54] and accidents.[55]

[53] HGVs accounted for 16% of domestic transport greenhouse gas (GHG) emissions in 2023, source Department for Transport Overview of the road freight sector July 2025
[54] HGVs accounted for 4.9% of all motor vehicle traffic in Great Britain in 2024, source Department for Transport Road Traffic Statistics
[55] HGVs were involved in 2% of all road traffic statistics in Great Britain in 2023, source Department for Transport Road Safety Statistics

There is considerable untapped potential for intermodal rail freight to and from the South East, exemplified by the scale of the addressable market represented by inter-regional traffic currently moved by road haulage to and from the South East.

The scale of the potential opportunity is reflected in the interest shown by promoters and their prospective end users in developing interchanges in the South East. Three attempts have been made to secure consent for SRFI in Bexley and Kent, along with two attempts in Slough, all of which ultimately failed on appeal. Promoters have faced widespread opposition from communities and local authorities, ultimately failing to convince local authorities or the Secretary of State that consent should be granted.

Yet, without expansion of interchange provision, businesses in and around the TfSE area will continue to rely on road haulage (with higher emissions) for movement of goods across the highway network. They will continue to locate on sites without rail access, perpetuating the lack of growth in new rail freight services. Note too that growth in rail freight interchanges in other parts of Britain, and prospective connecting rail services, will also be constrained to an extent by the lack of traffic to and from the South East.

Local planning authorities will have a critical role to play in determining new or expanded major employment sites in areas close to the strategic rail freight network, ideally where main line connections already exist, through the provision of suitable land in local plans.

4 Catering for intermodal rail freight growth

This chapter explores, primarily through case studies, the ways in which some of the main barriers to catering for intermodal rail freight growth (through the delivery of new rail freight interchanges) could be addressed.

4.1 Site identification for rail freight interchanges

The National Networks National Policy Statement (NNNPS) and the National Planning Policy Framework (NPPF) both make the case for a compelling need to expand the network of intermodal interchanges, but the rationalisation of rail freight facilities during the last 50 years has meant that many areas across the TfSE area either no longer have any interchange facilities, and the few "legacy" sites which still exist often suffer from poor location, accessibility, capacity or facilities. This in conjunction with the competition for land availability from the need for housing and employment facilities in the crowded South East has also resulted in a shortage of suitable Strategic or Intermodal Rail Freight Interchanges (SRFI and IRFI) and any supported warehousing.

Independent research from as far back as 1999 highlighted the challenge of locating large freight terminals within established urban areas. Existing rail freight sites typically lacked adequate space, while much of the former network of urban rail freight facilities had often been sold and redeveloped. Ideal locations required large sites around or between urban areas where strategic road and rail networks intersect, areas often protected by green belt designations or restrictive planning regulations. The research warned of the limited number of rail accessible sites in a local authority area with potential for rail freight. The research suggested that the priority for such sites would be to retain/secure rail freight development on them, over-riding other demands such as the need to develop housing on brownfield sites, or to retain low-grade farmland for agriculture as part of an urban containment strategy because once the rail freight connectivity/capability of a site is lost, it is often prohibitively expensive to reinstate and the rail capability of the site (and the opportunity associated with the ability to transport goods by rail) is therefore rendered null and void.[56]

4.2 Planning challenges for rail freight interchanges

The recently updated National Planning Policy Framework (NPPF) now makes some, if limited, reference to the need for local authorities to prepare local plans which consider the needs of freight and logistics infrastructure and development. It is stated that:

- planning policies should "pay particular regard to facilitating development to meet the needs of a modern economy, including by identifying suitable locations for uses such as laboratories, gigafactories, data centres, digital infrastructure, freight and logistics;" (NPPF, paragraph 86c) and;
- planning policies and decisions should recognise and address the specific locational requirements of different sectors, including "provision for storage and distribution

[56] Rail Freight Growth and the Land Use Planning System, Sheffield Hallam University 1999

operations at a variety of scales and in suitably accessible locations that allow for the efficient and reliable handling of goods, especially where this is needed to support the supply chain, transport innovation and decarbonisation." (NPPF, paragraph 87b).

The references to "suitable locations" and "the specific locational requirements of different sectors" in NPPF are intended to recognise that freight facilities need to be located near strategic transport networks to facilitate efficient distribution.

Despite this, feedback from the freight and logistics sector[57] indicates that the current planning approach frequently fails to provide the land and infrastructure required by the sector. Specific challenges include:

- Land allocation conflicts: optimal sites are often lost to competing uses - such as housing development or other higher-value projects - leaving freight operators with limited options for developing consolidated hubs near rail networks.
- Insufficient recognition of the role of interchanges: there is a limited understanding among planners of the strategic importance of interchanges in creating efficient supply chains (see Chapter 6). The planning framework tends to focus narrowly on traditional land use considerations rather than recognising the broader infrastructural benefits that IRFI provide, such as enabling multi-modal integration and supporting regional economic development.
- Lack of inter-authority co-operation: effective planning for interchanges requires co-ordination beyond local boundaries. Yet, the current system does not adequately facilitate co-operation between local authorities, resulting in fragmented planning that fails to address the needs of a regional freight network. There is some precedent for cross-border co-operation and planning for freight facilities between local authorities, but it is limited and increasingly dated. There is a significant role for the Sub-national Transport Bodies such as TfSE, and, in turn, for new Strategic Authorities such as Sussex and Brighton and Hampshire and Solent, to play in raising awareness of the need to plan at the appropriate spatial scale for freight facilities and supporting efforts by local planning authorities to do so.

A more holistic approach is needed, which recognises the critical role of interchanges in consolidating freight flows near railway networks, and that also supports regional co-ordination. Enhancing the planning framework in this way would not only optimise infrastructure investment but also support the development of a resilient, efficient, and sustainable freight network across the country, and so contribute to the realisation of the economic and environmental objectives of the NPPF itself.

4.3 Planning case studies in and around the TfSE area

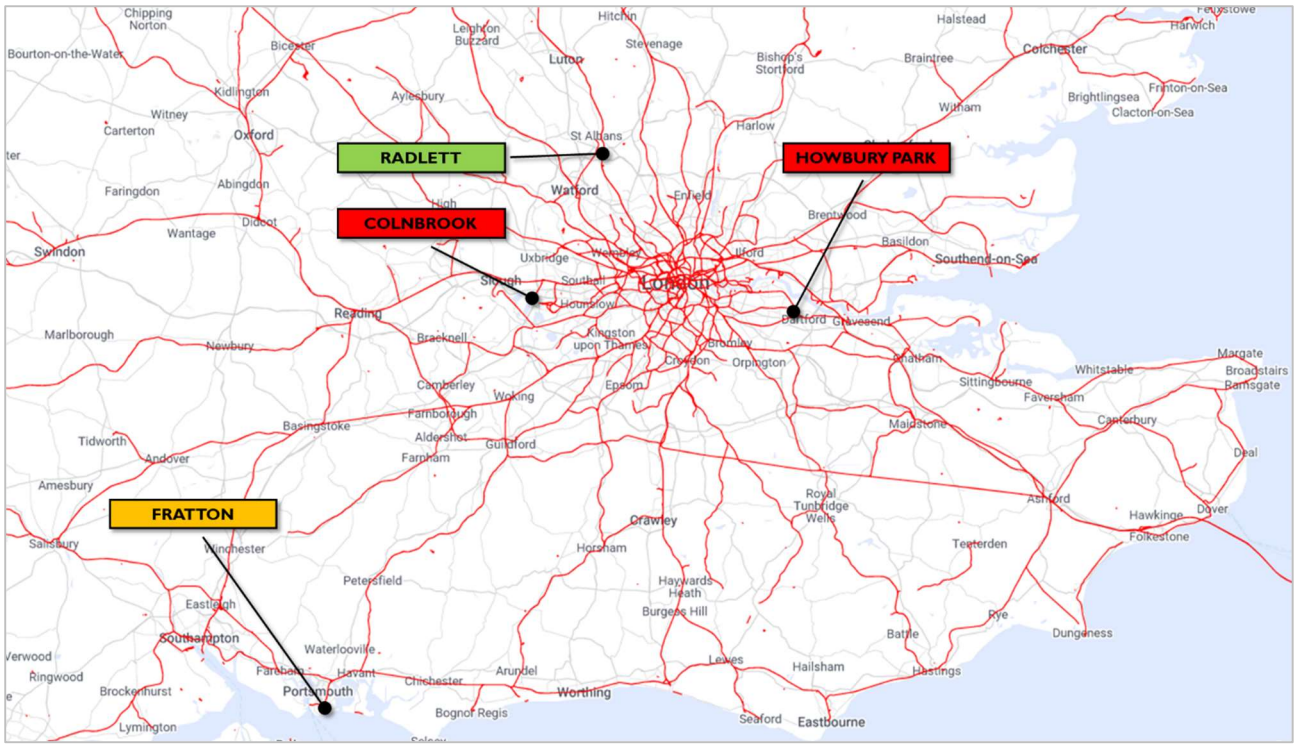
In the 1990s, the Strategic Rail Authority (SRA) envisaged three or four new Strategic Rail Freight Interchanges (SRFI) around the M25 to serve London and the Greater South East, supplemented by other Intermodal Rail Freight Interchanges (IRFI). The history of SRFI development in and around the South East exemplifies the challenges of delivery as acknowledged by the Strategic Rail Authority (SRA) and latterly by the NNNPS. The following case studies highlight the real-world challenges encountered by promoters,

[57] National Infrastructure Commission (2018), Freight Study Call for Evidence

when attempting to develop rail freight interchanges in and around the TfSE area through the public planning process.

These examples illustrate specific issues related to site selection, environmental constraints, and demonstrating a compelling/over-riding need for development. Figure 4-1 below shows the respective locations and status (green under construction, orange not in use at present, red refused planning consent). Note the map excludes the proposed SRFI east of Maidstone (Kent International Gateway) which was refused planning consent in 2010.

Figure 4-1 Map of case study sites in and around the TfSE area



4.3.1 London International Freight Exchange/Slough International Freight Exchange SRFI

In 2001, a proposal for the London International Freight Exchange (LIFE) was submitted by developer Argent. This project aimed to establish a SRFI near the M4/M25 motorway intersection and in proximity to Heathrow Airport. The scheme, within an area of quarrying activity, proposed an intermodal terminal integrated with 2 million square feet of rail-served warehousing, with direct rail access to the Great Western Main Line. The planning authorities refused consent, reasons cited including:

- a lack of a clear and compelling need to relieve congestion; and
- insufficient evidence that the proposed facility would address existing freight capacity challenges.

A decade later, a proposal for 'Slough International Freight Exchange' (SIFE) was resubmitted for the same site by a different developer (Goodman) (Figure 4-2 below).

Although the proposal retained most of the original plan, it too was refused planning consent on appeal in 2016. The Secretary of State's decision highlighted the significant environmental impact on protected areas, particularly the Green Belt and the need to protect a "strategic gap" between settlements, which could not be justified by the benefits offered by the scheme. Such challenges led to the scheme being abandoned, the site now falling within the area of interest for expansion of Heathrow Airport itself.

Figure 4-2 Slough International Freight Interchange SRFI

Source: FCPR Environment and Design Ltd (for Goodman)

4.3.2 Howbury Park SRFI

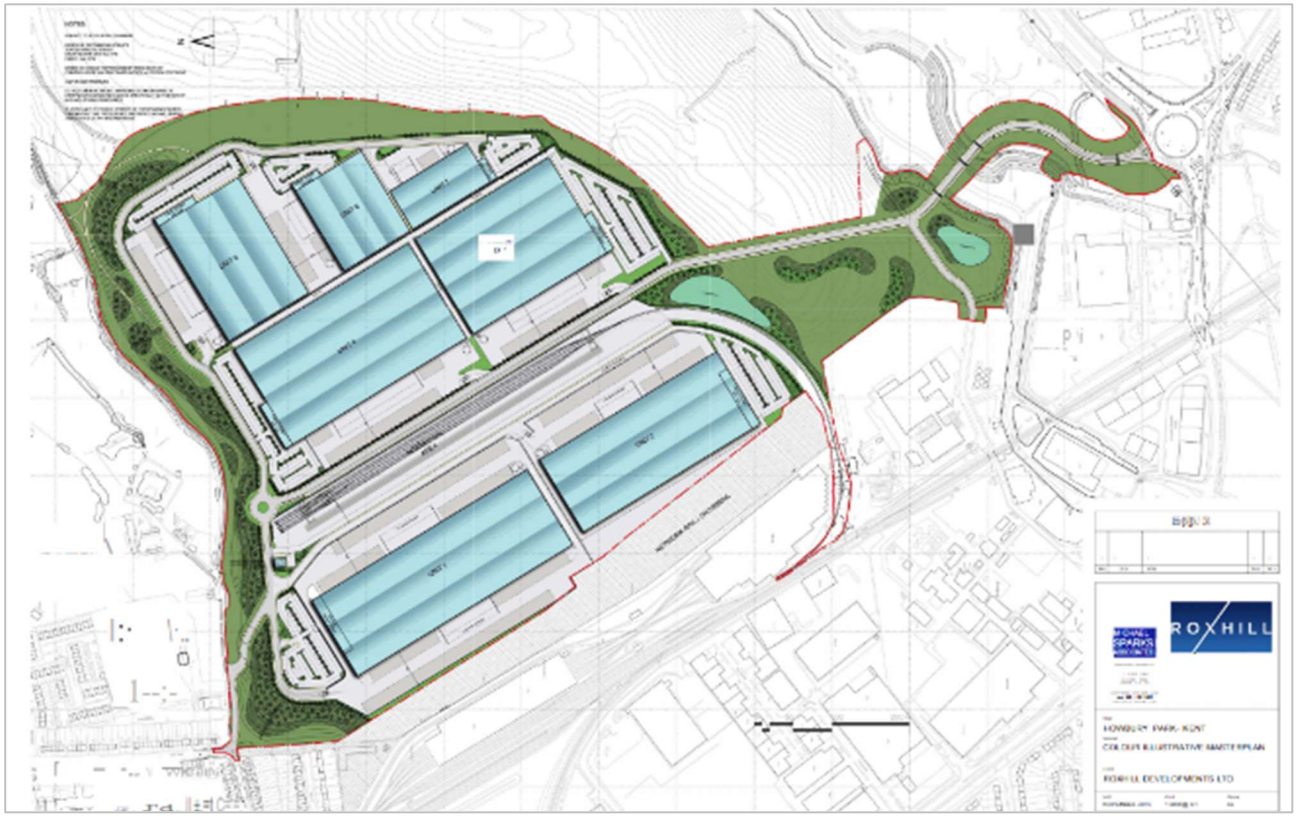
The proposal submitted by Prologis sought to develop a Strategic Rail Freight Interchange on agricultural land in Bexley. Like LIFE/SIFE, the scheme proposed an intermodal terminal integrated with two million square feet of rail-served warehousing, with direct rail access to the North Kent Main Line and the M25/A206 junction with the Dartford Crossing. The scheme was refused planning consent by Bexley Council but subsequently granted on appeal in 2007 with support from the Strategic Rail Authority (SRA), Network Rail and the Mayor of London. However, the financial recession that followed in 2008 prompted Prologis to halt the project. Nearly a decade later, a new proposal was submitted by Roxhill in 2015 (Figure 4-3 below). With support from Network Rail, Bexley Council granted consent, but this time the decision was overturned by the Mayor of London, who argued that:

- The "very special circumstances" justification for the development was inadequate, and the environmental harm, particularly to the Green Belt, outweighed any potential benefits.

- The development of the London Gateway port reduced the need for additional interchange capacity in the area.

The subsequent appeal was ultimately refused by the Secretary of State and no further proposals have yet been made.

Figure 4-3 Howbury Park SRFI



Source: Roxhill Developments (now part of SEGRO), second application proposals

4.3.3 Radlett SRFI

The Radlett project dates back to 2002, following interest from Railtrack in establishing a major rail freight interchange on the site, a former aerodrome, V-bomber factory and quarry which was latterly crossed by the M25 motorway. In 2006 Helioslough (now SEGRO) submitted a proposal for an SRFI with an intermodal terminal integrated with 3.3 million square feet of rail-served warehousing, with direct rail access to the Midland Main Line and the A414, linking with M25 Junctions 21a and 22. Of the 1,000 acres included in the scheme, 20% would be used for the SRFI with the remaining 80% used for landscaping and a country park (Figure 4-4 below).

Despite its ambitious scope and support from the SRA and Network Rail, the proposal was refused planning consent, with a subsequent appeal rejected in 2008. The Secretary of State ruled that the development was inappropriate for the Green Belt, that the environmental harm could not be outweighed by the benefits, and that the appellant had to failed to demonstrate that no other site could address the need for development. The scheme was resubmitted in 2009 and again refused consent, the second appeal

also dismissed by the Secretary of State (over-riding the Planning Inspectorate recommendation that consent be granted) on the basis that:

- the proposal did not clearly demonstrate that no alternative sites could meet the need for further rail freight interchanges in the area; and
- the environmental impact, particularly on the Green Belt, was substantial and could not be justified by the benefits offered.

The developer then sought a High Court review, which resulted in the appeal decision being quashed in 2011. A “minded to grant” decision followed in 2012, and consent was finally granted in 2014. However, in 2015 the District Council challenged this decision, proposing that the site be allocated instead for residential development as part of the Local Plan. The Planning Inspectorate Inquiry into the Local Plan expressed concerns about the counterproposal, which led to the District Council abandoning the proposals.

The scheme then faced a further challenge when, following the decision by the County Council to sell land needed for the SRFI, an application was made by a group of individuals to the High Court to challenge this decision, dismissed in June 2024. After almost 20 years of planning hurdles, the project has commenced initial infrastructure works, including the new underpass through the Midland Main Line for the new rail access. It is expected to become operational in 2028 – the only survivor of the original SRA proposals for a ring of SRFI around the M25.

Figure 4-4 Radlett SRFI

Source: SEGRO

4.3.4 Fratton IRFI, Portsmouth

At Portsmouth International Port, efforts began in the late 1990s to identify a suitable site for a rail freight interchange to support the port's container operations. A site within the former Fratton Goods Yard was chosen, utilising an existing disused main line connection, the rest of the site having been lost to retail development.

With support from European funding via the Regional Development Agency South East Economic Development Agency (SEEDA) in 2007, a 300-metre siding and apron were constructed. Critically, use of Permitted Development rights[58] enabled the facility to be constructed by the rail industry on railway operational land, without requiring a lengthy or uncertain planning application process.

A pilot intermodal service commenced in 2009, which combined separate train portions from the ports of Portsmouth and Southampton at Eastleigh, for onward long-distance movement to the North of England. However, with a relatively small throughput of containers and customers compared to Southampton (20,000 per annum for Portsmouth against one million per annum for Southampton), with much of the target traffic already moved by Portsmouth International Port's in-house road haulage operation, and cancellation of the "twin-port" rail service, the pilot service was not extended into full operation. Nevertheless, the Fratton site has been safeguarded and integrated into a broader redevelopment of local depot facilities, providing a multi-role facility supporting freight and passenger operations. This demonstrates that:

- existing rail connections can offer a cost-effective solution, especially when Permitted Development protocols on operational railway land are utilised; and
- the success of such projects is highly dependent on a sustained critical mass of customer interest, as well as "hub and spoke" rail freight services able to combine less-than-trainload volumes from multiple locations.

4.4 Case studies from outside of the South East

Despite the challenges of delivering rail freight interchanges in and around the South East, there are examples of positive engagement and outcomes elsewhere in England, between scheme promoters, local authorities and communities, including the examples outlined below.

4.4.1 DIRFT SRFI, West Northamptonshire

The District Council at the time (now incorporated into a larger combined authority) and the original promoters (and subsequently Prologis) worked together to assess the economic contribution of the SRFI to the local area, as well as capturing and addressing operational issues as the new development settled in. Reflecting a long partnership with

[58] Under The Town and Country Planning (General Permitted Development) (England) Order 2015, specified categories of development are granted an automatic planning permission by law, and therefore do not require any application for planning permission. Part 8, Class A (railway or light railway undertakings) classes development by railway undertakers (e.g. Network Rail) on their operational land, required in connection with the movement of traffic by rail, as Permitted Development (PD)

the public sector and local community, one of the more recent developments on site has been "The Hub," jointly funded by Prologis, BT and Aviva, for use by occupiers at DIRFT. The Hub is home to DIRFT's Police Community Support Officers and site management team, as well as the Prologis Warehouse and Logistics Training Programme - an initiative aimed at training those leaving education and re-skilling the unemployed to pursue careers in logistics. The site is now approaching 14 million sq. ft of floorspace built across three main phases, handling up to 14 trains per day – the largest generation of rail freight traffic of all the SRFI in England to date. Alongside, a new sustainable urban extension for Rugby is delivering 6,200 new homes, improving the supply of local housing to complement the employment site.

4.4.2 Doncaster Railport IRFI and iPort Doncaster SRFI

The Borough Council was one of the pioneering local authorities who chose to actively respond to the opportunities presented by construction of the Channel Tunnel. In 1989 after the passing of the Channel Tunnel Act 1987 the Council promoted a 5 Ha site as an IRFI, subsequently constructed by a public/private joint venture alongside a consent for around 1 million sq. ft of warehousing. The Council leases the site to Freightliner which handles its own trains as well as other competing train operators. The Council subsequently engaged with the promoter Helioslough on the application for a six million sq. ft SRFI scheme which, at 400 hectares (171 used for the development and the balance for access and landscaping), was the largest green belt SRFI development of its kind at the time.

The site sat alongside Rossington Colliery, the main local employer which closed in 2007, creating significant scope to regenerate the area. When delays connecting the site to the main line threatened knock-on impacts to the wider development and regeneration, the local authority worked with the promoter to revisit the planning conditions to allow warehousing development to be brought forward ahead of the intermodal terminal. This not only helped deliver employment to the local community, it also helped establish freight users and operations on site in advance of the intermodal terminal and rail services becoming operational. iPort Doncaster has since become the fastest-growing SRFI in terms of rail traffic, reaching seven trains per day within only two years of opening. Alongside the SRFI, the Council has worked with Helioslough (now Verdion) and other stakeholders to deliver a new access road from the M18, and in 2012 granted permission for a £100 million housing development including 1,200 new homes a primary school and hotel on the former colliery site, with construction starting in 2015. Both the Railport and iPort continue to operate their respective services, despite being only 3km apart.

4.4.3 Mersey Multimodal Gateway (3MG) SRFI, Halton

The Borough Council has jointly promoted the SRFI development alongside a consortium of landowners, developers and operators/occupiers. The lead officer at the time has responded to this study, noting lessons learnt as part of promoting the scheme with the private sector:

- Setting realistic timescales and cost estimates, ensuring significant contingencies are built in from the start, particularly where new rail and road connections are required.

- Avoid the risk of over-accelerating the delivery process, resisting pressure from other stakeholders, particularly in the private sector.
- Manage expectations within and between stakeholders, including being aware of community opposition and giving it serious consideration.

4.4.4 Intermodal Logistics Park North SRFI, St Helens

Staying in the North West, St Helens Council has provided the catalyst for restarting proposals for a SRFI in and around the former Parkside Colliery. This was closed in 1993 and was the focus for a series of abortive attempts by Railtrack, Prologis and others to deliver a new SRFI equidistant between Manchester and Liverpool because it was located at the intersection of the West Coast Main Line and the M6 motorway. Key interventions by the Council over the last decade have included:

Commissioning the Parkside Logistics and Rail Freight Interchange Study in 2016 to investigate the feasibility of delivery options for a road and rail-linked logistics development on land at the former Parkside Colliery site, to help inform and advise the preparation of the new draft Local Plan.

Working to secure the original Parkside Colliery site for warehousing development with private-sector developer Langtree, the planning consent including a safeguarded corridor for future rail access into the site. Final consent for the first phase was granted in 2024.

Identifying and promoting a green belt site to the east of the Parkside Colliery site for a SRFI, as the main employment component of the draft Local Plan. The Council undertook further scoping studies, with input from Network Rail, train operator Freightliner and other stakeholders to demonstrate the need for, and feasibility of, a SRFI development on the site. The Local Plan Inquiry, having heard the Council's case alongside other stakeholders (including objectors), accepted the proposed removal of the site from Green Belt to allow an application to be progressed by Freightliner and development partner Tritax.

Currently, the Council continues to be involved in the progression of the proposals by Tritax through the Development Consent Order process, which will ultimately be determined by the Secretary of State.

4.4.5 Other examples

Other examples of positive engagement and feedback to the study have been provided by local authorities in the East of England (Breckland, South Holland), Yorkshire & Humberside (WYCA, North Yorkshire), the North East (Stockton-on-Tees, Tees Valley Combined Authority) and Scotland (Fife), where local authorities are seeking to attract rail-served development, for similar reasons to those already listed.

4.5 Main findings

Across the case studies common challenges emerge:

- Site scarcity and competition: optimal locations for rail freight interchanges are often highly sought after for alternative, higher-value developments, such as housing. This

results in intense competition for suitable land, particularly in environmentally sensitive areas.
- Environmental constraints: significant environmental concerns, notably the potential harm to the Green Belt, have been a consistent barrier. In each case, planning authorities have been unwilling to approve developments that could lead to irreversible environmental damage, even when the economic benefits are substantial. The recent introduction of the "Grey Belt" designation may assist in this regard.
- Demonstrating demand/need: proposals have struggled to demonstrate evidence of the need for additional rail freight interchange capacity, a situation since addressed in part by the NNNPS confirmation of a compelling national need.
- Operational and technical limitations: constraints on rail and highway network capability, combined with the need for new rail and highway connections, create further challenges, as exemplified by the recent refusal of a proposed SRFI at Hinckley in Leicestershire, primarily on the grounds of unresolved highway issues.

There is also a significant contrast between the approach and outcomes of interchange development in and around the South East, against other parts of the country. In the case of the latter, there appears to have been a greater willingness to engage proactively in the positive benefits of interchange development (e.g. regional/national mode shift and decarbonisation of freight, inward investment, employment, economic (re)generation) as demonstrated in Daventry, Doncaster, Halton and St Helens.

These case studies provide lessons and recommendations to address the challenges for potential new interchanges in and around the TfSE area. These include:

- Revising planning frameworks: update planning criteria to treat rail freight interchanges as essential strategic infrastructure, recognising their role in supporting economic growth, not least through improving the critical mass needed for mode shift of freight from road to rail at scale, and associated air quality and environmental benefits.
- Enhancing regional co-ordination: foster stronger cross-boundary collaboration between local planning authorities, regional transport bodies, Network Rail/GBR and National Highways, with input from users and operators of freight services, to create a more unified and effective approach to site allocation and delivery – taking account of rail industry restructuring and the opportunity presented by local government devolution[59].
- Strengthen the evidence base: support and inform the NNNPS view of the compelling need for interchanges, with more robust methods for assessing freight demand at regional and sub-regional levels, including detailed analysis of current freight flows and warehouse provision, along with growth forecasts.

[59] The English Devolution White Paper contains proposals for a statutory requirement for Mayoral Strategic Authorities to produce a Local Growth Plan. Local Growth Plans would cover a larger area than Local Plans, which could enable better strategic planning

These improvements could help overcome the challenges observed in the case studies, ensuring that rail freight interchanges are developed in a timely and sustainable manner to support TfSE and national economic and environmental goals.

5 Interchange opportunities in the TfSE area

This chapter identifies the potential opportunity areas for new or reinstated Strategic Rail Freight Interchanges (SRFI) in and around the TfSE area, including the key criteria used to identify and shortlist sites. It should be noted that the sites identified as potential opportunity areas are not promoted by TfSE as their development (or otherwise) would be a matter between a developer and a local planning authority; the purpose of identifying them here is to provide information as to where further work could be focused if there was interest in taking any of the sites forward.

5.1 Key criteria for IRFI and SRFI development

Building on the case studies of the interchange sites exemplified above, Table 5-1 below sets out the key criteria in the National Networks National Policy Statement (NNNPS) for a SRFI, with an additional column for IRFI to indicate where the two types of RFI differ in scope and in scale.

Table 5-1 Key criteria for rail freight interchanges

Criteria	SRFI	IRFI
At least 60 Hectares situated in England	✓	>1.5 Ha
Appropriately located relative to the markets they will serve, which will focus largely on major urban centres, or groups of centres	✓	✓
Being part of the railway network in England	✓	✓
Located alongside the major rail routes, in particular the Strategic Rail Freight Network	✓	✓
Located on a rail route with a gauge capability of W8 or more, or capable of enhancement to a suitable gauge	✓	✓
Capable of handling 775 metre trains with appropriately configured on-site infrastructure and layout, minimising the need for on-site rail shunting and provide for a configuration which, ideally, will allow main line access for trains from either direction	✓	>500m trains or longer with shunting
Being close to major trunk roads	✓	Major roads
Capable of accommodating rail-served warehousing, container handling facilities, manufacturing and processing activities	✓	Customer dependent
Capable of handling consignments of goods from more than one consignor and to more than one consignee	✓	Customer dependent
Capable of handling four trains per day and, where possible, be capable of increasing the number of trains handled	✓	Customer dependent
Capable of providing a number of rail connected or rail accessible buildings for initial take up, plus rail infrastructure to allow more extensive rail connection within the site in the longer term	✓	Customer dependent

Criteria	SRFI	IRFI
The initial stages of the development must provide an operational rail network connection and areas for intermodal handling and container storage	✓	✓
It is not essential for all buildings on the site to be rail connected from the outset, but a significant number should be	✓	Customer dependent
Availability of workforce	✓	✓

In addition to the high-level criteria set out in the NNNPS for SRFI, other practical features which can assist with delivery of new sites include:

- Availability of an existing main line connection - as a new signalled main line connection can cost upwards of £5m to install.
- Access to the main line tracks without the need to provide complicated, expensive or visually intrusive additional infrastructure e.g. flyovers or underpasses - to avoid costs and potential environmental impact of structures.
- Access to a main line with sufficient capacity in the timetable to accommodate additional trains - to ensure sufficient throughput in trains and intermodal units for commercially sustainable operation.
- Sufficient level topography for train berthing, handling equipment and articulated HGVs manoeuvring (16m minimum turning circle), and intermodal unit storage (warehousing if relevant can be at a different plateau height to the rail facilities).
- Well-drained site outside of medium and high-risk flood zone areas.
- Sufficiently distanced from residential development, with highway access to the trunk road network avoiding residential areas.
- Sufficiently distanced from sensitive areas (e.g. Sites of Special Scientific Interest, Areas of Outstanding Natural Beauty).
- Utility connections (power and water), with sufficient capability for future electrically powered handling equipment and vehicles.

5.2 GBRTT methodology for identifying sites

The GRBTT study in 2022 identified a future pipeline of sites in England.[60] These would be able to provide additional capacity in the event of existing I/SRFI facilities being exhausted, and/or where no material capacity exists at present, to serve particular regions or sub-regions, for example, the South East of England.

The process of identifying potential sites used the same criteria discussed in the previous section, working through a sequence of:

a) existing operational sites;

b) non-operational sites with existing main line connections;

c) sites with previous main line connections; and

[60] Included in the 'Intermodal rail freight interchanges: levelling up regional provision, Market Assessment Report', Intermodality for GBRTT 2022

d) other sites with potential merit in terms of location and accessibility by rail.

The methodology for shortlisting and sifting sites involved using online mapping (including historic records) and satellite imagery. This enabled identification of existing and former rail-linked sites, where despite the connections and sidings being removed many years ago in most cases, the former rail formation has been retained, providing an indication of rail feasibility. In addition, other sites were identified with no previous main line connection, but which could provide a suitable location for interchange with the road network and/or existing industrial land.

Those sites emerging from the initial identification and sifting process (using the high-level criteria in Table 5-1) were then assessed against a more detailed set of criteria, summarised in Table 5-2 below (which draw on the bulleted list above).

Table 5-2 GBRTT assessment criteria for shortlisted potential sites

Site Characteristics	Description
Site topography	Overall levels/gradients across the site (rail needing relatively flat sites)
Rail topography	Extent to which rail access is constrained by cuttings or embankments
Rail loading gauge (height and width of rail vehicle and payload)	(W6-W12) – the larger the gauge, the greater the range of rail service options available. Ideally routes at or capable of W8 gauge to enable carriage of the tallest deep-sea shipping containers
Rail Route Availability (axle load of rail vehicle)	(RA1-RA8) – the larger the Route Availability classification, the greater the wagon payload (i.e. the amount of freight carried)
Train length	Intermodal trains will typically need to be at least 450m in length to be viable, ideally closer to 640-750m, the entire train needing to enter or exit the main line in a single manoeuvre to avoid impeding progress of other trains on the main line
Network capacity	The ability of the connecting route to accommodate additional freight trains, given these may require windows of 10-15 minutes between other trains to enter or exit the site
Rail main line access	Existing, previous or no previous connection
Highway topography	Extent to which road access can be achieved between railway and highway
Highway access	Capability of local highway network to accommodate HGV traffic at scale (an intermodal train may typically generate 40 HGV trips each way through an IRFI/SRFI, compared to other RFI for heavier bulk trains such as aggregates generating up to 80 HGV trips each way)
Flood risk	Extent to which sites might be affected by flooding
Maximum site length	RFI will need to accommodate trains 450 – 775m clear of the main line
Maximum site width	Sufficient to accommodate the sidings and handling area (typically >30m)
Maximum site extent	A view on how far a site could be assembled around other uses/boundaries

Site Characteristics	Description
Nearest settlement	How close would potential residents be (and be potentially concerned) and any screening offered by topography/vegetation
Electricity power lines	The presence of high-voltage lines could fetter crane operations
Local Plan status	Extent to which RFI development would align with local policies
Current usage	How far might existing uses/users complement or conflict with RFI development and associated distribution activity, in particular Regional Distribution Centres which tend to be larger buildings with greater flows of freight traffic, with direct transport links to National Distribution Centres in the Midlands/North of England

5.3 Interchange opportunities for the TfSE area

Drawing on the 2022 GBRTT commissioned study methodology and findings, and re-visiting the sites identified at the time, Figure 5-1 below shows how factors such as highway accessibility, rail loading gauge and existing clusters of regional distribution assist in focussing on those areas most likely to support development of either IRFI or larger integrated SRFI in the TfSE area.

The key locational criteria for ensuring success of IRFI/SRFI focus on intersections between the strategic road and rail networks, particularly where the latter is already configured for accommodating intermodal traffic (i.e. having or capable of having at least W8 loading gauge). Beyond this, proximity to established major clusters of population and/or demand (particularly for Regional Distribution Centres) will be important, as the latter will tend to involve a scale of baseload freight traffic capable of sustaining trainload intermodal freight services.

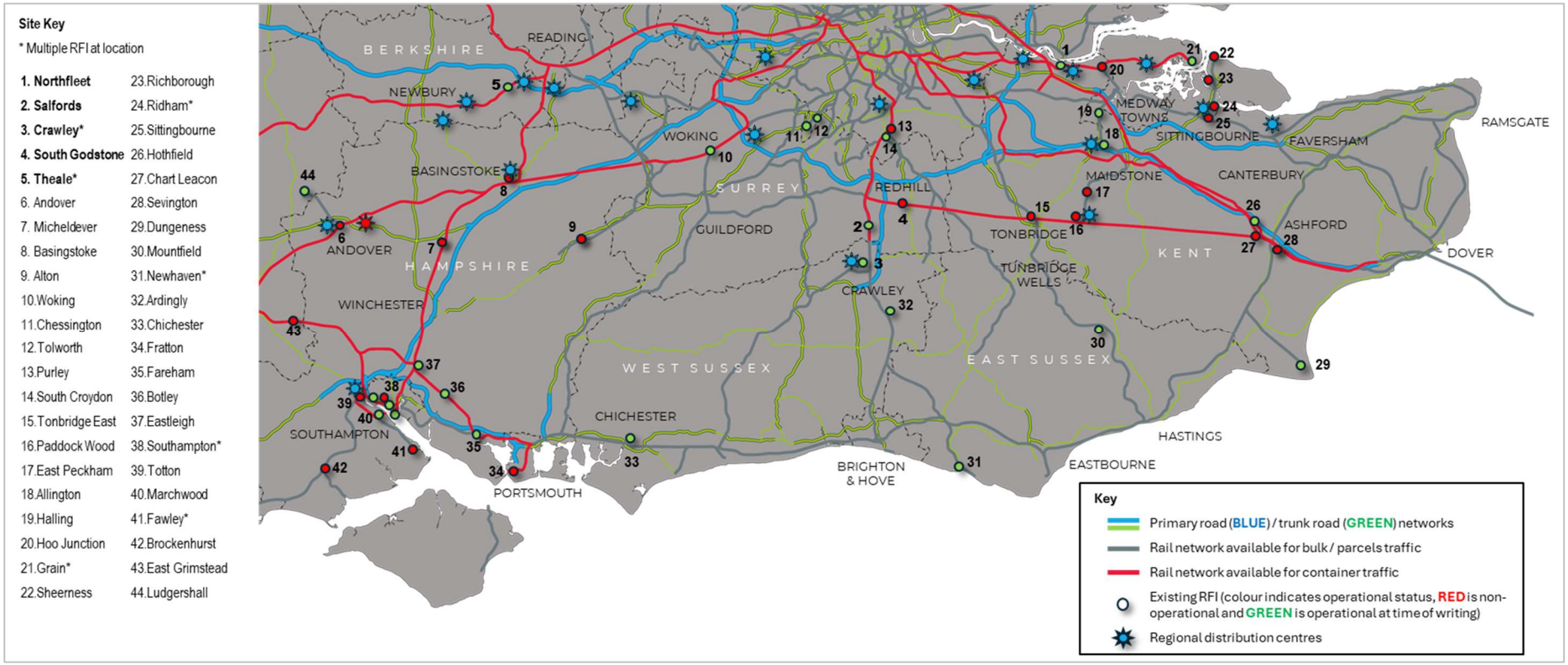
It is apparent from Figure 5-1 that, to accommodate IRFI or SRFI, the main areas of opportunity will generally fall towards the north and west of the M3, M25 and M20 motorways, where the connecting rail routes are cleared for carrying containers. Outside of these areas, other RFI could also be delivered for other traffic, such as aggregates or parcels traffic, which use other types of rolling stock less constrained by height/width.

The 2022 GBRTT second stage assessment classified sites as follows:

- **Green**: existing operational main line connection in place, with existing operations or strong prospects for using the site for rail-related purposes.
- **Orange**: some challenges in creating a site, due to a lack of a rail connection and associated cost (£5m) and/or highway access issues, land availability, flood risk or local plan allocations/designations or potential commercial issues. Potentially deliverable subject to funding and/or local authority policy support.
- **Red**: significant obstacles to creating a site, primarily due to physical factors e.g. railway line in tunnel/cutting/embankment, lack of suitable local highway access, space constraints, redevelopment of site for other purposes, planning policy conflict. Unlikely to be deliverable even with funding available.

The sites identified and shortlisted in the 2022 exercise for the South East region and surrounding areas have been reviewed again and are set out below, together with additional sites which have emerged in the interim.

Figure 5-1 Potential opportunity areas for interchange development



Source: Intermodality analysis[61]

[61] Note: any sites shown are purely for illustrative purposes only and do not confirm or imply feasibility, or alignment with local planning policy. Any site-specific proposal would be subject to full environmental and business case appraisal and associated planning consent(s).

5.3.1 Potential opportunity areas in the TfSE area

Based on the information above, areas with potential opportunities for rail freight interchange facilities are set out below, the colour-coding of site titles relating to the previous green, amber or red classification described above.

It should be noted that the areas identified are purely for illustrative purposes only and do not confirm or imply feasibility, or alignment with any local planning policy. Any site-specific proposal would be subject to full environmental and business case appraisal and associated planning consent(s).

1. **Northfleet** (Gravesham): existing third-party rail-linked site with wharf access on Strategic Freight Network (SFN)[62] core route, close to A2 with scope for additional connectivity to HS1 at Ebbsfleet from adjacent disused stabling sidings, subject to loading gauge confirmation through into site.

2. **Salfords** (Reigate and Banstead): partly undeveloped Network Rail rail-linked site close to SFN core route with potential for multi-role facility, intermodal operations dependent on confirmation of W8/W9 loading gauge availability.

3. **Crawley Goods Yard** (Crawley): scope to expand existing Network Rail rail-linked site close to SFN core route, current multi-user aggregates RFI (safeguarded in Minerals Plan) with adjacent third-party land, close to M23. Intermodal operations dependent on confirmation of W8/W9 loading gauge availability.

4. **South Godstone** (Tandridge): industrial estate with retained main line access alongside SFN core route (W9 loading gauge and third-rail electrification), safeguarded in Local Plan, rural road access to A22 and M25.

5. **Theale** (West Berkshire) land adjacent to existing third-party multi-role rail-linked site alongside SFN core route (W10 loading gauge and electrification to/from Reading) and close to M4 Junction 12, with scope to create an intermodal facility. In the 2022 review this site was initially classified as a "red" site, reflecting uncertainties regarding local authority support, land availability and flood risk mitigation. In the intervening period, discussions brokered by the Chartered Institute of Logistics and Transport, West Berkshire Council and the landowner has led to the latter proposing the site for allocation as part of updating of the local plan, with support from Network Rail and responding to a requirement from a major end user for an IRFI to link with a nearby Regional Distribution Centre.

[62] The 2007 Rail White Paper defined the SFN as: "a core network of trunk freight routes, capable of accommodating more and longer freight trains, with a selective ability to handle wagons with higher axle loads and greater loading gauge, integrated with and complementing the UK's existing mixed traffic network."

5.3.2 Potential opportunity areas in surrounding regions

As interchanges and associated supply chains do not recognise arbitrary boundaries defining local authority areas, it is expected that some of the interchange capacity capable of serving the TfSE area could also be located in the wider South East region, and possibly on the margins or adjoining regions/Sub-national Transport bodies. This might then affect the level of interchange capacity needed to be provided within the TfSE area. However, as noted in section 2.4 earlier the ability of multiple sites can co-exist in an area. Additional sites have therefore been noted where these could provide such a role:

Thorney Mill (Buckinghamshire): recently reactivated Network Rail rail-linked site close to SFN core route, current multi-user aggregates RFI (safeguarded in Minerals Plan) with adjacent third-party land, close to M4/M25. Intermodal operations dependent on confirmation of W8/W9 loading gauge availability.

Oxfordshire SRFI (Oxfordshire): proposals being developed for a Development Consent Order (DCO) application for a SRFI north west of Bicester with highway access to the M40 Junction 10 and rail access to the Chiltern Main Line (SFN diversionary route). Loading gauge is currently W7, the route was previously used by W9 gauge intermodal services and is proposed for clearing to W8 gauge.

Barking (Barking & Dagenham): proposals being developed by Network Rail and third-party landowner to redevelop the former IRFI and surrounding rail-locked land as a major facility for domestic and Channel Tunnel intermodal traffic. Site has access to Network Rail (W12 loading gauge) and High Speed 1 (continental GB1 loading gauge) via Ripple Lane West Yard (partially electrified), with road access to the A13 to the north and east (the latter grade-separated).

London Gateway (Thurrock): the port has recently announced plans to expand operations and develop a second rail terminal on site (W12 loading gauge).

Thames Enterprise Park (Thurrock): situated immediately east of London Gateway, the former Shellhaven refinery complex is now being redeveloped across 412 acres, providing over 3.7 million sq. ft of development space for manufacturing, energy and logistics operations. The site is adjacent to the 13-acre Thames Haven Yard owned by Network Rail, which retains an operational main line connection and has recently received its first train after many years of disuse.

5.4 Main findings

The key factors for determination and delivery of IRFI/SRFI sites include:

- Proximity to strategic road and rail network intersections, ideally with existing/former connection points.
- Suitable scale/topography of available land - at least one hectare (Ha) for IRFI or 60 Ha for SRFI.

- Rail network capability – ideally, cleared for carrying shipping containers (which needs a Loading Gauge of W8 or higher), for wagons up to 90 tonne gross weight (which needs Route Availability 8 or higher), for trains of 450-750m in length and of 1200 - 1800 tonne weight. One to four trains per day main line capacity.
- Highway network capability – ideally, able to cater for at least 40x articulated 44-tonne HGVs arriving or departing site for each train through the site.
- Distance from sensitive land designations and/or receptors.

The areas with most potential in the TfSE area for IRFI/SRFI are typically north/west of the major motorway corridors, including:

- Theale (West Berkshire)
- Northfleet (Gravesham)
- Salfords (Reigate & Banstead)
- South Godstone (Tandridge)

There are other areas which may also offer potential, either for:

- non-intermodal traffic e.g. existing rail-linked sites at Andover, Crawley, Fratton, Micheldever and Newhaven [which would be in the wrong place or too small for intermodal traffic, but would be fine for aggregates, waste, parcels]; or
- for larger SRFI developments of 60 Ha or more at strategic road/rail network intersections suitable for larger regional distribution centres, involving new main line and trunk road connections and associated warehousing development. As Figure 5-1 indicates, these would be anticipated towards the northern, eastern and western extents of the TfSE area, where rail routes cleared for containers intersect with the strategic highway network, and where the market has shown interest in locating larger regional distribution centres. Other areas could then fall into scope with suitable investment in the rail network to improve its capability in terms of containers and/or capacity.

6 Stakeholder engagement

A key element of this study involved engaging with TfSE's key stakeholders to understand their perspectives on the opportunities and challenges presented by rail freight and intermodal facilities in terms of their local areas. The engagement that was undertaken helped to identify the challenges and opportunities for local authorities in making the case and planning for new/enhanced interchange facilities.

This chapter outlines the findings from the stakeholder engagement activities.

6.1 The local authorities and industry representatives who took part in this study

- Ashford Borough Council
- Bracknell Forest Council
- Brighton & Hove City Council
- Dartford Borough Council
- East Sussex County Council
- Elmbridge Borough Council
- Epsom & Ewell Borough Council
- Hampshire County Council
- Kent County Council
- Lewes & Eastbourne Borough Council
- Medway Council
- New Forest National Park
- Portsmouth Borough Council
- Slough Borough Council
- Southampton City Council
- Surrey County Council
- Swale Borough Council
- Wealden District Council
- West Sussex County Council
- Woking Borough Council
- Freightliner
- Maritime Transport
- Network Rail
- The Rail Freight Group.

6.2 Approach to stakeholder engagement

The engagement with TfSE partner authorities included:

- Presentations to the Transport Strategy Working Group (TSWG) and the Wider South East Freight Forum (WSEFF).
- Undertaking an initial online surveying with partner authority practitioners.
- Hosting a workshop session on 25 February 2025 with attendees from TfSE partner authorities and industry representatives.

- Follow-up meetings with individual partner authorities including Brighton & Hove City Council, East Sussex County Council (in relation to their emerging Rail and Freight Strategies) and Portsmouth City Council.

These meetings were undertaken to:

- Enable local authorities to gain more information about the importance of rail freight from industry representatives.
- Gauge awareness of, and support for, the freight sector as a component of employment and economic growth by local authorities.
- Gauge local authority support for encouraging mode shift support of freight to rail through new or enhanced interchange facilities.
- Learn more about specific local authorities' rail freight plans, where appropriate.

6.3 Key findings from the stakeholder engagement

6.3.1 The role of freight and logistics in local employment is broadly recognised

The importance of the freight and logistics sector in supporting local employment was acknowledged by survey respondents, particularly those with an economic development role. Freight and logistics was highlighted as a key driver for job creation, particularly in existing logistics hubs and along key transport corridors. In rural and peripheral areas, logistics can be a major source of employment ('[logistics is] one of the main employment drivers in our region') due to fewer land constraints and therefore the availability of suitable land for logistics facilities. However, such areas can also face challenges in attracting investment due to their weaker transport connectivity.

In contrast, urban areas struggle with space constraints, making it difficult to balance logistics needs with other land uses. Transport and spatial planners responding to the survey recognised the employment potential of logistics but expressed concern over accommodating logistics developments given significant competition for land for other purposes, most notably housing, for example: 'finding sufficient space for logistics without impacting other priorities is a challenge.'

Economic development practitioners reported that logistics connectivity is a key determinant in business location decisions, with one respondent explicitly stating, "Investors always ask about logistics accessibility before committing to a site." Transport and spatial planners acknowledged its importance but highlighted challenges in co-ordinating infrastructure upgrades to match investor demand, as reflected in comments such as 'timing of infrastructure investment and business demand rarely align.' Access to non-road modes of freight transport were seen to be slightly less important factors in investors' decisions on location than highway connectivity, though responses varied by region. In areas with established rail and water freight infrastructure, such as those near the area's ports, interest in non-road modes was stronger, while landlocked regions reported minimal discussion on alternatives. One respondent stated, 'Rail freight is only considered where infrastructure already exists; otherwise, it's not seen as viable.'

6.3.2 Limited understanding of the freight sector among local authorities

A key observation from responses to the survey is that many local authorities lack the time and resources to engage proactively with the freight and logistics sector. While there is a broad understanding of the sector, detailed knowledge and expertise is often limited – particularly among economic development practitioners, who tend to focus more on logistics' role in employment and investment. In contrast, transport and spatial planners generally reported a slightly stronger understanding of the freight and logistics sector but engaged with the topic in terms of understanding and mitigating its impacts, rather than how to enable and grow the sector within the local area.

Engagement with the freight sector is typically reactive rather than proactive, especially in smaller or less growth-focused authorities. Urban and high-growth areas reported more consistent dialogue with the sector, often driven by ongoing infrastructure projects. In contrast, smaller authorities noted that engagement usually occurs only when specific schemes require it, making sustained relationships with freight stakeholders difficult to maintain. This reactive approach limits the ability of many authorities to develop a strategic understanding of freight needs and opportunities. There was also some discussion about the potential opportunities for improved engagement and planning for rail freight and IRFIs through the development of spatial development plans as part of the new Mayoral Combined County Authorities responsibilities.

6.3.3 Freight emissions present a major challenge for meeting air quality targets so local authorities can be wary of supporting new sites/facilities

Respondents to the survey recognised the transport emissions associated with freight and logistics sites and facilities as a major challenge to achieving their air quality targets, particularly in congested urban areas: 'freight emissions are a primary contributor to non-compliance with air quality standards.'.

Respondents from urban authorities said that they must prioritise emissions reduction and often struggle to balance environmental regulations with the need to attract and support logistics investment. Transport and spatial planners need to focus on long-term mitigation strategies such as Clean Air Zones, alternative fuels, and modal shift projects, while economic development practitioners expressed concern that overly strict measures could deter business interest.

Again, there was some geographical variation in the responses: respondents from urban areas emphasised emissions reduction as a priority, whereas rural authorities ranked air quality lower on their list of priorities.

6.3.4 Land and highway capacity can be key barriers to the growth of the logistics sector

Land and highway capacity were recognised by respondents as major constraints on the growth of the logistics sector, particularly in high-demand urban areas. Urban authorities identified limited land availability and road capacity as significant barriers to new logistics development. Transport and spatial planners cited the challenge of allocating sufficient space for logistics amid competition from other land uses, while

economic development practitioners stated that constrained land supply was driving up costs of development, leading to investment concerns. These issues are particularly acute in the South East, where demand for land that can be developed is in very short supply.

Highway network limitations, including congestion and a lack of freight-specific infrastructure such as warehousing, further deter investment. Respondents noted that investors often reconsider sites due to inadequate road capacity, especially in areas without bypasses or dedicated freight routes. While respondents from less land-constrained authorities reported greater land flexibility, they faced connectivity challenges that limited their attractiveness to logistics investors. These combined constraints on land and infrastructure significantly impact both employment and investment potential in the logistics sector.

6.3.5 Geographical location and availability of rail freight infrastructure limits opportunity for modal shift

High-quality transport infrastructure is essential for attracting logistics investment, but access to non-road freight modes – particularly rail – remains limited in many areas, constraining modal shift opportunities. Respondents to the survey from areas near ports or established rail hubs showed stronger interest in diversifying transport modes. Transport and spatial planners were also the most vocal supporters of shifting long-distance freight from road to rail, citing benefits for congestion and air quality. However, economic development practitioners were more divided, raising concerns about infrastructure readiness and commercial viability. Support for mode shift to rail freight varied by the capacity and capability of the existing network in the area, with stronger backing in areas close to major freight terminals and weaker engagement where infrastructure is lacking.

Discussions highlighted the challenges for local authorities in resourcing to better engage with and understand the logistics sector, and for all stakeholders in trying to identify suitable sites for logistics-related development, including interchanges. Broad locations for possible development or expansion of interchanges were also discussed including areas around Gatwick, Havant, Medway, Portsmouth and Southampton.

6.4 Summary of stakeholder discussions

- Delivery challenges persist for interchanges due to an imbalance between perceived impacts and benefits in the local area relative to contributions made to national policies and targets. This is particularly the case for rail freight growth and transport decarbonisation.
- There is a lack of local authority resources (staff/time) to achieve more joined-up working internally and with external stakeholders to build knowledge and bridges with industry. This would achieve a better awareness and consensus about outcomes of local plan allocations and applications.
- Experience from other areas and projects suggests scope exists to improve outcomes through low-intensity interventions by/with local authorities. This would include encouraging more fieldwork in the freight sector from which to yield more informed proposals and decisions within local plans and planning applications.

- The establishment of Mayoral Combined County Authorities will require the production of Spatial Development Strategies. These may present opportunities for more strategic and regional approaches to both planning and engagement with the rail and freight sectors, as experienced in the Midlands and North East of England.
- For Intermodal Rail Freight Interchange (IRFI) projects, opportunities exist to work with Network Rail and interchange promoters to expedite delivery by making best use of the provisions of the Town & Country Planning Act 1990, the Planning Act 2008 and The Town and Country Planning (General Permitted Development) (England) Order 2015. The latter particularly useful for delivery of smaller and/or pre-existing rail-linked sites.
- For larger SRFI projects, the National Significant Infrastructure Project/DCO process could be used. While these are significantly more expensive for scheme promoters, they can provide greater clarity and benefits to both developers and local authorities alike where projects are assessed on a collaborative rather than confrontational basis (which places equal responsibility on private and public sectors to achieve this).

7 Key findings, conclusion and recommendations

This study, commissioned by TfSE, has sought to build on the Great British Railways Transition Team's (GBRTT's) work at the sub-national level. It has considered how TfSE, working in partnership with the local authorities in the TfSE area, could best identify and unlock opportunities for Intermodal Rail Freight Interchanges (IRFI), and to a lesser extent Strategic Rail Freight Interchanges (SRFI), in and around the TfSE area.

7.1 Key findings

7.1.1 The need for interchange infrastructure

Rail transport can provide a more efficient alternative to road haulage for the movement of materials given it can carry up to 3,200 tonnes per train and, for some mail and parcel services, which can travel at speeds of up to 100mph[63], far higher than the legal speed limit for HGVs. Rail freight can also remove the equivalent of up to 110 articulated heavy goods vehicles from the road network per train and per tonne-km, generating up to 71% less emissions.

The current and preceding governments support a greater role in freight for rail transport to help reduce the burden on the highway network and help with decarbonisation of the transport industry and in 2023 announced a target of 75% growth in rail freight by 2050. This is the equivalent of around 500 extra freight trains per day or around 8,000 articulated HGV loads removed from the road network.

To achieve this, the capacity and capability of the rail network and operations will need to improve access to the network, along with developing additional and/or expanded intermodal rail freight interchanges. Without either the prospects for growth will be limited. This is because intermodal services carrying containers between ports and inland distribution centres now account for the largest share of rail traffic. Investment in expanding interchange facilities, both at ports and at inland sites, has supported unprecedented growth of intermodal rail services in recent years through both standalone IRFI and larger integrated SRFI.

The study undertaken by GBRTT in 2022[64] concluded that the wider development of intermodal rail freight in the UK requires a far broader geographical distribution of IRFI to complement the SRFI network. This requirement is particularly applicable in areas, including the South East, where to date planning policy, land availability or distribution space demand/value would not support the developer-led SRFI model. Here the level of SRFI/IRFI provision and/or associated intermodal traffic falls below that of more established regions, and where initial market research confirms there is an interest.

The National Networks National Policy Statement (NNNPS) also reiterated the importance of SRFI and the compelling need to create an expanded network. It notes

[63] For example, InterCity Rail Freight services run by Great Western Railway and East Midlands Railway since 2017

[64] Included in the 'Intermodal rail freight interchanges: levelling up regional provision, Market Assessment Report', Intermodality, 2022. A copy of this report can be made available by TfSE on request.

that in London and the South East, away from the deep-sea ports, most IRFI and associated rail-connected warehousing is on a small scale and can be poorly located in relation to the main urban areas. It is also noted that there is a particular challenge in expanding rail freight interchanges serving London and the South East. This is evident in the multiple failed attempts to date to deliver SRFI in the wider South East region or the TfSE area within it.

7.1.2 Challenges for additional rail freight interchange provision in the South East and TfSE area

The need for more rail freight interchanges in the South East is primarily because planning policy, land availability or distribution space demand/value has not supported the developer-led SRFI model in the past. It is not due to a lack of private investment or customer interest. This means that there is:

- a scarcity of land and road / rail network capacity;
- a lack of suitable locations where road and rail networks meet in order to site an interchange;
- a lack of sites where both road and rail networks provide suitable capacity and capability for freight haulage and interchange services and where the development of the land needed for these facilities align with local community and authority aspirations;
- the lack of awareness within local authorities of the needs of rail freight and the potential of SRFI/IRFIs and the lack of engagement between local planning authorities; and
- local opposition to proposals when they have been put forward.

Therefore, national and regional needs and benefits have tended to be overshadowed by a focus on local issues. As observed by the local authorities consulted as part of this study, local authorities are not resourced or structured to gain insights into the nature, opportunities and challenges facing the freight sector. This is despite its role in supporting the wider economy and as a major component of economic activity in its own right. This means that there is not enough understanding of the needs of rail freight and the potential of IRFI/SRFI in particular.

7.1.3 The opportunity for additional rail freight interchanges in the TfSE and surrounding area

Analysis of the GBRTT 2022 research suggests that if the current national share of total road and rail freight tonne-km accounted for by intermodal rail services (3.6%) were applied to the South East, the equivalent of eight trains per day each way could be generated by the South East. This could remove over 700 long-distance HGV loads from the road network. This could be achieved if rail services were able to target the longer-distance flows from the South East to the North West, Yorkshire & Humber, Midlands and Wales, and excluded the container traffic moved by road to and from the port of Southampton. Eight trains per day would equate to least two IRFI or SRFI based on the average throughput of existing RFI.

The development of IRFI/SRFI would not only represent opportunities to encourage intermodal rail freight and decarbonisation by improving access to rail transport

services and networks, but also to secure investment, employment. Examples in other regions have shown that SFRI could generate an average of 4.2 million sq. feet of warehousing, 4,100 jobs and at least £500m of local investment, therefore increasing the accessibility of the rail network for local businesses and contributing to the logistics estate and network requirements of consumers.

7.1.4 Potential opportunity areas in the TfSE and surrounding area

The study has shown that it may be possible to deliver more interchanges in these areas and the study has identified some potential opportunity areas as set out below. The colour-coding of site titles to a green, amber or red classification describing the relative deliverability of sites, including factors such as land conditions and classifications and the ease of connectivity to, and capability of, road and rail networks.

- **Northfleet** (Gravesham)
- **Salfords** (Reigate and Banstead)
- **Crawley Goods Yard** (Crawley)
- **South Godstone** (Tandridge)
- **Theale** (West Berkshire)
- **Thorney Mill** (Buckinghamshire)
- **Oxfordshire SRFI** (Oxfordshire)
- **Barking** (Barking & Dagenham)
- **London Gateway** (Thurrock)
- **Thames Enterprise Park** (Thurrock)

There are other areas which may also offer potential, either:

- for non-intermodal traffic e.g. existing rail-linked sites at Andover, Crawley, Fratton, Micheldever and Newhaven for intermodal traffic, but would be fine for aggregates, waste, parcels; or
- for larger SRFI developments of 60 Ha or more at strategic road/rail network intersections suitable for larger regional distribution centres, involving new main line and trunk road connections and associated warehousing development.

However, it should be noted that the areas identified are purely for illustrative purposes only and do not confirm or imply feasibility, or alignment with any local planning policy. Any site-specific proposal would be subject to full environmental and business case appraisal and associated planning consent(s).

7.2 Conclusion

In order to achieve the government's 75% rail freight growth target, the capacity and capability of the rail network and operations will need to significantly improve. This includes the provision of access points onto the network.

In addition, without additional and/or expanded rail freight interchanges, particularly but not exclusively for the intermodal sector, prospects for growth will be limited.

The National Networks National Policy Statement and a study for GBRTT in 2022 have both shown that there are not sufficient intermodal rail freight interchanges in the TfSE or its surrounding area to support this growth.

The other key risks of not finding suitable locations for IRFI or SRFI in the TfSE area will be the increasing difficulty of being able to deliver goods and services without the continued reliance on road transport and the highway network. In turn this will also mean using distribution sites which may never offer scope for rail access.

It could also result in missed opportunities to generate local investment and employment as outlined above.

7.3 Recommendations

Despite the lack of resources faced by local authorities to support the development of intermodal rail freight interchanges in the TfSE area, there could be scope to improve outcomes through relatively low-intensity interventions by or with local authorities. These include:

- Seeking the use of designated officer(s) with freight-related issues that have been actively developed as part of their role, backed by Continuous Professional Development (CPD) to improve knowledge of the freight sector. It might be possible to appoint a jointly funded cross-boundary officer to make best use of resources.
- Gaining a greater understanding of the nature of logistics and the challenges faced by the sector through the ongoing Freight Awareness work programme. This is being developed by TfSE, England's Economic Heartland and Transport East.
- Joint working between officers during local plan development through jointly requesting site consultations. This could mean that land-use, economic development and transport planners collectively encourage and engage with potential SFRI/IRFI site owners/promoters, as well as with Network Rail and National Highways. This may become easier with the establishment of the Mayoral Combined County Authorities and development of strategic development plans.
- Making a commitment to supporting the use of rail freight in relevant strategies and plans. For example, East Sussex County Council have committed to ensuring rail routes and supporting infrastructure support the growth of rail freight in their draft Freight Strategy.
- Making best use of the planning and delivery tools available, for example, using the Permitted Development[65] route working with Network Rail and other railway undertakings for smaller RFI. For larger, and often more contentious SRFI, using the Development Consent Order could provide an alternative to the Town & Country Planning Act, to speed up the process and reduce the cost to the local authority.

[65] Under The Town and Country Planning (General Permitted Development) (England) Order 2015, specified categories of development are granted an automatic planning permission by law, and therefore do not require any application for planning permission. Part 8, Class A (railway or light railway undertakings) classes development by railway undertakers (e.g. Network Rail) on their operational land, required in connection with the movement of traffic by rail, as Permitted Development.

In addition, TfSE will:

- Work with Network Rail, GBR once established, other potential delivery partners and our partner local authorities to review the opportunities this study offers.
- Explore working with central government to support the further strengthening of planning policy and guidance to ensure that these facilities are considered as critical components of regional infrastructure and as an enabler of employment and housing delivery.
- Explore alternative methods for determining 'the scale of need'. This would enable local authorities to better account for the role of these facilities in enabling efficient supply chains and their role in supporting more efficient distribution to and servicing of population centres.
- Work with the DfT and others to enhance the availability and utilisation of data on trends, demand, supply, and performance to facilitate more informed planning decisions.

7.4 Next steps

In order to gain further momentum for the provision of rail freight interchange facilities and services for the TfSE area, TfSE will share the report with its partner local authorities, the Wider South East Freight Forum (WSEFF), freight operators, developers of interchange facilities, Network Rail, other Sub National Transport Bodies, the Wider South East Rail Partnership and the Department for Transport.

It may also be worth considering holding a round table event to gain a clearer understanding of the current level of interest in addressing the shortfall of interchange and network capacity in the TfSE area. Potential attendees could include representatives from Network Rail alongside potential developers, interchange operators, freight operators, end users e.g. retail and aggregate companies and those local authorities who have already shown an interest in developing RFIs.