

# Freight Study: Executive summary



A technical report produced by WSP  
for the EEH evidence base

# 1 EXECUTIVE SUMMARY

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## 1.1 A NEW APPROACH TO LOGISTICS PLANNING

- 1.1.1. England's Economic Heartland freight study builds on the unique attributes of the Heartland:
- Excellent connectivity and a growing hub for logistics
  - An area likely to undergo significant growth, including new communities
  - A centre of excellence for logistics, research, and advanced vehicle technology
  - High contribution to UK GVA
- 1.1.2. The proposals in the study cover a wide suite of measures intended to fully integrate consideration of logistics issues into land use and transport planning and to establish England's Economic Heartland as the national centre for logistics innovation.
- 1.1.3. Rather than focussing on infrastructure bottlenecks specifically for freight, the study suggests an approach which will mean that freight needs and opportunities are better taken into account from the earliest stages of corridor studies and other infrastructure plans.
- 1.1.4. The study also proposes a role for EEH to support its local members to deliver best practice for urban and rural logistics, and to develop plans for new communities which maximise the opportunity to provide low impact, efficient, last mile logistics.

## 1.2 PURPOSE OF THE STUDY

- 1.2.1. Stretching from Swindon to Cambridgeshire and from Northamptonshire to Hertfordshire, England's Economic Heartland (EEH) brings political and business leaders together in a strategic collaborative partnership with a shared commitment to realise the economic potential of the Oxford – Milton Keynes – Cambridge corridor and surrounding areas.
- 1.2.2. The National Infrastructure Commission (NIC) has identified development in the CaMkOx arc as a national priority, due in part to its existing clusters of world-class research, innovation and technology and excellent accessibility.
- 1.2.3. This report is intended to support EEH to plan for the most efficient way of providing access to goods that unlocks economic potential, protects the environment and communities, and future-proofs networks to accommodate growth and improve efficiency.
- 1.2.4. The purpose of this report is to define a clear starting point for freight sub nationally, analyse the implications of future scenario changes, identify how EEH can capitalise on opportunities and mitigate risk – and plan for this by drawing on technical conclusions. This will feed into the development of the EEH Transport Strategy.
- 1.2.5. The study identifies the key role freight and logistics will play in servicing the needs of the Cambridge-Milton Keynes - Oxford arc (CaMkOx) and the wider Heartland area over the next 30 years.

## 1.3 MANAGING CHANGE

- 1.3.1. The delivery of potentially one million new homes by 2050, major urban extensions and the construction of infrastructure schemes will lead to pressure from increased freight activity during construction and to service new communities and businesses.



- 1.3.2. The region's internationally significant business hubs, which range from scientific research to motorsport, depend on the effective movement of goods. Reducing barriers to the import and export of goods for these sectors is particularly important.
- 1.3.3. Freight and logistics is in a period of rapid change, including:
  - Customers demanding more rapid response times
  - Restrictions and other measures imposed to manage the negative impacts of freight
  - Rapid change in technology and innovation in logistics.
- 1.3.4. To support the freight and logistics industry to respond to the increasing demand in the region, EEH needs to understand the consequences of these changes and the opportunities they may present.
- 1.3.5. The industry is diverse, with a wide variety of business types and sizes and this may influence both how the industry responds to demands placed on it and also the impact of potential interventions being considered by EEH.

## **1.4 A NATIONAL PRIORITY**

- 1.4.1. This study reviews the policy context for freight, logistics and EEH. A number of reports in recent years recognise that efficient freight and logistics is a key enabler of growth, most recently, published in April 2019, NIC's major freight report, Better Delivery: The Challenge For Freight which identified a number of priorities needing to be addressed to respond to the growing pressure on the industry.
- 1.4.2. The NIC's recommendations include:
  - Government should commit to decarbonising road freight by 2050, announcing plans by the end of 2021 to ban the sale of new diesel-powered HGVs no later than 2040.
  - To help manage peak time congestion on the urban transport network, local authorities should include a plan for urban freight within the infrastructure strategies they are developing. These plans should review local regulations to incentivise low congestion operations, consider the case for investments in infrastructure such as consolidation centres, and identify the land and regulatory requirements of new and innovative low congestion initiatives.
  - Government should produce new planning practice guidance on freight for strategic policy making authorities. The guidance should better support these authorities in planning for efficient freight networks to service homes and businesses as part of their plan making processes.
  - Government should develop a data standard for freight data collection to support local authorities.
- 1.4.3. This study is the first Sub National Transport Body freight report to be published post this review and the recommendations for the Freight Strategy reflect the priorities identified within the NIC report.

## **1.5 SIGNIFICANCE OF LOGISTICS FOR EEH**

- 1.5.1. The long-term trend towards centralisation of supply chains has resulted in a strong concentration of large national distribution centres (NDCs) in the so called Golden Triangle of logistics centred around Lutterworth. The same forces have attracted developers and occupiers of "big sheds" for logistics into parts of the EEH area, notably Northampton and Milton Keynes.
- 1.5.2. This means that, under current models, businesses in the EEH area benefit from good access to key distribution centres, and logistics is an important employer in the region.

- 1.5.3. The extent of forecast change in the sector means that new supply chain models may develop, possibly more focussed on local distribution centres and less centralised supply chains. EEH needs to be prepared to adapt to continue to be attractive for logistics operations.
- 1.5.4. Nationally and within the Heartland there is no data on freight volumes by commodity or business. However, conclusions can be drawn about certain key freight generating industries, notably strategic warehousing, aggregates, and automotive.
- 1.5.5. Depending on the definition, parts of the “Golden Triangle” for distribution are in the EEH area, notably Northampton and Daventry, and Milton Keynes has become a major location for distribution space. There are signs of increasing demand for large warehouses around Banbury and Bicester on the M40 corridor, and distribution is a major land user in the Swindon area. Of particular note are:
- Crick / DIRFT
  - Northampton / Wellingborough
  - Milton Keynes
  - Didcot
  - Swindon
- 1.5.6. EEH includes 7.7% of the UK population, 8.9% of journeys by UK registered HGVs start in the region. This suggests that there are some significant businesses generating freight journeys from the region. Similarly, 9.5% of UK registered goods vehicle journeys end in the region. The 132 million Tonnes involved equates to approximately 44,000 lorry journeys per day based on an average payload of 12T and over 250 days per annum.
- 1.5.7. It is worth noting at this stage that 35% of EEH trips start AND finish their journeys in the region – this reflects the fact that many HGV trips are quite short, with an average trip length of about 100k

## 1.6 CHALLENGES AS OPPORTUNITIES

- 1.6.1. The study has identified a very wide range of challenges and opportunities for logistics in the region. These are summarised in the tables below.

### STRATEGIC

| Issue                                        | Opportunity                                                                                                                                                 |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The challenge of growth                      | Deliver growth in population and employment but increase freight movements at a significantly slower rate.                                                  |
| Planning for freight                         | Optimise freight movements in a growing region by ensuring that freight needs are taken into consideration more thoroughly throughout the planning process. |
| Logistics innovation                         | Encourage investment by supporting logistics innovation across the region, with EEH becoming recognised as an international leader in the field.            |
| Rapid development of supply chain technology | Optimise efficient deliveries and freight transport across the region by supporting businesses in EEH to adopt new logistics solutions and technologies.    |
| Lack of data                                 | To build on EEH's regional evidence base, by identifying and utilising new sources of data to support planning and traffic management.                      |

|                                      |                                                                                                                                                                                                            |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Regulatory certainty and consistency | To use EEH to review and coordinate freight regulation and restrictions across the region, making the region a more attractive location and destination for businesses and improving logistics efficiency. |
| Logistics skills gap                 | To address skills and workforce gaps in the region, enabling continued growth and providing opportunities for residents and attracting new business.                                                       |
| Land for distribution and clustering | To enable investment and growth and to reduce surplus freight movements by ensuring that land is available for logistics needs, provided with innovation in mind.                                          |

## ROAD

| Issue                                      | Opportunity                                                                                                                                                                                                                                                                                      |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Congestion hot spots                       | To refocus investment in capacity improvements to address freight needs as well as the needs of people, leading to enhanced benefits for businesses from infrastructure investment.                                                                                                              |
| Reliability and diversionary routes        | Improve the reliability and resilience of road journeys, reducing costs for businesses and impacts on communities.                                                                                                                                                                               |
| Information                                | Improve end to end journey times for goods vehicles while reducing the impact of goods vehicles using inappropriate routes.                                                                                                                                                                      |
| Low payloads and empty running             | Slow the growth of HGV movements in the EEH region by making more efficient use of vehicles.                                                                                                                                                                                                     |
| Road access to ports and gateways          | Maintain the attractiveness of the region for investment by reducing journey times to ports where practicable.                                                                                                                                                                                   |
| Poor access East / West                    | Improve East to West road access for HGVs, providing journey improvements to key markets.                                                                                                                                                                                                        |
| Collaboration                              | Encourage greater collaboration in supply chains to and from EEH as an important step towards decoupling freight growth from the population growth of the region.                                                                                                                                |
| Emissions                                  | Improve air quality across the region, and particularly in towns and cities by reducing HGV volumes and emissions per tonne moved through changing behaviours and investment in new business practices.                                                                                          |
| Alternative fuels                          | Improve air quality and reduce GHG emissions across the region, while making the region more attractive to businesses and supporting innovation in vehicle and infrastructure.                                                                                                                   |
| Safety                                     | Reduce the number of collisions and injuries involving HGVs which both add societal benefits as well as reducing incident related congestion.                                                                                                                                                    |
| Autonomous freight vehicles and platooning | The primary opportunity associated with autonomous vehicles is to use the skill base in EEH and the opportunity of significant growth to place EEH at the forefront of innovation in autonomous freight vehicles. Ultimately this could lead to more efficient deliveries and freight transport. |

|                            |                                                                                                                                                                                  |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lorry parking              | To reduce the impact of lorry parking in unsuitable locations, reduce haulage costs, and improve working conditions for drivers through providing more and better lorry parking. |
| Abnormal Indivisible Loads | Improve the competitiveness of the region for investment and reduce costs for new developments by maintaining a fit for purpose AIL network.                                     |

## RAIL

| Issue                                    | Opportunity                                                                                                                                                                                                                                                                                        |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Construction materials                   | Reduce construction costs and reduce the impact of construction by using rail to transport materials whenever possible.                                                                                                                                                                            |
| Lack of capacity                         | Continue to grow rail freight market share to, from, and through EEH, reducing congestion and improving safety and air quality.                                                                                                                                                                    |
| Longer freight trains                    | Reduce rail freight costs and improve rail freight track capacity utilisation by operating longer trains.                                                                                                                                                                                          |
| Lack of intermodal terminals             | Increase the market share for rail freight, reduce road freight volumes, and provide businesses with a cost-effective alternative to road haulage by maximising the volume of new distribution development located at or near to an SRFI and by developing local rail terminals where practicable. |
| East West Rail opportunity               | Reduce the impact of growth and reduce HGV movements by maximising use of EWR for rail freight.                                                                                                                                                                                                    |
| Generally low average rail freight speed | Encourage good to transfer to rail by offering shorter journey times. This will also reduce rail freight costs through better asset utilisation.                                                                                                                                                   |
| Freight on passenger trains              | Reduce LGV movements by transferring some transport of packages from road to rail.                                                                                                                                                                                                                 |
| Rail freight into London                 | Reduce the volume of road freight on motorways into London, with improvements in safety and emissions, through offering new rail freight services into city centre terminals.                                                                                                                      |
| HS2 impacts                              | Maximise use of rail freight and reduce HGV volumes through EEH by ensuring that adequate capacity is provided on the WCML. Particularly once HS2 is operational.                                                                                                                                  |

## URBAN

| Issue                                                     | Opportunity                                                                                                                 |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| New Communities, Homes, And Employment                    | Ensure that new communities can be served by efficient zero carbon logistics delivery systems.                              |
| Support for urban freight initiatives in local strategies | To improve the efficiency of deliveries into towns and cities and reduce impact by coordinating and supporting initiatives. |
| Historic city centres<br>Oxford / Cambridge               | Share expertise and address the unique challenges of delivering into historic city centres.                                 |

|                                                          |                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High percentage of deliveries in the morning peak        | Reduce peak hour goods traffic in towns and cities leading to reduced congestion and reduced conflicts with pedestrians and cyclists.                                                                                                                                                        |
| Increasing LGV traffic                                   | Improve understanding of the nature of LGV traffic in order to consider opportunities to reduce the growth in volume and reduce the impact on congestion and the environment.                                                                                                                |
| Air quality                                              | Improve air quality in towns and cities through coordinated initiatives. Support local businesses to understand the potential of new delivery apps and information systems to improve efficiency. Maximise opportunities to use data to reduce the impact of freight and improve efficiency. |
| Lack of consolidation centres and fragmented procurement | Reduce the number of vehicles making deliveries into urban areas, with deliveries being in zero emission vehicles. Reduce additional mileage due to drivers not knowing the area or delivery bays not being available.                                                                       |

## OTHER

| Issue                                                  | Opportunity                                                                                                                                       |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Major infrastructure projects                          | Improve the efficiency of construction of major infrastructure projects and reduce impacts on the environment and local communities.              |
| The impact of construction traffic                     | Reduce construction traffic impacts and reduce construction costs through applying the most appropriate measures.                                 |
| Need and opportunity to upskill construction logistics | Reduce the impact of construction HGV movements by ensuring that developers and local government staff are trained and qualified.                 |
| Rural logistics                                        | Reduce the impact of HGVs on rural communities while maintaining or improving the efficiency of deliveries to support communities and businesses. |
| New modes                                              | Transfer goods away from roads to zero emission pipeline systems. Establish EEH as a leader in logistics technology.                              |

## 1.7 A VISION FOR CHANGE

1.7.1. The study proposes the following vision to guide the strategy:

**“Efficiently connecting our businesses and people with goods and services”.**

1.7.2. This would be supported with logistics objectives that reflect the principles behind the EEH Transport Strategy, the objectives of the EEH LEPS and Highways Authorities, stakeholder views, and the NIC recommendations. The following objectives are proposed for an EEH Logistics Strategy.

- Improve the consideration of freight in planning
- Enhanced data for informed decision making
- Enable EEH growth
- Regulatory certainty and consistency
- Boost the EEH economy
- Support last mile solutions

- Reduce freight impacts on the environment
- Reduce freight impacts on communities
- Improve logistics skills and opportunities
- Establish EEH as a centre of logistics innovation

## 1.8 SOLUTIONS AND MEASURES

1.8.1. A number of solutions intended to deliver these opportunities was reviewed and appraised. The following list summarises the range of proposed solutions to be addressed. The study then used a multi criteria approach based to appraise the solutions based on an assessment of the impact on each of the performance measures. The results of the appraisal are provided in the appendices. This will be useful when considering the cost, deliverability and sequencing of each solution. Those marked with an \* are those that indicate specific outputs.

### Strategic

Freight stakeholder engagement programme (including the developing the case for an EEH freight officer\* and the implementation of EEH Logistics Forum\*)

EEH innovation cluster\*

Synchromodality Trial

Training for planners\*

Best Practice standards for logistics in planning

EEH freight data repository\*

Pilot data project

Collect DSP and CLP data

“Future Logistics” training and upskilling

### Roads

Fostering collaboration to improve utilisation

Improving strategic road access\*

Optimise Expressway design to maximise freight benefits

Improvements to reduce incidents (to vehicles, to road design, accident hot spots)

Delivering reliability and resilience

Abnormal Indivisible Loads (AIL)

Development of lorry parking solutions\*

Alternative fuels support programme\*



## Rail

Corridor approach to capacity and capability  
 Felixstowe to Nuneaton improvements\*  
 Rail served construction terminals\*  
 Encourage the development of Strategic Rail Freight Interchanges  
 Intermodal services to London  
 Promote freight use of EWR

## Airports

Improve connectivity to Heathrow

## Towns and Cities

Improved last mile logistics in new communities  
 Delivery and Service Plans\*  
 Deliveries into historic cities  
 Land for urban logistics\*  
 Standard and consistent delivery restrictions\*  
 Promote retiming of deliveries  
 Public sector consolidation and procurement\*

## Construction

Construction Logistics Plan implementation\*  
 Improved approaches to infrastructure delivery  
 Coordinated construction logistics  
 Impact of modular construction

## Rural

Rural Delivery and Service Plans\*  
 Rural consolidation centres\*

## Other Modes

Monitor and support feasibility studies


## 1.9 LOGISTICS VISION, OBJECTIVES AND FREIGHT ACTION PLAN

- 1.9.1. The study concludes with a recommendation of a slightly different vision for the freight strategy to focus action. The study suggests that the following alternative wording for the vision is adopted for the freight strategy:

***“Efficiently connecting our businesses and people with goods and services”.***

- 1.9.2. This would be supported with logistics objectives that reflect the principles behind the EEH Transport Strategy, the objectives of the EEH LEPS and Highways Authorities, and the NIC recommendations. The study suggests a number of objectives under which set of performance measures is proposed. The objectives include;
- Improve the consideration of freight in planning
  - Enhanced data for informed decision making
  - Enable EEH growth
  - Regulatory certainty and consistency
  - Boost the EEH economy
  - Support last mile solutions
  - Reduce freight impacts on the environment
  - Reduce freight impacts on communities
  - Improve logistics skills and opportunities
  - Establish EEH as a centre of logistics innovation
- 1.9.3. The results of the appraisal reflect the challenges and opportunities identified by the NIC report “Better Delivery: The Challenge for Freight”. This includes pushing forward the decarbonisation of freight transport, including freight issues and solutions in land use and transport planning in a more rigorous way, improving access to and use of freight data, and working with businesses to reduce the impact of freight on congestion and communities.
- 1.9.4. The conclusion to the study notes that EEH has strategic, national regional and local roles and responsibilities which will influence how the solutions chosen will be implemented.
- 1.9.5. The study concludes with a recommendation of an action plan for phased delivery of the proposed solutions. Key to this will be creating structures to support a new approach to logistics issues including:
- Creating a freight governance structure (including progress reporting requirements)
  - Defining and recruiting an EEH freight officer
  - Establishing a Logistics Forum, with potential sub groups
  - Developing a freight engagement strategy

## Get in touch

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