

Tritax Symmetry (Hinckley) Limited

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

The Hinckley National Rail Freight Interchange Development Consent Order

Project reference TR050007

Written Statements of Oral Case ISH4 Appendix D Market Need Update

Document reference: 18.8.4

Revision: 04

14 November 2023

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009
Regulation 5(2)(q)

Consolidated Note on the Need for HNRFI

NEED FOR HNRFI

1.1. This note is accompanied by the following appendices:

- Appendix 1 - Leicester and Leicestershire Strategic Distribution Sector Study (Final Report) Nov 2014
- Appendix 2 – Warehousing and Logistics in Leicester and Leicestershire: Managing growth and change (April 2021 amended March 2022)
- Appendix 3 - Leicester and Leicestershire Strategic Warehousing and Logistics Needs SoCG (Sept 2021)
- Appendix 4 – LLEP Economic Growth Strategy 2021-2030
- Appendix 5 - Housing Market Area Justification

1.2. A summary of the need for the delivery of national networks is provided in the Green Box on page 9 of the NPS-NN (*Government’s vision and strategic objectives for the national networks*). This delivery is required to meet the Country’s long-term needs; supporting a prosperous economy and improving overall quality of life as part of wider transport systems.

1.3. The Government states that there is a ‘*critical need*’ to improve the national networks (NPS-NN 2.2). At NPS-NN 2.10, the Government concludes that at the strategic level, there is a ‘*compelling need*’ for the development of the national networks.

1.4. The need for development of strategic rail freight interchanges is set out on pages 20 – 23 of the NPS – NN¹.

1.5. The drivers for the need for strategic rail freight interchanges are described at NPS-NN paragraphs 2.46 – 2.52 (Drivers of need for strategic rail freight interchanges) under the following headings:

- The Changing Needs of the Logistics Sector;
- Rail Freight Growth;
- Environmental; and

¹ A strategic rail freight interchange (SRFI) is a large multi-purpose rail freight interchange and distribution centre linked into both the rail and trunk road system. It has rail-served warehousing and container handling facilities and may also include manufacturing and processing activities. Further details are provided at section 26 of the Planning Act: <http://www.legislation.gov.uk/ukpga/2008/29/section/26>.

- UK Economy, National and Local Benefits – Jobs and Growth.
- 1.6. The Government’s vision for transport is a low carbon, sustainable transport system that is an engine for economic growth, but is also safer and improves the quality of life in our communities. The Government therefore, believes it is important to facilitate the development of the intermodal rail freight industry (NPS-NN 2.53).
 - 1.7. To facilitate modal transfer, a network of SRFIs is needed across the regions to serve regional, sub-regional and cross-regional markets. The Government states that in all cases, it is essential that these (SRFIs) have good connectivity with both the road and rail networks in particular the strategic rail freight network, as shown on NPS-NN Appendix C (NPS-NN paragraph 2.54). The Proposed Development has excellent connectivity with road and rail as illustrated on Figure 4 in the Planning Statement (Document reference 7.1A, APP-347).
 - 1.8. The Government has concluded that there is a ‘*compelling need*’ for an expanded network of SRFIs. The NPS-NN acknowledges that it is for developers to bring forward sites, within a commercial framework (Footnote 61) and that by reasoning of the locational requirement, the number of locations suitable for SRFIs will be ‘*limited*’.
 - 1.9. In March 2023, the Government consulted on a draft of the revised National Networks NPS, which is considered to be an ‘*important and relevant consideration*’ in the determination of this application.
 - 1.10. The draft NPS-NN recognises the important role that all modes play in the transportation of freight across the UK’s transport networks, which is stated as being vital in achieving the country’s economic goals, domestically and internationally through facilitating effective and efficient movement of freight (Draft NPS-NN paragraph 2.2).
 - 1.11. The Government concludes that there is a need for long-term strategic action through Government and industry collaboration, to bolster the freight network as a whole through improvements to infrastructure with multi-modal impacts (Draft NPS-NN paragraph 2.3).
 - 1.12. The NPS and the Draft NPS-NN explain that the aim of a SRFI is to optimise the use of rail in the freight journey, by maximising rail trunk haul and minimising some elements of the secondary distribution leg by road through co-locations of other distribution and freight activities (NPS-NN paragraph 2.44; Draft NPS paragraph 2.15). A SRFI is a large multi-purpose rail freight interchange **and** distribution centre linked into both the rail and trunk road system NPS-NN (footnote 42 Paragraph 4.83). The Proposed Development satisfies these functions.
 - 1.13. The drivers of need for SRFIs in the draft NPS are set out under the sub-headings of (Draft NPS-NN paragraphs 3.83 – 3.99) namely:
 - User needs;
 - Connectivity and supporting economic growth; and

- Environment.

1.14. The Government states that the transfer of freight from road to rail has an important part to play in the low carbon economy and in helping to meet net zero targets (Draft NPS paragraph 3.100). The Government is clear on the benefits of rail freight and its commitment to growing the sector both through the Plan for Rail, where the creation of a freight growth target was outlined and the Call for Evidence from Great British Railways Transition Team to develop this target (Draft NPS-NN paragraph 3.101).

1.15. The Government maintains that the need for an expanded network of SRFIs is ‘compelling’ (Draft NPS-NN paragraph 3.105).

1.16. A compelling need for an expanded network of SRFIs is firmly established by the NPS-NN and the draft revision to the NPS-NN, in the national interest.

Sub-Regional Need

1.17. In 2013, consultants were appointed by the Leicestershire Housing Planning and Infrastructure Group (HPIG) to undertake a study examining the strategic distribution sector in the county. In November 2014, the final report of the ‘Leicester and Leicestershire Strategic Distribution Sector Study’ was published (attached as Appendix 1). The Report suggested that one further SFRI will need to be brought forward within Leicester up to 2036 (paragraph 5.8).

1.18. It was the findings of this Study which instigated the search for a suitable area of land for a SRFI by the Applicant focusing on land within the county. In (April 2021 amended March 2022) GL Hearn and MDS Transmodal published the study ‘Warehousing and Logistics in Leicestershire and Leicestershire: managing growth and change’ (attached as Appendix 2) on behalf of the local planning authorities in Leicester; Leicestershire County Council and the Leicester and Leicestershire Local Enterprise Partnership. The key messages from the Report include:

- *‘The most crucial component of this study has been to recommend a future volume of warehouse floorspace and area of land required to accommodate it that should be planned for from 2020 – 2041’.*
- *‘Based on 43% of future need at rail served sites which reflects an expected increase in rail orientated freight in the future, there is a shortfall of 768,000 m² (307 ha) at rail served sites which should be planned for (including margins) after taking in to account existing supply. This would largely be met by the proposed Hinckley NRFI, should it be permitted’. (Emphasis added)*

1.19. In the Statement of Common Ground on Planning Matters with the LAs for HNRFI it has been agreed:

- That the Study above identifies a short fall of 718,875 m² of rail served sites which should be planned for the period to 2041 – and that a supply shortfall for rail served sites ‘starts to emerge around the mid 2020’s (Leicester and Leicestershire Authorities’ ‘Statement of Common Ground relating to Strategic Warehousing and Logistics Needs’

attached as **Appendix 3** (September 2021 paragraphs 3.4-3.5).

- 1.20. Both the ‘Warehousing and Logistics at Leicester and Leicestershire: managing growth and change’ (April 2021 amended March 2022), jointly commissioned by the local authorities in Leicestershire and the ‘Market Needs Assessment’ commissioned by the Applicant identify a need for rail served logistics sites but the differing methodologies for the studies give different results in terms of the quantum. It is agreed that there is a need for rail served logistics sites and in principle HNRFI would meet this rail-related need.
- 1.21. That the ‘*Warehousing and Logistics at Leicester and Leicestershire: managing growth and change*’ (April 2021, amended March 2022) will form part of the evidence base for Leicester and Leicestershire planning authorities in the preparation of the reviews of their development plan in meeting future development needs.
- 1.22. Leicestershire County Council has agreed in the Statement of Common Ground that it has no objection to the principle of SRFIs and accepts the need for a SRFI to be located in south Leicestershire.

Leicester and Leicestershire Economic Growth Strategy 2021 – 2030 November 2021

- 1.23. The Strategy (see **Appendix 4**) highlights a ‘*vision for achieving sustainable economic growth*’ (Foreword). It acknowledges that:
- Leicester *and* Leicestershire is [also] the UK’s central logistics hub, having gained significant jobs and investment due to the area’s strategic location.
- 1.24. The strategy identifies 4 Pillars, under the headings:

Productive

- 1.25. Four priorities are identified for meeting this aim and addressing the challenges including:
- Entrepreneurial, resilient and high growth businesses. Logistics is identified as one of the ‘Beacon Sectors’ (page 6).
- 1.26. Priority 4 is the provision of world-class business locations. The objective is stated as being to ‘*provide more employment sites and premises for growth*’. In the Long-term (2021 – 2030) reference is made to ‘*preparing for the next phases of extension to existing sites and large-scale office, technology, manufacturing and logistics sites and premises.*’ (page 33).

Innovative

- 1.27. The four main priorities for meeting this aim and addressing the challenges include:
- Innovation for sustainability. The Strategy states: ‘*Sectors such as food and drink, textiles and logistics will need support in the transition to sustainability*’ (page 4).

Sustainable

1.28. Priority 2 of the Sustainable pillar is sustainable transport and connectivity. The Strategy states (page 65):

- *‘Transport sustainability will need to be built into all of our economic ambitions and plans...’*
- *‘The logistics sector which is a local success story will need to incorporate alternatives to fossil fuels and adopt the latest innovations and methods of working’.*

1.29. An objective under Priority 2 is to, *‘improve rail infrastructure and services. The Long Term (2021 – 2030) includes ‘support for greater use of rail freight transport’.*

1.30. The principle of an expanded network of SRFIs with provision for an SRFI is supported by the Councils’ evidence base for the preparation of the review of development plans and the requirement to meet the development needs arising therefrom. The provision of HNRFI is in principle supported by the Economic Strategy.

Logistics Demand & Supply Assessment (Document reference: 16.2)

1.31. As requested by the ExA, the Logistics Demand & Supply Assessment (Document Reference 16.2) has been converted to metric. These changes are shown as tracked changes. The following section provides the written update of the Property Market Area as set out by Mr Mark Powney of Savills at ISH4.

Assessment / Catchment areas

1.32. Document reference: 16.2 at Chapter 2 defines a Property Market Area (PMA) specific to HNRFI. The HNRFI PMA needs to be relevant to the Subject Site, namely it is the broad 'area of search' the site sits within that industrial and logistics (I&L) investors and prospective occupiers of large units above 9,290 m² (100,000 sqft) will consider when looking to lease space.

1.33. Effectively the PMA includes the competitor locations to the HNRFI for attracting this occupier demand. The warehousing component of the Proposed Development will compete within the general market with both rail-served and non-rail schemes. However, given the Proposed Development relates to nationally significant infrastructure, being a SRFI, it is also essential from a market perspective that this PMA captures key operational and supply chain linkages in addition to competitor locations.

1.34. Based on discussions with rail freight operators, it is considered a 20-mile truck-drive isochrone from the proposed HNRFI is appropriate. This equates to roughly a 45-minute truck-drive time, which most I&L companies would consider a reasonable distance from which to use the rail freight interchange, to either collect or drop off materials and goods as part of their supply chain.

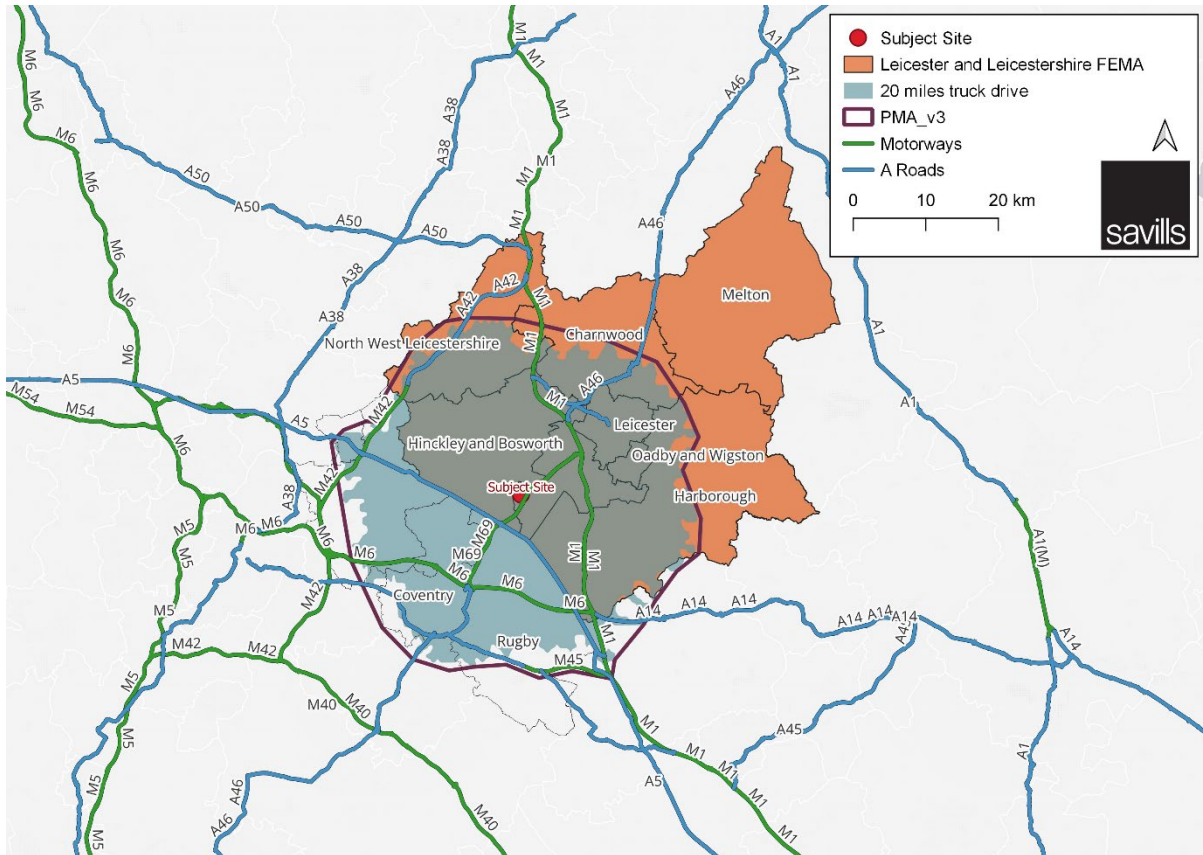
1.35. Across the PMA, there is over 8 million m² of floorspace in I&L properties sized above 9,290 m². There is a further 5.5 million m² of I&L floorspace in units below 9,290 m² that also could utilise the proposed HNRFI as part of their supply chains.

1.36. The HNRFI PMA is different to the Functional Economic Market Area (FEMA) used in the Warehousing and Logistics in Leicester and Leicestershire: Managing growth and change study. Inevitably this report is 'project blind' in that it relates to the generic subregional need for larger B8 units over 9,290 m² across Leicestershire. The Applicant accepts this geography as being appropriate to inform local plans within this geography but not for HNRFI specifically as HNRFI has specific operational characteristics which underpin the HNRFI PMA, as indicated above.

1.37. The below map shows the geographic coverage of both the HNRFI PMA and the Leicester and Leicestershire FEMA. They significantly overlap but the HNRFI PMA spans further to

the south and not as far to the north, logically, given its location.

Figure: Geographic coverage of the HNRFI PMA and the Leicester and Leicestershire FEMA



Market need for large logistics units

1.38. The need case for large B8 units over 9,290 m² is outlined in the Logistics Demand & Supply Assessment (Document reference 16.2). This document has been produced alongside the Market Needs Assessment: Rail Freight Market Demand & Supply (Document Reference 16.1) which considered the need for rail freight terminals specifically.

1.39. The logistics industry provides the warehousing and distribution network that supports the national economy. Currently it is predominantly road-based – with 77% of domestic freight being transported by road vs only 9% by rail². However, logistics operators are increasingly looking to integrate rail freight into their operations in response to the Government’s decarbonisation agenda, which actively promotes a modal shift towards rail that is considered a lower carbon solution to road haulage.

1.40. Document reference 16.2 considers both the national trends underpinning unprecedented demand in the I&L sector as well as demand and supply dynamics specific to the PMA within which HNRFI is located. The analysis shows that based on strong, unmet demand in the sub-region for large B8 units, consistent with national trends, there

² DfT (2021), Table TSGB0401

is a robust market need case for the development of the HNRFI.

- 1.41. The logistics sector has been on a high growth trajectory, well above historic levels being driven by various factors such as housing growth, increased online shopping, higher freight flows and Brexit and Covid induced shocks such as re-shoring³ and increased stockpiling to guard against supply chain breakages. Some of the key data presented to evidence this conclusion within Document Reference 16.2, is the fact take-up in the East Midlands for units above 9,290 m² was **113% above the long term average** in 2021 (1.2 million m²); the highest on record⁴. Take-up in the East Midlands in 2021 accounted for around 22.5% of national take-up, highlighting the strategic importance of the region, and by extension the HNRFI PMA, in the I&L market. However, the supply of premises is at an historically low level as evidenced by a regional **vacancy rate which stands at just 1.40%**⁵ - **the lowest of any region nationally**. The average transaction size in the East Midlands has increased substantially in the last year to circa 38,300 m², highlight the shifting occupier demand towards larger units. Take-up in the West Midlands too reached a new record in 2021, with 871,400 m² accounting for 17% of national take-up⁶. This means that together, the East Midlands and the West Midlands, which the HNRFI PMA sits within, accounted for nearly 40% of national take-up in 2021.
- 1.42. The logistics sector is also important to the national economy, both in terms of jobs and GVA contributions but also because of the critical function it plays in serving other sectors of the economy and the country's growing population. For, instance the I&L sector is a significant employer of at least 3.8 million people in England and produces £232 billion of GVA annually⁷. Jobs growth in I&L has outpaced the wider economy at 26% growth vs 14% growth. Gross Value Added (GVA)⁸ per job, is currently at £58,000, 12% higher than the average of all sectors. Its productivity is also predicted to grow at a faster pace, increasing by 29% between 2025 to 2039 compared to 18% across the UK economy as a whole⁹. These are argued to be important statistics given that the UK's labour productivity currently lags many of its western European peers.
- 1.43. Against this context of exceptional growth in the sector, Savills experience and evidence points to the fact that demand has been outpacing supply both nationally and within HNRFI PMA. This is evidenced by the fact that the availability rate for large B8 units has been below the 5.5% equilibrium rate (at which supply and demand is considered to be in balance) in 8 of the last 10 years. Current availability is just 2.8%, lower than the availability across England which is at 3.2%. Also leasing demand, as measured by net absorption, has been higher than the delivery of new floorspace which has maintained

³ Moving a business that had gone overseas back to the country from which it had originally relocated

⁴ Savills Research (2022), Big Shed Briefing (January 2022)

⁵ Ibid

⁶ Savills Research (2022) Big Shed Briefing – The Logistics Market in the West Midlands. 0

⁷ ONS (2021), Workforce Jobs by Region and Industry - Jobs in Manufacturing, Transportation and Storage for March 2020; ONS (2021) – England, Regional Gross Value Added (Balanced) by Industry – GVA for Manufacturing, Transportation and Storage in 2019 – England

⁸ Gross Value Added (GVA) measures the contribution made to an economy by one individual producer, industry, sector or region.

⁹ Oxford Economics (2019), GVA by Sector and Employment by Sector for Manufacturing, Transportation and Storage - UK

downward pressure on the availability rate. The strong demand against the lack of supply has seen rents across the PMA grow by 66% between 2011 and 2021, more than twice the rate of inflation over the same period at 25%¹⁰, and higher than the national rate of 61%.

1.44. Savills contend that the methods typically used to estimate logistic demand, as specified in the NPPG (ie past take up, labour demand etc) and within the Warehousing and Logistics in Leicester and Leicestershire: Managing growth and change study, do not accurately consider lost demand (referred to as ‘suppressed demand’) due to historic supply constraints, nor current and future growth drivers such as the increase in online spending. Instead Savills adopt an alternative method which considers market signals as required by Paragraph 31 of the NPPF and relevant sections of the Planning Practice Guidance (PPG) as follows:

- *Analyses ‘market signals, including trends in take up and the availability of logistics land and floorspace across the relevant market geographies’¹¹; and*
- *Applies ‘economic forecasts to identify potential changes in demand and anticipated growth in sectors likely to occupy logistics facilities, or which require support from the sector.’¹²*

1.45. In addition to being NPPF / PPG compliant, the Savills approach to estimating future B8 demand is considered to represent industry best practice. It has been endorsed by the British Property Federation (BPF) and a number of major commercial investors in the ‘Levelling Up – The Logic of Logistics’¹⁶ report including St Modwen, The United Kingdom Warehousing Association, IM Properties, Newlands Developments, Segro, GLP, Tritax Symmetry and the BPF itself (Savills approach was also shortlisted for an RTPi Award for Research Excellence 2022). This report has also been referenced as part of the Government’s recently published ‘Future of Freight Plan’¹⁷ and has been the focus of several discussions with senior officers at DLUHC, DfT and DBT.

1.46. Savills approach has also recently been used in the ‘Warehousing and Logistics in the South East Midlands’ study and it is understood that it is being used as one of the estimation methods as part of the current Phase 3 ‘West Midlands Strategic Employment Sites’ Study.

1.47. Based on Savills’ demand methodology, over a 20-year plan period, large B8 demand in units over 9,290 m² is estimated at 1,772 ha. This level of demand is 150% higher than the current supply of 709 ha, resulting in over a 1,000 ha shortfall between demand and supply. This indicates HNRFI is needed to help address part of this shortfall.

1.48. HNRFI is also evidenced as being needed as part for the Warehousing and Logistics in the South East Midlands’ study consistent with Savills Logistics Demand & Supply Assessment (Document Reference: 16.2). This is why the issue of need has not been raised as part of

¹⁰ According to the Bank of England inflation calculator between 2011 and 2021

¹¹ In accordance with PPG, Paragraph: 031 Reference ID: 2a-031-20190722

¹² Ibid

the Statements of Common Ground and is accepted by LCC, BDC and HBBC in particular.

E-commerce Uplift and Double Counting

- 1.49. The ExA during IDH 4 noted that a written representation has raised the issue of potential double counting as part the 'e-commerce uplift' component of the Savills approach.
- 1.50. As referenced at paragraph 7.2.15 of Document Reference 16.2, the strongest growth drivers underpinning logistics demand are population growth and the move to online shopping, which the Covid-19 pandemic has accelerated. Demand arising from population growth is considered to be largely captured by increases in online sales which are a function of household spending and household growth. For this reason, the Savills approach also considers the move to online shopping in addition to its suppressed demand calculation.
- 1.51. In order to estimate future increases in B8 demand linked to e-commerce growth, the Savills approach first establishes the share of demand that has historically been linked to e-commerce and then determines how much higher this is likely to be in the future. This process removes any issues around double counting as the e-commerce uplift is only applied to that part of demand within e-commerce related sectors and at levels above the historic trend. On this basis, double counting is not considered to be material.
- 1.52. As detailed in paragraph 7.2.16 of Document Reference 16.2, the sectors which are typically linked to e-commerce are Retail, Transport and Warehousing and Wholesale. Across the PMA these sectors account for 64% of leasing demand. An estimate of how much additional floorspace this part of the market may need in the future can be made by reference to future retail spending estimates provided by Forrester, a respected source of this information.
- 1.53. Even if the e-commerce uplift was removed from the Savills approach, the shortfall between demand and supply within the HNRFI PMA would still be in excess of 500 ha, which is roughly double the size of the Proposed Development.

Rail Market Need

- 1.54. The central hub for the UK's distribution system is the Midlands, often referred to as the Golden Triangle, as a c.4-hour trip to serve most of the UK's consumers and production centres is possible from here. It is also a large consumer market and manufacturing region in its own right. Unlike the South East, North West and North East, the Midlands has no coast. So nearly everything coming into or out of the Midlands, must be transported by road or rail.
- 1.55. To put this into context, as of August 2022, the total UK road freight sector has a revenue of c. £33.3bn comprising c. 58,874 businesses. Of these, the Midlands has by far the highest proportion, at 27.7%, followed by the East of England at 11.5% (primarily servicing Felixstowe and London Gateway) and then the North West at 11.4%.
- 1.56. By comparison, the rail freight sector currently has a revenue of c£1.2bn, comprising c.

102 business, with only 4 major train operating companies, DB Cargo (26.5%) Freightliner (24%), GB Railfreight (19.7%) and Direct Rail Services (8.2%). There is therefore considerable potential for rail freight to increase its market share in terms of both volumes and revenues.

- 1.57. In the period since the launch of the NPS in 2014 many more pressures to use intermodal rail freight have emerged, ranging from the Government's environmental commitments and targets to reach Net Zero; shortages of HGV drivers; changing work and shopping patterns; through to global trade and geo-political disruptions that are forcing supply chains to adapt and provide resilient and sustainable transport solutions, that also meet corporate Environmental, Social and Governance criteria.
- 1.58. Intermodal rail has been growing and is now the largest rail freight sector at c. 39.5% of the market, with construction materials at 28.3%, other goods at 12%, metals at 8.6% and coal at 4.3%.
- 1.59. The British rail freight market has seen a significant growth in intermodal market share of rail freight, between 1998/99 and 2020/21, measured in net tonne kilometres moved. The 2015/16 jump reflected a drop in coal traffic, but clearly the overall trend is one of continued growth.
- 1.60. The Midlands share of the overall growing intermodal rail market in 2021, was around 32%, with the North West at around 30%.40 The market itself has increased 35% since 2015, enabled by the development of new SRFI terminals, such as Doncaster iPort and EMG; and a growth in containers moved by rail across many areas of the country, both to and from ports and to and from different terminals. The Midlands market has increased by 46.4%, showing a marked propensity to move more freight by rail when facilities are developed and come on stream. EMG is up to 6 trains a day within 2 years of opening.
- 1.61. HNRFI's location in the centre of the country, between the West Coast and East Coast Mainlines and immediate access to the National and Regional Strategic Rail Freight Network, makes it exceptionally well placed to serve a regional market function and a national rail hub function, as set out above.
- 1.62. The East and West Midlands market is the largest regional market outside of London and the South-East, with a very significant volume of manufactured goods being imported and exported to continental Europe via short sea shipping ports and to the rest of the world, via deep-sea shipping ports.
- 1.63. HNRFI is not being developed to take market share from other terminals or SRFI developments. It will provide a terminal in line with Midlands Connects plans, that will serve the Coventry to Leicester and Magna Park market within a c20 mile radius of the rail terminal; with an ability to readily serve deep-sea and short -sea ports without the need to route through Birmingham. HNRFI includes rail served buildings on site and the potential for rail connected buildings.
- 1.64. In terms of onward distribution, the rail element is one leg, with the next being either into an adjoining warehouse on the SRFI development, or into the surrounding region. For

HNRFI, having worked with terminal operators with road haulage services, the optimal maximum distance for the road leg is c20 miles / 45 minutes drive time.

1.65. This means that the Midlands market will primarily operate such that:

- West Midlands Interchange, will serve the Black County, Southern Staffordshire
- Hams Hall will serve north Birmingham and along the M42, to Solihull.
- Landor St will serve Central Birmingham,
- BIFT will serve Tamworth and North,
- HNRFI will serve Coventry through to Leicester South, including Magna Park for deep sea / east coast, west coast and domestic time sensitive flows.
- East Midlands Gateway will serve Leicester North, Nottingham and Derby
- DIRFT will serve Northants Fast Moving Consumer Goods National Distribution Centres and Magna Park for short sea, domestic and Channel Tunnel flows.
- Northampton Gateway will serve a similar market to DIRFT

This network of rail terminals is critical to maximise the ability of the region to move more long-haul freight by rail and allow the short haul cartage to be undertaken by EV HGV's.

13.1. Hinckley NRFI is critical to grow the key import and export markets for rail serving the Midlands, particularly deep sea which cannot be readily served by DIRFT or Northampton Gateway, and which it can do so exceptionally efficiently without all the constraints of Water Orton and the legacy rail connections of the Birmingham rail terminals. The deep sea ports need high volumes of freight to be moved by rail as the most efficient mode of hinterland transport. With a move to EV HGVs, the charge time required makes it critical for the Midlands in particular (as it has no coast) to have a high capacity of rail freight access to replace long haul HGV moves, as we move to a Net Zero carbon infrastructure.

Appendix 1 - Leicester and Leicestershire Strategic Distribution Sector Study (Final Report) Nov 2014



Leicester and Leicestershire Strategic Distribution Sector Study

Final Report

A technical report prepared for the Leicester &
Leicestershire Housing Planning & Infrastructure
Group by:



MDS Transmodal Ltd
Savills

November 2014

Our Ref: 213063r_Final Report

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Appendix:

Relevant Extracts from NPPF and NPS

Interim Report Part A

Interim report Part B

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1. INTRODUCTION

- 1.1 *MDS Transmodal and Savills* were commissioned in December 2013 by the *Leicester and Leicestershire Housing Planning and Infrastructure Group (HPIG)* to undertake a study examining the strategic distribution sector in the county. HPIG represents the county's local planning authorities, Leicestershire County Council and the *Leicester and Leicestershire Local Enterprise Partnership (LLEP)* on spatial planning matters. The main objectives of the study were to enable a better understanding of the sector and objectively determine future need, together with managing change and supporting sustainable economic growth.
- 1.2 The study was undertaken in three phases, as follows:
- Part A: Review and Research;
 - Part B: Planning for Change and Growth; and
 - Part C: Developing a Strategy for the Distribution Sector in Leicestershire¹.
- 1.3 An interim report covering *Part A* of the study was presented to the planning authorities and LLEP in *Spring 2014*. It essentially presented a 'baseline' position with regards to the distribution sector in Leicestershire. It provided an overview of the strategic distribution sector, both nationally and in Leicestershire, established the existing supply of large scale warehousing in the county, described the key locational characteristics enjoyed by commercially attractive logistics sites, provided an overview of employment in the Leicestershire strategic distribution sector and contribution to Gross Value Added (GVA) alongside the current policy context. It concluded that Leicestershire has established a distinct competitive advantage in the strategic logistics sector, generating significant employment and contribution to regional GVA.
- 1.4 A second interim report covering *Part B* of the study was presented in early *Summer 2014*. It concerned planning for change and growth, and provided an overview of the key challenges and threats facing the strategic distribution sector. It concluded that the key to addressing the challenges, and hence maintaining the established competitive advantage, is the continued development of new commercially attractive strategic sites across Leicestershire, a significant proportion of which will need to be directly rail-served. Forecasts of future land requirements for strategic distribution in Leicestershire were undertaken and subsequently compared with the quality and quantity of existing sites with B8 consents or in the planning pipeline. The need for additional land to come forward up to 2036 was subsequently

¹ The main study area, the county of Leicestershire, is the same as that covered by the LLEP. In local Government terms, the study area comprises the City of Leicester unitary authority along with those parts of the county administered by Leicestershire County Council and the seven district councils. For ease and consistency, 'Leicestershire' is the term used throughout to refer to the LLEP area and these local authorities on a collective basis. Where relevant, areas adjacent to the main study area are also considered.

identified. Estimates of future job creation and contribution to GVA related to the land use forecasts were also undertaken.

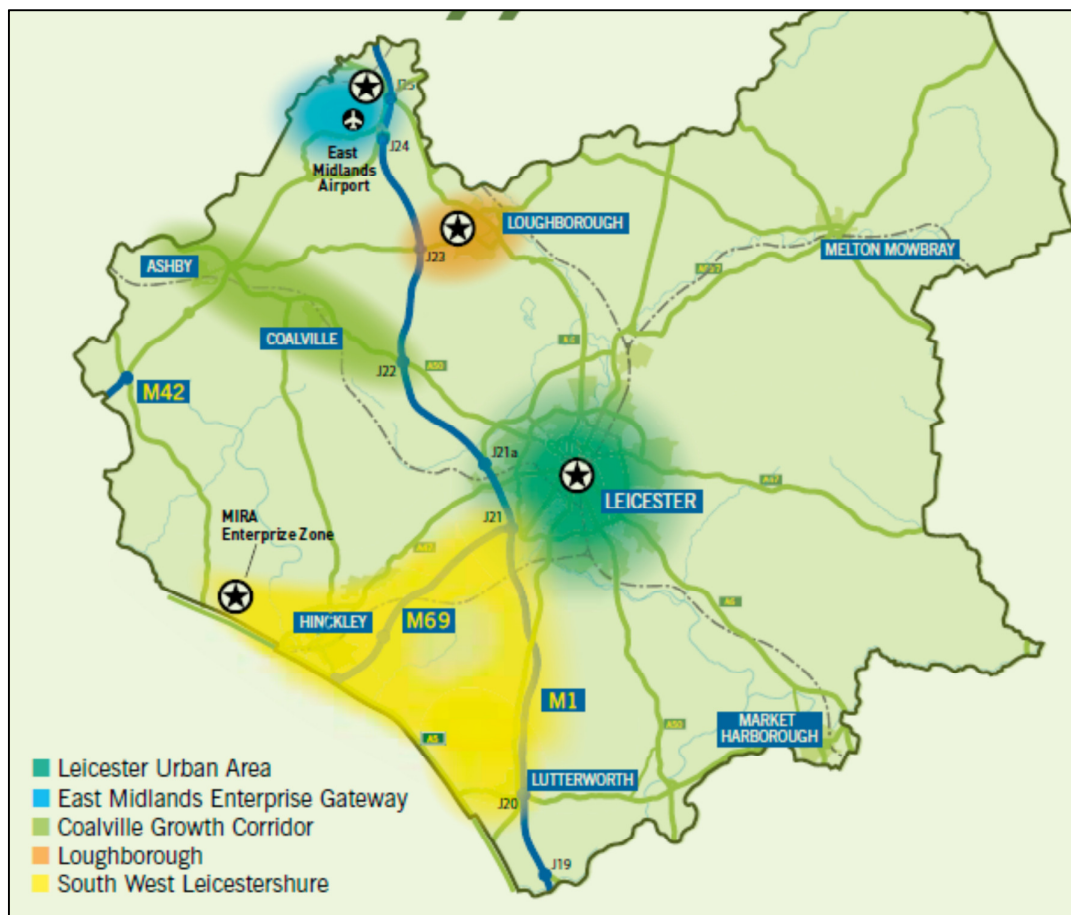
1.5 This document forms the formal written final report of the study. It takes into account the findings of Parts A and B of the study and develops a recommended strategy designed to maintain and enhance the county's established competitive advantage and enable growth for the strategic distribution sector in Leicestershire. It will ultimately inform future LLEP plans/strategies and the development of local plans across the county of Leicestershire. As a result, the recommendations concentrate on those 'policy levers' which the Leicestershire authorities/LLEP are able to control. Consequently, the main focus of the recommended strategy is the identification and allocation of the additional land required at commercially attractive sites up to 2036, albeit that other 'softer' measures and issues are addressed. In brief, it covers the following elements:

- A summary of the key issues, findings and forecasts presented in the Parts A and B reports;
- Policy advice with respect to identifying new sites and delivering sustainable growth; and
- Provides guidance of a more general nature alongside other practical measures for delivering sustainable growth.

1.6 The final versions of the Parts A and B reports are appended to this report document.

1.7 It is important to note that this document is a technical report which will inform the future development of planning policy and economic strategy. The views expressed are those of the consultants and should not be interpreted as policy.

1.8 It is also important that this document (and the study as a whole) is considered alongside the LLEP's Strategic Economic Plan 2014-2020 (SEP). The 'ambition' of the SEP is to create an additional 45,000 jobs, lever £2.5 billion of private investment and increase GVA by £4 billion to 2020. In particular, the SEP is promoting five growth areas in Leicestershire, as illustrated on the map below (reproduced from the SEP).

Map 1.1: The LLEP Growth Areas

- 1.9 Noting that there is a lack of suitable employment land for key sectors (including logistics), one of the key priorities of the SEP is the delivery of infrastructure investment, which can then be used to unlock key development sites and employment land in the identified growth areas. The *East Midlands Gateway Strategic Rail Freight Interchange* is also identified as one of the four 'transformational priorities' in the SEP. The LLEP's SEP is available to download from the following link: www.llep.org.uk/SEP.

2. SUMMARY OF KEY ISSUES, FINDINGS AND FORECASTS FROM PART A AND PART B

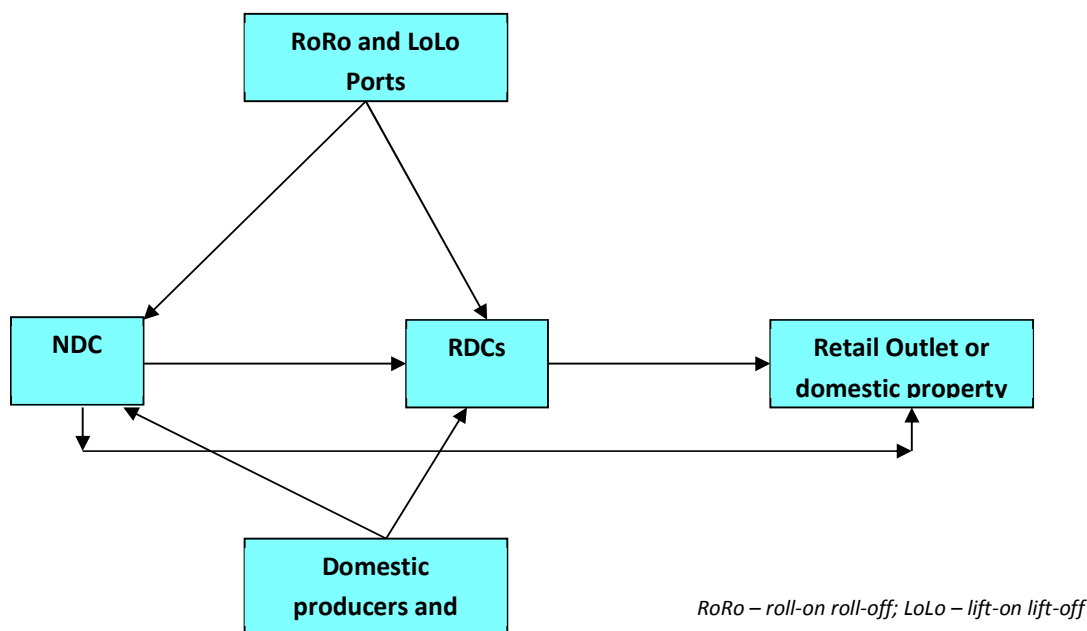
Section 2.1: Part A - The Baseline Position

Section Summary

- The southern part of the East Midlands region, of which Leicestershire is part, has become the competitive 'location of choice' in both supply chain cost and performance terms when sourcing and distributing on a national basis.
- A significant quantum of large scale warehouse floor space has been developed in the golden triangle - 2.25 million square metres of floor space across 89 warehouse units in Leicestershire – predominantly serving a national market.
- LLEP Strategic Economic Plan 2014-2020: 51,300 jobs in the LLEP area in distribution and logistics, accounting for 12% of local employment.
- 21% of the LLEP area Gross Value Added from strategic distribution.

- 2.1 *Logistics and distribution* are often used interchangeably to refer to the movement and management of the flows of goods and information. This can be contained strategically within an organisation or be part of a complex supply chain. The growth in the service industries alongside the eastward shift in manufacturing has fuelled Great Britain's logistics industry and the creation of a distinct logistics sector; with an increase in distribution requirements and changing distribution patterns. As a consequence, industrial property demand has shifted from factories (B2 and B1c use) towards distribution warehouses (B8 use).
- 2.2 The distributors general cargo and retail/consumer type goods generally organise their supply chain strategies around large scale *warehouses* or *distribution centres*. Given their fixed nature and the large capital required to develop them, they can be considered as key geographically specific investments at the 'shipper' level. It is therefore important that sites selected for large scale distribution centres are competitive and attractive to the logistics market. The Part A report described that there are basically two types of distribution centre when defined by their functions and hinterland.
- 2.3 *National Distribution Centres (NDCs)* act as inventory holding points, particularly for imported goods, before re-distribution to other stages in the supply chain. They are termed 'national' because they serve the whole of the UK from the one site. NDCs are generally occupied by retailers or their suppliers, who require facilities to consolidate and hold goods before re-distribution to either a Regional Distribution Centre (see below) or direct to an end user (retail outlet or domestic household).

- 2.4 *Regional Distribution Centres (RDC)* are similar to NDCs in that they receive, hold and then re-distribute goods to the next stage in the supply chain, normally multiple retail outlets. However there are a number of important differences. They have a regional hinterland and, more importantly, their primary role is to consolidate and re-distribute goods in shorter periods of time, rather than acting as inventory holding locations. Consequently dwell times are much shorter at an RDC and they are therefore normally associated with retailers.
- 2.5 The 'supply chain' can therefore be defined as the flow of goods from manufacturer to the general public via suppliers, retailers and their distribution centres as described above. Ultimately, it is demand for goods from the general public which drives the supply chain, and in turn generates the need for strategic distribution infrastructure (including warehousing) and creates the commercial relationships which exist between the main players in the market. The important commercial players are the manufacturers/producers (particularly those based overseas) and the major retailers, together with their 3PLs who physically transport and handle the cargo on their behalf. It is these organisations who will dictate future logistics strategy, particularly with respect to the location of distribution centres and inland transport mode. Cost effective logistics strategies are an important factor contributing to the process of maintaining and enhancing competitive positions. As noted above, the provision of strategic distribution sites which are competitive and attractive to the logistics market will play a crucial role in this overall process.
- 2.6 With respect to the distribution of general cargo and retail/consumer type goods, the distribution strategy which has been established and adopted by most players in the market over the past 25-30 years is illustrated by the flow diagram below.



- 2.7 Under this strategy, goods which are seasonal (such as out-door/garden equipment, summer clothing etc..) and those which are non-time sensitive and/or have long lead times (e.g. toys, electricals etc..) generally go direct to NDCs, for storage ahead of demand or as buffer-stock etc.. Goods which are time sensitive and/or have short lead times (e.g. perishable groceries) generally go direct to RDCs (for fast turn-around and onward distribution to store).
- 2.8 Inbound flows to NDCs can be from domestic sources, but a significant proportion now originates from the deep-sea container ports or Dover Straits ports. Around 30% of inland hauls from the deep-sea container ports to NDCs now involve rail freight for at least part of the journey. Outbound flows from NDCs direct to individual retail outlets will generally only occur when there is sufficient traffic to fill a full size unit load i.e. articulated HGV. Otherwise, goods are shipped from NDCs to RDCs in full loads (HGV or equivalent size intermodal unit), where they are split into smaller consignments and consolidated with other cargo (including goods delivered direct to the RDC) for re-distribution in mixed full size unit loads.
- 2.9 Under this established strategy, the southern part of the East Midlands region became the preferred location for most large scale NDCs. This was for three main reasons, namely:
- It was broadly central to the major domestic production sites, the deep-sea and Channel ports (for imported cargo) and RDCs in other regions (the next stage in the supply chain).
 - The release of large competitive sites by local authorities for B8 use during the 1980s which were close to junctions on the M1/M6. This, combined with the above reason, meant that most inbound or outbound cargo movements could be undertaken within 4.5 hours drive time, this being half a HGV driver's daily driving limit. Consequently, a HGV could round-trip within a driver's shift (enabling a HGV to undertake at least two round-trips over a 24 hour period); and
 - Historically, relatively low road haulage costs (in turn driven by low fuel costs) and competitive labour rates.
- 2.10 The combination of these factors meant the southern part of the East Midlands region became the competitive 'location of choice' in both supply chain cost and performance terms when sourcing and distributing on a national basis. The area has become known as the 'golden triangle'², and has to date consequently established a distinct competitive advantage in the strategic logistics sector.
- 2.11 This position was evidenced by the analysis undertaken in Section 4 (warehouse floor space) and Section 6 (Employment) of the Part A report. Section 4 showed that a significant

² There is no one standard recognised definition of the 'golden triangle'. It may be referred to as the area bounded by the M1, M6 and M69, albeit that others consider it to be a larger area broadly enclosed by Milton Keynes, Birmingham and north Leicestershire (along the M1 and M6 corridors). This study has taken the broader definition.

quantum of large scale warehouse³ floor space has been developed in the golden triangle (of which Leicestershire is part), with a significant proportion of this floor space serving the national market rather than a regional hinterland. The tables below, taken from the interim Part A report, shows existing large scale warehouse floor space capacity by region in England and Wales, alongside the existing capacity by county within the East Midlands.

Table 2.1: Current Large Scale Warehouse Capacity England and Wales, by Region

Region	Floor Space (000s sq m)	Number Warehouse Units	Mean size per unit (sq m)
<i>East Midlands</i>	8,056	334	24,121
North West	6,465	368	17,567
West Midlands	6,133	317	19,347
Yorks&Humb	6,010	302	19,900
East of England	3,988	199	20,039
South East	3,057	176	17,368
South West	1,821	100	18,213
Greater London	1,607	112	14,345
North East	1,352	72	18,775
Wales	1,335	69	19,354
Total	39,824	2,049	19,436
Region	Floor Space (% national total)	Number Warehouse Units (% national total)	
<i>East Midlands</i>	20%	16%	
North West	16%	18%	
West Midlands	15%	15%	
Yorks&Humb	15%	15%	
East of England	10%	10%	
South East	8%	9%	
South West	5%	5%	
Greater London	4%	5%	
North East	3%	4%	
Wales	3%	3%	

Source: MDS Transmodal Warehouse Database (derived from VOA business ratings data) as at January 2014

³ As defined in the Part A report, units greater than 9,000sqm (approx 1000,000 sq ft)

Table 2.2: Current Large Scale Warehouse Capacity in East Midlands by County

Region/County	Floor Space (000s sq m)	Number Warehouse Units	Mean size per unit (sq m)
<i>East Midlands</i>			
Northamptonshire	3,545	134	26,458
Leicestershire	2,250	89	25,277
Nottinghamshire	1,076	44	24,450
Derbyshire	829	45	18,418
Lincolnshire	357	22	16,219
Total	8,056	334	24,121

Source: MDS Transmodal Warehouse Database (derived from VOA business ratings data) as at January 2014

- 2.12 The East Midlands region hosts just over 8 million square metres of floor space across 334 large scale warehouse units. The average size of a warehouse unit is around 24,000 square metres. Around 72% of the East Midlands floor space capacity is located in Northamptonshire or Leicestershire, and in Leicestershire itself around 2.25 million square metres of floor space across 89 warehouse units was identified.
- 2.13 The East Midlands region records around 8% of the population of England and Wales, however it accommodates 20% of total English and Welsh warehouse capacity. Demand for warehouse floor space is directly related to cargo throughput, which in turn is related to the demand for goods within the wider economy. This data shows, therefore, that the East Midlands region has a distinct competitive advantage in this sector, in that it has attracted a quantum of warehouse floor space significantly above that which its population and wider economy would suggest. Essentially the region ‘punches above its weight’ in this sector; the total amount of floor space being significantly more than is required to handle the volume of cargo distributed into the East Midlands regional economy. It is estimated that around 65-70% of the region’s floor space is playing a national rather than regional role on this basis. The mean size per unit is also significantly above the national figure, indicating that they are predominantly undertaking a stock holding role (NDCs rather than RDCs).
- 2.14 This position is further evidenced by the economic and employment analysis undertaken in Section 6 of the Part A report. Nationally, direct employment in the logistics/distribution sector accounts for nearly 9% of the workforce. However, the LLEP Economic Growth Plan 2012-2020 gives a figure of 51,300 jobs in the LLEP area in distribution and logistics, accounting for 12% of local employment. It also identifies the high levels of employment in North West Leicestershire and the Harborough District at Magna Park. In addition the LLEP cites the ONS annual business inquiry employee analysis which shows that 7.7% of jobs are in transport and communication within Leicestershire compared to 5.5% in the East Midlands

and 5.8% in Great Britain. A breakdown of percentage total employment in transport and storage by local authority is shown in the table below.

Table 2.3: Percentage of Total Employment in Transport and Storage in Leicestershire

Local Authority	% of Total Employment
Blaby	11%
Charnwood	9%
Harborough	27%
Hinckley Bosworth	10%
Melton	8%
NW Leicestershire	24%
Oadby and Wigston	9%
City of Leicester	7%
LLEP area	12%
England	9%

Source: Business Register & Employment Survey 2012 (includes wholesale activity)

2.15 In terms of the strategic distribution sector's contribution to the sub-regional economy, the total Gross Value Added (GVA) of the LLEP area in 2012 was £17,949 million, which comprises approximately 1.4 % of total GVA across all the Local Enterprise Partnership (LEP) areas in England (£1,261,571 million)⁴. The same dataset also shows that GVA attributable to wholesale/retail, transport/storage and food activities was £3,794 million or around 21% of the LLEP area total. Unfortunately, the ONS dataset by LEP area does not disaggregate the GVA figures beyond the industrial groupings shown above.

2.16 Overall, output from distribution-related activities has been out-performing manufacturing and this is set to continue in the foreseeable future. The table below outlines the change in contribution to Leicestershire GVA of the distribution sector compared to production from 1997 to 2011 (as per above, the ONS dataset does not disaggregate the GVA figures beyond the industrial groupings shown above). It can be seen that the GVA from manufacturing has actually decreased by 6% over this time period, whilst the contribution from wholesale/retail, transport/storage and food activities has increased by 68%. The manufacturing sector GVA exceeded distribution until 2003 when this trend was reversed.

⁴ Source: ONS - GVA by Industry Type at LEP Area Level, April 2014

Table 2.4: Contribution to LLEP GVA of the Manufacturing and Wholesale/Retail, Transport/Storage and Food Sector

Year	GVA (£ millions)	
	Manufacturing	Wholesale/Retail, Transport/Storage and Food Activities
1997	£3,108	£2,253
1998	£3,079	£2,382
1999	£2,717	£2,400
2000	£2,978	£2,247
2001	£3,039	£2,381
2002	£2,706	£2,597
2003	£2,845	£2,879
2004	£2,883	£3,027
2005	£2,818	£3,103
2006	£2,703	£3,389
2007	£2,764	£3,622
2008	£3,015	£3,623
2009	£2,706	£3,600
2010	£2,844	£3,875
2011	£2,907	£3,794

Source: ONS – GVA by Industry Type at LEP Area Level, April 2014

- 2.17 This above analysis combined serves to underline the importance of the logistics/distribution sector to the sub-regional economy. The area has established a distinct competitive advantage in the strategic logistics sector, with warehouse floor space capacity being significantly more than is required to handle the volume of cargo distributed into the East Midlands regional economy. Consequently, the sector has generated high levels of employment and provides a significant contribution to GVA (above the national average in each case).
- 2.18 While airfreight is an important part of the logistics sector, there are a number of distinct differences between it and the conventional ‘overland’ distribution market which means that it should be considered separately. These were explained in Section 8 of the Part A report.
- 2.19 Statistics presented in Part A showed that long haul (inter-continental) scheduled airlines are the dominant carriers in the bellyhold segment of the airfreight market, and these predominantly use Heathrow as their only British ‘hub’ airport. Consequently, London Heathrow dominates the movement of airfreight in the bellyholds of passenger flights (1.4 million tonnes in 2013 or around 90% of bellyhold air freight). The analysis also showed that Stansted and East Midlands airports dominate the express service sector, accounting for 70% of freight conveyed on dedicated freight aircraft.

2.20 Airfreight within the East Midlands Airport boundary (i.e. providing direct access to the aircraft parking apron) is handled in two dedicated zones, namely.

- *Cargo West*: This includes the main DHL transit shed and its associated aircraft parking apron. The DHL transit shed has a floor space of around 33,000 square metres; and
- *Cargo East*: UPS, TNT and Royal Mail have their operations at Cargo East, occupying transit sheds ranging in size from 4,000 square metres to 7,000 square metre. All operators share the existing aircraft parking apron.

2.21 In addition, a number of logistics operators are located in Pegasus Business Park. This is located in the south-east of the wider airport estate, albeit that it does not have direct access to the aircraft parking aprons.

2.22 The table below shows the airfreight volumes handled at East Midlands Airport since 2003. Annual growth rates on a compound annual basis are just under 1.5% per annum.

Table 2.5: Airfreight Volumes at East Midlands Airport 2003-2013

Year	Tonnes lifted
2003	227,060
2004	253,053
2005	266,569
2006	272,303
2007	274,753
2008	261,507
2009	255,121
2010	273,669
2011	264,595
2012	264,292
2013	266,967
CAGR	1.48%

Source: CAA

2.23 East Midlands Airport published its Sustainable Development Plan (Land Use) in Spring 2014. This document updated the Airport's Master Plan first published in 2006. A review of the airport's cargo forecasts was carried out for the Sustainable Development Plan. These forecasts assume that total air freight demand doubles from 2012 levels (2.3 million tonnes) to 4.4 million tonnes by 2040 (a combined annual growth rate of 2.3%). The updated forecasts also assume that East Midlands Airport's cargo throughput is continued to be carried on dedicated freight aircraft, and also that the express service freight market will

grow at a faster rate than the traditional freight market. The forecast for future cargo tonnage is for some 618,000 tonnes in 2035 and some 700,000 tonnes in 2040.

- 2.24 The Sustainable Development Plan (Land Use) concludes that sufficient land is currently available within the airport boundary (i.e. providing direct 'air-side' access to the aircraft parking apron) to accommodate these growth forecasts. Land has been reserved in the Master Plan for the further development of the DHL building at Cargo West and land will also be safeguarded for a second major integrator hub in Cargo East. Given this conclusion, this final report does not consider the airfreight sector further.

Section 2.2: Part B - The Key Challenges

Section Summary

- The emergence of competing inland locations to the north and east of the 'golden triangle' and in ports; regions/locations which to date have not generally accommodated major national distribution facilities.
- Given a choice of sites, major distribution centre operators would be expected to locate at a rail-served site in the golden triangle as it continues to offer the most competitive location for national distribution.
- The key to addressing the emerging competition, and hence maintain and grow the established competitive advantage, is the continued development of new commercially attractive strategic sites in the East Midlands, a significant proportion of which will need to be directly rail-served (in addition to the usual requirements for high quality connections to the strategic highway network).
- Functional obsolescence of the existing warehouse stock, changes in market trading conditions (particularly the growth in on-line shopping) and technological advances have resulted in a trend towards a requirement for fewer but larger warehouse units. As a result, many existing sites no longer have the plot sizes now required by the market, implying a need to bring forward new/additional sites.

- 2.25 Market conditions can and do change over time, and as market conditions change a previously held competitive advantage can diminish unless action is taken to address the changes. This could include the inability to bring forward new commercially attractive strategic sites (of the size, scale and location required by the market), a situation which would be compounded by other regions (which hitherto had not been associated with national distribution) developing sites of the size and scale required by the market. With respect to the second issue, two important emerging challenges to the golden triangle's competitive advantage in national distribution (and by extension the Leicestershire sub-region) were identified in Part B, namely:

- The emergence of competing inland locations/sites to the north and east of the 'golden triangle', in particular former colliery and heavy industrial sites in the north Midlands, South Yorkshire and the East of England;; and
- The development of B8 land within port estates (so called port centric logistics) which is intended to serve a national market. Opportunities exist for port centric NDCs at London Gateway, the Humber, Teesport and the Mersey Ports

2.26 Both of these emerging challenges involves the development of NDCs in regions/locations which to date have not generally accommodated such facilities. The north Midlands/South Yorkshire has generally been considered 'too far north' for NDCs, while historical industrial relations issues within ports (among other issues) previously rendered them uncompetitive. In the first case, the main logistics strategy adopted by the major national distributors is likely to remain as per above (i.e. goods flowing via NDCs and RDCs to end-users), but the location of the NDCs could migrates away from the golden triangle to these other regions. The latter issue involves serving RDCs direct from NDCs located within ports.

2.27 Analysis was undertaken in Part B (Section 2.1) assessing total supply chain operating costs which would be incurred by a NDC occupier located in the golden triangle and at the competing locations/sites identified above (in this case South Yorkshire and London Gateway). The outputs of the analysis demonstrated that, given a choice of sites, a major distribution centre operator would be expected to locate at a rail-served site in the golden triangle as it continues to offer the most competitive location, particularly when handling a mixture of deep-sea, EU and domestic sourced cargo. Consequently, the key to addressing the above identified challenges to the golden triangle (and by implication Leicestershire), and hence maintaining Leicestershire's established competitive advantage, is the development of new commercially attractive strategic sites in the East Midlands which will be directly rail-served (Strategic Rail Freight Interchanges or SRFIs, as promoted by central Government – see Section 7 of Part A).

2.28 Despite this position, there are two important factors to appreciate. Firstly, even at a rail-served site road haulage will remain the dominant mode of transport for both inbound and outbound cargo flows (they are road connected sites which also have rail terminal facilities). It is therefore important that such sites also have good quality connections to the strategic highway network (as explained in Section 5 of the Part A report). Also, locating at a rail-served site does not necessarily compel the occupier to use rail in the first instance; albeit they may wish to 'future proof' their modal choice options. Secondly, it will be unrealistic in both planning and logistics terms to expect all new large scale distribution activity to locate at a directly rail-served site. In logistical terms, not all warehouse occupiers will benefit from or be of a nature to be attracted to the rail terminal facilities offered at rail-served strategic distribution sites. On that basis, there will still be a need to plan for commercially attractive strategic logistics sites which are not connected to the railway network, which the analysis

undertaken in Part A showed still perform well compared with sites to the north/east of the golden triangle.

2.29 Overall, therefore, the key to addressing the challenges outlined, and hence maintain the established competitive advantage, is the continued development of new commercially attractive strategic sites in the East Midlands, a significant proportion of which will need to be directly rail-served (in addition to the usual requirements for high quality connections to the strategic highway network).

2.30 Conversely, the inability to bring forward a range of commercially attractive sites in Leicestershire (and the wider golden triangle) would most likely result in an overall reduction in the region's total warehouse floor space capacity. As described in Part B, the vast majority of new-build floor space is actually replacing existing obsolete capacity. Consequently, this replacement capacity along with any growth build element would migrate to other regions given a lack of sites in the golden triangle. This clearly has GVA and employment implications.

Section 2.3: Part B - Planning for Growth

Section Summary

- Preferred high replacement land use forecast suggests that around *115ha of new land* at rail-served sites will need to be brought forward by 2036 once existing consents and pipeline sites are accounted for.
- Preferred high replacement scenario suggests around *153ha of new land* at non rail-served sites will need to be brought forward within Leicestershire up to 2036.
- The recycling of plots at existing sites may contribute towards meeting the identified land use requirements to 2036, albeit this issue will need to be addressed by a separate future commissioned study.
- Meeting the land use forecasts, by means of allocating sufficient land through local plans, will have the potential to generate around 7,000 new full-time jobs. The contribution to LLEP Gross Value Added resulting from the generated employment is estimated to be additional £297million.
- Between 3,500 and 7,500 full-time equivalent jobs would be lost from Leicestershire due to the inability to bring forward the new sites in-line with the land use forecasts. This would subsequently result in a reduction in LLEP Gross Value Added of between £274 million and £548 million.

2.31 Given the need to maintain and enhance Leicestershire's competitive position through the continued development of new commercially attractive strategic sites, a forecast of future demand for new-build large scale warehousing in the East Midlands region and Leicestershire

sub-region up to 2036 was undertaken in Part B. The associated land required was then compared with the supply of existing sites with B8 consents and those large rail-served sites either with B8 consents or currently being considered by the planning system.

- 2.32 Most newly built floor space is a 'like-for-like' replacement for existing warehouse capacity which is 'life expired'. This is for a number of reasons. Firstly, the useful economic life of a modern warehouse building is around 30 years, after which the building can be substantially refurbished and then re-let for a similar use (e.g. for new occupier and cargo type) or occasionally demolished, allowing the plot to be 'recycled' for new buildings (potentially new-build warehousing). While many older buildings may be physically sound (i.e. they are not physically obsolete), they can become functionally obsolete e.g. they are unable to accommodate modern automated stock handling equipment or transport equipment such as double-deck trailers. Essentially, buildings reach the end of their useful economic life and are no longer suitable for their original designed use, thereby necessitating a more modern direct replacement facility for the existing occupier. In addition, occupiers can gain economies of scale by merging operations based at multiple sites to one new large warehouse. The ability to operate fewer but larger distribution centres has been facilitated by advances in modern ICT inventory management systems which have permitted much larger warehouses to be operated more efficiently than was previously the case.
- 2.33 Demand for warehouse floor space is also linked to cargo volume. Therefore, future economic growth in the wider economy along with the forecast population increases will lead to growing demand for consumer goods. This in turn will lead to increasing demand for additional warehouse floor space. Consequently, new warehouses are constructed partly to accommodate growing traffic volumes over the long term. For example, the new distribution centres which have been commissioned by the major grocery retailers over the past few years have partly been to accommodate their expansion into 'non-food' lines i.e. volume growth.
- 2.34 On this basis, the forecasting methodology adopted in Part B accounted for these 'replacement build' and 'growth build' elements separately in the first instance. The two elements were then added together to produce an estimate of total gross warehouse new-build. In effect, the forecasts were undertaken on the basis that existing distribution centre occupiers in Leicestershire and the wider East Midlands will commission their new warehouse facilities in broadly the same location as their life-expired building i.e. they do not re-locate to the competing regions or ports discussed above. The total gross warehouse new-build which can be expected by 2036 is shown in the tables below together with the associated land requirements for the preferred high replacement scenario.

Table 2.6: Total Gross New-Build Floor Space and Associated Land Requirements to 2036

Year	000s sq m			
	2021	2026	2031	2036
Leicestershire				
Replacement build	675	900	1,260	1,643
Growth Build	87	136	185	244
Total	762	1,036	1,445	1,886
Land required (ha)	191	259	361	472
	000s sq m			
	2021	2026	2031	2036
East Midlands				
Replacement build	2,417	3,222	4,511	5,881
Growth Build	501	779	1,059	1,405
Total	2,918	4,001	5,570	7,286
Land required (ha)	730	1,000	1,393	1,822

Land required - floor space is 40% of plot footprint

2.35 On the basis that all of the forecast new-build were to locate at new sites, the amount of land that would need to be brought forward across the East Midlands region by 2036 is 1,822ha for the high replacement scenario, given that the warehouse itself normally occupies around 40% of the total plot footprint. On the same basis, 472ha would need to be brought forward by 2036 in Leicestershire. However, this will not be the case and this issue is addressed below.

2.36 While a lower replacement build element was also undertaken as part of the forecasts (low replacement scenario), it is our view that the 'high' replacement scenario should be considered as the preferred option going forward for planning purposes. This is for three principal reasons:

1. Market evidence suggests that while many existing older buildings may be physically sound (i.e. they are not physically obsolete), they are increasingly becoming functionally obsolete. To a great extent, this situation is being driven by changes in the retail sector, and in particular the large growth rates for e-commerce. It is often the case that the modern automated picking, handling and packaging systems required for e-commerce cannot be 'retro-fitted' into older buildings.

2. Similarly, economies of scale can now be gained by operating fewer but larger distribution centres, facilitated by advances in modern ICT inventory management and handling systems. Operations are therefore 'merged' into a large new-build, with much of the new floor space replacing existing capacity at other sites. A number of the consented sites in Leicestershire

do not have the capacity for these larger units, suggesting more land needs to be allocated at new sites.

3. Strong growth rates in rail freight and an increasing desire for some occupiers to re-locate their existing operations to rail-served sites in order to achieve the financial benefits associated with rail freight.

- 2.37 Further, from a logistics market and regional/sub-regional competitiveness perspective, there is also what can be considered the 'more is better' factor. In order to maintain and enhance the competitive position currently enjoyed by the region/Leicestershire, it is vitally important that the market in future is offered a geographical spread of commercially attractive sites available to satisfy individual operator locational requirements. This will be achieved by delivering a supply of B8 sites at the higher end of the land use forecasts. Conversely, a restricted spatial spread at less advantageous locations, implied by the lower end of the land use forecasts, will have the opposite effect.
- 2.38 Expecting all of the forecast new-build warehousing to locate at new sites is unrealistic from both a planning and logistics market perspective. The remainder of the forecasting exercise consequently considered the following:
- The proportion of the forecast demand that is likely to demand a plot at a rail-served site, along with the quantum of land (supply) which will potentially be brought forward at rail-linked sites up to 2036; and
 - For the remainder of the demand that will locate at non rail-linked sites, the amount of land currently available at suitable existing sites which have vacant plots and already have consents for B8 development.
- 2.39 In both cases, any shortfall identified between future demand and expected supply would represent a shortfall which will need to be addressed through the planning system.
- 2.40 It is also important to appreciate that in many cases new-build floor space will not 'fit' onto existing plots at general industrial sites or on 'recycled' brownfield land. This is particularly the case when a large new building is replacing two or more smaller facilities. It may also be the case that many existing sites are no longer fit-for-purpose for strategic distribution e.g. located close to or within urban areas and a substantial distance away from the motorway network. Further, national planning policy expects that developments which generate large volumes of freight (i.e. including strategic logistics facilities) to be located on sites where the use of sustainable transport modes can be maximised. Also, the logistics market itself, particularly operators of large distribution centres, are demanding facilities located alongside rail terminals. Most existing sites are not and cannot be rail-linked (the only site in the region

currently rail-served is DIRFT, albeit that East Midlands Distribution Centre is about to be commissioned)

- 2.41 The implication of the above is that some new large sites will need to be brought forward over the long term to accommodate a significant proportion of the forecast gross new-build, given that such sites will be capable of being rail-served and will have the large plots required for modern distribution buildings.
- 2.42 In terms of demand at rail-served sites, Part B concluded that 58% of the forecast gross new-build is likely to demand a plot at such locations. This took into account a number of factors which are outlined in Part B (Section 5). On that basis, the preferred high replacement scenario suggests 1,057ha of rail-served land will need to be developed by 2036 across the East Midlands region. For Leicestershire, 274ha of land at rail-served sites will need to be developed by 2036.
- 2.43 The quantum of land that is currently being developed or proposed for the region at rail-served sites, both for the large SRFIs (as defined in planning terms) and the smaller schemes, was subsequently considered. This is shown in the table below.

Table 2.7: Site Supply - Rail-served Warehousing and SRFIs Operational/Planned for the East Midlands

Development	County	Approx Floor Space Remaining or Planned (sq m) ¹	Hectares ²
Existing B8 Consent			
East Midlands Distribution Centre	Leicestershire	120,000	20
CIRFT, Corby	Northants	78,000	20
DIRFT II	Northants	38,000	10
DIRFT III (SRFI)	Northants/Warwickshire	730,000	182
Planned (awaiting or seeking consent)			
Eurohub (ProLogis Corby) ³	Northants	230,000	58
East Midlands Gateway (SRFI)	Leicestershire	557,000	139
East Midlands Intermodal Pk (SRFI)	Derbyshire	552,000	138
South Northants (SRFI)	Northants	600,000	150
	TOTAL	2,905,000	717

1. Developer's published estimate 2. Calculated from floor space estimate, based on 40% of plot footprint

3. Not planned to be directly rail-linked but could be served from the adjacent CIRFT rail terminal

Source: Savills and developer's publicity or SRFI application

2.44 The table below consequently compares the expected forecast demand with the likely land supply at rail-served sites to 2036. This assumes that all of the schemes outlined in the table above receive consent and are operational by 2026.

Table 2.8: Land Required at Rail-served Sites, Potential Site Supply and Shortfall to 2036

Year	ha			
	2021	2026	2031	2036
Leicestershire				
Supply - Land planned for rail-served sites	159	159	159	159
Forecast demand - high	111	150	209	274
Shortfall - high	48	9	-50	-115
East Midlands				
Supply - Land planned for rail-served sites	717	717	717	717
Forecast demand - high	423	580	808	1,057
Shortfall - high	294	137	-91	-340

2.45 The preferred high replacement scenario suggests that, once existing consents and potential sites are accounted for, around *115ha of new land at rail-served sites* will need to be brought forward by 2036. This suggests *one further SRFI* will need to be brought forward within Leicestershire up to 2036 (and towards the end of the planning period considered), given that the SRFIs currently planned for the region are in the 100-150ha size range.

2.46 In terms of demand at non rail-served sites, the preferred high replacement scenario suggests 765ha of land will need to be developed by 2036 across the East Midlands region. For Leicestershire, 198ha of land at non rail-served sites will need to be developed by 2036 (preferred high replacement scenario). As per the rail-served sites analysis, the quantum of land that is currently available at existing (non rail-served) sites *with B8 consents* in Leicestershire and across the wider region was considered. Only those sites meeting the criteria for commercially attractive sites (as described in Part A) were considered i.e. large plots, well located in relation to markets and the strategic highway network etc..

2.47 Around 45ha was identified in Leicestershire and 483ha in the rest of the East Midlands and at sites just over the regional boundary in the West Midlands region (528ha in total across the region). It should be noted that only 160ha in total is identified within the broader definition of the 'golden triangle' (equating to approximately 30% of the land available). Many of the sites identified are to the north and east of the golden triangle (on former colliery sites north Nottinghamshire and eastern Northants).

2.48 Consequently, taking the above existing supply into account the table below compares the expected forecast demand at road only sites with the likely land supply to 2036 at non rail-served sites.

Table 2.9: Land Required at Non Rail-served Sites, Potential Land Supply and Shortfall to 2036

Year	ha			
	2021	2026	2031	2036
Leicestershire				
Total Supply - Available at current sites	45	45	45	45
Forecast Demand - high	80	109	152	198
Shortfall - high	-35	-64	-107	-153
East Midlands				
Total Supply - Available at current sites	528	528	528	528
Forecast Demand - high	306	420	585	765
Shortfall - high	222	108	-57	-237

2.49 The preferred high replacement scenario suggests around *153ha of new land at non rail-served sites* will need to be brought forward within Leicestershire up to 2036. To put this figure into context, the *Bardon Hill* development near Coalville has a gross land area of around 160ha i.e. plot footprints plus service roads etc.. Similarly, across the region as a whole the high replacement scenario suggests around 237ha will need to be brought forward up to 2036.

2.50 The total additional employment likely to be generated in the Leicestershire sub-region and East Midlands region resulting from the forecast growth in warehouse floor space capacity was subsequently estimated. Also, the contribution to Gross Value Added resulting from the generated employment was estimated. By delivering in full the new-build forecasts (by means of allocating sufficient land through local plans) it is estimated that just over 7,100 new full time equivalent jobs will be created in Leicestershire. The table below shows the total estimated employment generation associated with the new-build and land use forecasts.

Table 2.10: Estimated Job Creation – Direct and Supporting Activities

	East Midlands	Leicestershire
Floor space growth to 2036 (000s sq m)	1,405	244
Direct jobs created (FTEs)	17,567	3,050
Supporting jobs created (FTEs)	23,716	4,117
Total	41,283	7,167

80 sq m per Full Time Equivalent.

A ratio of 1 warehousing job to 1.35 jobs in supporting activities (e.g. road transport and cargo handling)

2.51 The forecast growth in warehouse floor space capacity will subsequently deliver additional Gross Value Added (GVA). Taking the national GVA per job data for the warehousing and storage sector (Sector 52.1) in the ONS Annual Business Survey and adjusting to GVA per FTE (by using the ratio of FTE jobs to employment from the latest BRES data), GVA per FTE job is around £41,500. It is also assumed that national average productivity rates hold during the 20 years. For Leicestershire, the contribution to Gross Value Added resulting from the generated employment is estimated to be additional £297million (at 2014 prices). This is shown in the table below.

Table: 2.11: Estimated Job Creation and Impact on GVA

GVA	£million (2014 prices)	
	East Midlands	Leicestershire
Direct jobs	£729.0	£126.6
Supporting jobs	£984.2	£170.9
Total	£1,713.3	£297.4

2.52 Similar analysis estimates that between 3,500 and 7,500 full-time equivalent jobs would be lost from Leicestershire due to the inability to bring forward the new sites in-line with the land use forecasts. For Leicestershire, this would subsequently result in a reduction in GVA of between £274 million and £548 million (at 2014 prices).

Section 2.4: Summary and Conclusions from Part A and Part B

2.53 The combined analysis throughout Parts A and B has clearly demonstrated the importance of the logistics/distribution sector to the sub-regional economy. The area has, to date, established a distinct competitive advantage in the strategic logistics sector, with warehouse

floor space capacity being significantly more than is required to handle the volume of cargo distributed into the East Midlands regional economy.

- 2.54 Consequently, the sector has generated high levels of employment and provides a significant contribution to GVA (above the national average in each case). The LLEP Economic Growth Plan 2012-2020 gives a figure of 51,300 jobs in the LLEP area in distribution and logistics, accounting for 12% of LLEP area employment. Gross Value Added in 2012 attributable to wholesale/retail, transport/storage and food activities was £3,794 million or around 21% of the LLEP area total.
- 2.55 Market conditions can and do change over time, and as market conditions change a previously held competitive advantage can diminish unless action is taken to address the changes. Two important emerging challenges to the golden triangle's competitive advantage in national distribution (and by extension the Leicestershire sub-region) have been identified, namely:
- The emergence of competing inland locations/sites to the north and east of the 'golden triangle', in particular former colliery and heavy industrial sites in the north Midlands, South Yorkshire and the East of England; and
 - The development of B8 land within port estates (so called port centric logistics) which is intended to serve a national market.
- 2.56 Both of these emerging challenges involves the development of NDCs in regions/locations which to date have not generally accommodated such facilities. The north Midlands/South Yorkshire has generally been considered 'too far north' for NDCs, while historical industrial relations issues within ports (among other issues) previously rendered them uncompetitive. In the first case, the main logistics strategy adopted by the major national distributors is likely to remain as per above (i.e. goods flowing via NDCs and RDCs to end-users), but the location of the NDCs could migrates away from the golden triangle to these other regions. The latter issue involves serving RDCs direct from NDCs located within ports.
- 2.57 On the basis that Leicestershire wishes to maintain its established competitive advantage and grow the sector, the key to addressing the challenges outlined is the continued development of new commercially attractive strategic sites across the golden triangle (and by implication Leicestershire), a significant proportion of which will need to be directly rail-served (in addition to the usual requirements for high quality connections to the strategic highway network). The supply chain cost analysis demonstrated that, given a choice of sites, a major distribution centre operator would still be expected to locate in the golden triangle as it continues to offer the most competitive location, particularly when handling a mixture of deep-sea, EU and domestic sourced cargo.

- 2.58 The preferred high replacement land use forecast suggests that, once existing consents and pipeline sites are accounted for, around 115ha of new land at rail-served sites will need to be brought forward by 2036. This suggests *one further SRFI* will need to be brought forward within Leicestershire up to 2036 (from the mid-2020s), given that the SRFIs currently planned for the region are in the 100-150ha size range. On a similar basis, the preferred high replacement scenario suggests around *153ha* of new land at non rail-served sites will need to be brought forward within Leicestershire up to 2036.
- 2.59 The analysis undertaken suggested that this will have the potential to generate around 7,000 new full-time jobs in Leicestershire. The contribution to Leicestershire's Gross Value Added resulting from the generated employment is estimated to be additional £297million (at 2014 prices).
- 2.60 Conversely, the inability to bring forward a range of commercially attractive sites in Leicestershire (and the wider golden triangle) would most likely result in an overall reduction in the region's total warehouse floor space capacity. As described, the vast majority of new-build floor space is actually replacing existing obsolete capacity. Consequently, this replacement capacity along with any growth build element would migrate to other regions given a lack of sites in the golden triangle. This clearly has GVA and employment implications as estimated above.
- 2.61 The analysis estimates that between 3,500 and 7,500 full-time equivalent jobs would be lost from Leicestershire due to the inability to bring forward the new sites in-line with the land use forecasts. For Leicestershire, this would subsequently result in a reduction in GVA of between £274 million and £548 million (at 2014 prices).
- 2.62 Consequently, the main focus of the developing strategy outlined in the remainder of this report concerns the identification and allocation of new land at commercially attractive strategic sites, the purpose of which is to maintain and enhance the established competitive advantage, enabling the sector to growth in a sustainable manner.

3. DEVELOPING A STRATEGY – POLICY ADVICE

Section Summary

- Advice on the formulation/drafting of local plan policies with respect to a strategy for the strategic distribution sector.
- Local Plans and site allocations will need to conform with the broader objectives of national planning policy and other relevant public policy.
- Presumption in favour of sustainable development. Local planning authorities should plan proactively to meet the development needs of business. Local plans should proactively drive and support sustainable economic development.
- Given the forecast shortfall in land, working with neighbouring authorities (under the duty to cooperate principle) local plans will need to allocate new appropriate sites to meet the demand which has been forecast (meeting objectively assessed needs).
- Local Plans should encourage the effective re-use of land that has been previously developed. Importance of the Green Belt – development in the Green Belt should not be approved except in very special circumstances (albeit there are technically no Green Belt designations in Leicestershire, only Green Wedges locally designated).
- The extension of existing sites and satellite sites should be considered before the development of new sites. Previously developed land should be promoted for new strategic sites ahead of greenfield land.
- New strategic distribution sites should be safeguarded for B8 use only

3.1 The land use forecasts suggest that an additional 115ha of new land at rail-served sites will need to be brought forward up to 2036, on the basis that those schemes currently in the planning pipeline are delivered. A further 153ha shortfall is forecast at non rail-served sites in Leicestershire. The main aim of this Section is to provide advice on the formulation/drafting of local plan policies with respect to a strategy for the strategic distribution sector, including the identification and allocation of appropriate sites within such plans for strategic distribution, in order to meet the identified shortfalls.

Section 3.1: Summary of Relevant Policy

3.2 Local plans and site allocations will need to conform with the broader objectives of national planning policy and other relevant public policy.

National Planning Policy Framework

- 3.3 The *National Planning Policy Framework (NPPF)* sets out the Government's planning policies for England and how these are expected to be applied in local plans. A number of key sections of the NPPF are therefore relevant to the formulation/drafting of local plan policies with respect to the strategic distribution sector. These are presented in Appendix 1.

Draft National Policy Statement for National Networks

- 3.4 The *National Policy Statement (NPS)* for national networks was published in draft form by the DfT in December 2013. National Planning Statements are primarily intended to provide guidance for promoters of nationally significant infrastructure projects, and they will form the basis for the examination by the Examination Authority and the Secretary of State will use them as the primary basis for making decisions on Development Consent Orders. However, the NPS for national networks does form a good source of advice regarding strategic distribution facilities, particularly with regards to where large rail-served strategic distribution facilities should be located. Its contents should therefore be taken into account when drafting local plan policies and allocating sites within local plans with respect to strategic rail-served distribution greater than 60ha. Again, the relevant sections with respect to the drafting of local plan policies are presented in Appendix 1 (the Part A report provides a full review of the draft NPS, including the need for their development).

NPPF and NPS – Summary

- 3.5 A brief summary of the relevant sections from the NPPF and NPS with respect to the drafting of local plan policies and allocating sites is presented below.
- Local plans should contribute to the achievement of sustainable development. A presumption in favour of sustainable development should be seen as a golden thread running through plan-making. Local planning authorities should positively seek opportunities to meet the development needs of their area, and local plans should meet objectively assessed needs.
 - Local planning authorities should plan proactively to meet the development needs of business. Local plans should proactively drive and support sustainable economic development, should take account of market signals and set out a clear strategy for allocating sufficient land which is suitable for development in their area.
 - Local Plans must be prepared with the objective of contributing to the achievement of sustainable development. They should be consistent with the principles and policies set out in the NPPF, including the presumption in favour of sustainable development.
 - Local plans should support solutions which support reductions in greenhouse gas emissions, reduce congestion and facilitates the use of sustainable modes of transport. Plans should

- ensure developments that generate significant movement are located where the use of sustainable transport modes can be maximised.
- Local authorities should work with neighbouring authorities and transport providers to develop strategies for the provision of viable infrastructure necessary to support sustainable development, including large scale facilities such as rail freight interchanges.
 - The Government attaches great importance to Green Belts⁵. Green Belt boundaries should only be altered in exceptional circumstances through the preparation or review of the Local Plan. When reviewing Green Belt boundaries local planning authorities should take account of and be consistent with the need to promote sustainable patterns of development.
 - Inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances. Local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. 'Very special circumstances' will not exist unless the potential harm to the Green Belt is clearly outweighed by other considerations.
 - Local Plans should encourage the effective re-use of land that has been previously developed.
 - Local planning authorities should set out the strategic priorities for the area in the Local Plan, which should include strategic policies to deliver commercial development and the provision of infrastructure for transport.
 - Local Plans should plan positively for the development and infrastructure required, be based on co-operation with neighbouring authorities, and allocate sites to promote development and flexible use of land, bringing forward new land where necessary.
 - Local planning authorities should have a clear understanding of business needs within the economic markets operating in and across their area and work together with neighbouring authorities and Local Enterprise Partnerships to prepare and maintain a robust evidence base to understand both existing business needs and likely changes in the market.
 - Public bodies have a duty to cooperate on planning issues that cross administrative boundaries, particularly those which relate to the strategic priorities.
 - Adequate links to the rail and road networks are essential. As a minimum a strategic rail freight interchange (SRFI) should ideally be located on a route with a gauge capability of W8 or more, or capable of enhancement to a suitable gauge.
 - SRFIs tend to be large scale commercial operations, which are most likely to need continuous working arrangements (up to 24 hours). By necessity they involve large structures. Locationally, therefore, they often may not be considered suitable adjacent to residential areas or environmentally sensitive areas such as National Parks and AONBs
- 3.6 Part A and Part B of this study have previously concluded that the Leicestershire sub-region (part of the golden triangle) has to date established a distinct competitive advantage in the logistics sector. It has become the competitive 'location of choice' in both supply chain cost and performance terms when sourcing and distributing on a national basis. Further, it was

⁵ There are technically no Green Belt designations in Leicestershire, only Green Wedges locally designated

shown that the key to maintaining this position (and addressing the identified challenges) is the continued development of new commercially attractive strategic sites, a significant proportion of which will need to be directly rail-served.

- 3.7 Considering these policy requirements, local plans should therefore be proactively planning to enhance this competitive advantage in a sustainable manner. Given the forecast shortfall in land, working with neighbouring authorities local plans (under the duty to cooperate principle – see below) will need to allocate new appropriate sites to meet the demand which has been forecast (meeting objectively assessed needs). These will need to be well connected to the strategic highway network; should this require the provision of major new or significantly improved highway infrastructure, it is important to recognise the often long delivery lead in times. A significant proportion of the new sites will need to be directly rail-served (for both competitiveness and sustainability reasons) by suitable railway lines (W9 loading gauge etc.). While the use of previously developed sites should be encouraged in the first instance, it is likely that greenfield and greenbelt sites might need to be allocated, given very special circumstances, to meet these needs. Recent major planning decisions in this sector (DIRFT III and Radlett SRFIs) have clearly indicated that there is a clear need for the development of directly rail-served facilities, that sustainability and emissions benefits subsequently arise, and that substantial weight should be attached to both of these factors.

Re-use/Recycling of Existing Sites

- 3.8 The NPPF states that Local Plans should encourage the effective re-use of land that has been previously developed. It has previously been noted that warehouse buildings have a useful economic life, and beyond that may not be suitable for their original designed use (either physical or functional obsolescence). In such cases and on the basis that the site in question is commercially attractive to the market (i.e. good road connections, close to labour, large plot etc.), the life expired building can be substantially re-built/refurbished for a similar use (e.g. for new occupier and cargo type) or demolished, allowing the plot to be 'recycled' for new warehouse buildings (in some cases it may be cheaper to clear the plot and develop a new-build unit).
- 3.9 Conversely, some existing plots and sites will be unsuitable for re-development for strategic distribution e.g. not of the size and configuration required for modern buildings, poor highway connections or close to residential. It should be noted that in these circumstances, opportunities will then exist for such land adjacent to or within urban areas to be released for other employment use or even for non-employment use (residential).
- 3.10 Clearly, the quantum of land at existing plots which could be recycled for new-build warehousing has the potential to reduce significantly the amount of new land that needs to be allocated. Local Plans should therefore encourage the refurbishment of buildings at

existing commercially attractive sites or the recycling of plots at such sites (which meet the same criteria as used for identifying new sites – see below) ahead of the development of new sites for strategic distribution. On that basis, identifying and quantifying the amount of recycled land potentially available at appropriate existing sites should be undertaken before new sites are allocated in Local Plans. However, Local Plans will also need to acknowledge that not all sites and plots will be suitable for redevelopment for strategic distribution, and that new sites will still need to come forward.

Section 3.2: Identification of New Sites

3.11 A criteria based approach should be adopted when identifying and assessing potential new sites for strategic distribution. Based upon the rationale described in the Part A report, sites considered to be appropriate for hosting strategic distribution are those which meet the following criteria:

- Good connections with the strategic highway network – close to a junction with the motorway network or long distance dual carriageway. Motorway/dual carriageway junctions and the approach routes should have sufficient network capacity;
- Appropriately located relative to the markets to be served;
- Offers modal choice; is served by a railway line offering a generous loading gauge (minimum W9), available freight capacity and connects to key origins/destinations directly without the requirement to use long circuitous routes;
- Is sufficiently large and flexible in its configuration so that it can accommodate an intermodal terminal and internal reception sidings;
- Is sufficiently large and flexible in its configuration so that it can accommodate the size of distribution centre warehouse units now required by the market;
- Is accessible to labour, including the ability to be served by sustainable transport, and located close to areas of employment need; and
- Is located away from incompatible land-uses.

3.12 Given that it is unrealistic in both planning and logistics terms to expect all new large scale distribution activity to locate at a directly rail-served strategic logistics site, appropriate road only sites can therefore be considered ones which meet all the other criteria outlined above bar the modal choice requirements. It is also noted that ecological surveys alongside other studies e.g. flood risk, will also be required to ensure that sites are suitable for hosting strategic distribution.

Section 3.3: Deliverability and Phasing

- 3.13 The conclusions within this study (Part B) relating the quantum of land required for strategic distribution up to 2036 should be considered central to the drafting of local plan policy. When identifying appropriate locations for strategic distribution, it is essential that supply is phased to ensure that the best sites can be progressed first and to enable a geographic choice of sites to satisfy individual operator locational requirements.
- 3.14 In line with the duty to co-operate principle, it should be the responsibility of a *strategic distribution sites task group* to identify and discuss opportunities and determine the most suitable sites to bring forward in local plans. This concept, including its composition and operation, is fully addressed in the following section (Section 4).
- 3.15 In order to ensure that there is a sufficient pipeline of strategic distribution sites, new land should be identified and allocated in the following sequential order, namely:
- The extension of existing strategic distribution sites, both rail-served and road-only connected. For existing rail-served sites, this should only be permitted where there is spare capacity available at the existing rail freight terminal or capacity can be enhanced as part of any extension. Likewise, site extensions should only be permitted where there is adequate road capacity serving the site and at adjacent motorway/dual carriageway junctions or capacity can be enhanced as part of any extension;
 - In circumstances where rail-served sites cannot be extended, local plans should consider satellite sites (which shall be located close to the existing strategic distribution sites) which meet the site selection criteria and could utilise the existing rail freight infrastructure at the core site. A prerequisite for satellite sites to be considered should be spare rail capacity being available at the core site rail terminal or capacity that can be enhanced as part of any satellite development;
 - Identifying suitable new strategic distribution sites on previously developed land which meet the site selection criteria; and
 - Identifying suitable new strategic distribution sites on greenfield land which meet the site selection criteria.
- 3.16 When considering the extension of existing sites and the development of satellite sites, it should be a prerequisite that all existing suitable plots have been taken up.
- 3.17 A hierarchy of key areas of opportunity was identified in the Part B report (in no particular order of priority), namely:

Best key areas of opportunity – Leicestershire

- Key Area A: *Leicester to Hinckley corridor*;

- Key Area B: *Midland Main Line North corridor*; and
- Key Area C: *East Midlands Airport to south Derby corridor*.

Good key areas of opportunity – Leicestershire

- Key Area D: *M1 South corridor*;
- Key Area E: *M1 North corridor*; and
- Key Area F: *M42/A42 corridor*.

3.18 In general, the site selection task group should consider potential sites within the ‘Best’ category before considering locations in the ‘Good’ category. However, flexibility will be important so that suitable strategic sites in the ‘Good’ locations can come forward ahead of new sites within the ‘Best’ locations. Examples where this flexibility might be applied include:

1) The need to maintain a geographical spread of available sites across Leicestershire. To maintain competitiveness, it is important that a geographic choice of sites is made available to satisfy individual operator requirements. In order to ensure geographical choice, it will be important to consider where the ‘gaps’ in provision exist, and potentially bring forward sites within a ‘good’ key area of opportunity ahead of a ‘best’ area; and

2) A major scheme which is backed by a significant occupier deal (anchor tenant). Significant would be deemed to include those requirements in excess of c.50,000sqm for a single user which subsequently enabled the delivery of the major site infrastructure, including the intermodal rail terminal, and that the site meets the site selection criteria in all other respects.

Section 3.4: Geographic Choice of Sites

3.19 In order to maintain and enhance the competitive position currently enjoyed by the region/sub-region, it is vitally important that the market in future is offered a geographical spread of commercially attractive sites available to satisfy individual operator locational requirements. For road-only sites and taking into account the policy advice outlined above, it is vitally important that a strategy for the strategic logistics sector brings forward new sites within at least two of the *key areas of opportunity* simultaneously i.e. not one after the other. As noted above, flexibility in policy development should ensure that suitable strategic sites in the ‘Good’ locations can come forward ahead of new sites within the ‘Best’ locations in order to maintain a geographic choice at anyone time.

3.20 Given that the forecasts suggest *one further SRFI* will need to be brought forward within Leicestershire up to 2036 and the need to offer a geographical choice, this suggests any new

development should be brought forward in an area away from the current/planned schemes to the north of the county.

Section 3.5: Timescales

3.21 The table below summarises the position detailed on the Part B report with respect to site demand and supply to 2036 for Leicestershire.

Table 3.1: Demand and Supply to 2036

Year	ha			
	2021	2026	2031	2036
Rail Served Leicestershire				
Supply - Land planned for rail-served sites	159	159	159	159
Forecast demand - high	111	150	209	274
Shortfall - high	48	9	-50	-115

Year	ha			
	2021	2026	2031	2036
Non Rail Served Leicestershire				
Total Supply - Available at current sites	45	45	45	45
Forecast Demand - high	80	109	152	198
Shortfall – high	-35	-64	-107	-153

3.22 With respect to rail-served sites, the forecasts suggest that new rail-served land will need to come forward at some point during the mid-2020s. With respect to non rail-served sites, the need for new land to be allocated is more immediate. Part B noted that only around 45ha is identified in Leicestershire and in the rest of the East Midlands most of the available plots are outside the broader definition of the ‘golden triangle’ (approximately 30% in the golden triangle). Many of the sites identified are to the north and east of the golden triangle (on former colliery sites north Nottinghamshire and eastern Northants). Markham Vale, G-Park Newark, Future Point Newark and Vertical Park are the largest sites with availability, all of which are in areas to the north and east of the golden triangle which have been identified as being the key threat to Leicestershire’s hitherto comparative advantage.

3.23 For Strategic Rail Freight Interchanges which seek consent through the Development Consent Order (DCO) process, the actual delivery of such schemes is estimated to take at around seven years (assuming a ‘clear run’ through DCO process). The first two years would generally be occupied by master planning, liaising with Network Rail and highway authorities

and gaining 'sign-off' for the planned network connections alongside undertaking the necessary ecological and environmental impact studies. Assuming all goes to plan, the following 18 months would be occupied by the extensive consultation exercises that are required to be conducted with stakeholders. The next 18 months would then consist of the main examination stage by the Planning Inspectorate, the preparation of a report by the Planning Inspectorate to the Secretary of State for Transport, following by his/her consent decision (which has to be within three months of the report from the Planning Inspectorate). On the basis that consent is granted, Years 6 and 7 would be the main construction phases of the SRFI. Assuming site allocation in a local plan, a major road-only connected site is estimated to take between 4-6 years to deliver.

Section 3.6: Duty to Cooperate

- 3.24 Maintaining and enhancing Leicestershire's competitive position in this sector will be achieved through the continued development of new commercially attractive strategic sites. The landuse forecasts suggests that around 115ha of new land at rail-served sites will need to be brought forward by 2036 once existing consents and pipeline sites are accounted for. On a similar basis, the preferred high replacement scenario suggests around 153ha of new land at non rail-served sites will need to be brought forward within Leicestershire up to 2036.
- 3.25 Delivering new commercially attractive strategic sites on this scale cannot be undertaken by local planning authorities working alone. The NPPF now places a *duty to cooperate* on planning authorities when covering issues that cross administrative boundaries, particularly those which relate to the strategic priorities. Given the above, delivering the identified need will require continual long-term strategic and collaborative planning across the county of Leicestershire, and potentially with authorities in neighbouring areas outside the county. The need for a geographical choice of sites (see above) also implies a county-wide and cross-border approach to planning.
- 3.26 When preparing local plans and policies, in practical terms this means the Leicestershire planning authorities, the County Council and LLEP working together on a long term collaborative basis to allocate appropriate sites within the county to meet the identified shortfall. In the event that the identified shortfall cannot be entirely allocated within Leicestershire, this implies a requirement to bring forward further appropriate sites in neighbouring authorities outside the county. The duty to cooperate principle will therefore have to extend into neighbouring authorities in Northamptonshire, Nottinghamshire, Derbyshire and the West Midlands region.
- 3.27 This study should therefore not be viewed as a 'one-off process', and HPIG or a similar grouping will need to take the strategy forward on a long-term basis (and review the strategy periodically). This issue is dealt with in more detail in Section 4 below. Further, the

preparatory work will need to begin immediately so that the right sites in the most competitive locations can come forward for development as and when they are required by the market.

Section 3.7: Safeguarding

3.28 To enable the potential of strategic distribution sites to be realised and in order to meet the overriding competitiveness objectives for Leicestershire, the following uses should not be permitted at strategic distribution sites;

- B1 uses (unless ancillary)
- B2 General industrial
- Un-related smaller units.

3.29 B1(a) uses will not be acceptable, however, ancillary offices to a warehouse should not be precluded. There are also likely to be more suitable sites available for the location B1(b), B1(c) and some B2 uses.

3.30 It is acknowledged that the principal use of strategic logistics sites will be for B8 uses. However, 'just in time' production and processing units with substantial elements of storage and distribution should be permitted. It is also relevant that there are many more large units which have B2 and B8 activities being undertaken within a single building which also offer a significant number of employment opportunities. Other uses will not be acceptable on strategic logistics sites..

3.31 One of the functions of strategic logistics sites will be the ability to offer larger plot sizes to be able to accommodate the large footprint buildings increasingly required by the market. It would therefore conflict with their wider objectives if smaller units were developed which compromised the size of available plots. It is therefore recommended that a minimum unit size of 10,000 square metres be imposed to address this.

3.32 There may be exceptional circumstances when some flexibility is required but this should only be considered for cases which can demonstrate significant potential for rail freight use. These units should also only be accommodated, where possible, on smaller plots or as infills following other larger development and where plots have been completed.

3.33 In order to complement the above, from a market perspective it would be beneficial for local plan policy to identify the characteristics and expectations for strategic logistics sites to inform developers/occupiers. These should include:

-
- 24/7 unrestricted operating hours;
 - Good road and rail freight access (for those sites which will be rail-served);
 - The ability to deliver high-bay warehousing at least 20m height;
 - Acceptable plot and building sizes;
 - Stance on renewable energy generation;
 - Servicing requirements and parking standards;
 - Phasing of infrastructure and periphery landscaping requirements;
 - S106 expectations;
 - Green transport initiatives;
 - Public transport expectations; and
 - Noise/lighting expectations.

4. DEVELOPING A STRATEGY – SITE SELECTION GUIDANCE AND OTHER MEASURES

Section Summary

- A requirement to continue long-term strategic and collaborative planning across the county of Leicestershire, and potentially with authorities in neighbouring areas. This study should therefore not be viewed as a ‘one-off process’, and *HPIG* or a similar grouping will need to take the strategy forward on a long-term basis. On that basis, a *strategic distribution sites selection task group* should be established to identify and discuss opportunities and determine the most suitable sites to bring forward in local plans.
- The amount of land which could potentially be recycled up to 2036 at existing commercially attractive sites in the East Midlands/Leicestershire should be factored into the demand/supply equation before a ‘search’ or ‘call’ for new sites is commenced. It is therefore recommended that the first major task of the sites task group should be to commission a study to fully examine this issue.
- The *strategic distribution sites task group* will also need to identify new sites for development (pro-active approach) alongside undertaking a ‘calls for sites’ from prospective commercial developers.
- Three ‘Best’ Key Areas of Opportunity and three ‘Good’ Key Areas of Opportunity identified. A growth strategy should aim to bring forward sites within the ‘Best’ Key Areas of Opportunity before considering locations in the ‘Good’ areas, subject to flexibility.
- A number of barriers to development are identified within the key areas of opportunity. planning authorities and LLEP to liaise with (and lobby) the Highways Agency and Network Rail to ensure that enhancement schemes are ultimately delivered.
- Leicestershire planning authorities, the LLEP and other relevant stakeholders co-operate in the commissioning of a logistics and distribution sector growth action plan. This will consider how to develop the growth potential of the sector, covering a broad range of issues important to the sector including skills and training.
- Potential to utilise future Growth Deal funding to unlock private sector investment in new rail-served and road only connected strategic logistics sites.

Section 4.1: Site Selection Task Group

- 4.1 To bring forward the quantum of land identified as being required, there will be a need to continue long-term strategic and collaborative planning across the county of Leicestershire, and potentially with authorities in neighbouring areas (duty to cooperate). This study should therefore not be viewed as a ‘one-off process’, and *HPIG* or a similar grouping will need to take the strategy forward on a long-term collaborative basis. On that basis, a *strategic*

distribution sites selection task group should be established to identify and discuss opportunities and determine the most suitable sites to bring forward in local plans. In line with the duty to co-operate principle, already established through the Leicester and Leicestershire HPIG, this task group should be formed of the following bodies (core members):

- Leicester City Council;
- Harborough District Council;
- Hinckley and Bosworth Borough Council;
- Blaby District Council;
- Oadby and Wigston Borough Council;
- North West Leicestershire;
- Charnwood Borough Council;
- Melton Borough Council;
- Leicestershire County Council; and
- Leicester and Leicestershire Local Enterprise Partnership (LLEP).

4.2 A senior representative from each of the local planning authorities should be represented on the task group, along with relevant senior representation from the County Council and LLEP. Given its role in strategic economic planning and its county wide remit, it may be that the LLEP is also the appropriate body to chair the task group (albeit it may wish to decline this recommended role). Under the duty to cooperate principle, neighbouring authorities in Northants, Nottinghamshire and the West Midlands region could also be ‘co-opted’ onto the task group as ‘associate members’ or attend the task group meetings when issues of relevance are being discussed e.g. where land has to be allocated outside Leicestershire to meet the identified shortfall, or if an appropriate site being considered crosses/straddles a planning authority boundary. Given the key areas of opportunity identified below, this is likely to include Nuneaton, Rugby, Daventry and Northampton councils to the south and west, and Nottingham, Rushcliffe, Derby and South Derbyshire to the north of the county.

4.3 It is also important to note that such a long-term strategic and collaborative approach will need to focus on issues beyond land use planning. Infrastructure development as a means of ‘unlocking’ employment land has previously been highlighted (Part B and also below), while addressing other issues such as skills and training should also be taken forward in a similar manner.

4.4 The main remit of the task group could be as follows:

- To identify and quantify the amount of land at existing commercially attractive sites that could potentially be recycled up to 2036 for new-build warehousing;
- To identify new sites for development (pro-active approach);

- To issue ‘calls for sites’ to prospective commercial developers⁶;
 - To foster a collaborative approach to planning for the strategic logistics sector across Leicestershire and beyond;
 - To monitor progress in site allocation and take-up over time; and
 - To develop a common position with respect to those large schemes which will be considered via the Development Consent Order process e.g. SRFIs. Such schemes are examined by the Planning Inspectorate, with local authorities being statutory consultees. Input into the examination process potentially will be stronger via an agreed combined approach, rather than authorities acting in isolation.
- 4.5 Infrastructure delivery is by its nature long-term. It is therefore important that the *strategic distribution sites task group* be formed and begin its work as soon as practically possible. The underlying evidence base to inform its decisions and the preparation of local plan policies will need to commence now so that the right sites in the most competitive locations can come forward for development as and when they are required by the market.
- 4.6 At this stage, it is not envisaged that the task group will undertake a ‘joint core strategy’ approach to planning and the strategic distribution sector in Leicestershire. A number of planning authorities in Northamptonshire have progressed this approach e.g. Daventry District, Northampton Borough and South Northamptonshire Councils are currently developing a joint core strategy for the plan period up to 2026⁷.
- 4.7 The approach adopted by the former *West Midlands Employment Land Advisory Group* is perhaps the more appropriate model for Leicestershire at present. Formed by the now defunct Regional Development Agency/Planning Board but with representatives from most major planning authorities, a collaborative and co-ordinated approach to planning for the strategic logistics sector was developed, including commissioning demand-supply research and other relevant data/evidence. However, the resultant strategy that emerged (including preferred locations for development) was intended to be implemented via individual authority Local Plans across the region (rather than joint strategies), albeit that relevant policies in each of the plans would reflect the collaborative and co-ordinated approach.
- 4.8 The amount of land which could potentially be recycled up to 2036 at existing commercially attractive sites in the East Midlands/Leicestershire should be factored into the demand/supply equation (Part B and Section 2 above) before a ‘search’ or ‘call’ for new sites is commenced. However, it was also noted in Part B that there is currently no reliable data or information readily at hand to allow these figures to be verified or otherwise in a robust manner (i.e. could withstand ‘testing’ at examination or inquiry). On that basis, it was not

⁶ Identifying new sites and a ‘call for sites’ should be undertaken simultaneously (a twin-track approach).

⁷ <http://www.westnorthamptonshirejpu.org/connect.ti/website>

possible to robustly quantify the amount of recycled land potentially available up to 2036, and such data was therefore not included in the supply-demand analysis.

- 4.9 It is therefore recommended that the first major task of the sites task group should be to commission a study to fully examine this issue. It would need to be undertaken by a specialist commercial property consultancy, with both research and agent departments. Such a study will most likely include a significant amount of primary research, including the surveying of landlords, developers and occupiers at existing sites across the county.
- 4.10 In terms of the *methodology* likely to be adopted by such a study, it would most likely commence by identifying all existing sites, plots and buildings above 9,000 square metres across the county. It would then discount those existing sites, plots and buildings which can be considered unsuitable for re-development for large scale strategic distribution e.g. not of the size and configuration required for modern buildings, poor highway connections or close to residential. This would primarily be a map-based exercise informed by relevant local authority records showing age of construction of the units along with the size of the plots/floor space based on planning consents records, potentially supplemented by Valuation Office Agency (VOA) data on building floor space (such as that contained in MDS Transmodal's warehouse database).
- 4.11 The remaining (commercially attractive) sites, plots and buildings, where the potential opportunities to refurbish buildings or recycle plots for new buildings will be located, are likely to be the more modern 'out of town' sites, originally developed during the 1980s and 1990s, which offer large uniform plots, have good connections to the strategic highway network, are located away from incompatible land uses and are well located relative to end-users. Again, the relevant local authority should be able to provide age of construction of these units along with the size of the plots/floor space based on consents records (perhaps supplemented by VOA data). Surveys of landlords/occupiers could then be undertaken to fill any gaps. The main *outputs* would most likely be an inventory of sites, plots and buildings (square metres and hectares of land) which could realistically be refurbished or recycled for new buildings up to 2036.
- 4.12 The outputs from this exercise could then be 'deducted' from the short fall and consequently assist in determining the quantum of new land that will need to be brought forward in local plans and strategies. However, the outputs are also likely to be very subjective, as it would be based on the collective industry knowledge of the consultants commissioned and the occupiers/landlords consulted during the study. For example, the consultants would need to consider whether a unit built in 1989 is likely to become functionally or physically obsolete by 2036.
- 4.13 The study will need to appreciate that the point at which employment land suitable for strategic distribution is recycled is determined by a number of factors. Firstly, the building

must have become obsolete as a strategic distribution warehouse. This obsolescent can be categorised as physical, functional or locational.

- 4.14 Physical obsolescence caused by the deterioration of the fabric of the building is linked to the quality of original construction and the implementation of an ongoing maintenance programme. If either of these is lacking and the cost of remedying physical defects in the building exceed the value of those works, then the building is likely to be demolished. However the strategic distribution warehouse sector is relatively immature, emerging in the UK in the late 1980s to early 1990s. Many of the warehouses constructed during this time were occupied on 25 year, full repairing and insuring leases providing a secure income for investors and consequently a profitable scheme for developers. A warehouse constructed in 1990 is quite likely to be occupied under the terms of the original lease which will be due to expire in 2015. Over this time the property has not only provided a good return to the freeholder, but will have been maintained to the standard required in the lease.
- 4.15 However, few of these first generation strategic distribution warehouses are likely to meet current standards for *Grade A* units; larger units, with higher ceilings, more dock doors, large yards and modern technology. Generally they will have lost their competitive position and will be functionally obsolete as a Grade A strategic distribution unit. These facilities are likely to be re-occupied on shorter term leases by cost conscious local occupiers. Whilst there continues to be a market for cheaper second hand space, demolition and rebuild is unlikely.
- 4.16 Factors beyond the property itself such as a radical change in consumer patterns or political climates may also render the building locationally obsolete. In these circumstances it would only be relevant to develop for alternative use.
- 4.17 Secondly, obsolescence as a strategic distribution unit will not necessarily result in demolition. Even those first generation warehouses which are likely to be functionally obsolete as strategic distribution units at lease expiry, will be occupied on shorter leases by local companies. Larger units may be subdivided or, subject to planning, reinvented as B2 units. The market for these properties as investments will be different; the slightly riskier short term lease consequent higher yield and lower capital value is more likely to attract private investors or property companies than funds, but as long as there is a market for this product the building will be maintained and occupied. Land will only become available when the cleared site value i.e. the value of the land less demolition costs, is greater than the value of the existing buildings. Not only will the land not be recycled in the medium term for strategic distribution, but the effect will be to reduce the overall stock of Grade A strategic distribution space.
- 4.18 The process of identifying new sites for development (the pro-active approach) should be guided by and based around the site selection criteria outlined in Section 3 above (criteria

and their rationale being presented in the Part A report). While this process will probably not require a level of detail comparable to that undertaken when testing a specific SRFI type scheme at a public inquiry, it will necessitate the commissioning of primary research to ascertain suitability against the key criteria, as follows:

- At least 50ha of developable land;
- Good highway connectivity – demonstrating that the motorway/dual carriageway junctions serving the prospective sites and the approach routes have sufficient network capacity;
- Showing that a prospective site can be connected to the railway network and that it is served by a railway line offering a generous loading gauge (minimum W9), available freight capacity and connects to key origins/destinations directly without the requirement to use long circuitous routes;
- Are the prospective sites sufficiently large and flexible in configuration to accommodate an intermodal terminal and internal reception sidings;
- Similarly, are they sufficiently large and flexible in configuration to accommodate the size of distribution centre warehouse units now required by the market;
- Demonstrating that they are accessible to labour, including the ability to be served by sustainable transport, and located close to areas of employment need; and
- Located away from incompatible land-uses.

4.19 It is also noted that high level landscape and ecological surveys alongside other constraint studies e.g. flood risk, will also be required to eliminate the possibility that prospective sites are unsuitable from this perspective.

4.20 While it will not be the responsibility of the task group or planning authority to ultimately develop any commercially attractive site identified, the group or respective local authority (i.e. district in which the site is located) is likely to have an on-going role in planning and assisting the delivery of the completed development. The approach adopted by *Halton Borough Council* with respect to the initial development of the *Merseyside Multi Modal Gateway (3MG)* would appear to be the appropriate model. The site was originally identified in the *Merseyside Freight Study (2000)*, to which Halton was a partner, as being potentially suitable for a SRFI type development (and in the process regenerating a part-derelict brownfield site). The totality of the site was under a number of different ownerships, however Halton played a co-ordinating role in formulating the 'vision' for the site and bringing the various commercial interests together into a collaborative partnership. This included managing the master planning exercise and ensuring the landowners 'buy in' into the plan which emerged, devising a Supplementary Planning Document for the site, developing an overarching marketing strategy/brand for the development, appointing a commercial developer (following a competition) for those parts of the site owned by Halton and assisting in securing grant funding.

- 4.21 Alongside and at the same time as the pro-active approach, the task group should also issue a 'call for sites' to the commercial property sector. Developers and land owners would be asked to suggest potentially suitable sites located within the key areas of opportunity. As part of the process, the developers would be required to demonstrate suitability against all of the site identification criteria noted above (i.e. submissions would need to include primary research demonstrating suitability against the criteria). This will need to be a stipulated requirement outlined in the initial 'call for sites'.
- 4.22 The task group would most likely need to commission their own experts to review the submissions and select the most appropriate (and deliverable) sites for subsequent inclusion in local plans. Again the Halton model would appear the most appropriate. The respective local authority could play a co-ordinating role in managing the master planning exercise, devising the required planning policies (e.g. Local Plan or Supplementary Planning Document) and assisting in securing any grant funding. The approach of *St Helens MBC* with respect to the proposed Parkside SRFI is another example of this approach. The Council, working collaboratively with the prospective developer, has included a specific policy within its emerging Core Strategy which allocated the land for a SRFI and will ultimately guide the development of the scheme.
- 4.23 Taking all of the above in account, it can be concluded that the sites selection task group will need to develop a 'partnership approach' with the commercial property sector. In some cases, such as with 3MG, it will be the relevant local authority effectively taking the lead in co-ordinating the development. In others, it will be the local authority assisting a commercial developer in promoting a specific scheme.
- 4.24 Some commercial developers may already be planning schemes within Leicestershire which ultimately will be considered through the Development Consent Order (DCO) process. Given the considerable amount of up-front pre-examination consultation which needs to be undertaken when seeking a DCO, the process would be aided (and progressed more quickly) were the task group able agree to common positions with respect to those large schemes.
- 4.25 The task group will also have an important role in monitoring the progress of site allocation and take-up rates at strategic sites over time. In practical terms, this should include the following:
- The establishment of a strategic distribution site database. This should record all existing strategic sites in Leicestershire in terms of overall size, the warehouses located there, size of each unit and the occupier. Vacant plots at existing sites would also be recorded;
 - The maintenance of the strategic distribution site database on an annual basis. New sites would be added to the database as they emerge and details of the existing sites would be amended accordingly; and

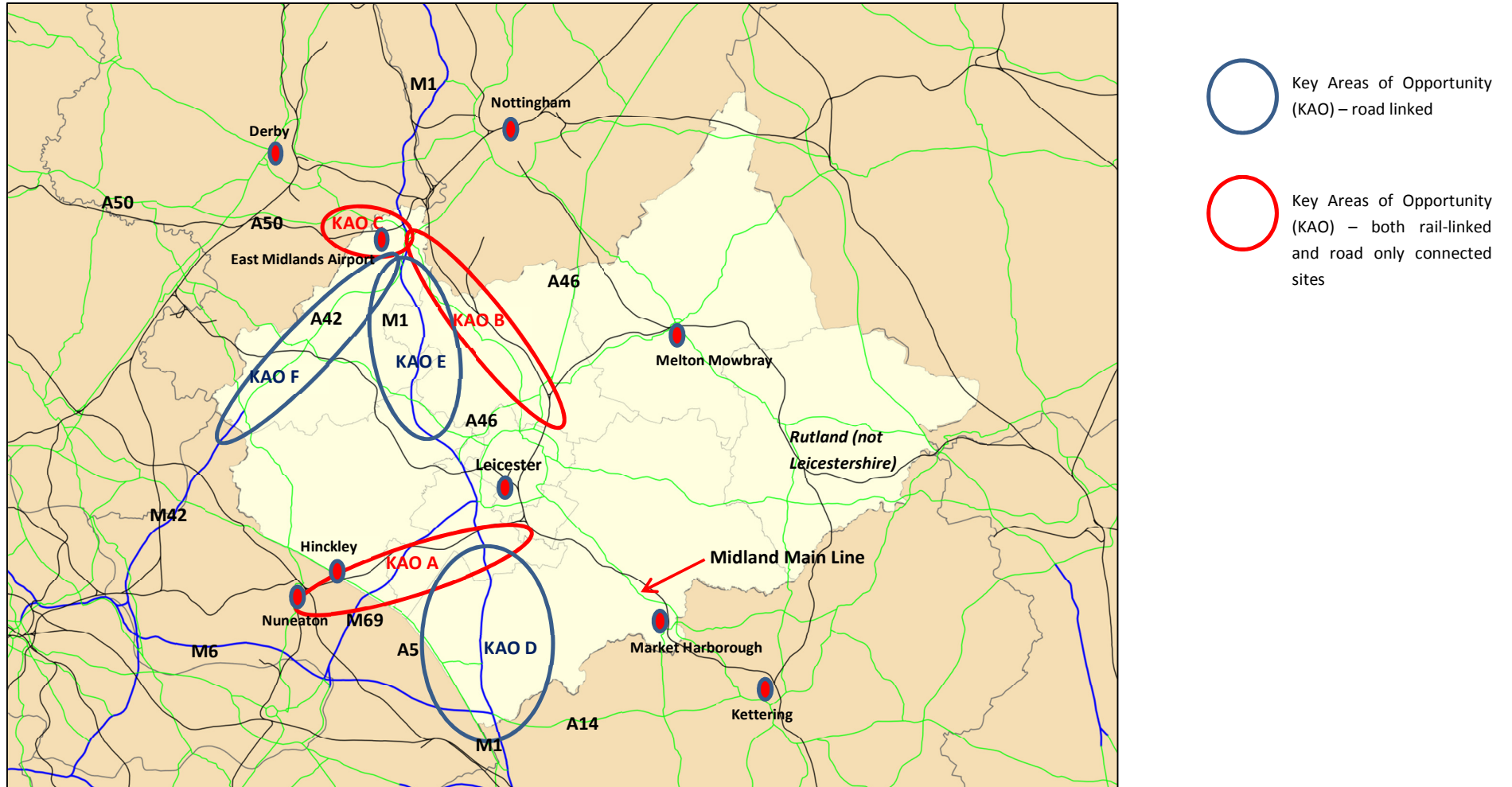
- The periodic commissioning of studies, in a similar manner to the former regional employment land use studies, and the updating the demand forecasts presented in this study.

Section 4.2: The Key Areas of Opportunity

4.26 The Part B report identified 'Key Areas of Opportunity' and these are illustrated on the map below. Those enclosed in red are key areas of opportunity for both rail-served and road only connected sites, while those enclosed in blue are key areas of opportunity for road only connected sites. It is broadly within these identified key areas of opportunity where individual sites commercially attractive to the logistics market might be located. These are therefore the key areas where a strategy for growth should be allocating new sites to meet the identified land shortfall, through a pro-active search for sites alongside a 'calls for sites' process with the commercial property sector (see above).

Map 4.1: Key Areas of Opportunity

(NB: Boundaries of key areas are not definitive and are shown for indicative purposes only)



4.27 Part B further considered whether there is a hierarchy of key areas of opportunity. Only those sub-regions meeting each of the four criteria to the highest level (i.e. offering both road and rail connected opportunities, central golden triangle location and close to available labour) have been considered for inclusion in the top category (termed the 'best key areas of opportunity'). Three 'best key areas of opportunity' were subsequently identified. A further three sub-regional areas meet the criteria, albeit to a lower level. These have been termed 'good key areas of opportunity'. The best and good areas are listed below (in no particular order of priority).

Best key areas of opportunity – Leicestershire

- Key Area A: *Leicester to Hinckley corridor*;
- Key Area B: *Midland Main Line North corridor*; and
- Key Area C: *East Midlands Airport to south Derby corridor*.

Good key areas of opportunity – Leicestershire

- Key Area D: *M1 South corridor*;
- Key Area E: *M1 North corridor*; and
- Key Area F: *M42/A42 corridor*.

4.28 A growth strategy should aim to bring forward sites within the 'Best' Key Areas of Opportunity before considering locations in the 'Good' areas, subject to flexibility (see Policy Advice, Section 3 above).

Barriers to Development/Infrastructure Enhancements

4.29 It was noted in the Part B report that the identified key areas of opportunity were either dependent on the delivery of railway enhancements or would perform better in terms of highway connectivity given the implementation of a number schemes currently being explored by Leicestershire County Council. The following barriers to development are therefore identified within the key areas of opportunity, alongside the infrastructure enhancements being explored to realise their full potential.

Key Area A: *Leicester to Hinckley corridor*

4.30 Key Area 1 is served by the Leicester-Nuneaton railway line, however it is currently poorly served with regards to connections to the strategic highway network. There is limited access at M69 Junction 2 and with access to the M1 being via circuitous routes to M1 Junction 21/M69 Junction 3. Leicestershire County Council is currently exploring options for improving accessibility to the strategic highway network in the south west Leicester and Leicestershire area, in order to address current traffic and transport problems and to unlock possible future

growth opportunities. Combined with the effects of the railway proposals, the outcomes of this work would open up strategic rail-linked distribution opportunities.

- 4.31 The County Council's work is at an early stage and no definitive proposals exist at this time. A strategy for the strategic logistics sector should seek to ensure delivery of the transport infrastructure schemes required, amongst other things, to improve connectivity to the strategic road network, alongside the releasing of sites for strategic logistics in key areas of opportunity.

Key Area D: M1 South corridor

- 4.32 Within Key Area 4, the eastern side of the M1 to the south of Leicester (Blaby) and areas on the western side of the M1 to the north of Lutterworth (Harborough) are poorly served with regards to connections to the strategic highway network.
- 4.33 A strategy for the strategic logistics sector should, amongst other things, seek to develop and deliver highway schemes to improve connectivity to the strategic road network alongside the releasing of sites for strategic logistics in these key areas of opportunity.
- 4.34 One sub-regional area which currently cannot be considered a key area of opportunity is the A6/Midland Main Line corridor to the south and south-east of Leicester (central part of the Harborough market area on north-south axis). Despite the railway enhancements planned for the Midland Main Line (electric spine and loading gauge enhancement), this area currently suffers from poor road connectivity with the strategic highway network; either via south Leicester and the A563 to the M1 at Junction 21, or south to the A14 at Rothwell. This significant impediment to the area's attractiveness to the logistics sector would need to be addressed in order to open it up as a key area of opportunity for rail-served strategic distribution.
- 4.35 Given the above, as part of the recommended strategy there will be a requirement for the planning authorities and LLEP to liaise with (and lobby) the Highways Agency and Network Rail to ensure that enhancement schemes are ultimately delivered. One of the key conclusions pervading this study is the need to identify and allocate new land at commercially attractive strategic sites, the purpose of which is to maintain and enhance the established competitive advantage, enabling the sector to grow in a sustainable manner. The infrastructure schemes are required to improve connectivity to and from the key areas of opportunity identified.
- 4.36 Further, there may also be other motorway/dual carriageway junctions currently unknown acting as barriers to development. For example, while land being considered for allocation as a strategic distribution site may be located close to a motorway dual carriage junction, it may be the case that the junction in question is already operating at/above its design capacity

(junctions serving the prospective sites and the approach routes must have sufficient network capacity).

- 4.37 As noted above, if the site being considered has emerged from the 'call for sites' process, the developers would be required to demonstrate suitability e.g. that sufficient junction capacity existed or by means of a plan outlining how they intend to provide the required capacity if the junction was considered substandard. A similar process would need to be undertaken by the strategic sites selection task group for the pro-active approach. It should also be noted that contributions can be sought from/agreed with developers of strategic logistics sites towards the cost of upgrading infrastructure e.g. Section 106 or Section 278.

Section 4.3: Skills and Training

- 4.38 Logistics and distribution is a commercial activity in which private sector organisations compete for business and generate financial returns for their investors. The public sector's role at the national level is mainly concerned with regulating the industry from a health and safety perspective⁸, alongside ensuring an open competitive market operates in the sector.
- 4.39 As discussed and outlined throughout this study, the main public sector role at the regional/sub-regional level is the allocation of appropriate sites for B8 use at the commercially attractive locations. The analysis undertaken above concluded that identifying and allocating new land at commercially attractive strategic sites will be the crucial factor in maintaining and enhancing the established competitive advantage, enabling the sector to growth in a sustainable manner. The strategy outlined above has therefore focused on this important conclusion.
- 4.40 However, there are other areas where public sector 'interventions' could help maintain its established competitive advantage and grow the sector. One such area is in the field of skills and training, and in particular supporting and part funding skills training in areas where there are recognised skills shortages. While this should incorporate both manual functions through to higher grade management roles, the training of large goods vehicle (LGV) drivers is a particular case in point.
- 4.41 Less than 1% of LGV drivers are under the age of 25. The average age of LGV drivers is 56 and 25% are over 60 and will be retiring over the next five years. A significant number of these may well retire or change industry beforehand as they have not completed the mandatory Driver CPC hours and could leave as early as September 2014. The expected numbers are estimated to be over 48,000 leaving the industry each year. LGV licence applications and

⁸ In addition to general health and safety at work rules, this also includes specific regulations for the sector, including drivers hours regulations and the Operators Licencing system for goods vehicle operators.

tests have declined year on year, and now stand at less than 50% of what were they in 2005/6, down from 45,000 per year to 22,000 per year.

- 4.42 Traditionally, the logistics industry itself has not provided or funded LGV driver training. Individuals tended to either fund their own training or received 'on the job' training by non-logistics employers e.g. the Army. As a result, the sector could rely on a steady stream of suitable qualified drivers entering the job market. This is no longer the case, with one of the reasons now being the high cost of 'self-funding' driver training. Additional driving tests are now required alongside mandatory CPC qualifications.
- 4.43 Data Academy (a Leicester based driving training provider) is piloting a 'route-way' for LGV drivers with support by Skills for Logistics, The pilot will involve moving 10 unemployed people through selection and enrolment, training and licence acquisition (medical, theory, practical assessment), and then workplace assessments. Job Centre Plus are part funding this pilot (£1,000), and employers will fund the rest. It is understood that the LLEP is considering whether to also part fund this scheme in conjunction with Skills Support for the Unemployed (SSU-Derby College). The LLEP has also asked the Skills Funding Agency if LGV can be funded under their ESF 'Skills Support for the Workforce' (SMEs can access free training for most training needs in the workplace), but have been advised that this is not possible. If the pilot is considered a success, the LLEP will review progress and hopefully expanded the scheme.
- 4.44 However, the ability to drive a large goods vehicle is not the only employment skill required in the sector. Other skilled functions specific to the logistics sector, amongst others, include:
- Forklift truck drivers;
 - Data/inventory input;
 - Depot/warehouse managers
 - Fleet managers;
 - Vehicle mechanics; and
 - Traffic desk planners.
- 4.45 In addition to these tasks, there is the need for higher level management/IT skills alongside the usual administrative jobs associated with large labour intensive industries e.g. Payroll, Human Resources.
- 4.46 The ability of the sub-region to maintain and enhance its skills levels in these specific and ancillary roles will also be an important factor maintaining and enhancing the established competitive advantage. The LLEP has also undertaken research into skills and training in the strategic distribution sector in Leicestershire. In particular, current areas of skills shortages have been identified. The LLEP's research can be downloaded from its website, as follows: http://www.llep.org.uk/employment_and_skills/.

- 4.47 As part of this wider strategy, therefore, it is recommended that the LLEP, in co-operation with the Leicestershire planning authorities and other stakeholders, should commission further research into the employment, skills and training needs of the sector. This research should be undertaken as a key component of the logistics sector growth action plan. This should include how links can be developed between the logistics industry and the further/higher education sector in Leicestershire.

Section 4.4: Promoting and Marketing Leicestershire

- 4.48 In addition to its participation in the sites selection task group and co-ordinating the recommended research into skills/training, there should be a key continuing role for the LLEP covering the promotion and marketing of strategic logistics opportunities Leicestershire to potential occupiers and operators, the commercial investor market and other potential investors.
- 4.49 As has been demonstrated throughout this study, Leicestershire has established a distinct competitive advantage in the strategic logistics sector, and the delivery of the recommended 'land strategy' outlined above should help ensure that this position is maintained and enhanced. However, there will be a need to promote and market the county to wider interests outside Leicestershire, particularly as the other competing/alternative regions identified are heavily promoting their own areas. In this respect, the 'Logistics Hub UK' initiative of the Doncaster and Sheffield city region is a good 'case study' of how the LLEP should proceed. *Logistics Hub UK* is a web-based initiative bringing together developers, landowners, occupiers, local authorities and the LEPs to promote the Doncaster and Sheffield city region as 'The location' for logistics. It can be found at the following link: <http://www.logisticshubuk.com/>.
- 4.50 Logistics Hub UK states that its 'central UK location provides logistics, warehousing and distribution companies with fast access to the UK's largest markets and population centres, combined with global connectivity via multimodal international freight terminals.' The area's direct access to the UK's motorway network at a central north-south/east-west interchange (M1/A1/M18-M62/M180) is promoted, claiming that most major markets in England, Wales and Scotland can be reached within 4.5 hours driving time. Close proximity to Doncaster's air and rail freight terminals, as well as the UK's largest sea port by tonnage (the Humber ports) is noted. The new Rossington SRFI (iPort), currently under development, is heavily promoted as is the new FARRS link road connecting Doncaster/Sheffield Airport and iPort to the M18. The analysis presented in Part B of this study clearly showed that rail-served sites in the golden triangle (of which Leicestershire is part) continue to offer the most competitive locations for receiving and distributing goods on a national basis.

- 4.51 A significant part of the website is dedicated to promoting and marketing existing strategic logistics sites in the Doncaster/Sheffield city region. Location maps are presented together with descriptions of sites, highway/rail connectivity and size of plots available etc. Links are subsequently provided to the developers and agents.
- 4.52 Likewise, a significant part of the website is focused on workforce and skills issues. It states that the area benefits from an established, large-scale warehousing and logistics workforce, and the education and training infrastructure required to meet the skills needs of companies at all levels; from 'workforce preparation' to NVQ, degree and post-graduate (BSc and MSc) levels. Links are also provided to educational facilities and courses at Doncaster College, Sheffield University and Hull University.
- 4.53 For companies considering or undertaking investments in the Doncaster Sheffield City Region, Logistics Hub UK notes that potential dedicated support is available from Business Doncaster. This is an inward investment and business support agency of Doncaster Council and Sheffield City Region LEP. The following services are marketed:
- Identifying Sites and Properties;
 - Identifying Development Opportunities;
 - Addressing Planning Issues;
 - Identifying and securing Financial Support; and
 - Finding Personnel and Training services, through our unique HR Business.
- 4.54 It is therefore recommended that the LLEP establish a similar marketing and promotional web-based tool. As per the South Yorkshire website, this would bring together the LLEP and local authorities along with promoting suitable strategic sites and providing links to skills and training facilities.

Section 4.5: Single Local Growth Fund

- 4.55 In 2012 Lord Heseltine, the former Deputy Prime Minister and Environment Secretary, was commissioned to undertake a review of regional investment and wealth creation policies. His report, *No Stone Unturned*, was subsequently presented to Government in the Autumn of 2012. The core proposition of Lord Heseltine's report is a decentralised approach to resources and decision making, with particular emphasis on empowering Local Enterprise Partnerships (LEPs) to drive forward growth in their local areas.
- 4.56 In its formal response to Lord Heseltine's report, the Government announced the creation of a single £12 billion 'Local Growth Fund' to support investment by the LEPs in skills/training, housing and transport infrastructure. Approximately £2 billion was made available for

distribution to LEPs in the fund's first year of operation (2015-2016). All LEPs across England were subsequently asked to bid for a share of the fund, by developing plans outlining how and on what they would spend the money.

- 4.57 The LLEP submitted its 'Growth Deal' bid in March 2014 and after a period of negotiation, the Government announced in July that nearly £28.3 million would be made available in 2015/6. Around £80 million is likely to be made available over the subsequent five years.
- 4.58 The LLEP Growth Deal aims to drive growth across the area by providing additional funding and leveraging investment to provide new homes and space for businesses, provide high quality skills and training facilities and deliver key transport improvements across the county of Leicestershire. The Growth Deal will bring together local, national and private funding as well as new freedoms and flexibilities to focus on the LLEP's four key priority areas as identified in the Strategic Economic Plan. These are:
- Enhancing transport connectivity, reducing congestion and enabling the development of major sites for housing and employment;
 - Investing in skills infrastructure and business support to deliver skills and support that meets employer needs;
 - Extending the availability of superfast broadband across the city and county; and
 - Investing in flood risk management to reduce the risk to homes and businesses in Leicester.
- 4.59 Ten projects in the LLEP's Growth Deal will benefit from a share of the £28.3 million⁹ in 2015/16. Relevant projects for this study include:
- A50/A6 Leicester North West Major Transport Investment Corridor (£8.1 million);
 - Skills Training Centre (MIRA Enterprise Zone, £5 million) - Transport Engineering skills training facility to be delivered jointly by MIRA, North Warwickshire and Hinckley College, University of Leicester and Loughborough University this will create a 4,578 sqm facility and provide 2500 training places each year to address skills shortages in the sector and to increase the number of skilled engineers;
 - Sustainable Transport Fund (Hinckley, £1.5 million) - Sustainable Transport improvements including footpaths and cycle ways reducing congestion to developments in Earl Shilton and Barwell and improving connectivity between Hinckley and the Enterprise Zone at MIRA Technology Park.
 - North City Centre Access Investment Programme (£2 million) - Programme of linked transport and public realm improvement to improve 4km of highways and enable the development of 10 hectares of employment and housing sites.

⁹ This includes £20.2 million of new funding plus £8.1 million of previously committed funding

-
- M1-Junction 22/A42-Junction 13 (£2.5 million) - Junction improvements to ease congestion and create capacity to enable the development of 25 hectares of employment land and 900 homes at Coalville and Ashby.
- 4.60 As noted above, new rail-served and road only strategic logistics sites will ultimately be brought forward by property developers and landowners, with schemes broadly funded by institutional investors and other sources (see Section 2, Part A report). However, it may be that a proportion of future LLEP Growth Deals, funded from the Local Growth Fund, could be utilised to support private sector investment in new rail-served and road only strategic logistics sites. For example, maritime container transporter Pentalver's new intermodal terminal at its Cannock operating base has secured a grant from the Greater Birmingham and Solihull LEP's Growth Deal. Also, future LLEP Growth Deal Funding could be used to 'unlock' the barriers to development identified above, thereby leveraging in private sector funding and delivering development in the Key Areas of Opportunity.

5. KEY STUDY CONCLUSIONS

5.1 Four over-arching conclusions can be drawn from the study, namely:

- A need to identify and allocate new land at commercially attractive strategic sites, the purpose of which is to maintain and enhance the established competitive advantage, enabling the sector to growth in a sustainable manner;
- To deliver the identified need, there will be a requirement to continue long-term strategic and collaborative planning across the county of Leicestershire, and potentially with authorities in neighbouring areas. This study should therefore not be viewed as a 'one-off process', and HPIG or a similar grouping will need to take the strategy forward on a long-term basis (and review the strategy periodically);
- While the strategy outlined is a long-term plan (up to 2036), the preparatory work will need to begin immediately. Infrastructure delivery is by its nature long-term, albeit that the underlying evidence base and the preparation of local plan policies needs to commence now so that the right sites in the most competitive locations can come forward for development as and when they are required by the market; and
- The strategy requires the implementation of a number of highway and railway enhancement schemes. Consequently, there will be a requirement for the planning authorities and LLEP to liaise with (and lobby) the Highways Agency and Network Rail to ensure that the enhancement schemes are ultimately delivered.

5.2 The southern part of the East Midlands region (including Leicestershire) became the competitive 'location of choice' in both supply chain cost and performance terms when sourcing and distributing on a national basis. The area has become known as the 'golden triangle', and has to date consequently established a distinct competitive advantage in the strategic logistics sector.

5.3 This position was evidenced by the analysis undertaken in Section 4 (warehouse floor space) and Section 6 (Employment) of the Part A report. A significant quantum of large scale warehouse floor space has been developed in the golden triangle. In Leicestershire, there currently exists 2.25 million square metres of floor space across 89 large scale warehouse units. Around 72% of East Midlands floor space capacity is located in Leicestershire or Northamptonshire. The East Midlands region records around 8% of the population of England and Wales, however it accommodates 20% of total English and Welsh warehouse capacity. This means that the identified warehouse capacity in Leicestershire is predominantly serving a national market.

5.4 The LLEP Economic Growth Plan 2012-2020 gives a figure of 51,300 jobs in the LLEP area in distribution and logistics, accounting for 12% of local employment. It also identifies the high levels of employment in North West Leicestershire and the Harborough District at Magna

Park. In terms of the strategic distribution sector's contribution to the sub-regional economy, data was presented showing that that GVA attributable to wholesale/retail, transport/storage and food activities was £3,794 million or around 21% of the LLEP area total.

- 5.5 Market conditions can and do change over time, and as market conditions change a previously held competitive advantage can diminish unless action is taken to address the changes. Two important emerging challenges to the golden triangle's competitive advantage in national distribution (and by extension the Leicestershire sub-region) were identified in Part B, namely:
- The emergence of competing inland locations/sites to the north and east of the 'golden triangle'; and
 - The development of B8 land within port estates (so called port centric logistics).
- 5.6 The key to addressing the above identified challenges to the golden triangle (and by implication Leicestershire), and hence maintaining the established competitive advantage, is the development of new commercially attractive strategic sites in Leicestershire and the East Midlands which will be directly rail-served.
- 5.7 Conversely, the inability to bring forward a range of commercially attractive sites in Leicestershire (and the wider golden triangle) would most likely result in an overall reduction in the region's total warehouse floor space capacity.
- 5.8 Given the need to maintain and enhance Leicestershire's competitive position through the continued development of new commercially attractive strategic sites, the Part B report undertook a forecast of future demand for new-build large scale warehousing in the East Midlands region and Leicestershire sub-region up to 2036. The preferred high replacement scenario therefore suggests that, once existing consents and potential sites are accounted for, around 115ha of new land at rail-served sites will need to be brought forward by 2036. This suggests one further Strategic Rail Freight Interchange (SRFI) will need to be brought forward within Leicestershire up to 2036. The preferred high replacement scenario suggests around 153ha of new land at non rail-served sites will need to be brought forward within Leicestershire up to 2036.
- 5.9 By delivering in full the new-build forecasts (by means of allocating sufficient land through local plans) it is estimated that just over 7,100 new jobs will be created in Leicestershire. The contribution to Gross Value Added in Leicestershire resulting from the generated employment is estimated to be additional £297million (at 2014 prices).
- 5.10 Similar analysis estimates that between 3,500 and 7,500 full-time equivalent jobs would be lost from Leicestershire due to the inability to bring forward the new sites in-line with the

land use forecasts. For Leicestershire, this would subsequently result in a reduction in GVA of between £274 million and £548 million (at 2014 prices).

- 5.11 Given the forecast shortfall in land, working with neighbouring authorities local plans will need to allocate new appropriate sites to meet the demand which has been forecast (meeting objectively assessed needs). These will need to be well connected to the strategic highway network; should this require the provision of major new or significantly improved highway infrastructure, it is important to recognise the often long delivery lead in times. A significant proportion of the new sites will need to be directly rail-served (for both competitiveness and sustainability reasons) by suitable railway lines (W9 loading gauge etc..). While the use of previously developed sites should be encouraged in the first instance, it is likely that greenfield sites might need to be allocated, given very special circumstances, to meet these needs. Recent major planning decisions in this sector (DIRFT III and Radlett SRFIs) have clearly indicated that there is a clear need for the development of directly rail-served facilities, that sustainability and emissions benefits subsequently arise, and that substantial weight should be attached to both of these factors.
- 5.12 In order to ensure that there is a sufficient pipeline of strategic distribution sites, new land should be identified and allocated in the following sequential order, namely:
- The extension of existing strategic distribution sites, both rail-served and road-only connected;
 - In circumstances where rail-served sites cannot be extended, local plans should consider satellite sites (which shall be located close to the existing strategic distribution sites);
 - Identifying suitable new strategic distribution sites on previously developed land; and
 - Identifying suitable new strategic distribution sites on greenfield land.
- 5.13 In order to maintain and enhance the competitive position currently enjoyed by the region/sub-region, it is vitally important that the market in future is offered a geographical spread of commercially attractive sites available to satisfy individual operator locational requirements.
- 5.14 To bring forward the quantum of land identified as being required, there will be a need to continue long-term strategic and collaborative planning across the county of Leicestershire, and potentially with authorities in neighbouring areas. This study should therefore not be viewed as a 'one-off process', and HPIG or a similar grouping will need to take the strategy forward on a long-term collaborative basis. On that basis, a strategic distribution sites selection task group should be established to identify and discuss opportunities and determine the most suitable sites to bring forward in local plans.
- 5.15 The main remit of the task group shall be as follows:

- To identify and quantify the amount of land at existing commercially attractive sites that could potentially be recycled up to 2036 for new-build warehousing;
 - To identify new sites for development (pro-active approach);
 - To issue 'calls for sites' to prospective commercial developers ;
 - To foster a collaborative approach to planning for the strategic logistics sector across Leicestershire and beyond;
 - To monitor progress in site allocation and take-up over time; and
 - To develop a common position with respect to those large schemes which will be considered via the Development Consent Order process e.g. SRFIs.
- 5.16 The LLEP, in co-operation with the Leicestershire planning authorities and other stakeholders, should commission further research into the employment, skills and training needs of the sector. This research should be undertaken as a key component of the logistics sector growth action plan. This should include how links can be developed between the logistics industry and the further/higher education sector in Leicestershire.
- 5.17 In addition to its participation in the sites selection task group and co-ordinating the recommended research into skills/training, there should be a key continuing role for the LLEP covering the promotion and marketing of strategic logistics opportunities Leicestershire to potential occupiers and operators, the commercial investor market and other potential investors.
- 5.18 The Government announced the creation of a single £12 billion 'Local Growth Fund' to support investment by the LEPs in skills/training, housing and transport infrastructure. Approximately £2 billion was made available for distribution to LEPs in the fund's first year of operation (2015-2016). The LLEP submitted its 'Growth Deal' bid in March 2014 and after a period of negotiation, the Government announced in July that nearly £28.3 million would be made available in 2015/6. Around £80 million is likely to be made available over the subsequent five years. While the 2015/16 money has been allocated to projects, future LLEP Growth Deal Funding could be used to 'unlock' the barriers to development identified in this study, thereby leveraging in private sector funding and delivering development in the Key Areas of Opportunity.

APPENDIX 1

Relevant Extracts from NPPF and NPS

National Planning Policy Framework

The purpose of the planning system is to contribute to the achievement of sustainable development (paragraph 6).

There are three dimensions to sustainable development: economic, social and environmental. These dimensions give rise to the need for the planning system to perform a number of roles:

- An economic role – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation;
- A social role – supporting strong, vibrant and healthy communities; and
- An environmental role – contributing to protecting and enhancing our natural, built and historic environment, including moving to a low carbon economy (paragraph 7).

At the heart of the NPPF is a *presumption in favour of sustainable development*, which should be seen as a golden thread running through both plan-making and decision-taking. For plan-making this means that:

- Local planning authorities should positively seek opportunities to meet the development needs of their area;
- Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change, unless:
 - any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or
 - specific policies in this Framework indicate development should be restricted (paragraph 14)

Local plans should proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs. Every effort should be made objectively to identify and then meet the housing, business and other development needs of an area, and respond positively to wider opportunities for growth. Plans should take account of market signals, such as land prices and housing affordability, and set out a clear strategy for allocating sufficient land which is suitable for development in their area, taking account of the needs of the residential and business communities (paragraph 17, 3rd bullet).

Local plans should encourage the effective use of land by reusing land that has been previously developed (brownfield land), provided that it is not of high environmental value (paragraph 17, 8th bullet).

To help achieve economic growth, local planning authorities should plan proactively to meet the development needs of business and support an economy fit for the 21st century (paragraph 20).

Encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. In preparing Local Plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport (paragraph 30).

Local authorities should work with neighbouring authorities and transport providers to develop strategies for the provision of viable infrastructure necessary to support sustainable development, including large scale facilities such as rail freight interchanges, roadside facilities for motorists or transport investment necessary to support strategies for the growth of ports, airports or other major generators of travel demand in their areas (paragraph 31).

Plans and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised (paragraph 34).

Plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore, developments should be located and designed where practical to:

- Accommodate the efficient delivery of goods and supplies (paragraph 35).

The Government attaches great importance to Green Belts. The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence (paragraph 79).

Local planning authorities with Green Belts in their area should establish Green Belt boundaries in their Local Plans which set the framework for Green Belt and settlement policy. Once established, Green Belt boundaries should only be altered in exceptional circumstances, through the preparation or review of the Local Plan. At that time, authorities should consider the Green Belt boundaries having regard to their intended permanence in the long term, so that they should be capable of enduring beyond the plan period (paragraph 83).

When drawing up or reviewing Green Belt boundaries local planning authorities should take account of the need to promote sustainable patterns of development (paragraph 84).

When defining boundaries, local planning authorities should:

- Ensure consistency with the Local Plan strategy for meeting identified requirements for sustainable development;
- Not include land which it is unnecessary to keep permanently open;
- Where necessary, identify in their plans areas of 'safeguarded land' between the urban area and the Green Belt, in order to meet longer-term development needs stretching well beyond the plan period;

- Make clear that the safeguarded land is not allocated for development at the present time. Planning permission for the permanent development of safeguarded land should only be granted following a Local Plan review which proposes the development;
- Satisfy themselves that Green Belt boundaries will not need to be altered at the end of the development plan period (paragraph 85).

As with previous Green Belt policy, inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances (paragraph 87)

When considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations (paragraph 88).

Planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure. This is central to the economic, social and environmental dimensions of sustainable development (paragraph 93).

Local Plans must be prepared with the objective of contributing to the achievement of sustainable development. To this end, they should be consistent with the principles and policies set out in this Framework, including the presumption in favour of sustainable development (paragraph 151).

Local Plans should be aspirational but realistic. They should address the spatial implications of economic, social and environmental change. Local Plans should set out the opportunities for development and clear policies on what will or will not be permitted and where. Only policies that provide a clear indication of how a decision maker should react to a development proposal should be included in the plan (paragraph 154).

Local planning authorities should set out the strategic priorities for the area in the Local Plan. This should include strategic policies to deliver:

- The provision of retail, leisure and other commercial development;
- The provision of infrastructure for transport (paragraph 156, 2nd and 3rd bullets).

Crucially, Local Plans should:

- Plan positively for the development and infrastructure required in the area to meet the objectives, principles and policies of this Framework;
- Be drawn up over an appropriate time scale, preferably a 15-year time horizon, take account of longer term requirements, and be kept up to date;
- Be based on co-operation with neighbouring authorities, public, voluntary and private sector organisations;

- Indicate broad locations for strategic development on a key diagram and land-use designations on a proposals map;
- Allocate sites to promote development and flexible use of land, bringing forward new land where necessary, and provide detail on form, scale, access and quantum of development where appropriate (paragraph 157 and bullets 1-5).

Local planning authorities should have a clear understanding of business needs within the economic markets operating in and across their area. To achieve this, they should:

- Work together with county and neighbouring authorities and with Local Enterprise Partnerships to prepare and maintain a robust evidence base to understand both existing business needs and likely changes in the market; and
- Work closely with the business community to understand their changing needs and identify and address barriers to investment, including a lack of housing, infrastructure or viability (paragraph 160).

Local planning authorities should use this evidence base to assess:

- The needs for land or floor space for economic development, including both the quantitative and qualitative needs for all foreseeable types of economic activity over the plan period, including for retail and leisure development;
- The existing and future supply of land available for economic development and its sufficiency and suitability to meet the identified needs. Reviews of land available for economic development should be undertaken at the same time as, or combined with, Strategic Housing Land Availability Assessments and should include a reappraisal of the suitability of previously allocated land (paragraph 161, 1st and 2nd bullets).

Public bodies have a duty to cooperate on planning issues that cross administrative boundaries, particularly those which relate to the strategic priorities set out in paragraph 156. The Government expects joint working on areas of common interest to be diligently undertaken for the mutual benefit of neighbouring authorities (paragraph 178).

Local planning authorities should work collaboratively with other bodies to ensure that strategic priorities across local boundaries are properly co-ordinated and clearly reflected in individual Local Plans (paragraph 179).

Draft NPS

A strategic rail freight interchange (SRFI) is a large multi-purpose rail freight interchange and distribution centre linked into both the rail and trunk road system. It has rail-served warehousing and container handling facilities and may also include manufacturing and processing activities (paragraph 2.38).

The Government's vision for transport is for a low carbon sustainable transport system that is an engine for economic growth, but is also safer and improves the quality of life in our communities. The transfer of freight from road to rail has a part to play in a low carbon economy and help to address climate change (paragraph 2.48).

To facilitate this modal transfer, a network of SRFIs is needed across the regions, to serve regional, sub-regional and cross-regional markets. In all cases it is essential that these have good connectivity both with the road and rail network, in particular the strategic rail freight network (paragraph 2.49).

The Government has therefore concluded that there is a compelling need for an expanded network of strategic rail freight interchanges. It is important that SRFIs are located near the business markets they will serve – major urban centres, or groups of centres – and are linked to key supply chain routes. Given the need for effective connections for both rail and road, the number of locations suitable as SRFIs will be limited, which will restrict the scope for developers to identify viable alternative sites (paragraph 2.51).

All applications for strategic rail freight interchanges should include warehouses to which goods can be delivered from the railway network either directly or by another form of transport. Applicants should ensure that a significant proportion of the warehousing on a proposed site is rail connected from the outset (paragraph 4.78)

Because of the strategic nature of large rail freight interchanges it is important that new SRFIs or proposed extensions to RFIs upgrading them to SRFIs are appropriately located relative to the markets they will serve, which will largely focus on major urban centres, or groups of centres, and key supply chain routes. Because the vast majority of freight in the UK is moved by road, proposed new rail freight interchanges should have good road access as this will allow rail to effectively compete with, and work alongside, road freight to achieve a modal shift to rail (paragraph 4.80).

Adequate links to the rail and road networks are essential. Rail access will vary between rail lines, both in the number of services that can be accommodated, and the physical characteristics such as the train length and, for intermodal services, the size of intermodal units that can be carried (the 'loading gauge'). As a minimum a strategic rail freight interchange (SRFI) should ideally be located on a route with a gauge capability of W8 or more, or capable of enhancement to a suitable gauge. For road links, the Government's policy is set out in *Circular 02/2013 The strategic road network and the delivery of sustainable development* (paragraph 4.81).

SRFIs tend to be large scale commercial operations, which are most likely to need continuous working arrangements (up to 24 hours). By necessity they involve large structures, buildings and the operation of heavy machinery. Locationally, therefore, they often may not be considered suitable adjacent to residential areas or environmentally sensitive areas such as National Parks and AONBs, which may be sensitive to the impact of noise and movements. However, depending on the particular circumstances involved, appropriate mitigation measures may be available to limit the impacts of noise and light in populated areas (paragraph 4.82).

SRFIs can provide many benefits for the local economy. For example because many of the on-site functions of major distribution operations are relatively labour intensive this can create many new job opportunities. The existence of an available and economic local workforce will therefore be an important consideration for the applicant (paragraph 4.83).

As a minimum, a SRFI should be capable of handling four trains per day and, where possible, be capable of increasing the number of trains handled. SRFIs should, where possible, have the capability to handle 775 metre trains with appropriately configured on-site infrastructure and layout. This should seek to minimise the need for on-site rail shunting and provide for a configuration which, ideally, will allow main line access for trains from either direction (paragraph 4.85).

Appendix 2 – Warehousing and Logistics in Leicester and Leicestershire: Managing growth and change (April 2021 amended March 2022)

Warehousing and Logistics in Leicester and Leicestershire: Managing growth and change

Leicester and Leicestershire Authorities

Final Report

April 2021 (amended March 2022)

Prepared by

GL Hearn
65 Gresham Street
London EC2V 7NQ

T+44 (0)20 7851 4900
glhearn.com

With
MDS Transmodal Ltd
Iceni Projects Ltd

Public

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Quality Standards Control

The signatories below verify that this document has been prepared in accordance with our quality control requirements. These procedures do not affect the content and views expressed by the originator.

This document must only be treated as a draft unless it is has been signed by the Originators and approved by a Business or Associate Director.

DATE	ORIGINATORS	APPROVED
April 2021	David Leyden Planner (GL Hearn)	Matt Kinghan Director (Iceni Projects)
		

Limitations

This document has been prepared for the stated objective and should not be used for any other purpose without the prior written authority of GL Hearn; we accept no responsibility or liability for the consequences of this document being used for a purpose other than for which it was commissioned.

0 EXECUTIVE SUMMARY

0.1 GL Hearn with MDS Transmodal was appointed by a consortium comprising Blaby, Charnwood, Harborough, Hinckley & Bosworth, Melton, North West Leicestershire, Leicester City, Leicestershire County Council, Oadby & Wigston and the Leicester and Leicestershire Local Enterprise Partnership, to undertake the study 'Warehousing and Logistics in Leicester & Leicestershire: Planning and Managing Change / Growth'.

0.2 This study brings together a wide range of topics related to the current and future needs of the sector, with an emphasis in particular on future floorspace and land needs to 2041. Key matters addressed are:

- Drivers for change in the logistics market
- Review of the property market in the East Midlands and Leicester and Leicestershire
- The warehousing stock position in Leicester and Leicestershire
- Warehouse land supply in Leicester and Leicestershire and across the 'golden triangle'
- Estimates for future strategic warehousing need – modelling using: replacement and traffic growth; labour demand; and completions trends
- Testing demand forecasts and supply
- Potential future development areas
- Approaches to monitoring
- Future strategic warehousing needs implications on employment
- Assessment of current and future labour and skills in the sector
- Approaches to managing HGV parking
- Advice on planning policy and distribution development needs

Key messages from the report

0.3 Key findings from the report are set out in this section.

0.4 The most critical component of this study has been to recommend a future volume of warehouse floorspace and area of land required to accommodate it that should be planned for from 2020 to 2041.

- **It is recommended that the authorities plan for around 2,570,000 sqm of additional floorspace to 2041** (including a flexible margin of 643,000 sqm based on average 5 yr completions).
- Based on 43% of future need at rail served sites, which reflects an expected increase in rail orientated freight in the future, **there is a shortfall of 768,000 sqm (307 ha) at rail served sites which should be planned for** (including margin) after taking into account existing supply. This would largely be met by the proposed Hinckley NRFI should it be permitted.

- Based on 57% of future need at non-rail (i.e. road) served sites, **there is a shortfall of 392,000 sqm (112 ha) at non-rail served sites which should be planned for** (including margin) after taking into account existing supply. For scale, this is less than the extension of Magna Park North of over 400,000 sqm.

Rail - Forecast Demand and Site Supply 2020-2041 - Leicestershire

Rail-served Sites – for Planning	2026	2031	2036	2041
Rail-served (43% of all new build req.) (sq.m 000's)	237	434	632	829
Margin for flexibility (43% of 5-year completions) (sq.m 000's)	79	145	211	277
Total requirement (sq.m 000's)	316	579	842	1,106
Rail-served supply (at 2020) (sq.m 000's)	338	338	338	338
Balance (sq.m 000's)	22	-241	-504	-768
Indicative Additional Land required (Ha @ 25% plot ratio)	N/A	96	202	307

Non Rail (Road) - Forecast Demand and Site Supply 2020-2041 - Leicestershire

Non rail-served Sites for Planning	2026	2031	2036	2041
Non rail-served (57% of all new build req.) (sq.m. '000s)	314	576	837	1,099
Margin for flexibility (57% of 5-year completion) (sq.m. '000s)	105	192	279	367
Total requirement (sq.m. '000s)	419	768	1,117	1,466
Non rail-served supply (at 2020) (sq.m. '000s)	1,073	1,073	1,073	1,073
Balance (sq.m. '000s)	655	306	-43	-392
Indicative additional Land required (Ha @ 35% plot ratio)	N/A	N/A	12	112

Section Summaries

Section 2: Drivers for Change in the Logistics Market

- The National Infrastructure Commission (NIC) in 2019 identified the growth of e-commerce, decarbonisation efforts for zero-emissions road and rail freight vehicles and disruptive new technologies as the three main drivers of change in the domestic logistics market.
- In 2019, 19% of all retail sales were e-commerce transactions, although ONS data for the Covid-19 pandemic suggests this could be at 33% as of May 2020. The growth in sales can be attributed to technological developments, liberalisation of parcel and courier services, distribution fulfilment centres, the competitive price goods and the convenience. It is estimated that retail sales could reach 65% by 2050, leading to a significant increase to deliveries and the enhancement of the supporting logistics network.
- Decarbonisation is critical in enabling the UK to meet its challenging climate change targets. Currently, domestic transport accounts for 27% of the UK's total greenhouse gas (GHG) emissions (and has only decreased by 2% since 1990), with road and rail freight combined being responsible for 6% of total GHG emissions. Freight transport also has an impact on air quality. Road transport currently accounts for 32% of Nitrogen Oxides (NO_x) pollution, with HGVs and vans making up 46% of the contribution. Decarbonisation of logistics is possible through a switch to rail freight where possible and electric light goods vehicles. However HGV decarbonisation is more challenging and may involve options such as HGV batteries, hydrogen fuel cells or 'e-highways'.
- Automation in warehouses is increasingly being introduced to increase productivity. This may be further spurred by shortages of labour, exacerbated by the UK's withdrawal from the EU. Automation is also a driver for increased levels of power requirements for operators.
- Given the above, the availability of power to current and future logistics sites is a key issue with developers and operators already reporting challenges in achieving functional requirements. A key recommendation from the is for government to coordinate and direct electricity network operators to map out the infrastructure upgrades required to enable large scale freight van charging at depots.
- Rail freight tonnage has and is expected to continue to increase. The key drivers for this growth are the increase in road haulage cost, the development of SRFI's in the Midlands and the north of England and a growing proportion of imports arriving in maritime containers. Electrification of the rail network is important for decarbonisation although at present plans are in place to do so for only 50% of the network.
- MDS Transmodal, commissioned by Network Rail, produced rail demand forecast for 2033/34 and 2043/44. Overall, the forecasts indicate continued growing demand for rail freight services, particularly in the intermodal and construction sectors.

Section 3: Large Scale Warehousing Stock Position (March 2019)

- For this report, large scale logistics has been defined as a warehouse floor space that is greater than 9,000 square meters in total.
- In 2019, the East Midlands region hosts just over 9.3 million sqm of large scale warehouse floorspace across 386 commercial properties. The main regional competitors are the North West, West Midlands and Yorkshire/Humber but these regions have a smaller mean unit size suggesting

warehousing in these regions has a more regional role than the national role the East Midlands plays.

- In the East Midlands, around 0.75 million square metres is currently located on rail-served sites, equating to 8% of the region's stock.
- In Leicester and Leicestershire there are just over 2.3 million sqm of floorspace across 100 commercial properties. The average floor space per commercial property is around 23,000 square metres.

Section 4: Property Market Review

- In 2019, the East Midlands was the strongest market across the UK seeing take up of 2.5 million sqft (230,000 sqm) in the first half of 2019. 82% of this space involved A-grade quality units and 15% accounted for B-grade space.
- Take-up in Leicestershire remained above the 10-year average for the sixth successive year in 2019, with 2.2 million sqft (205,000 sqm) of space acquired. Several new developments have also boosted supply in the area. This has mainly been dominated by larger units above 50,000 sqft (4,600 sqm).
- VOA data states that the county contains 9,475,000 sqm of industrial floorspace in 2019. Leicester accounted for 26% of the county's total. Industrial floorspace in the county decreased by 467,000 sqm from 2012-19.
- Between 2014 and 2019 there have been 64 recorded industrial deals in Leicestershire, totalling 1.5million sqm of floor space. 27 of these transactions were recorded in North West Leicestershire with the largest amount of floor space totalling 778,000 sqm.
- New warehouses typically command around £6.25 psf. Rental values in and around Leicester have grown by 4% in a prime location and by 12% in a secondary location in recent years. This growth can be linked to the demand from retailers and delivery specialists.
- There is a direct available supply of 0.9 years across the study area (May 2020). The low level of supply has been confirmed by agent consultation which discussed supply pressures across the strategic warehousing and logistics market. Agents outlined that road accessibility was the most important factor for market demand. Furthermore (spring 2020) it is expected that the COVID 19 pandemic will increase pressure on warehousing demand / supply due to greater increases in e-commerce activity.

Section 5: Existing SFRI Rail and Freight Volumes

- The four rail terminals save the equivalent of 350,000 HGV movements (with the average loading of 15 tonnes per HGV trip).
- Modern Intermodal terminals developed integral to large-scale warehousing will generate significant volumes of rail and freight traffic serving a range of destinations.

Section 6: Warehouse Land Supply and Supply Trajectory, Leicestershire and ‘Golden Triangle’

- There is around 1.8 million sqm of future supply across Leicestershire. This is equivalent to around 6.9 years of take-up based on a past annual average (this is a gross figure excluding losses due to lease expiry). The data suggests that the current planned pipeline is not sufficient to cater for the period to 2041. Magna Park is the largest contributor to supply.
- The wider ‘Golden Triangle’ reports around a further 4.6 million sqm of supply.

Section 7: Estimates for Future Strategic Warehousing Need – Labour Demand and Completions Trends

- This section introduces two approaches to estimating future need, looking at a labour demand forecasting model and recent completions trends.

Labour Demand

- The labour demand model, based on an employment forecasting model produced by Oxford Economics (OE), estimates the number of jobs predicted to exist across the Leicester and Leicestershire local authorities to 2041.
- GLH converted total employment to full time equivalence (FTE) by using Business Register and Employment Survey (BRES) data, and then converted FTE jobs to floorspace using employment densities in accordance to HCA guidance. Finally, a plot ratio of 40% was used to arrive at a land need, resulting in an overall B8 need for an additional 10 hectares to 2031 and a surplus of need of 12.2 hectares to 2041.
- A sensitivity was undertaken where specific two-digit sectors that would be associated with strategic warehousing are isolated (growth only model) and the resultant land need from those sectors specifically is 40.8 hectares to 2041.

Completions

- The constituent local authorities provided monitoring data from 2012/13 to 2019/20 for all strategic warehousing units completed in each monitoring year. The data was annualised and extrapolated to 2041 resulting in an overall gross need of 2.7 million sqm of floorspace or 701 ha of land to 2041.
- Supplementing the completions data, Valuation Office Agency (VOA) annual business floorspace monitoring data was used to supplement the completions data, and projecting figures forward resulted in a need of 1.9m sqm of floorspace to 2041, although this model is indicative as it includes all industrial use classes.

Section 8: Estimates for Future Strategic Warehousing Need-Replacement and Traffic Growth

- This section considers a two part model: firstly where additional growth in goods tonnage generates net additional floorspace need; secondly whereby existing stock is replaced as it ages. A low and a high replacement demand model is identified (30/40 years) and a central and higher growth traffic scenario.

- Up to 2041, it is estimated that around 70% of the existing warehouse stock in the region will require replacement based on a 30 year lifespan of units, as historic stock is unable to meet the demands of modern retail needs (power, height, size etc). This could range from a forecast need of 1,215,000 sqm to 1,620,000 sqm.
- The forecast for freight flows indicates that in Leicestershire an additional 5.2 million tonnes of freight can be expected to pass through large scale distribution centres in 2041 compared with 2019. For road data, an additional 7.8 million tonnes can be expected to pass through large scale distribution centres in 2041 compared with 2019. This through-put of goods, or traffic growth, is considered as the primary driver of demand for additional floorspace alongside replacement demand under this model.
- For Leicestershire the 'high replacement, forecast traffic growth sensitivity' scenario can be expected to generate a gross new-build of just over 1.9 million square metres to 2041 which is recommended as the preferred rate for planning policy development.

Section 9: Testing Demand Forecasts and Supply

- This section considers the modal split of future needs identified under the replacement and traffic growth model and how this balances with supply. Figures are calculated without a margin which is examined in section 10.

Rail Served Sites

- East Midlands Gateway is currently the only directly rail-served site in Leicestershire - East Midlands Distribution Centre has an on-site rail terminal but currently is not served by services. Further units at East Midlands Gateway are currently being developed with capacity for over 200,000 sqm, which will increase the overall share of rail-served sites for strategic warehousing.
- The planning system should be making greater provisions of rail-served floorspace in the future on account of NPPF guidance and the commercial requirements in the industry. We have thus considered scenarios involving growth at Strategic Rail-Freight Interchanges (SRFI's) with proportions of 26%, 60%, and a midpoint of 43% which is the recommended rate for planning policy development.
- These demand scenarios are compared to the supply of floor space coming forward at these SRFI's, and also converted to an overarching land need to 2041 using a plot ratio of 0.25 (25%) on account of additional yard space and landscaping requirements.
- The shortfall of 768,000 sqm under the 43% rail scenario could be largely fulfilled through the *Hinckley National Rail Freight Interchange (NRFI)*, a SRFI being promoted by Tritax Symmetry adjacent to Junction 2 of the M69 and alongside the Leicester to Nuneaton main line. Covering around 226ha, an integral intermodal terminal is planned for the site serving around 650,000 square metres of large scale floor space.

Road Served Sites

- A similar exercise was undertaken for road-served sites analysing potential demand scenarios against expected supply in Leicestershire. A plot ratio of 0.35 (35%) was used.
- The model indicates a need of 26,000 sqm under the preferred 43% rail served scenario although rising to 354,000 sqm under the 26% rail served scenario to 2041.

Floorspace required to meet modelled need (rail and road) to 2041, 5 year bands

Leicestershire (R&TG Model)	2026	2031	2036	2041
High Replacement, sensitivity test Traffic Growth – New build Requirement	561,000	1,017,000	1,472,000	1,928,000
Current supply (exc pre-lets, inc avail stock)	1,411,000			
Balance	850,000	394,000	-61,000	-517,000

Land Required at Rail-served Sites and Potential Site Supply to 2041*

Leicestershire	To 2041 - % rail-served		
	26%	60%	43%
High Replacement, Forecast Traffic Growth			
New-build (000s sqm)	474	1,094	784
Supply (000s sqm)	338	338	338
Balance (000s sqm)	-136	-756	-446
Additional Land required (ha)	54	302	179
High Replacement, Sensitivity Test Traffic Growth			
New-build (000s sqm)	501	1,157	829
Supply (000s sqm)	338	338	338
Balance (000s sqm)	-163	-819	-491
Additional Land required (ha)	65	328	196

Source: DCO Applications (Planning Inspectorate) and Developer websites

* Plot ratio of 0.25 assumed.

Total New-build at Road Only Sites and Potential Site Supply to 2041*

Leicestershire	To 2041 - road only at % rail-served		
	26%	60%	43%
High Replacement, Forecast Traffic Growth			
New-build (000s sqm)	1,349	729	1,039
Supply (000s sqm)	1,073	1,073	1,073
Balance (000s sqm)	-276	344	34
Additional Land required (ha)	-79	NA	NA
High Replacement, Sensitivity Test Traffic Growth			
New-build (000s sqm)	1,427	771	1,099
Supply (000s sqm)	1,073	1,073	1,073
Balance (000s sqm)	-354	302	-26
Additional Land (ha)	-101	NA	-7

* Assumes plot ratio of 0.35

Section 10: Future Warehouse Floorspace Growth Scenarios Summary

- This section summarises all modelling undertaken and then identifies the preferred scenario for the need to 2041. Each scenario and its commentary are summarised below. This section introduces a margin for flexibility based on a 5 year completion trend.
- Overall, the use of the Replacement & Traffic Growth model for forecasting appears most reasonable going forwards which in this study equates to 99,000 sqm per annum rising to 122,000sqm pa with a margin for flexibility. The **high replacement demand, higher sensitivity traffic growth need figure of 2,571,000 sqm** is recommended for planning policy development based on the evidence considered, market feedback and broad alignment with completions trend.

Range of modelled strategic warehousing needs 2020-2041

Model	2041 Needs 000s sqm	Comments
High replacement, central traffic growth	2,466	Reflects accepted traffic growth and new technology needs in-stock replacement, with margin.
Low replacement, central traffic growth	2,061	Reflects accepted traffic growth and assumes longevity in stock, with margin, with margin.
High replacement, sensitivity test traffic growth	2,571	Increases traffic growth and assumes new technology requires stock replacement, with margin.
Low replacement, sensitivity test traffic growth	2,166	Increases traffic growth and assumes longevity in stock, with margin.
Completions trend	2,702	Reflects large warehouse floorspace delivery over the 2012-19 period, projected forwards.
VOA trend	1,941	Models growth only districts 2011-18 projected forwards, all warehouse and industrial stock including losses
Labour demand	-50	Assumes the baseline model for all sectors
Labour demand sensitivity	161	Assumes baseline model for warehouse and related sectors for growth only districts

- Taking into account the preferred scenario, including a margin for flexibility and the existing supply, **a shortfall of 768,000 sqm or 307 ha is identified for rail-served needs and 392,000 sqm or 112 ha is identified for road (non rail) needs.**

Section 11: Future Development – Areas of Opportunity

- As there is an identified shortfall of land to 2041, we have identified some general broad areas across Leicestershire where strategic warehousing could be located. The criteria used to identify these broad “areas of opportunity” are:
 - Good connections with the strategic highway network;
 - Good connections with the railway network;
 - Appropriately located relative to the markets to be served; and

- Is accessible to labour and located close to areas of employment need.
- Sites for strategic warehousing development should be selected according to the following considerations:
 - Good connections with the strategic highway network;
 - Appropriately located relative to the markets to be served;
 - Offers modal choice;
 - Is sufficiently large and flexible;
 - Is served from an electricity supply grid with sufficient capacity;
 - Is accessible to labour; and
 - Is located away from incompatible land-uses.
- It is recognised that future needs may be met by refurbished units built since the 1990s however insufficient evidence exists at the present time to indicate whether this will be sufficient to reduce the overall demand for new sites. The role of monitoring is important in this regard.

Section 12: Monitoring

- To effectively monitor strategic warehousing development, it is recommended that there is a concerted approach to data collection beyond the local authority level and primarily at the county level. In some cases, it may be appropriate to monitor activity across the longer list of authorities in the wider golden triangle.
- Monitoring should include a range of metrics including gains and losses of large scale units, refurbishments, ancillary floorspace and employment. The completions (gross gains) should be monitored against the need figure rather than total stock, as some losses are assumed.
- It is suggested using the information in Section 6 as a template table for monitoring new applications and completions.
- Additionally, it would be useful to collect market transactional data through paid services such as EGi and CoStar, and/or host industry events to collect information from developers and the private sector.

Section 13: Floorspace Scenario Implications on Employment

- This section of the report considers the labour market implications of the low and high preferred scenarios derived from the “low replacement demand, central traffic growth” as the low growth scenario and the “high replacement demand, higher sensitivity traffic growth” scenario as the high growth scenario.
- There is uncertainty in terms of future labour requirements due to potential changes in employment density and the potential effect of the replacement demand of units with an increasing number of older units staying in use.
- Taking into account direct employment creation and assuming a decrease in employment densities over time, the estimated total employment for the low growth scenario is 7,823 and for the high growth is 9,871 full-time equivalents.

- The breakdown of these additional jobs in terms of occupation and skill vary as it is difficult to project how the sector may change, however, some studies suggest that the jobs will become higher-skilled and more managerial as there are efficiency gains due to technological change.
- These jobs, due to current commuting patterns, will sometimes require workers from outside of Leicestershire. The housing impact of the additional employment growth in neighbouring HMA's is identified as being up to 15 dwellings per annum over the period to 2041.
- The implications of this section should be seen as indicative and used in conjunction with other assessments on employment, population and housing change.

Section 14: Labour and Skills

- In total the distribution parks in the study area employ around 50,000 workers across a range of sectors but primarily warehousing, wholesale, retail, postal, land transport management and manufacturing.
- There is potential for a greater portion of warehousing workers to be in higher tier occupation bands based on trends occurring in recent years.

Section 15: HGV Parking

- The National Survey Report estimates that there is currently capacity for 2,167 HGVs at on-site parking facilities in the East Midlands. Overnight demand is just over 3,000 HGVs per night equating a shortfall in the capacity of around 865 HGVs. The area around Magna Park is noted as being a 'parking shortage hotspot'.
- There is a requirement to develop short and long-term parking in Leicestershire. It is recommended that the issue of future HGV parking provision in Leicestershire be acknowledged in relevant growth plans and transport strategies for Leicester and Leicestershire, and a consideration in respect of future development via policy in the Local Plan.

Section 16: Planning Policy and Distribution Development

- Authorities should support last-mile delivery utilisations of sustainable methods of transport such as bikes or electric vehicles.
- Congestion of the freight industry in 2019 cost between £3-6 billion per annum. Planning policy needs to reflect the issues that HGVs face and update policy accordingly such as ensuring that planning decisions do not attach conditions restricting the times of day HGVs and LGVs can arrive or depart.
- HGV employ run was 29.2% in 2018, with road haulage companies factoring these trips into the costs. There is a call for greater freight optimisation as result but there need to be greater commercial or economic transport operators.

1 INTRODUCTION AND CONTEXT

- 1.1 GL Hearn with MDS Transmodal was appointed by a consortium comprising Blaby, Charnwood, Harborough, Hinckley & Bosworth, Melton, North West Leicestershire, Leicester City, Leicestershire County Council, Oadby & Wigston and the Leicester and Leicestershire Local Enterprise Partnership, to undertake the study 'Warehousing and Logistics in Leicester & Leicestershire: Planning and Managing Change / Growth'.
- 1.2 This study brings together a wide range of topics related to the current and future needs of the sector, with an emphasis in particular on future floorspace and land requirements to 2041. The study is focused on planning with respect to the development of large scale logistics warehouse facilities greater than 9,000 square metres (around 100,000 sq ft). This is the recognised industry definition and is also broadly the level above which purposely designed plots/sites are required to accommodate the buildings (in terms of plot size, configuration and the ability to handle significant volumes of HGVs and employee car traffic) when compared with smaller scale general industrial units. Key matters addressed in the study are:
- Drivers for change in the logistics market
 - Review of the property market in the East Midlands and Leicestershire¹
 - The warehousing stock position in Leicester and Leicestershire as of March 2019
 - Warehouse land supply in Leicester and Leicestershire and across the 'golden triangle'
 - Estimates for future strategic warehousing need – modelling using: replacement and traffic growth; labour demand; and completions trends
 - Testing demand forecasts and supply
 - Potential future development areas
 - Approaches to monitoring
 - Future strategic warehousing needs implications on employment, and additionally commuting and housing
 - Assessment of current and future labour and skills in the sector
 - Approaches to managing HGV parking
 - Advice on planning policy and distribution development needs
- 1.3 This report has been produced in spring 2020 during the height of the coronavirus pandemic. The work has endeavoured to take account of the implications of the pandemic as far as reasonably possible where this is likely to have a long-term impact on planning with respect to large scale

¹ The reference to 'Leicestershire' throughout refers to the geographical county of Leicestershire, which in local government terms comprises the City of Leicester plus the district council areas of Blaby, Oadby & Wigston, Charnwood, Harborough, Hinckley & Bosworth, Melton and North West Leicestershire.

warehousing. Where this may affect the modelling or other elements of the work reference has been made.

Context

1.4 Several previous studies have provided recommendations on future warehousing needs for Leicester and Leicestershire, notably:

- Leicester and Leicestershire Strategic Distribution Study MDS Transmodal, Scope B Update and Refresh of Outputs and Conclusions, September 2016
- Leicester and Leicestershire Strategic Distribution Study MDS Transmodal and GL Hearn, Scope C Wider Market Developments: Implications for Leicester and Leicestershire, January 2017

1.5 These provided future warehousing needs based on traffic growth and replacement demand to 2031 and 2036. The current study will update and extend these forecasts. They also considered the key characteristics and locations for growth which will be revisited - notably:

- **High Accessibility:** There is a general preference for logistics activity to be located equidistant between any given goods production and their final destination/consumers and market. Sites near to the strategic road network, in particular motorways and key junctions, as well as proximity to rail freight facilities, are considered the ideal location for distribution activity. In addition, good strategic links decrease the transport costs and allow large freight amounts to reach their market in optimal times while heavy loaded HGVs require good road conditions to operate to optimum functionality.
- **Site's context:** A modern logistics site should have an optimal layout ideally square or rectangular that allows cubic capacity and consequently the free flow of operations. The site should have a relatively flat topography as changes in the level might lead to inefficiency which increases production costs. Good drainage and subsoil conditions are also preferable, with good load-bearing qualities and surface water run-off.
- **Distribution Clusters:** Logistics companies benefit more by locating near each other rather than operating in isolated locations (agglomeration economies). In particular clusters of logistics or distribution centres: encourage co-operation that can consequently reduce supply chain costs; allow the exchange of knowledge, technology, and services; encourage innovation derived from the synergies among the cluster's occupiers; maintain and retain good conditions in the local infrastructure; provide access to the specialised workforce.
- **An adequate supply of a suitable workforce** is also an important factor in the choice of location. The requirements are changing while technology is evolving, and higher-skilled labour is more than ever occupied in the logistics sector.

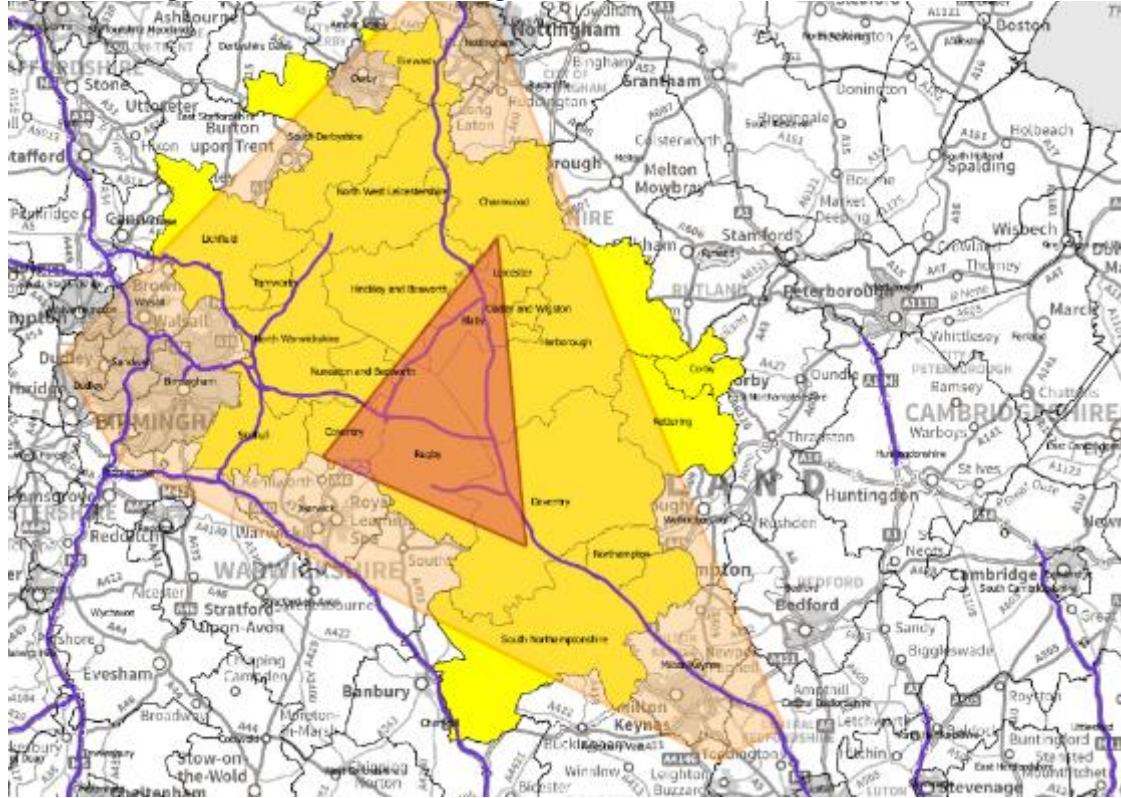
Study Area

1.6 Outside of the Leicester and Leicestershire area, consideration has been given to the wider market study area given that strategic warehousing often has markets that extend both across and beyond

traditional administrative boundaries. Figure 1 illustrates the inner Golden Triangle and the wider Golden Triangle as initially presented within the Leicester and Leicestershire Strategic Distribution Study 2016/17.

- 1.7 The Golden Triangle is referred to as the area bounded by the M1, M6 and M69 motorways, albeit that others consider it to be a larger area broadly running along the M1 corridor from Milton Keynes to north Leicestershire/Nottinghamshire and extending into the West Midlands towards Birmingham along the M6 corridor.
- 1.8 For this current study, we consider that the most interrelated distribution market for the County includes the 21 authorities highlighted in Figure 1. Milton Keynes and Birmingham have been excluded due to their urban nature and their different spatial dynamics to Leicestershire. We have also included Corby with its Midlands Logistics Park. Supply data for the authorities are reported in chapter 6

Figure 1: Figure: Wider 'Golden Triangle' Study Area



Source: Leicester and Leicestershire Logistics and Distribution Study 2017, GL Hearn

Stakeholders

1.9 The development of this report has involved engagement with a range of stakeholders. An online event was held (originally planned for face to face but held online due to COVID-19) with around 60 attendees and several one to ones were undertaken. The authors and commissioning authorities are grateful to the stakeholders for their inputs, some of which have been extensive. Consultees include:

- Berrys
- BlackRock
- Carter Jonas
- Dewar Planning
- East Midlands Airport
- Frampton Town Planning
- Gazeley
- IM Properties
- JLL
- Newlands Property
- Now Planning
- Oxalis Planning
- Savills
- SEGRO
- St Modwen
- Tritax Symmetry
- Turleys
- UK Warehousing Association
- Wilson Bowden

2 DRIVERS FOR CHANGE IN THE LOGISTICS MARKET

2.1 This section identifies and assesses the key drivers for change in the domestic logistics market, drawing out the important implications concerning land-use planning in Leicestershire and the wider Midlands region. They could potentially change the criteria by which commercially attractive logistics sites have hitherto been defined, and as a consequence, the broad areas of opportunity previously identified in the Leicester and Leicestershire (SDS) may also change. By not actively responding to the implications, it could diminish the current competitive position of Leicestershire (and the wider Midlands) when compared with other regions.

Better Delivery: The Challenge for Freight

2.2 This document, published by the *National Infrastructure Commission (NIC)* in April 2019, essentially presents the Government's current thinking on how the freight market is likely to change. Unlike a White Paper, which sets out policy over the short-medium term, this document presents the NIC's long term advice (up to 2050) to Government on delivering a clean freight system, focusing on generating zero greenhouse gas emissions from rail and road transport, tackling air pollution and minimising congestion. The document includes consideration of new technologies and the implications of market/technological changes in infrastructure development and land-use planning. The document was produced in-house by the NIC, albeit it's evidence base included Department for Transport (DfT) statistical data, engagement with several key stakeholders, previously published study reports and specifically commissioned studies. One of these commissioned studies, undertaken by *MDS Transmodal*, examined the future of freight demand².

2.3 The document commences by undertaking a brief overview of the current freight system. It notes that the sector currently employs around 2.5 million people and contributes £121 billion gross value added (GVA) to the economy. The sector operates entirely within the private sector, with the Government's role essentially comprising the provision of road and rail infrastructure alongside economic, environmental and safety regulation.

2.4 The state and structure of the economy determine the volume and mix of freight flows generated alongside the location of production and consumption. The document notes that the shift away from heavy industrial manufacturing towards a service-based economy has resulted in a de-coupling of

²https://www.nic.org.uk/wp-content/uploads/Future-of-Freight_Future-of-Freight-Demand_MDS-Transmodal.pdf

freight demand from Gross Domestic Product since the 1990s. Consequently, the demand for freight going forward is likely to reflect consumption (including changes in tastes, fashions and technological developments) and the population growth. The document notes that projections estimate that the population will increase from 66 million currently to 73 million by 2041. While these factors will determine the overall demand for freight, other issues are likely to affect how the freight sector delivers this demand. While the document states that it is not possible to predict with certainty how freight demand will change up to 2050, it identifies three main drivers for change in the domestic logistics market, namely:

- The growth of e-commerce;
- Zero emissions road and rail freight vehicles; and
- Disruptive new technologies.

E-Commerce

2.5 The document notes that the UK now has the second-highest market penetration of e-commerce in the world, making up around 20% of all retail sales as a percentage of total retail sales (at the time of publication in April 2019). In addition to technological advances (e.g. smartphones), the liberalisation of the parcel and courier networks has also been a significant contributory factor. The NIC report suggests that e-commerce could reach 65% of all retail sales by 2050. The sub-section below addresses e-commerce in more detail and the land-use planning implications going forward.

De-carbonisation

2.6 The report states that road and rail freight vehicles must decarbonise by 2050 if the UK is to meet its challenging climate change targets. Currently, domestic transport accounts for 27% of the UK's total greenhouse gas (GHG) emissions (and has only decreased by 2% since 1990), with road and rail freight combined being responsible for 6% of total GHG emissions. Freight transport also has an impact on air quality. Road transport currently accounts for 32% of Nitrogen Oxides (NO_x) pollution, with HGVs and vans making up 46% of the contribution.

2.7 The document notes that the traditional method of reducing GHG emissions from road freight transport has been a modal shift, either to rail freight or water. However, it also states that as most origins or destinations are not accessible by rail or water, HGV movements are still required for at least one leg in the overall end-end supply chain (e.g. rail-served distribution centre to a retail outlet). Therefore, while the modal shift will continue to play an important role in managing air quality and reducing GHG emissions, it is not capable of replacing all HGV journeys.

- 2.8 For smaller road freight vehicles (i.e. LGVs or vans), the report consequently notes that battery-electric vans are emerging as a viable zero-emission alternative to petrol or diesel powered vans. While uptake is currently slow, the report expects a greater choice of electric vans to emerge over the coming years (between 2.5 and 4.25 gross vehicle weight). It notes that while purchase costs are higher than petrol/diesel vans, these should be outweighed by lower operating costs (fuel and maintenance). It also notes that the electric van range is improving and the price differential should also start to fall. This is particularly important for e-commerce trade, as LGVs are the principal means of delivering directly to residential and commercial properties.
- 2.9 The report concludes that the main impact on land-use planning and infrastructure is therefore likely to come from the need to recharge large fleets of LGVs simultaneously (probably overnight) at a single depot location and from the same local grid connection. It will therefore be essential that local grid capacity does not restrict the future uptake of battery electric LGVs. Existing industrial areas and, importantly, new developments likely to support e-commerce delivery facilities (i.e. where goods are loaded into fleets of LGVs for the final delivery to residential and commercial properties) will need to be located where existing grid capacity is sufficient or could be upgraded (network reinforcement) relatively easily and at a reasonable cost. It will also be important that such facilities are designed so that loading docks can be equipped with fast charging points (either from new or retro-fitted at a later date), thereby enabling vans to recharge while cargo is loaded.
- 2.10 The report notes that decarbonising HGVs will be 'more challenging', though three key options are emerging as the most promising alternatives. All involve propulsion using electric motors, albeit being supplied by an electric current from different sources. The three options are:
- E-highways – similar to electrified railways, overhead live contact wires supported by catenary and masts provide power to the HGV (via a pantograph on the roof). They are being developed in several countries, including Sweden and Germany. For cost reasons, likely, only the strategic highway network could ever be wired in this manner, meaning that other power sources would still be required when HGVs join other road types e.g. between the motorway and a distribution centre or urban roads into retail outlets. A report published by the *Centre for Sustainable Road Freight* in July 2020 concluded that the technology is feasible and that around 15,000 lane-km of overhead wires along the core long-distance road network could be developed within 8 years. It also noted that such a scheme would effectively pay for itself within 15 years from sales of electricity to hauliers. However, critics have suggested the assumed capital costs are too low and the cost associated with disruption during delivery have not been factored into the business case.
 - Battery electric – as the energy density of batteries increases and their costs fall due to mass production, it may be that battery-electric HGVs are the most promising option. The range will not be as long when compared with diesel-powered HGVs, however, opportunities are likely to exist for recharging as HGVs load/discharge cargoes or drivers undertake statutory breaks. It may be

that e-highways HGVs also include batteries to enable trips away from the wires to be undertaken (with the battery recharged when operating under wires). As per battery-electric LGVs, the higher capital costs are likely to be outweighed by lower operating costs (fuel and maintenance). It is also likely that electric HGVs will have a longer economic life (fewer moving parts compared with a diesel HGV).

- Hydrogen fuel cells – combining hydrogen and oxygen (from air) to generate an electric current, with water produced as the by-product. Like diesel HGVs, they would have an extended range (when compared with battery electric HGVs) and rapid refuelling. However, to produce hydrogen using the electrolysis method currently requires a significant electric current (and therefore only viable sustainably when this comes from renewables). The methane production method is cheaper but produces carbon dioxide as a by-product. Further, fuel cell vehicles are currently estimated to have an efficiency of around 22% (it is around 33% for diesel vehicles and 70% for battery electric vehicles).

2.11 As per battery electric LGVs, the report concludes that the impact on land-use planning and infrastructure is, therefore, likely to come from the need to recharge large fleets of HGVs simultaneously at a single depot location and from the same local grid connection. Again, it will therefore be essential that local grid capacity does not restrict the future uptake and new developments will need to be located where existing grid capacity is sufficient or network reinforcement can be delivered relatively easily and at a reasonable cost. It will also be important that new distribution centres are designed so that loading docks can be equipped with fast charging points (either from new or retro-fitted at a later date), thereby enabling HGVs to recharge while cargo is loaded and discharged. Parking areas (within distribution centres and at lorry parks) will also need to be equipped with fast charging points (or capable of being retrofitted).

2.12 In addition to the aforementioned issues concerning hydrogen production and efficiency, its safe distribution to filling stations is the other main problem. Converting the domestic gas pipeline network to transport hydrogen has been mooted, which would allow the direct supply to refuel stations (from production facilities or importation ports). Otherwise, the distribution would have to be via road tanker or dedicated pipelines. The implication for land-use planning and infrastructure is that new logistics sites and existing sites earmarked for expansion would need to be capable of being served from the current domestic gas pipeline network (thereby replacing existing diesel bunkers at distribution centres).

2.13 The report states that the decision as to which solution(s) emerge will be principally market-driven. However, uptake is likely to be influenced by a range of factors, including Government policy, technology/infrastructure reliability and cost.

- 2.14 Despite the fact that the rail freight industry already generates significantly fewer GHG emissions (on a per tonne-km basis) when compared with road transport, the vast majority of rail freight services are still hauled by diesel traction. The report notes that around 87% of the national locomotive fleet is diesel powered, with the Government having already set 2040 as the date to remove all diesel-only trains from the network. The report states that the more important ambition will be to fully decarbonise by 2050 and that effectively this leaves the railway with two options:
- Significantly increasing the number of routes on the national network which are electrified (principally overhead live contact wires supported by catenary and masts), thereby allowing more services to be hauled by electric traction between origins and destinations. This could include the Midland Main Line, which is currently reliant on diesel traction for long distance passenger services north of Bedford and all freight services; and
 - Battery electric or hydrogen fuel-cell locomotives.
- 2.15 Currently, around 42% (by route-km) of the national railway network is electrified and only a small minority of rail freight services are hauled at some point in their trip by electric traction. The report notes that there are significant gaps in the electrified network on key freight routes limiting the use of electric traction (e.g. the Midland Main Line), and current planned electrification schemes will only increase the number of electrified route-km to around 48-50% of the network. Despite recent schemes having been delivered late and gone significantly over budget, the report advises that when other costs are considered, electrification is likely to turn out to be cheaper and quicker, will improve network efficiency and provide wider passenger benefits.
- 2.16 As per HGVs, battery electric or hydrogen fuel-cell locomotives have been mooted, particularly as they have shown promise for lightweight passenger trains. However, for heavier freight trains the report notes that the volume of hydrogen or the size of batteries required would necessitate the replacement of revenue earning wagons with fuel tanks or batteries (e.g. a hydrogen locomotive could require two fuel tank wagons). Pure fuel-cell or battery electric locomotives are therefore likely to be expensive to purchase, and the lower payload would result in higher operating costs per unit moved. In practice, it is likely that electric locomotives would have small batteries or fuel-cells installed to enable short 'last mile' trips on non-electrified lines into terminals from a significantly enhanced electrified network (e.g. the batteries could be recharged when the locomotive is operating under wires). From a land-use planning and infrastructure perspective, this suggests that new rail-served logistics sites would need to be located on or in close proximity to main lines which are likely to be electrified over the next 10-20 years.

2.17 Subsequent to the NIC document, Network Rail has been undertaking its own *Traction Decarbonisation Network Strategy (TDNS)*. An interim report was published in September 2020 and concludes that electrification is the only realistic solution for decarbonising rail freight operations (see further below).

2.18 The report considers the use of disruptive new technologies, particularly with how they could assist in reducing highway congestion for HGVs. It notes that road congestion currently costs freight operators at least £3 billion per year, with forecasts suggesting that road traffic is likely to increase between 18% and 54% by 2050. New technologies to enable road pricing (demand management) and Connected Autonomous Vehicles (CAVs) are referenced as potential solutions to reduce congestion (for completeness this section is referenced, albeit they do not have land-use planning implications concerning new large scale warehouse development).

Disruptive New Technologies

2.19 The report also considers future options for freight deliveries in urban areas. These include:

- The development of urban consolidation centres.
- Retiming urban freight deliveries.
- New delivery methods for the 'last mile'.

2.20 Urban consolidation centres are where multiple freight operators (third party logistics - 3PLs - and own account operators) initially deliver goods into a warehouse type facility located on the urban fringe. The goods are consolidated and then reloaded onto freight vehicles for the final delivery into the urban area. In theory, multiple freight vehicle trips into the urban centre can be replaced with fewer but fuller vehicles (and given the short distances involved this part of the delivery process could also be undertaken by battery electric vehicles). However, take-up to date has been limited and mainly where special/specific circumstances have necessitated consolidation (e.g. Heathrow Airport). The additional handling and transport leg add further costs into the end-end supply chain (compared with direct deliveries); the report casts doubt on whether they can operate competitively without public sector financial support. For land-use planning, it also notes that suitable land at the urban fringe is often in short supply. Further, the report notes that freight operators are already consolidating cargoes from multiple shippers, meaning vehicles are already loaded efficiently and trips minimised.

2.21 Retiming urban freight deliveries to retail outlets so that they take place at night-time can reduce daytime freight vehicle trips into city/urban centres. Dedicated unloading areas located away from

residential dwellings and low-noise equipment is often required. This should not have any land-use implications with respect to new large scale warehouse developments as suitable sites would permit 24/7 operations. Some operators are now trialling or introducing new methods for 'last mile' deliveries for smaller sized/e-commerce type cargoes. This includes the concept of 'portering', whereby a freight vehicle (such as a LGV or small HGV) would hand over multiple consignments (pre-sorted) to delivery staff at designated drop-off points in urban areas. Deliveries are then completed either on foot (perhaps supported by some form of wheeled carry equipment) or using e-cargo bikes. The concept is meant to eliminate multiple start-stop vehicle movements associated with parcel type operations. There should not be any land-use implications from this concept for new large scale warehouse developments.

- 2.22 The report concludes by noting that freight is often a forgotten element of spatial planning. This can often result in the freight system having insufficient or sub-optimally located space from which to run efficient operations. Better strategic guidance for planning authorities is therefore suggested. This should direct them to assess the need for further space for distribution facilities based on what businesses require for efficient freight operations. It should set out what is meant by good planning for freight, thereby allowing planning authorities to prepare development plans which better recognise the needs of the freight system.
- 2.23 The report's central finding is that through the adoption of new technologies and the recognition of freight's needs in the planning system, it is possible to decarbonise road and rail freight by 2050 and manage its contribution to congestion. Achieving this will require Government to outline clear, firm objectives, and begin working with the energy sector, freight industry and local areas to ensure that the infrastructure required for alternative fuels and land for efficient freight operations is available when and where it is needed.
- 2.24 A series of recommendations are made in the report. The relevant recommendations concerning this study are summarised below.
- 2.25 *Recommendation 1:* 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 support this:
- Government should, in conjunction with distribution and transmission network operators, prepare detailed assessments of the infrastructure required to enable the uptake of battery electric or hydrogen HGVs, including the refuelling requirements at depots and key rest areas on major

freight routes. For battery electric, these assessments should include enhancements to distribution networks alongside alternatives to reinforcement, such as energy storage. For hydrogen, these assessments should cover the production, storage and distribution of hydrogen.

- *Ofgem* should include a clear requirement for electricity distribution network operators (in partnership with the freight industry) to map out the infrastructure upgrades and opportunities for alternative solutions, such as energy storage, required to enable large scale freight van charging at depots.

2.26 *Recommendation 2:* Government should undertake detailed cross-modal analysis of the long term options for rail freight's transition to zero emissions. It should then publish, by the end of 2021, a full strategy for rail freight to reach zero emissions by 2050, specifying the investments and/or subsidies that it will provide to get there.

2.27 *Recommendation 4:* 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. This new planning practice guidance, which should be prepared by the end of 2020, should give further detail on appropriate considerations when planning for freight, such as the need to:

- Provide and protect sufficient land/floorspace for storage and distribution activities based on population and economic need, with particular consideration for the floorspace requirements for last mile distribution and consolidation centres;
- Support the clustering of related activities within a supply chain, minimising the distance that goods must be moved and maximising the potential for efficient operations;
- Maximise the potential for freight trips to be made at off peak times; and
- Accommodate deliveries and servicing activity at the point of delivery.

National Planning Policy Framework and Planning Practice Guidance

2.28 While the NIC recommends that Government should provide new strategic planning guidance for freight, national planning policy for England is currently set out in the *National Planning Policy Framework (NPPF)*. This was originally published by the Department for Communities and Local Government (DCLG) in March 2012 and then revised and reissued in February 2019. Several key sections of the reissued NPPF are relevant to this project, and these are summarised below.

2.29 The NPPF states that the overarching objective of the planning system is threefold (Para 8), namely:

- Economic – to build a strong, responsive and competitive economy;
- Social – to support strong, vibrant and healthy communities; and
- Environmental – to contribute to protecting and enhancing our natural, built and historic environment.

- 2.30 It states that plans and decisions should apply a presumption in favour of sustainable development (Para 11). This means that plans should positively seek opportunities to meet the development needs of their area, and be sufficiently flexible to adapt to rapid change. Strategic policies should, as a minimum, provide for objectively assessed needs for housing and other uses. For decision-taking this means approving development proposals that accord with an up-to-date development plan without delay.
- 2.31 The NPPF states that the planning system should be genuinely plan-led, noting that succinct and up-to-date plans should provide a positive vision for the future of each area, and provide a framework for addressing housing needs and other economic, social and environmental priorities (Para 15). Strategic policies in plans should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for employment and infrastructure for transport (Para 20 a and b). It also states that local planning authorities and county councils (in two-tier areas) are under a duty to cooperate, and with other prescribed bodies, on strategic matters that cross administrative boundaries (Para 24).
- 2.32 It notes that the preparation and review of all policies should be underpinned by relevant and up-to-date evidence. This should be adequate and proportionate, focused tightly on supporting and justifying the policies concerned, and take into account relevant market signals (Para 31).
- 2.33 The NPPF states that planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. It notes that significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development (Para 80). Further, it also states that planning policies and decisions should recognise and address the specific locational requirements of different sectors. For storage and distribution operations, provision should be made at a variety of scales and in suitably accessible locations (Para 82).
- 2.34 Sustainable transport is addressed in Section 9 of the NPPF. Overall, it provides for transport policies that facilitate sustainable development but also contribute towards wider sustainability objectives. It states that transport issues should be considered from the earliest stages of plan-making and development proposals, so that the potential impacts of development on transport networks can be addressed and that opportunities from existing or proposed transport infrastructure, and changing

transport technology and usage, are realised – for example about the scale, location or density of development that can be accommodated (Para 102 a and b).

2.35 It notes that significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health (Para 103).

2.36 The NPPF requires that planning policies should:

- Be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned (Para 104b)
- Identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development (Para 104c);
- Provide for any large scale transport facilities that need to be located in the area, and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy (Para 104e). Policies for large scale facilities, including rail freight interchanges should, where necessary, be developed through collaboration between strategic policy-making authorities and other relevant bodies.

2.37 There is a specific reference in the NPPF that planning policies and decisions should recognise the importance of providing adequate overnight lorry parking facilities, taking into account any local shortages, to reduce the risk of parking in locations that lack proper facilities or could cause a nuisance. Proposals for new or expanded distribution centres should make provision for sufficient lorry parking to cater for their anticipated use (Para 107).

2.38 The NPPF states that in assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location (Para 108a).

2.39 Additionally, the Planning Practice Guidance (PPG) on Housing and Economic Development Needs Assessment³ states that local authorities should understand the extent to which their land provisions

³ Paragraph: 031 Reference ID: 2a-031-20190722

supports the needs of not only larger footprint buildings, but also SME's and more localised last mile facilities.

National Planning Statement for National Networks

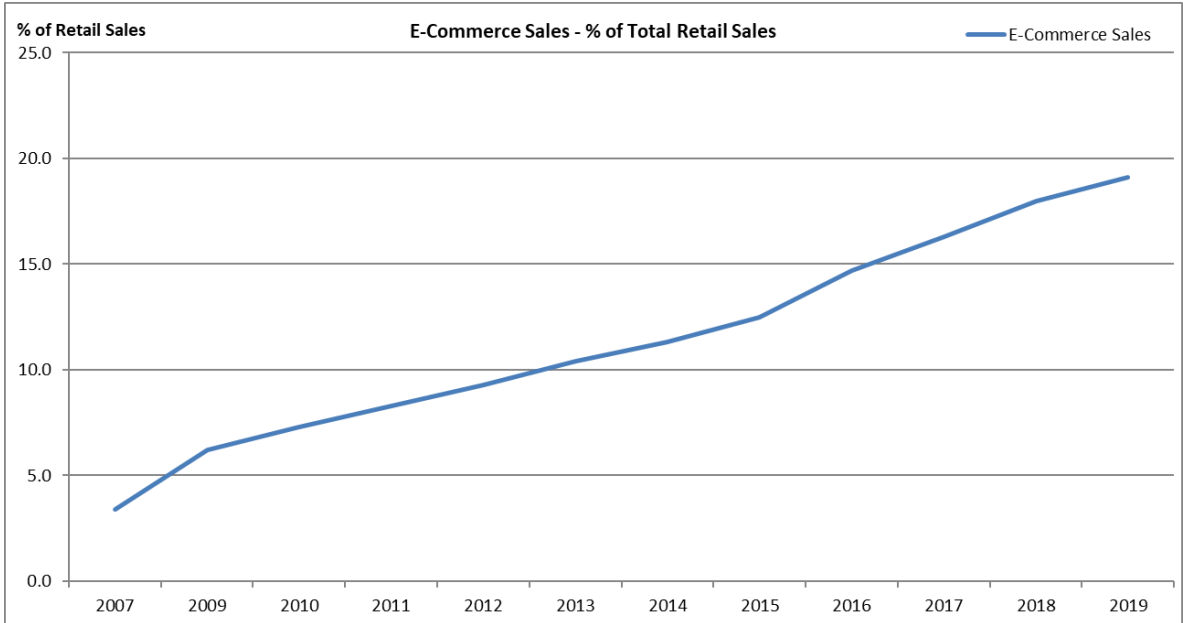
- 2.40 The *National Planning Statement (NPS) for National Networks* was published by the Department for Transport (DfT) in December 2014. It includes the Government's current policies concerning the development of Strategic Rail Freight Interchanges (SRFIs), providing planning guidance for the promoters of such projects. It is considered to be the principal policy document concerning the development of rail-served warehousing and logistics facilities, with Paragraph 1.4 noting that it may also be a material consideration in decision making on applications that fall under the Town and Country Planning Act.
- 2.41 While overall Government freight transport policy is effectively 'mode neutral', the NPS makes the case for further road-rail mode shift on the grounds of sustainability and economics. Paragraphs 2.42 to 2.58, therefore, addresses the need for the development of SRFIs. The document notes that for many freight movements, rail is unable to offer a full end-to-end journey. SRFIs, therefore, enable goods to be transferred between modes, allowing rail to be used to best effect to undertake the long trunk-haul, with road haulage subsequently undertaking the final delivery (Paragraph 2.43). The NPS states that SRFIs aim is to optimise the use of rail in the freight journey by maximising rail trunk haul and minimising some elements of the secondary distribution leg by road through co-location of freight and distribution activities. They are therefore a key element in reducing the cost of moving freight by rail and are important in facilitating modal shift (Paragraph 2.44).
- 2.42 Logistics is currently a predominantly road based industry. However, the NPS states that the users and buyers of warehousing and distribution services are increasingly looking to integrate rail into their transport operations. This will require the logistics industry to develop new facilities that need to be located alongside the major rail routes, close to major trunk roads as well as near the conurbations that consume the goods (Paragraph 2.45).
- 2.43 Four 'drivers of need for SRFIs' are identified by the NPS (Paragraphs 2.46 to 2.52), namely:
- Changing needs of the logistics sector;
 - Rail freight growth;
 - Environmental; and
 - Jobs and growth.

- 2.44 The Government's vision is for a sustainable transport system that is an engine for economic growth. The NPS consequently states that the transfer of freight from road to rail has an important part to play in play in reducing greenhouse gas emissions and addressing climate change (Paragraph 2.53).
- 2.45 To facilitate this modal transfer, the NPS concludes that a network of SRFIs is needed across the regions, to serve regional, sub-regional and cross-regional markets. The NPS concludes that reliance on existing rail freight interchanges and on road-only based logistics is neither viable nor desirable. The Government has therefore concluded that there is a compelling need for an expanded network of SRFIs (Paragraphs 2.54-2.56 and Table 4). Forecasts are presented in the NPS to support these conclusions. It should be noted that these were previously produced by MDS Transmodal in 2013 for Network Rail and included in the NPS; these forecasts have since been updated and are presented below.
- 2.46 Paragraphs 4.83 to 4.89 address the form and function of SRFIs. The NPS states that new SRFIs and extensions to existing sites will need to be appropriately located relative to the markets they will serve, which will largely focus on major urban centres, or groups of centres, and key supply chain routes. Because the vast majority of freight in Great Britain is moved by road, proposed new rail freight interchanges should have good road access as this will allow rail to effectively compete with, and work alongside, road freight to achieve a modal shift to rail. It also states that SRFIs should meet the following criteria for location and form/structure:
- Be located on a route with a loading gauge profile of W8 or more, or capable of enhancement to a suitable gauge;
 - Provide an operational rail network connection and areas for intermodal handling;
 - As a minimum, should be capable of handling four trains per day and, where possible, be capable of increasing the number of trains handled.
 - Have the capability to handle 775m trains with appropriately configured on-site infrastructure and layout. This should seek to minimise the need for on-site rail shunting and allow main line access for trains from either direction;
 - Located away from residential areas or environmentally sensitive areas such as National Parks and AONBs, which may be sensitive to the impact of noise and movements.

The Growth of E-commerce

- 2.47 The graph below tracks the value of e-commerce sales as a percentage of total retail sales since 2007 (derived from ONS data).

Figure 2: E-Commerce Retail Sales 2007-2019



Source: ONS

2.48 During 2019 (the last full year of data), around 19% of all retail sales were undertaken via e-commerce; they were below 4% in 2007. This large growth can be explained by a combination of factors, including:

- Technological developments – the development of smart phones and tablets alongside fast broadband and data provision services means many consumer products can be purchased within a few ‘clicks’;
- The liberalisation of parcel and courier services in the EU – new entrants and the competition subsequently generated have enabled e-commerce retailers to access quick, efficient and cost competitive delivery services;
- Related to the above, retailers and their logistics providers have developed distribution/fulfilment centres which allow goods to be stored, picked and packed efficiently;
- The ability of e-commerce retailers to competitively price goods, undercutting traditional ‘bricks and mortar’ retailers. This has arisen through a combination of bulk buying (from China/Far East), efficient storage and relatively cheap delivery services (see above bullets) and no requirement to operate a labour intensive outlet network in city/town centres which attract high rents and business rates; and
- Convenience – avoiding the need to travel into congested urban centres or retail parks (not everybody subscribes to the ‘retail therapy’ concept!)

2.49 The recent Covid-19 pandemic, and the subsequently forced lock-down of non-essential retail outlets, has resulted in a significant further step-change increase in the volume of e-commerce trade. Items

such as clothing and electricals were only available to purchase on-line between mid-March and June 2020. Interim ONS data for 2020 suggests that e-commerce accounted for 33% of retail sales in May 2020, albeit this fell-back to just under 27% by August 2020 following the re-opening of non-essential retail outlets. However, the long-term lasting impact of Covid-19 from a logistics perspective is that these trends will almost certainly continue and will potentially accelerate; as noted above the NIC report suggests that e-commerce could reach 65% of all retail sales by 2050 (potentially sooner). E-commerce order fulfilment⁴ can be undertaken in three ways:

- Digital – tickets, films and music can be downloaded digitally rather than a physical object being posted to the consumer;
- Direct deliveries to residential and commercial properties or to a designated drop-off point e.g. newsagent or locker at a train station, supermarket etc. – either via the retailer’s transport operation or through one of the parcel/courier networks; and
- ‘Click and collect’ – goods are reserved/purchased online but are collected by the consumer at one of the retailer’s outlets or some other type of ‘collection point’.

2.50 The second and third methods have implications to the need for, size and location of distribution centres. E-commerce retailers have essentially adopted three models to fulfil consumer orders.

E-commerce Model 1

2.51 This is illustrated in the Diagram 1 of Appendix A. Amazon in the UK broadly follows this model. The retailer will operate a series of Regional Distribution Centres (RDCs) which are well located in relation to the main urban conurbations (in the East Midlands Amazon operate RDCs at Coalville and Daventry with a further new facility at East Midlands Gateway. Each RDC receives and then stores cargo from the retailer’s multiple suppliers (by road and rail if located at a rail-served site). Suppliers are often located overseas and this movement will take place via one of the main container/ferry ports.

2.52 On-line orders placed by end-users are then picked, appropriately packed and labelled at the RDC, before being loaded onto freight vehicles for delivery to residential/commercial properties or designated drop-off points in the immediate urban hinterland. This is normally undertaken on a multi-drop basis (sometimes called ‘milk-round’ deliveries, where multiple deliveries are undertaken from the same vehicle). In most cases, LGVs or medium-sized goods vehicles (MGVs) up to 7.5 tonnes

⁴ In e-commerce, the process of picking, packing and delivering the product ordered is often called ‘order fulfilment’ and distribution centres are sometimes called order fulfillment centres.

GVW are utilised depending on the product being handled. The retailer will often out-source all/part of the operation to a 3PL such as DHL or the main multi-national parcel couriers (e.g. TNT, DPD etc.).

2.53 The implication of this model with respect to land-use planning is the requirement for large scale warehouse properties located in reasonable proximity to the major urban conurbations. The large urban centres of Leicester, Nottingham and Derby implies demand for such facilities in the Leicestershire area. Given the decarbonising agenda set out in the NIC report, future facilities for operators of this model are likely to demand locations which also meet the following:

- Rail-served in order to move goods from importation ports to the RDCs by means of electrically hauled freight trains; and
- In relation to the urban hinterland being served, located so that battery electric LGVs/MGVs undertaking final deliveries can round trip on a single charge (and by implication where existing grid capacity is sufficient or could be upgraded).

E-commerce Model 2

2.54 This is illustrated in Diagram 2 in the report Appendix A. Ocado, Next and ASOS broadly follow this model. The retailer will operate a single or series of customer fulfilment centres (CFCs) which receive and then store cargo from the retailer's multiple suppliers (by road or rail). The CFC will serve either the whole country (effectively a National Distribution Centre or NDC) or multiple regions (i.e larger hinterland than a RDC). Again, suppliers are often located overseas and this movement will take place via one of the main container/ferry ports (Ocado operates a CFC at BIFT (Birch Coppice SRFI) serving the Midlands and north of England).

2.55 Order fulfilment initially begins at the CFC, where on-line orders received by the retailer are picked, appropriately packed and labelled before being loaded onto freight vehicles for trunking to a series of regional cross-dock facilities located close to major conurbations. A cross-docking facility is superficially similar to a warehouse but is designed primarily for transferring cargo directly between freight vehicles i.e. no storage or fulfilment functions. At the cross-docking facility, the consignments are off-loaded from the trunking freight vehicles and re-loaded onto LGVs/MGVs (as per Model 1 above) for delivery to residential/commercial properties or drop-off points on a multi-drop (milk-round) basis.

2.56 For the CFC to cross-dock trunking operation, this may be undertaken on HGVs (double-deck trailers are often used given the light-weight nature of the cargo) or potentially rail freight for longer distance

flows. In the case of lighter/small individual consignments such as clothing, this part of the supply chain is often undertaken by the main parcel couriers (e.g. TNT, DHL, Yodel, DPD etc..) via their shared-user trunking networks.

2.57 The implication of this model with respect to land-use planning is the requirement for very large scale warehouse (25,000 sqm+) properties for CFCs located centrally to major urban conurbations across the country. The East Midlands central location to the country at large means it will almost certainly be a sought-after location for such facilities. The large urban centres of Leicester, Nottingham and Derby also implies demand for smaller scale cross-dock type facilities in the Leicestershire area. Given the decarbonising agenda set out in the NIC report, future facilities for operators of this model are likely to demand locations which also meet the following:

- Rail-served in order to move goods from importation ports to the CFCs (and potentially from the CFCs to the cross-docking facilities) by means of electrically hauled freight trains; and
- In relation to the urban hinterland being served, the cross-dock facilities (also rail-served) are located so that battery electric LGVs/MGVs undertaking final deliveries can round trip on a single charge (and by implication where existing grid capacity is sufficient or could be upgraded).

E-commerce Model 3

2.58 This is illustrated in the Diagram 3 in the report Appendix A. This model is effectively the classic 'bricks and mortar' retail supply chain, but where the retailer has subsequently added a 'click and collect' e-commerce offer alongside their existing retail operations. The retailers Sainsburys, John Lewis and Argos broadly follow this model.

2.59 In this model, an NDC receives and stores cargo from the retailer's suppliers (as per Models 1 and 2 above). When required in-store, goods will then be transported (mainly in HGVs but also intermodal rail freight services for longer distance flows) to a series of RDCs located close to major urban conurbations. Likewise, each RDC will also receive goods directly from the retailer's multiple suppliers, generally goods with short lead times (e.g. perishables) or fast-moving lines. Goods received at the RDC, either via the NDC or direct from suppliers, will then be consolidated before onward delivery to the retailer's outlets, normally in HGVs.

2.60 On-line orders received by the retailer are generally picked in-store (from the store's inventory). Fulfilment is completed when the end-user collects the product from store using their own transport,

though most grocery retailers provide a home delivery option from store using LGVs (Morrisons home deliveries are undertaken by Ocado through their CFC network).

- 2.61 The advantage of this model is twofold. Firstly, it has allowed the traditional 'bricks and mortar' retailers to distribute e-commerce orders via their established logistics networks and infrastructure which serve existing stores. Secondly, orders rejected by customers can be fed back into the retailer's inventory almost immediately and be available for re-sale; under Models 1 and 2 goods have to be returned to the retailer via a parcel or mail network, which could potentially take up to a month. Model 3 also allows so called 'up-selling'; while a customer is in-store to collect an on-line 'click and collect' order, they may be tempted to make additional purchases.
- 2.62 The implication of this model with respect to land-use planning is the requirement for very large scale warehouse properties both located centrally to major urban conurbations across the country i.e. East Midlands and also in reasonable proximity to the major urban conurbations. As per above, suitable sites will also be rail-served and permit battery electric LGVs/MGVs to round trip on a single charge (and by implication where existing grid capacity is sufficient or could be upgraded).
- 2.63 Note that it may be the case that an individual company's supply chain could be an amalgam of two or more models, or they may have adopted more than one model for different parts of their businesses. The Marks and Spencer NDC at Castle Donington (East Midlands Distribution Centre) was designed to fulfil e-commerce orders delivered directly to residential properties (Model 2) but at the same time serve the retailer's extensive outlet network (Model 3), both traditional purchases and 'click and collect'.
- 2.64 While Model 3 has allowed some retailers to offer an e-commerce option via their existing logistics networks and infrastructure, Models 1 and 2 have necessitated in many cases investment in new infrastructure (CFCs, RDCs and cross-docks). Parcel couriers have had to develop expanded facilities in order to handle the greater volume of e-commerce passing into their shared-user networks. It is also the case that many older buildings cannot accommodate the modern automated stock handling equipment required for e-commerce, and likewise cannot operate direct delivery e-commerce operations alongside continued servicing of the 'bricks and mortar' outlets under the same roof (they were designed to service a retail network which is rapidly changing).
- 2.65 The expected continual growth of e-commerce is therefore likely to drive further investment in new infrastructure as described, and in particular for:

- Very large scale units for CFCs; and
- Smaller units to operate as cross-dock facilities.

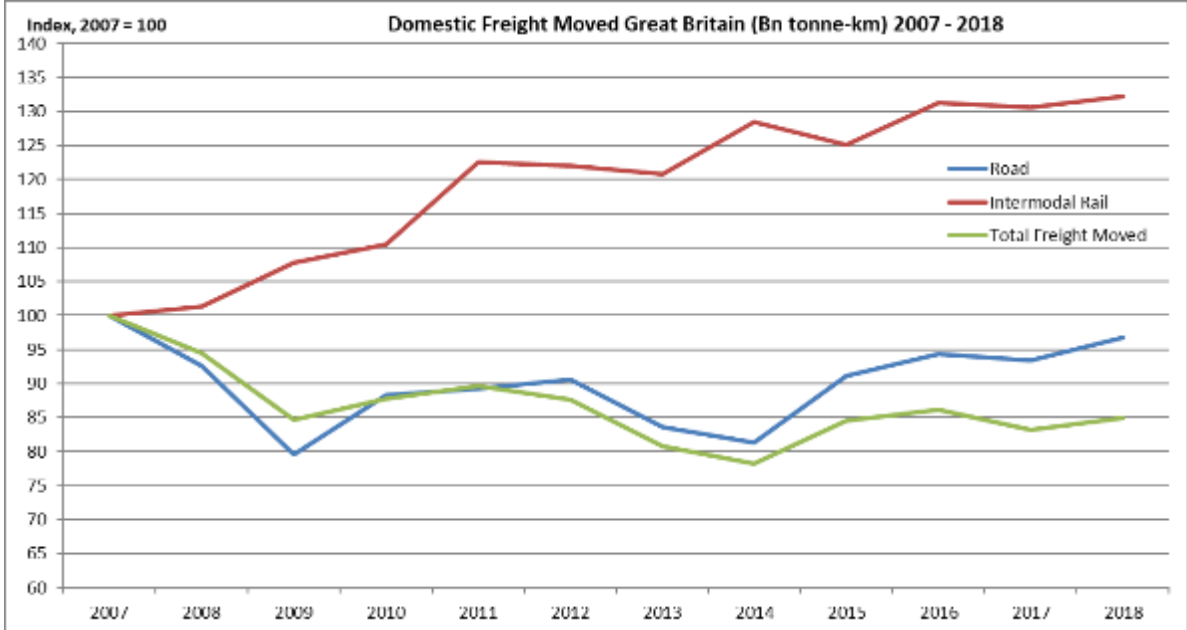
2.66 This has implications for Leicestershire. Its central location to the country at large means it will almost certainly be a sought-after location for large scale CFCs. The large urban centres of Leicester, Nottingham and Derby also implies demand for smaller scale cross-dock type facilities. Further, as traditional retailing declines, this will inevitably lead to a significant rationalisation of existing logistics networks and older warehouse infrastructure. Given the decarbonising agenda set out in the NIC report, future investment will need to be directed at sites which enable goods to arrive/depart by electrically hauled rail freight alongside deliveries using battery electric vehicles.

Rail Freight Trends and Forecasts

2.67 The total volume of cargo lifted by rail freight fell from around 101 million tonnes in the financial year 2004/5 to just over 75 million tonnes in 2018/19. Taken at face-value, this trend would appear to suggest that rail freight is a declining sector. However, this overall market fall is explained by the dramatic reduction in coal volumes, principally coal supplied to the Electricity Supply Industry (ESI), which fell from a high of 52 million tonnes in 2012/13 to around 10 million tonnes in 2018/19. This is due to European emissions legislation and Government policy to phase out electricity generated from coal, which has resulted in many coal-fired power stations closing and a consequent reduction in the use of steam coal for electricity generation. Fiddlers Ferry (Cheshire) closed in March 2020 and Drax (Yorkshire) plans to stop burning coal in 2021. West Burton and Ratcliffe on Soar are likely to close ahead of the Government's cut-off date of 2025, meaning that within a few years no ESI coal will be distributed.

2.68 The fall in ESI coal volumes has actually masked significant growth in other sectors. Removing ESI coal, rail freight tonnes-lifted increased from 57 million tonnes in 2004/5 to 65 million tonnes in 2018/19. When measured as freight moved (tonne-km), intermodal rail freight grew from 5.5 billion tonne-km in 2007/8 to 7.3 billion tonne-km in 2018/9. Over the same time period, construction materials (principally aggregates) grew from 2.8 billion tonne-km to 4.5 billion tonne-km. Rail has benefitted from an increased concentration on rail-linked 'super quarries' in the Midlands (Leicestershire and Peak District) and the Mendips, replacing locally sourced materials in the South East. The graph below shows the performance of total domestic freight moved (tonne-km) from 2007 to 2018 alongside the equivalent performance of intermodal rail freight and road haulage (*Source – all data: Transport Statistics Great Britain 2019*).

Figure 3: Domestic Freight moved in GB



Source: Transport Statistics Great Britain and Consultants Calculation to Index

2.69 The key drivers of growth in the intermodal sector have been:

- A growing proportion of consumption is satisfied by imports, which often arrive in maritime containers through rail-linked ports;
- Road haulage costs are rising (fuel and driver wage rises), while at the same time rail freight has become more fuel and labour efficient through using longer trains; and
- The development of SRFIs at key locations in the Midlands and northern England, thereby reducing the costs associated with transferring cargo from rail to storage and onward redistribution.

2.70 Rail freight’s commercial ‘offer’ to the market has therefore become more competitive over the past 15 years. As a consequence, intermodal rail freight moved has grown by 32% despite the intervening financial crises of 2008/9. Over the same time period, road haulage traffic has fallen. While part of this can be accounted for by the further decline of heavy industry, modal shift to intermodal rail freight has also played a role. A number of developments within the logistics market illustrate these trends in more practical terms. These include:

- It is now well known that Tesco, Asda and Sainsbury’s all use rail services to transfer goods from their warehouses in the Midlands (DIRFT and Magna Park) to their Scottish distribution centres (and in the case of Tesco to Dagenham and South Wales), primarily as it offers a more cost competitive solution;

- *Maritime Transport* has historically been a road haulier specialising in the inland transport of containers to/from ports. However, in 2019 they effectively purchased rail operator DB Cargo's intermodal business, including the lease on terminals in Trafford Park and Wakefield (they already managed the BIFT/Birch Coppice terminal). They are now seeking to undertake much of their long distance hauls from the ports by rail freight. This is mainly on cost grounds, and it also allows their HGV drivers to be focused on more efficient short-distance trips. This is essentially the reason they sought and won the operating concession for the intermodal terminal at East Midlands Gateway.
- Peel Ports (Liverpool) and Teesport have begun to contract intermodal train services from their respective ports as it provides their shipping line customers with a cost competitive inland transport option. This includes a service from Teesport to iPort Doncaster for Ikea, a distance of only 140km. AB Ports at Immingham and Hull are understood to be exploring similar services; and
- Stobart and Scottish hauliers Russell and Malcolm also contract train services for some of their long distance flows, particularly between the Midlands and Scotland.

2.71 While there are still 5 principal rail freight operating companies of FOCs (DB Cargo, Freightliner, GBRf, DRS and Colas Rail), within the intermodal sector there has been a shift over recent years in the manner by which services are contracted commercially. In most cases, the FOCs are now contracted to operate services on-behalf of shippers, which include shipping lines, ports, retailers and road hauliers (as per above). The commercial risk associated with filling the trains therefore rests with the contracting shipper, while the FOCs effectively provide the traction to haul the wagons in return for a guaranteed revenue stream. The key exception is Freightliner's services operating from the deep-sea container ports, which still effectively sells 'slots' on scheduled trains to shipping lines.

Rail Freight Forecasts

2.72 Against this background of growth (excluding coal), during Summer 2018, MDST were commissioned by Network Rail to produce a set of rail freight demand forecasts for 2023/4; they were intended to inform their inputs into the Control Period 6 determination process. Subsequently, during late 2018, MDST were further commissioned by Network Rail to produce demand forecasts for 2033/4 and 2043/4. The forecasts for the three years concerned were to represent an update on similar forecasts produced in 2013 and would inform Network Rail's long-term planning. Six main scenarios were forecast, reflecting a range of economic factors and overall market growth:

- Scenario A: factors favouring rail (relative to road) and low market growth;
- Scenario B: factors favouring rail and high market growth;
- Scenario C: factors less favourable to rail and low market growth;
- Scenario D: factors less favourable to rail and high market growth;
- Scenario E: central scenario (factors and market growth central to Scenarios A-D);
- Scenario F: as scenario E, but with internalisation of external costs.

- 2.73 The principal forecasting tool was the latest version of MDST's GB Freight Model. The forecasts covered 15 main commodity groupings, including intermodal (ports, domestic and Channel Tunnel), construction, steel, biomass and automotive. As per the earlier forecast iterations, the outputs are projections of future demand unconstrained by capacity, either on the national railway network or at terminals. Consultation was undertaken with the main rail freight traction operators, the Department for Transport (DfT) and Network Rail during the process.
- 2.74 In each scenario, various assumptions were made regarding changes to HGV and train crew wages and fuel costs which were consistent with the DfT's WebTag appraisal guidance. Scenarios A and B also included some moderate improvements in train productivity (train length). Maritime container growth was derived from MDST's World Cargo Database trade forecasting tool, with domestic non-bulk traffic growth related to population change. For the intermodal sector, Scenarios A and B assumed that in future 26% of warehouse new-build would be located at a rail served site (around 260,000 square metres per annum). Scenarios C and D assumed half this rate, with Scenario E adopting the midpoint between the two.
- 2.75 The final forecasts (following consultation) were published by Network Rail in August 2020, alongside a routing study (also produced by MDST) which allocated the forecast demand (in terms of estimated trains per day) to specific routes/lines on the national network⁵. Overall, the forecasts indicate continued growing demand for rail freight services, particularly in the intermodal and construction sectors. Table 1 presents a summary of the forecasts to 2033/4 and 2043/4 in terms of tonnes-lifted.

⁵ The forecasts and routing study can be found here - <https://www.networkrail.co.uk/running-the-railway/long-term-planning/>

Table 1: Table: Summary of Rail Freight Demand Forecasts to FY2033/4 and FY2043/4

	000s tonnes lifted						
	Actual 2016/7	A	B	C	D	E	F
2033/4 TOTAL	85,786	121,248	147,013	86,333	106,258	113,145	159,122
of which:							
Ports Intermodal	16,213	38,505	42,549	25,920	28,759	31,756	47,832
Domestic Intermodal	2,481	10,096	12,440	3,311	4,576	6,046	18,465
Construction	24,286	36,348	45,410	23,028	28,769	35,869	51,277
2043/4 TOTAL	85,786	153,617	200,212	113,518	151,132	147,696	194,307
of which:							
Ports Intermodal	16,213	51,844	56,596	35,099	39,321	42,879	61,493
Domestic Intermodal	2,481	16,724	23,633	5,203	9,026	10,933	27,613
Construction	24,286	47,903	72,412	37,782	57,113	53,338	63,182

Source: MDST GB Freight Model for Network Rail

- 2.76 Taking the central scenario (E), total rail freight demand is forecast to grow from 85.8 million tonnes in 2016/7 to 113.1 million tonnes by 2033/4 (+32%) and 147.7 million tonnes by 2043/4 (+72%). Significant growth in demand is forecast for the ports intermodal, domestic intermodal and construction sectors. Ports intermodal, for example, is forecast to grow from 16.2 million tonnes in 2016/7 to 31.8 million tonnes by 2033/4 (+96%) and 42.9 million tonnes by 2043/4 (+165%). Increasing rail freight competitiveness is the key driver of growth in the intermodal sector, essentially the same three drivers which explained the recent trends described above.

Rail Network Enhancements

- 2.77 In the Leicester and Leicestershire SDS, a number of rail enhancement schemes in the East Midlands were detailed. Some were specific to freight while others were essentially passenger focused projects that would generate 'spin-off' benefits for the freight sector. These schemes were to be funded through the Control Period 5 (2014-2019) funding settlement agreed between Network Rail, the Department for Transport (DfT) and the Office of Rail and Road. This included a 'ring fenced allocation' of £200 million 'to fund Strategic Freight Network (SFN) investments identified by the industry'. The key areas of opportunity subsequently identified in the SDS reflected, in part, the rail enhancement schemes planned.

2.78 Due to significant cost over-runs on a number of projects nationally, principally the Great Western Main Line electrification, many other schemes were subsequently reduced in scope (thereby reducing the cost but also the deliverable benefits), have been delayed or cancelled completely. Table 2 provides the current position with respect to the enhancement schemes listed in the SDS that were expected to be delivered (or at least commenced) during Control Period 5.

Table 2: Rail Enhancement Scheme Progress

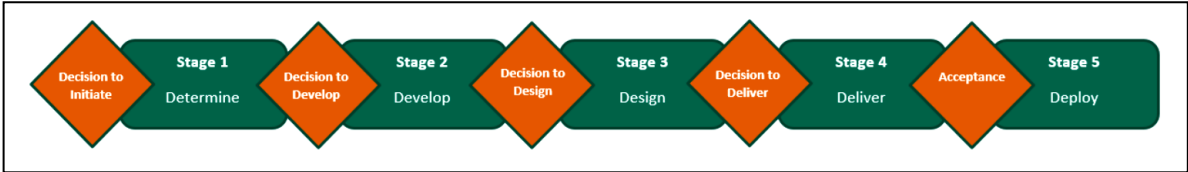
Scheme and Description	Current Position
<p><i>Felixstowe to Nuneaton via Ely and Peterborough capacity enhancement.</i> Works at various locations, including Syston-Leicester-Wigston, to generate additional freight capacity between Felixstowe and Nuneaton. Effectively Phase 2 of the route upgrade (Phase 1 being the gauge clearance on the route to W10 which was completed 2009-2014)</p>	<p>Most of the works planned have effectively been delayed indefinitely with no timescale for development or delivery. This includes the grade separation planned for freight trains passing Syston-Leicester-Wigston towards Nuneaton. The only scheme currently being delivered on the route (completion expected April 2021) is the dive-under at Werrington Junction (north of Peterborough) to enable freight trains to pass under the ECML towards the Spalding-Lincoln line. It is understood that solutions are still being examined for Syston-Leicester-Wigston and other schemes such as Ely-Soham double tracking and Ely North Junction upgrade, albeit with no guarantee on detailed development, funding or delivery at this stage.</p>
<p><i>The electric spine.</i> An electrified and W10 gauge cleared freight route from Southampton to South Yorkshire via Oxford, Bedford and Leicester.</p>	<p>Effectively cancelled, albeit parts of the scheme are being delivered in the form of East-West Rail (reopening Oxford-Bicester-Bletchley, albeit as a non-electrified passenger route) and MML electrification from Bedford to Kettering, Corby and Market Harborough.</p>
<p><i>Doncaster to Water Orton loading gauge enhancement.</i> W12 loading gauge between Doncaster and Water Orton via Erewash Valley Line and Trent Junctions</p>	<p>Completed in April 2019.</p>
<p><i>MML electrification.</i> Full electrification from Bedford to Sheffield and Nottingham via Leicester</p>	<p>De-scoped, with only Bedford-Kettering-Corby and Kettering-Market-Harborough to be delivered as part of the current funding package. Bedford-Kettering Corby expected to be completed by the end of 2020 (live for passenger services from the May 2021 timetable). Part of this scheme has included the installation of a fourth track between Sharnbrook Jn and Kettering (additional freight capacity).</p>
<p><i>Derby station area re-signalling and re-modelling.</i> An enhanced layout with additional platforms to increase operating resilience and capacity.</p>	<p>Completed in 2019.</p>

2.79 The first two schemes listed above have direct relevance for rail freight in Leicestershire (and hence SRFI location). If they had been delivered (or when they are eventually delivered) they would have generated additional freight capacity between Peterborough and Nuneaton via Leicester, along with a W10 gauge cleared route from the south coast and along the MML through Leicestershire (including

trains joining the MML at Syston from Peterborough and heading north). The *Key Area of Opportunity B* (Midland Main Line North corridor) identified in the SDS was effectively predicated on the MML loading gauge upgrade. The MML electrification would also have helped deliver towards the zero-carbon target.

2.80 Due to the afore-mentioned cost over-runs, the DfT decided that the funding settlement for Network Rail’s Control Period 6 (2019-2024) would only cover day-to-day operations, maintenance and renewals of assets. Rail network enhancements would in future be funded directly by the DfT separately from the Control Period financial settlement, with projects appraised for their benefits and funding subsequently allocated on a case-by-case basis. This was set out in the DfT’s New Approach to Rail Enhancement document published in March 2018.

2.81 A *Rail Network Enhancement Pipeline (RNEP)* has been created as part of this new funding process. It is a five stage process as follows:



Source: RNEP Update, October 2018 (DfT)

2.82 Note that the RNEP includes a series of ‘decision gateways’ through which schemes must pass before they can be delivered. The ‘Decision to Initiate’ essentially takes a scheme into the pipeline and unlocks funding for developing a Strategic Outline Business Case (SOBC). Should a successful SOBC emerge, the ‘Decision to Develop’ provides the go-ahead for further advance development work towards a single viable option and to construct an Outline Business Case. Again, should this stage be successful, a ‘Decision to Design’ will enable detailed design work and planning to prepare the scheme for delivery as well as constructing a Full Business Case. The ‘Decision to Deliver’ effectively provides funding for a project’s implementation. The process conforms with the Treasury’s *Green Book*.

2.83 Relevant schemes in the East Midlands which are now part of the RNEP are shown in Table 3.

Table 3: Rail Network Enhancement Pipeline, East Midlands

Scheme and Description	Current Position
<i>Passed 'Decision to Initiate'</i>	
Syston to Trent Junction gauge enhancement	Now in stage 1. Next gateway – 'Decision to Develop'
<i>Passed 'Decision to Develop'</i>	
None in East Midlands	
<i>Passed 'Decision to Design'</i>	
Hope Valley capacity. Provide additional freight capacity on the Hope Valley line	Now in stage 3 Next gateway – 'Decision to Deliver'

2.84 The afore-mentioned freight demand forecasts and associated routing study should form the basis of Network Rail's future strategy for freight enhancements nationally.

2.85 Longer term, Network Rail is currently developing a *Traction Decarbonisation Network Strategy (TDNS)*. An *Interim Programme Business Case* report⁶ was published in September 2020, which was intended to provide the DfT and the Welsh/Scottish devolved administrations with recommendations to inform decisions required to remove diesel trains from the railway network. The document provides a summary of the evidence collated and analysis undertaken. The report notes that currently around 15,400 single-track km (STK) are not electrified, representing around 62% of the national network (when defined as STKs). The TDNS process has investigated the most realistic/feasible alternatives to diesel traction and concluded that there are essentially long-term three options, namely electrification (by overhead wires), battery electric trains and hydrogen fuel cell trains. The report concludes that electrification is the best whole life cost solution for more intensively used areas of the network. In particular, for freight the report concludes that for freight electrification is the only feasible option available (albeit slow speed battery electric operations will probably be required in terminals and sidings). On lesser used lines, battery electric or hydrogen fuel cell will probably emerge as the long-term solutions. Overall, the report recommends that:

- An additional 13,000 STKs of infrastructure will need to be electrified;
- Hydrogen fuel-cell deployment over 1,300 STKs of infrastructure; and
- Battery train deployment over 800 STKs of infrastructure.

For the East Midlands, the report recommends that all lines be electrified, including the MML north of Market Harborough (the planned limit of electrification under the currently funded scheme).

⁶ <https://www.networkrail.co.uk/running-the-railway/long-term-planning/>

2.86 Assuming the Syston to Trent Junctions loading gauge enhancement (RNEP) also proceeds (logic would suggest that it is delivered in tandem with the MML electrification extension north from Market Harborough), this would generate two important strategic W10/electrified routes through Leicester, as follows:

- Midland Main Line Market Harborough to Trent Junctions via Leicester; and
- Peterborough to Nuneaton via Syston, Leicester and Wigston.

2.87 Importantly, this would also create full W10 cleared routes to all the deep-sea container ports, the Channel Tunnel, the Humber and the Mersey ports and Scotland. It is therefore alongside these routes that new SRFIs will need to be developed. Likewise, future growth opportunity areas in local plans will also need to reflect these enhanced routes. It is important to note that there are still long-term issues related to network capacity, particularly on the key Syston-Leicester-Wigston section of the MML. However, as noted above works planned on this section have effectively been delayed indefinitely with no timescale for development or delivery (they are not currently part of the RNEP).

Highway Network Enhancements

2.88 Table 4 lists the key highway schemes currently being delivered, developed or proposed for the main strategic highway network in Leicestershire. It is at sites close to the strategic road network or those routes which are to be upgraded as described below where developers and occupiers will be seeking to invest in new warehouse capacity.

Table 4: Leicestershire Highway Schemes

Road	Scheme Description
A511	<ul style="list-style-type: none"> • Junction improvements at nine locations between A42 Junction 13 near Ashby-de-la-Zouch to M1 Junction 22. • Localised widening. • A new link road, connecting the A511 to Bardon Link Road, creating a new north-south link across Coalville. • Growth Corridor scheme prioritised by Midlands Connect (MC) for submission to DfT. Outline Business Case submitted in January 2020 – outcome awaited. Estimate completion 2024.
A5	<ul style="list-style-type: none"> • Early stages of corridor study (M1 J18 to M6 J12) • Developing Strategic Outline Business Case (SOBC)
A5	<ul style="list-style-type: none"> • A5 Dodwells to Longshoot. Plan to widen the current section of single carriageway between Dodwells roundabout and the Longshoot junction to a dual carriageway. • Part of the Roads Investment Strategy 2 (RIS2) programme, with funding committed for Road Period 2 (RP2, 2020/21 to 2024/25). • Estimated delivery towards the end of RP2.
M1	<ul style="list-style-type: none"> • Upgrade of M1 J21 to 23a. Capacity improvements, potentially to include some form of Smart Motorway solution (though Smart Motorway solutions are currently being reviewed by Highways England). • Project to be developed during RIS2, but scheduled for delivery as part of the Roads Investment Strategy 3 (RIS3) pipeline i.e. after 2025
M1	<ul style="list-style-type: none"> • Junction 21 improvement. Upgrade of Junction. Leicester CC promoting inclusion in Highways England works programme 2020-2025.
A606/A607	<ul style="list-style-type: none"> • Melton Mowbray Distributor Road (MMDR) – southern section. 2020-25.
M69	<ul style="list-style-type: none"> • Upgrade of Junction 2 and link road. Would add south facing slip roads at Junction 2. Funding currently not secured. • Maybe taken forward as part of the Hinckley NRFI scheme – developer/part developer funded.
M1	<ul style="list-style-type: none"> • The possibility of a new M1 Junction 20a. A new Motorway Junction approximately mid-way between Junctions 20 (Lutterworth and Magna Park) and 21 (Leicester and M69), with the potential to link with the A46. • Leicestershire CC currently working with Midlands Connect and Highways England to enter scheme into the RIS3 pipeline.

Sources: MDS Transmodal

2.89 In addition to the above, the DfT 2020-2025 Road Investment Strategy 2 notes the following projects:

- M1 Leicester Western Access
- M1 North Leicestershire extra capacity
- A5 Hinckley to Tamworth

- 2.90 These projects are listed as being for RIS3 pipeline delivery, albeit there is no guarantee of any delivery funding at this time.
- 2.91 Other relevant schemes outside Leicestershire (but will impact on logistics activity in the county) which are to be funded under RP2 are:
- A46 Newark by-pass – completing the dualling of the A46 to the A1 at Newark;
 - A38 Derby Junctions – replacement of roundabouts on the A38 with grade-separated junctions; and
 - A46 Coventry Junctions – grade-separation of junctions on the A46 in Coventry (Binley and Walsgrave).
- 2.92 Other relevant schemes outside Leicestershire which are likely to form part of the RIS3 pipeline include upgrading the A5 from Hinckley to Tamworth. It is also worth noting that the A14 between the A1 and M11 (Huntingdon) has recently been upgraded, thereby providing enhanced access to the Haven ports from Leicestershire.
- 2.93 Note that some of these schemes are currently not committed and funded, and they have no status in planning terms. Where these schemes are designed to provide greater connectivity opportunities to the long-distance strategic highway network, the areas served by them will become increasingly attractive to developers seeking to implement new large scale warehouse capacity. Again, future growth opportunity areas in local plans will also need to reflect these enhanced routes.

Brexit

- 2.94 The UK formally left the European Union (EU) on 31 January 2020. A withdrawal agreement setting the terms of the UK's departure made provision for a transition period ending on 31 December 2020, though this could have been extended for up to two years at the request of the UK Government (an option that was subsequently not taken up). During the transition period, the UK remains a member of the EU Single Market and Customs Union. It therefore has to follow EU Regulations/Directives during this period, including processes relating to the import of goods, the regulation of freight transport (particularly road haulage) and the freedom of movement for labour. The future trade and economic relationships with the EU (along with other issues such as travel, health care and security etc..) are meant to be agreed and then implemented by the start of January 2021.

- 2.95 At the time of writing, formal discussions with the EU are still on-going with respect to future relationships on trade and other matters, and at this stage it is therefore impossible to define the precise outcome. However, the UK Government has committed to:
- Leaving the EU Customs Union so that the UK can negotiate Free Trade Agreements (FTAs) with other countries; and
 - Ending freedom of movement of labour with the EU and instead introducing an immigration system focused on permitting 'skilled' labour from anywhere in the world.
- 2.96 These two commitments alone will have a significant impact on the logistics sector, as large scale warehouses handle significant volumes of cargo imported from the EU, often employing labour which has been recruited from other EU countries. This in turn may also affect the means by which those goods arrive.
- 2.97 The UK Government's formal position currently is that they want to avoid the introduction of tariffs and quotas on the trade in goods with the EU from the start of January 2021. Even if that is the case, the formal departure from the EU Customs Union on that date will necessitate the introduction of formal Customs declaration procedures on goods imported from the EU (i.e. those currently in place for imports from outside the EU, even where zero tariffs apply). These are significantly more bureaucratic and time consuming when compared with those applied to goods which pass freely within the EU Single Market.
- 2.98 Since the mid-1990s, the Dover Straits (Port of Dover and Channel Tunnel), predominantly handling accompanied HGVs, has become the largest and most important route into Great Britain for imported cargo from the EU. The ability for goods to pass freely without Customs checks, combined with competitively priced turn-up and go ferry/shuttle services and the use of cheaper eastern European haulage (running on lower cost diesel) have been, amongst other factors, the key economic drivers behind this position. This position has enabled goods to move speedily at competitive transport rates, even if they could realistically sustain longer transit times.
- 2.99 However, the post January 2021 trading environment is likely to have an impact on this position. The introduction for formal Customs checks (associated with the afore-mentioned introduction of Customs declaration procedures) could generate delays on the Calais-Dover corridor, leading to increases in transit times and impacts on journey reliability. Restrictions on the activities of EU haulage operators once they enter the UK are also likely; currently under EU rules they are able to freely seek backloads

and transport cargo within the UK (cabotage operations). Both consequences are likely to result in additional transport costs.

2.100 Shippers may therefore start to seek alternative routes which offer cost savings and provide better journey time reliability. One consequence of this could be a shift away from using accompanied HGVs passing via the Dover Straits. Instead, shippers would use unaccompanied trailers on RoRo⁷ ferries or containers on short-sea LoLo⁸ shipping services, principally serving East Coast ports on the Haven, Humber and Tees. The longer sailing times would potentially allow the goods to be formally cleared by Customs during the sea voyage, thereby permitting their (almost) immediate release from the port once landed. There is some evidence to suggest shippers may have already begun this shift as shown in Table 5.

Table 5: RoRo Units Handled at Dover and Great Britain Ports 2016 and 2018

Geography	RoRo Units (000's)	
	2018	2016
Dover	2,530	2,642
Total GB	7,099	7,074
% Dover	35.6%	37.3%

Source: DfT Port Freight Statistics

2.101 The data shows that between 2016 and 2018, the Port of Dover has seen a reduction both in the number of RoRo units handled (almost exclusively accompanied) and its market share. While conclusions should not be drawn from such a short timespan of data (and over the long-term this maybe just a 'blip'), it does potentially indicate that shippers are beginning to use other routes into the UK from the EU which avoids the Dover Straits.

2.102 The consequence for East Midlands strategic warehousing is that a proportion of goods which hitherto arrived from Dover on an eastern European HGV may instead arrive from an East Coast port on a British registered goods vehicle. The greater use of LoLo containers also potentially generates a critical mass which enables the contracting of full-length rail freight services to inland sites (noting that the main East Coast ports are all rail-served). It is understood that a number of operators are now examining the viability of intermodal rail services from the Humber and Tees to terminals such as DIRFT and Hams Hall. To remain competitive, it is therefore important that the East Midlands

⁷ RoRo – roll-on roll-off.

⁸ LoLo – lift-on lift-off (where containers are lifted to and from ships, usually by means of quayside cranes)

(and by extension Leicestershire) seeks to develop a substantial proportion of its future new-build at SRFIs (in addition to the sustainability reasons or planning obligations).

2.103 Ending freedom of movement of labour with the EU and instead introducing an immigration system focused on permitting 'skilled' labour from anywhere in the world is also likely to impact on the East Midlands strategic warehousing sector. Distribution centres in the East Midlands have to date attracted labour from across the EU; freedom of movement has allowed warehouses to be fully staffed with cost competitive labour, often in areas where occupiers have otherwise struggled to recruit from the domestic labour pool. The Government's proposed new immigration system would effectively prevent future recruitment on similar terms, as the positions to be filled and the associated wage rates would be classed as 'unskilled'. The impact of this is potentially twofold:

- It may spur further investment in warehouse automation as a means of 'replacing' the lost labour from the EU. However, in many cases older warehouse buildings cannot accommodate modern automated stock handling equipment, particularly to service e-commerce. Further warehouse automation will therefore necessitate the continued development of new-build units to accommodate the equipment. Also, the staff required to install and maintain the automation equipment would more likely be in the 'skilled' category the Government's new immigration system is designed to attract;
- In addition to warehouse operatives, many HGV operations based at strategic distribution centres have relied on drivers from the rest of the EU. This is likely to lead to difficulties in the future recruitment of drivers from the domestic labour pool. It may be that HGV drivers will become focused on operating short distance trips on an intensive basis, with medium to long distance trips instead undertaken by rail freight.

2.104 To remain competitive, it is therefore important that the East Midlands (and by extension Leicestershire) seeks to develop new rail-served sites (in addition to the sustainability reasons or planning obligations).

Industry Publication Perspective

What Warehousing Where, Turley, 2019

2.105 Turley's "What Warehousing Where" report, written in conjunction with the British Property Federation in 2019, aims to uncover the future role of logistics across England in order to better align warehouse construction with strategic housing policies.

2.106 It reports there currently is 69 sqft of warehousing floorspace for every home across England. Assuming that this ratio will remain the same, the study claims that there should be an additional 21.6 million square feet of logistics floorspace in line with the government target of 300,000 homes per

annum. Although a point of interest, this provides a national average that will not be applicable to specific areas – some will have a different population to floorspace ratio and will serve different roles. For example, the ratio differs by region. Within the “Golden Triangle” of the East and West Midlands, for example, the ratio is closer to 100 sqft per home. This is compared to regions with only local significance in logistics, such as the North East and London, which have ratios as low as 40 sqft of logistics floorspace per home. This accounts for all warehousing and not just large strategic development.

- 2.107 According to the report, the majority of logistics employees live within 15 miles of their work, which could mean that proximity to labour pools is a driver for logistics firms. The average salary for the sector is greater than the national average as there has been consistent growth in demand and the requirement for more complex skills.
- 2.108 There is a specific requirement for those with skills in electrical and mechanical engineering, IT and analytics, and this is expected to only increase in the future.
- 2.109 This coincides with the fact that more people are buying their products online than 5 years ago, with growth particularly being driven by 18-35 year olds. There is also an increased blurring in land use as logistics and retail blend into pick-up points and fulfilment centres. Warehouse floorspace demand has doubled over the past decade, with a large driver of that demand being from retailers. Retailers now represent two-thirds of all warehouse floorspace as compared to one-third a decade ago. The 2017 SDS study noted that the automotive sector, particularly due to JLR taking up 44,000 sqm at Prologis Park Ryton, was seen as a key driver for floorspace take up. Subsequently JLR has received permission for a new distribution centre at Appleby Magna, North West Leicestershire for c. 300,000 sqm. Whilst these are significant developments there is little additional evidence regarding further automotive or advanced manufacturing requirements.
- 2.110 Logistics floorspace was also defined across several size-types down the supply chain:
- **National Distribution Centres (NDCs)** are 500k-1m sqft (100 acres)
 - Located along the “spine” of the country. Require direct access to Strategic Rail Freight Interchanges (SRFIs), ports, airports, and a strong power supply. They also require a labour pool within a short drive.
 - **Regional Distribution Centres (RDCs)** are 200k-500k sqft (5+ acres).
 - More common amongst food retailers. Require locations with access to population centres along motorways.

- **Last Mile Fulfilment** are up to 100,000 sqft on a minimum 5-acre site (urban sites its 3-5 acres) and some Pureplay.
 - Locational requirements include a concentration of the population, strong online spend, population growth, and sustainable transport. The fine balance of this is called the “sweet spot”.
- **Pickup** which comprise spaces such as amazon locker, doddle, existing retail stores
 - Broad locational characteristics but typically requires customers that spend their money online.

2.111 Barriers to finding the “sweet spot” of last-mile logistics space include:

- Lack of available sites and stock being released by LPAs.
- Land designation restrictions that exist as a ring around cities where last mile prefers to locate such as environmental restrictions including Green Belt and AONB sites.

Delivering the Goods, British Property Federation, December 2015

2.112 The British Property Federation (BPF) produced “Delivering the Goods: The Economic Impact of the UK Logistics Sector” in order to challenge common misconceptions about the sector and demonstrate its role in driving economic growth.

2.113 At the time of writing, the logistics sector supported 710,000 employees across the UK, and employment had increased by 40% between 2009 and 2013. Average salaries across the logistics sector were £28,000 per worker as compared to £20,000 on average. Only 15% of the sector works part time as compared to 32% on average across all sectors.

2.114 Modernisation of facilities is leading to higher employment densities, or more sqm required per employee. The report indicates that every 1,000 sqm of floorspace equates to 12 FTE jobs (83 sqm per employee).

2.115 Whilst there is a clear current economic benefit of the logistics sector, other aspects of the future of logistics were analysed. The sector is forecast to see a 31% increase in full time employment between 2013 to 2035.

2.116 Drivers of change include e-commerce growth, wholesaling, manufacturing and retail growth. As high-speed internet is rolled out across the country, new markets will continue to open up for online shopping.

2.117 Key skills required are drivers, managers, mechanical engineers, electrical engineers and computer specialists. In particular, skills gaps are increasing. These are especially apparent for technical skills,

customer-handling skills, and light goods vehicle drivers. This will become increasingly apparent as last-mile delivery increases in frequency.

2.118 The report recommends:

- Provision of the right quantity of space in the right locations
- Acknowledgment of the economic contribution of the sector
- Coordinated infrastructure planning
- A joined-up approach from government
- Building a dialogue with local planning authorities

Drivers of Change – Summary of Key Findings

2.119 The road and rail freight sectors must decarbonise by 2050 if the UK is to meet its climate change obligations.

2.120 For smaller road freight vehicles (i.e. LGVs or vans), battery electric vans are emerging as a viable zero emission alternative to petrol- or diesel-powered vans. Decarbonising HGVs will be 'more challenging', though three key options are emerging as the most promising alternatives, namely e-highways, battery electric and hydrogen fuel-cells.

2.121 New warehousing developments will need to be located where existing grid capacity is sufficient or could be upgraded (network reinforcement) relatively easily. It will also be important that warehouse facilities are designed so that loading docks can be equipped with fast charging points.

2.122 Network Rail's TDNS concluded that electrification is the only realistic solution for decarbonising rail freight operations. For the East Midlands, Network Rail's TDNS recommends that all lines be electrified, including the MML north of Market Harborough (the planned limit of electrification under the currently funded scheme).

2.123 While overall Government freight transport policy is effectively 'mode neutral', the NPS makes the case for further road-rail mode shift on the ground of sustainability and economics. The NPPF notes that planning policies and decisions should recognise and address the specific locational requirements of different sectors. For storage and distribution operations, provision should be made at a variety of scales and in suitably accessible locations. Policies for large scale facilities, including

rail freight interchanges should be developed through collaboration between strategic policy-making authorities.

- 2.124 At the end of 2019, e-commerce accounted for 19% of all retail sales. During the peak of the Covid-19 pandemic, it reached 33% albeit this fell-back to 27% once non-essential retail outlets re-opened. However, the long-term lasting impact of Covid-19 from a logistics perspective is that these trends will almost certainly continue and will potentially accelerate.
- 2.125 The expected continual growth of e-commerce is likely to drive further investment in new infrastructure, in particular for:
- Very large-scale units for CFCs. The East Midlands central location to the country at large means it will almost certainly be a sought-after location for such facilities; and
 - Smaller units to operate as cross-dock facilities. The large urban centres of Leicester, Nottingham and Derby also implies demand for such facilities in the Leicestershire area
- 2.126 Given the decarbonising agenda set out in the NIC report, future investment will need to be directed at sites which enable goods to arrive/depart by electrically hauled rail freight alongside deliveries using battery electric vehicles.
- 2.127 Rail freight's commercial 'offer' to the market has become more competitive over the past 15 years. As a consequence, intermodal rail freight moved has grown by 32% despite the intervening financial crises of 2008/9. Total rail freight demand is forecast to grow to 147.7 million tonnes by 2043/4 (+72% over 2016). Significant growth in demand is forecast for the ports intermodal, domestic intermodal and construction sectors. Recent gauge clearance schemes and likely electrification should ensure that Leicestershire remains a key location for rail-served logistics.
- 2.128 Overall, the locational advantages of the golden triangle are unlikely to diminish. Leicestershire remains capable of meeting both rail-served and non-rail-served needs

3 WAREHOUSING STOCK POSITION (2019)

- 3.1 This section aims to quantify the existing stock of large-scale logistics and distribution floor space capacity nationally, across the wider English Midlands and within Leicestershire. It describes existing logistics and distribution facilities in terms of the quantum of floor space available and by location..
- 3.2 The *Valuation Office Agency (VOA)* records the amount of floor space by function within commercial properties across England and Wales for Business Rates purposes (non-domestic Rating List). The complete Rating List database is held in-house by MDS Transmodal; we have interrogated the raw dataset and extracted data relating to floor space within commercial buildings with a designation 'warehouse' or a similar classification. For clarification, this includes:
- Floor space designated as 'warehouse' or similar within a building whose primary classification is 'Warehouse and Premises' i.e. a building purposely built to receive, store and distribute cargo (the classic distribution centre); and
 - Floor space designated as 'warehouse' or similar within a building that has some other primary classification e.g. a 'Factory and Premises' which contains floor space used to store and distribute goods manufactured at that site.
- 3.3 Only property where the warehouse floor space (as defined) is greater than 9,000 square metres in total has been included. This 'cut off' figure broadly equates to buildings around 100,000 sq ft or larger, the logistics industry's recognised definition of a large-scale distribution centre. Other ancillary floor space designations (e.g. offices) within each identified property have been excluded i.e. the total 'headline' size of a commercial property will be greater once these other floor space functions are included. Further, while the total quantum of 'warehouse' or similar floor space within an individual property is greater than 9,000 square metres, the actual floor space may be distributed over two or more different areas (zones) within the individual commercial property. For example, a 'Warehouse and Premises' may record a separate 'cold store' of 10,000 square metres plus an ambient 'warehouse' area of 5,000 square metres. The analysis has recoded this as one building with a total of 15,000 square metres of warehouse floor space. The Rating List utilised is from March 2019, albeit the data analysis presented below is taken to be representative of floor space capacity and location for the calendar year 2019 as a whole.

England and Wales

- 3.4 Based on the above, across England and Wales a total of *2,397 buildings* covering *49 million square metres* of floor space can be identified from the VOA Rating List database (as described).. A breakdown of these figures by Government Office Region are presented in Table 6.

Table 6: Table: Current Large-Scale Warehouse Capacity England and Wales, by Region (2019)

Region	Floorspace		Number		Average Unit
	000s sqm	%	Units	%	Size (sqm)
East Midlands	9,262	19%	386	16%	23,995
North West	8,373	17%	423	18%	19,795
West Midlands	7,505	15%	381	16%	19,697
Yorkshire and The Humber	6,839	14%	329	14%	20,788
East	5,142	10%	255	11%	20,164
South East	3,858	8%	197	8%	19,586
South West	2,964	6%	136	6%	21,795
London	1,845	4%	119	5%	15,501
North East	1,682	3%	90	4%	18,687
Wales	1,600	3%	81	3%	19,756
Total	49,070	100%	2,397	100%	20,471

Source: VOA (May 2019)

- 3.5 It is of note that as of Nov 2015 (according to the report 'Wider Market Developments: Implications for Leicester and Leicestershire Final Report' by MDS Transmodal / GL Hearn 2017), the East Midlands contained 18% of floorspace, the North West 19% and the West Mids 14%. The East Midlands has therefore increased its stock at a greater rate. However, in 2014 (Leicester and Leicestershire Strategic Distribution Sector Study Part A Interim Report MDS Transmodal / Savills 2014) the East Midlands had 20% of floorspace, North West 16% and West Mids 15%, more closely aligned to the 2019 position. VOA figure comparison should be viewed with caution due to the way the VOA records floor space function between each Rating List compilation and a difference in the extraction criteria adopted to extract the data from the master database at the time.
- 3.6 The equivalent commercial property data in Scotland is collated by the *Scottish Assessors Association (SAA)*. For reference, Scotland currently accommodates around 1.4 million square metres of large-scale warehouse floor space, of which around 1.1 million square metres is located in the 'Central Belt'.
- 3.7 Table 6 shows that the East Midlands region hosts just over *9.3 million square metres* of floor space across 386 commercial properties. It is the largest region in terms of total floor space (though the North West has a greater number of units). The average floor space per commercial property in the East Midlands is around 24,000 square metres, compared with the national average of 20,000 square metres per unit.

- 3.8 The East Midlands region records around 8% of the population of England and Wales, yet the data above shows that it currently accommodates 19% of total English and Welsh warehouse capacity. The mean size per unit is also significantly above the national figure. The East Midlands region has therefore attracted a quantum of warehouse floor space significantly above that which its population and wider economy would suggest; it is significantly more than is required to handle the volume of cargo distributed into the East Midlands regional economy. This confirms the analysis previously presented in the Leicester and Leicestershire SDS, namely that the region's floor space is predominantly playing a national rather than regional role in this sector (around 65-70% of the floor space having a national hinterland). The reasons for this position were presented and discussed in the SDS.
- 3.9 The main 'competitor' regions to the East Midlands are the North West, West Midlands and Yorkshire/Humber. These regions currently accommodate around 8.4, 7.5 and 6.9 million square metres respectively. However, the smaller mean unit sizes suggest the warehousing in these regions has a more regional role when compared with the East Midlands.
- 3.10 Derived from the VOA Rating List as per above, Table 7 presents the existing supply of large-scale logistics and distribution floor space at the various Strategic Rail Freight Interchanges (SRFIs) to have been developed to date and other rail-connected warehousing schemes.

Table 7: Table: Current Large Scale Warehouse Capacity at SRFIs and other Rail-connected Sites (2019)

Area	Floorspace
	000s sqm
Hams Hall	318
BIFT (Birch Coppice)	392
ProLogis Coventry	121
DIRFT	597
EDMC Castle Donnington	153
iPort Doncaster	231
Doncaster Railport	163
SIRFT Sheffield	56
Wakefield Europort	327
3MG (Widnes)	60
Trafford Park	343
Teesport	120
London Gateway	86
TOTAL	2,967
% rail-served	6%
East Midlands	750
% rail-served	11%
West Midlands	831
% rail-served	11%
Yorkshire and Humber	777
% rail-served	11%
North West	403
% rail-served	5%

Source: VOA

- 3.11 Nationally, just under 3 million square metres is currently located at a rail-served site, equating to around 6% of large-scale floor space in England and Wales. Note that the two tables above do not currently include the new large scale floor space currently being developed and brought into operation at *East Midlands Gateway* (Segro Logistics Park) at Kegworth (around 205,000 square metres across 5 units are currently being developed and brought into operation). Once that becomes operational and the site is fully built-out, the quantum of rail-served floor space and the overall percentage in the East Midlands region will increase.
- 3.12 For the East Midlands, around 0.75 million square metres is currently located on a rail-served site, equating to around 8% of the region's stock (i.e. currently slightly ahead of the national position). In

the West Midlands, the equivalent figure is just over 0.8 million square metres or 11% of that region's floor space. However, East Midlands Distribution Centre (EMDC) currently does not handle any rail services and ProLogis Coventry is only comprised of rail sidings alongside the warehouses for conventional cargo vans (not intermodal). Successful rail-served sites require a number of large occupiers served by an intermodal terminal in order to attract rail services; EMDC essentially has one such occupier (M&S) and cargo vans are generally not appropriate to most freight flows (only economic when large volumes are transported directly between two rail-served facilities, meaning they are suitable for niche flows e.g. bottled water, rather than for general fast-moving consumer goods, or FMCG, type flows which tend to move in smaller quantities but frequently).

- 3.13 The large developments surrounding Wakefield Europort and the new iPort Doncaster results in the Yorkshire/Humber region currently having around 11% of its warehouse capacity being rail served (around 777,000 sqm). In the North West region, just under 0.5 million square metres is rail-served equating to around 5% of the region's capacity. However, this includes Trafford Park, where the two intermodal terminals are not integral to and were developed separately from the warehousing; use of the public road network is required to transfer containers between them.

Leicestershire and East Midlands

- 3.14 Appendix B presents a breakdown of large-scale warehouse floor space within the East and West Midlands regions by Billing Authority (i.e. planning authority level). Daventry, Northampton, Harborough, North West Leicestershire, Corby and East Northants are the six authorities with the largest stock in the East Midlands region, each accommodating over 0.5 million square metres. The position with respect to Leicestershire county is shown in Table 8.

Table 8: Large Scale Warehouse Capacity Leicestershire by Billing Authority (2019)

Billing Authority	Floorspace 000s sqm	Number Units	Average Unit Size (sq m)
Harborough	770	32	24,049
North West Leicestershire	707	27	26,178
Hinckley & Bosworth	284	9	31,596
Blaby	193	13	14,841
City of Leicester	176	9	19,559
Charnwood	92	6	15,291
Melton	73	3	24,436
Oadby & Wigston	19	1	18,913
TOTAL	2,314	100	23,137

Source: VOA

- 3.15 Table 8 shows that Leicestershire hosts just over 2.3 million square metres of floor space across 100 commercial properties (25% of the regional total measured by floor space). The average floor space per commercial property in the County is around 23,000 square metres. Harborough and North West Leicestershire account for around 65% of the county's large scale floor space. The spreadsheet database (*Leicestershire Warehousing*) supplied with this study report provides a full inventory of warehousing in the county of Leicestershire by location, occupier and floor space.
- 3.16 Table 9 summarises the age of the stock based on authority records. This suggests that around 15% of the area's stock is pre 1990; 20% is 1990-2000; 30% is 2000-2010 and 30% is post 2010. Considering the largest volumes by authority, around 85% of Harborough stock is 1990-2010 (Magna Park build out) whereas 80% of North West Leicestershire stock is post 2000. Note that stock in Leicester and Charnwood, and as a result total stock, differs from that reported in the main VOA database extraction following refinement by the authorities undertaken later in the process after the forecasting.
- 3.17 Appendix E provides a map of the locations of units categorised by age.

Table 9: Age of Large-Scale Warehouse Capacity Leicestershire by Authority (April 2020)

	1990-00	2000-10	2010+	Pre-1990	Unknown	Grand Total
Blaby	18,679	37,717	66,900	69,631		192,928
Charnwood			20,291			20,291
City Of Leicester	14,567	39,344	12,244	11,901		78,057
Harborough	260,811	387,523	10,777	88,519	21,945	769,574
Hinckley & Bosworth	23,930	68,917	69,216	122,301		284,365
Melton					73,307	73,307
North West Leicestershire	44,262	156,697	414,735		91,117	706,811
Oadby & Wigston	18,913					18,913
Grand Total	381,162	690,199	594,163	292,353	186,369	2,144,246

Source: Local Authority Records

4 PROPERTY MARKET REVIEW

4.1 This section provides an assessment of the strategic industrial property market in Leicester and Leicestershire. This assessment has been undertaken using a variety of sources including take-up and availability data from the Estates Gazette Interactive (EGi) database and the CoStar commercial property database, alongside assessment of Valuation Office Agency (VOA) data and a review of the latest commercial property literature and stakeholder/property agent consultation.

Warehouse / Industrial Market Review

4.2 In this section, we summarise the findings of commercial market reports for the logistics market in the UK, Midlands and the different local areas undertaken by key agencies including:

- Market Insight Great Commercial Property Decisions 2019, Innes England
- Big Shed Briefing July 2019, Savills
- Big Shed Market View March 2019, Avison Young

4.3 Through 2019 the market has been of the view that Brexit has had limited impact thus far on the demand for warehouse space and more important drivers are around the structural changes in retailing, the growth of the online retail sector and how the UK manufacturing supply chain responds in the long term to leave the EU.

4.4 Take-up for the 2019 half-year reached 16.1 million sqft (1.5m sqm), 28% up on the long term average for the first half of a year across the UK. Moreover, the second quarter in isolation was outstanding with 9.6 million sqft (900,000 sqm). transacted, making it the highest level take-up since 2014 and the second-best Q2 on record.

4.5 In terms of supply, this has risen in 2019 and now stands at 34.1 million sqft (3.2 million sqm) Nationwide, reflecting a vacancy rate of 6.6%. Of the current supply on the market 56% is classified as grade A, up from 35% in Q1 2015.

4.6 Distribution investment volumes reached £4 billion during 2018 in line with the five-year average, with Tritax Big Box REIT accounting for 16% of volumes. However, this level is below the record of £6.8 billion in 2017.

East Midlands Overview

- 4.7 The East Midlands has been the strongest market across the country in 2019, seeing the largest take up. East Midlands has seen an increase in speculative development completions, which paired with large units returning to the market, has led current supply to total 5.4 million sqft (500,000 sqm) representing a rise of 64% from 2018, yet still maintains a comparatively low vacancy rate of 5.4% reflecting the strong demand across the area but also a propensity for design-build of strategic warehouses. The proportion of supply has altered dramatically, 2015 saw 19.4% of space available on the market classified as grade A yet recent speculative development has shifted this proportion 57.8%.
- 4.8 Take-up in the first half of 2019 has reached 2.5 million sqft (230,000 sqm), 33% above the long-term average take-up evidencing continued strength in the East Midlands market. Interestingly, in the first half of 2019, we have witnessed 82% of space transacted involve grade A quality units with grade B space accounting for 15%. This reveals a preference for occupiers for better quality units. According to recent transaction records, build-to-suit (or also known as design and build) transactions dominate the market activity in terms of transacted floorspace. The largest transaction is the lease of Unit 2 Mountpark Bardon Phase 2 from VF Corporation (578,620 sqft of 5,000 sqm). East Midlands Gateway and Corby concentrated half of the take-up volumes.
- 4.9 In terms of new development, there are currently eight units under construction which total 2.3 million sqft, adhering to the regional trends these are primarily located in Northamptonshire where five units are being developed (see below). The largest unit is at DIRFT in Daventry where Prologis is developing 535,000 sqft (50,000 sqm) due to reach practical completion in Q4 2019.
- 4.10 The Leicestershire market has started responding to the long-term shortage of new industrial and warehouse development to the point where agents expect to see new stock, both large and small, in the coming years. This will not only continue to support the strategic B8 market but will also provide opportunities for smaller organisations wishing to improve their image and profile locally.
- 4.11 Overall, the distribution market across Leicester and Leicestershire continued to be the largest contributor to the national take-up in 2019. This remained above the 10-year average in 2018, helped by lettings to GEODIS at Optimus Point of 277,000 sqft (26,000 sqm), and 320,000 sqft (30,000 sqm) to DPD at Hinckley Park.

- 4.12 In particular, the take-up in Leicestershire remained above the 10-year average for the sixth successive year in 2019, with 2.2 million sqft (200,000 sqm) of space acquired. The activity was dominated by larger lettings, with two-thirds of take-up being in units of 50,000 sqft (5,000 sqm) and above. Several new developments boosted supply, which was also dominated by larger units above 50,000 sqft (5,000 sqm) accounting for 81% of the stock. Prime rents have now grown by almost 5% a year since 2013.
- 4.13 The Nottingham distribution market is expected to attract interest as works on the former Imperial Tobacco Horizon Factory have started by Henry Boot to provide a new logistic hub of 470,000 sqft (44,000 sqm). In addition, Panattoni Park at J26 of M1 has been commenced with speculative construction of 715,000 sqft (66,000 sqm).
- 4.14 Supply in Nottingham remained tight in 2019, with a particular shortage of Grade A accommodation. Second-hand space accounted for 97% of the year's activity and take-up was down to 857,300 sqft (80,000 sqm), the lowest for five years. Prime industrial rents remained at £6.25 per sqft (£67.30 per sqm) in 2018, largely due to the lack of stock, while secondary rents rose to £5.00 per sqft (£53.80 per sqm), up 5.3% on the year.
- 4.15 Derbyshire's take-up was in line with the long-term trend. Secondary rents rose sharply due to a lack of stock. Supply increased in 2019 Q4 albeit half of all availability is in two buildings, namely Solex 55 and First Panattoni's Derby 370. Most transactions have been within the small to mid-size shed market, which has been thriving. Local developer Ivy Grove continue to dominate this sector, having disposed of 80% of their units at Eagle Park. The largest industrial letting was ATL's acquisition of 66,000 sqft (6,000 sqm) from the Harworth Group at Sinfin Commercial Park.
- 4.16 While total lettings were down by 13%, the take-up of units of 20,000 sqft and below increased by almost 60% across Derbyshire in 2019. Overall, take-up fell back from the previous year, primarily because of fewer larger lettings. Supply edged up by 9.2% to 890,663 sqft (83,000 sqm), driven largely by newly developed Grade A space, which more than doubled from 2017. Prime rents rose to a new record of £6.50 per sqft (£70.00 per sqm).

West Midlands Overview

- 4.17 Political and economic uncertainty continues to impact larger requirements across the country and in the West Midlands albeit demand is still strong across the market. Take-up in the first half of 2019 reached 1.5 million sqft (140,000 sqm) through eight transactions, representing a 6.3% decrease from

the first half of 2018. There has been a slight decline in larger requirements within the region. Grade A quality space continues to see the strongest demand with 67% of all space leased in the first half of 2019 being of grade A quality. Furthermore, with strong demand from developers, investors and occupiers land values in the West Midlands continue to rise which will further impact rental growth in the region.

- 4.18 The high levels of take-up and occupier demand seen in recent years have stimulated speculative development, since the beginning of 2018, 2.4 million sqft (220,000 sqm) of speculatively developed warehouse space has been added to the West Midlands. However, despite the recent rise in supply in the region, using the five-year rolling average yearly take-up there are just 1.6 years left of supply within the market.
- 4.19 Nine units are currently under construction within the West Midlands totalling 1.7 million sqft (160,000 sqm). The largest unit currently under construction is the recently announced Fradley 432 where Evans Property Group are speculatively developing 431,500 sqft (40,000 sqm) set to reach practical completion Q1 2020.

Warehousing Floorspace

- 4.20 In some cases, our analysis of industrial floorspace includes both industrial (B2) and warehouse/ distribution (B8) use classes as the VOA does not distinguish between these use classes in their database. A more detailed analysis of warehousing stock is provided in the previous chapter.
- 4.21 According to the VOA the County contained 9,475,000 sqm of industrial floorspace in 2019. This includes warehouse/ distribution floorspace. The greatest proportion of space was in Leicester (26%), followed by North West Leicestershire, Harborough and Charnwood.
- 4.22 Over the period from 2000-12, total industrial floorspace in the county decreased by 467,000 sqm and from 2012-19 increased by 365,000 sqm. However, the spatial distribution of floorspace changed, with growth in NW Leicestershire and Harborough – driven by new B8 floorspace development - compared to reductions in Leicester City, Charnwood, and Hinckley and Bosworth.

Table 10: Industrial Floorspace Trends, 2002-19

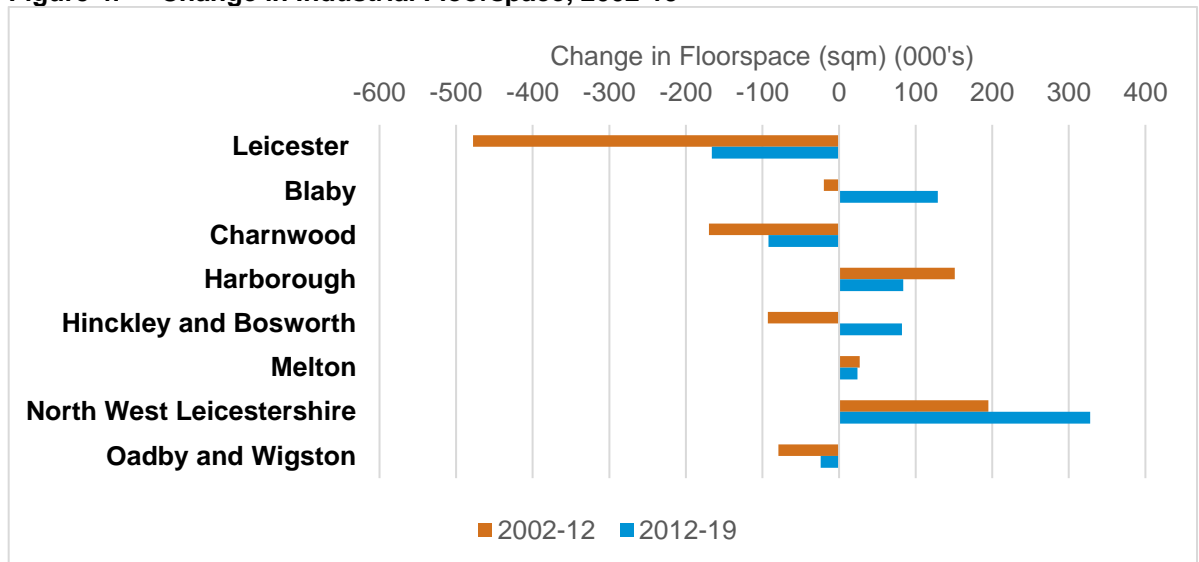
	'19 Industrial Floorspace ('000 sq.m)	% County Total	Change 02'-12'	Change 12'-19'
Leicester City	2,439	26%	-16%	-6%

Blaby	805	8%	-3%	19%
Charnwood	1,187	13%	-12%	-7%
Harborough	1,324	14%	14%	7%
Hinckley and Bosworth	1,147	12%	-8%	8%
Melton	508	5%	6%	5%
NW Leicestershire	1,726	18%	16%	23%
Oadby and Wigston	339	4%	-18%	-7%
FEMA	9,475	100%	-5%	4%

Source: VOA Business Floorspace Statistics

4.23 Figure 4 below profiles the change in floorspace over this period, with the greatest decreases seen in Leicester City, and the greatest increases seen in North West Leicestershire.

Figure 4: Change in Industrial Floorspace, 2002-19



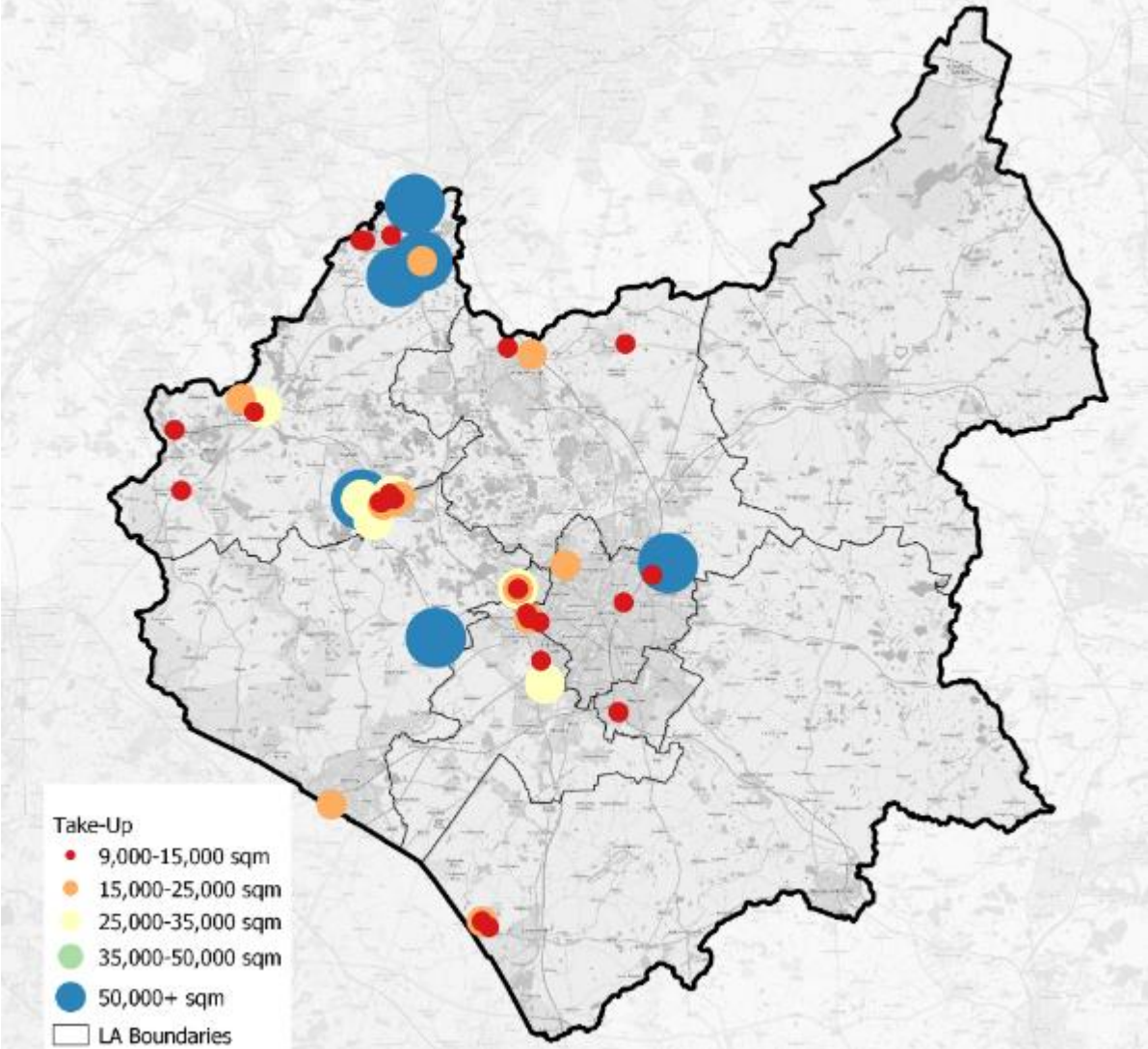
Source: VOA Business Floorspace Statistics

4.24 The Leicester 2020 Economic Development Needs Assessment has looked at this VOA loss data for the City in more detail. The figures above are net, so although Leicester has seen reasonable new industrial development rates, the scale of the losses completely masks this. The EDNA demonstrates that over 60% of these losses occurred within Leicester's Strategic Regeneration Area. This covers over 470ha of land and was taken out of employment designation, by the 2006 Local Plan. Transformation of the city centre and the surrounding area, providing over 6500 new dwellings, major new retail, leisure and other regeneration in 5 intervention areas, has been enabled by the change of use or redevelopment of these former industrial buildings. Leicester currently only has 8 buildings in use as a strategic warehouse (over 9000sqm in size).

Warehousing Take-up

- 4.25 Take-up is defined as the leasing and occupational sales of floorspace, as recorded on CoStar and EGI. For the purposes of this assessment, only “Strategic” units over 9,000 sqm (100,000 sqft) have been included. There were no transactions recorded in Melton. Take-up includes both new and existing floorspace.
- 4.26 Figure 5 below profiles the spatial distribution of strategic industrial transactions since 2014. For the period 2014-2019 there have been 64 recorded industrial deals relating to 1.5 million sqm of floorspace.
- 4.27 The highest concentration of industrial transactions was recorded in North West Leicestershire (27 deals) followed by Leicester (11). The largest amount of floorspace was transacted in North West Leicestershire: this totalled 778,000 sqm. This was followed by Hinckley and Bosworth (200,381 sqm) and Leicester (193,545 sqm).

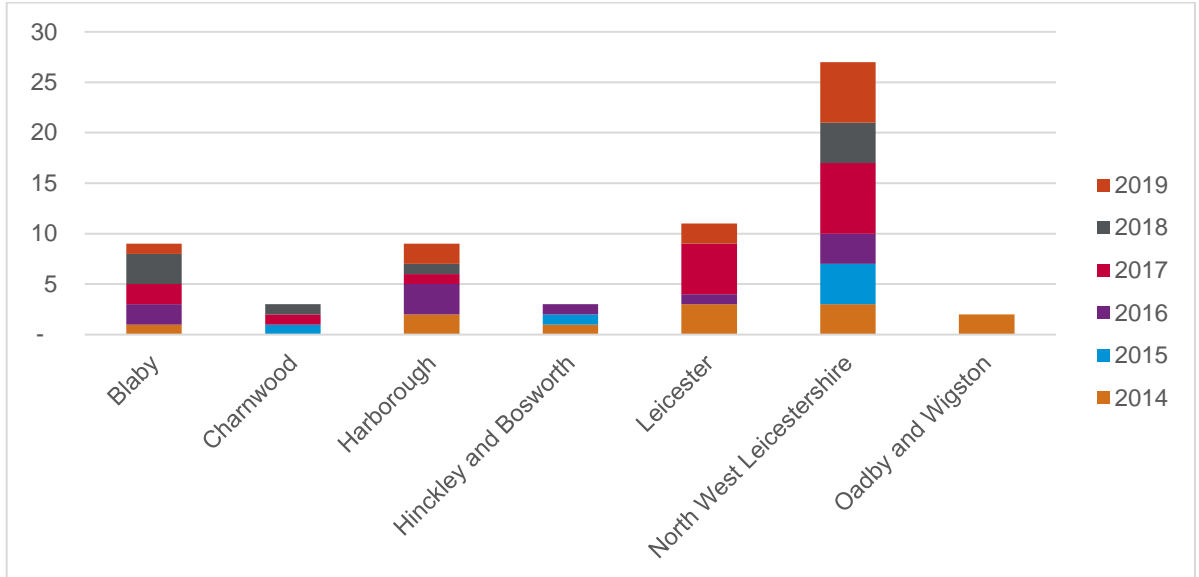
Figure 5: Strategic Industrial transactions in Leicester and Leicestershire since 2014



Source: GL Hearn Analysis of EGi and CoStar Data

- 4.28 Figure 6 below presents the number of large industrial deals by local authority and year. On average 11 deals were recorded per annum in Leicester and Leicestershire. The highest number of transactions recorded in a single year was 2017 with 16 deals. In total 50% of all the deals related to stock smaller than 15,000 sqm and a further 27% between 15,000 to 25,000 sqm.
- 4.29 The figure presents the number of deals broken down by year and local authority for the 2014 to 2019 period. The largest number of transactions were located in North West Leicestershire with 27 deals, or 42% of total deals. The smallest number of deals were found in Oadby and Wigston at 2 deals.

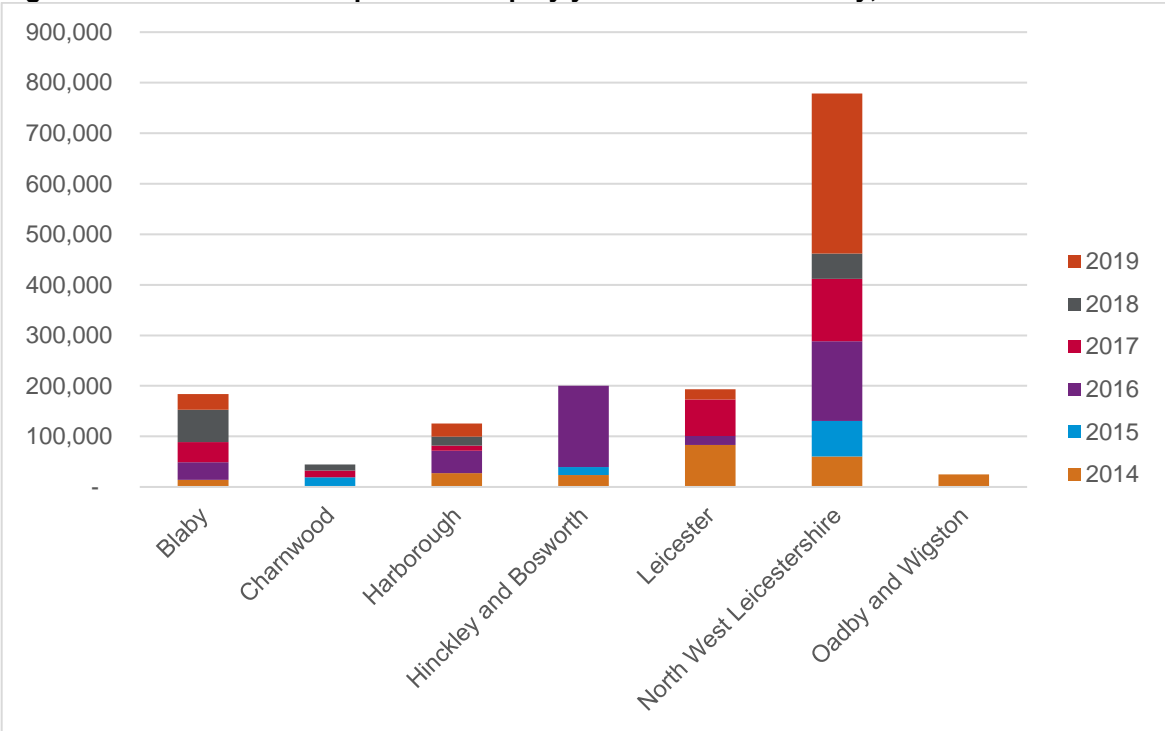
Figure 6: Industrial deals in Leicester and Leicestershire by year and local authority, 2014-
19



Source: GL Hearn Analysis of EGi and CoStar Data

4.30 Figure 7 below presents the spatial distribution of the industrial floorspace take-up. The highest volume of industrial floorspace transacted was in North West Leicestershire at 50% followed by Hinckley & Bosworth at 13%. Blaby and Leicester each transacted 12% and Harborough transacted 8% of total floorspace. The smallest amount of industrial floorspace was leased in Charnwood at only 3% and Oadby & Wigston at 2% of total floorspace in the County.

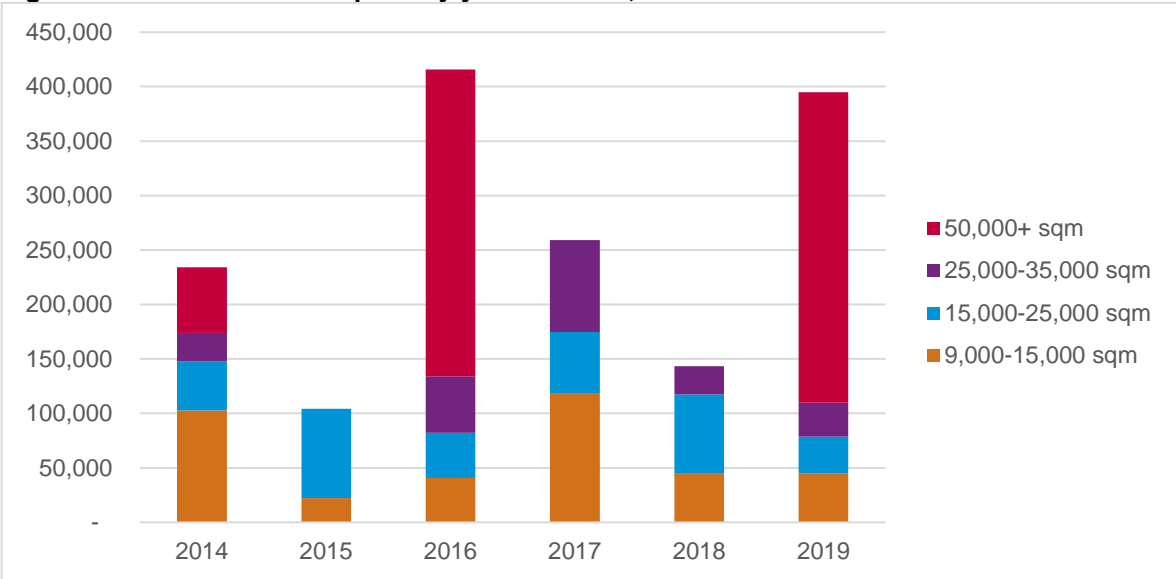
Figure 7: Industrial floorspace Take-up by year and local authority, 2014-19



Source: GL Hearn Analysis of EGi and CoStar Data

4.31 Figure 8 presents the industrial floorspace take-up by unit size band. In total 40% of floorspace transacted over the last decade related to units over 50,000 sqm in size. This was followed by 24% of floorspace transactions in units between 9,000 and 15,000 sqm and 21% in units above between 15,000 and 25,000 sqm. The highest volume of industrial take-up was in 2016 at 415,804 sqm (21%).

Figure 8: Industrial floorspace by year and size, 2014-19



Source: GL Hearn Analysis of EGi and CoStar Data

4.32 The spikes in 2016 and 2019 relate predominantly to Amazon’s following transactions above 100,000 sqm including:

- the 121,000 sqm (1.3 million sqft) warehouse in Mountpark Bardon Beveridge Lane in Coalville in 2016; and
- the 111,000 sqm (1.2 million sqft) warehouse in East Midlands Gateway in 2019.

4.33 Other large schemes across Leicester and Leicestershire, over 46,000 sqm (500,000sqft), transacted in 2019, include:

- A 59,500 sqm (640,000 sqft) warehouse known as Big Box 2 East Midlands Gateway leased to XPO Logistics;
- A 51,000 sqm (550,000 sqft) warehouse known as Big Box 3 in East Midlands Gateway leased to Shop Direct; and
- A 48,000 sqm (520,000 sqft) warehouse known as EMDC 525 leased to CWC Group, however, this is an investment transaction and has been excluded from the take up. The unit is currently available for lease and has been considered in the supply position.

4.34 As noted, all these schemes are located within North West Leicestershire.

4.35 There are two more units across the County which have been transacted recently that are above 46,000 sqm (500,000 sqft), these include:

- Neovia Logistics warehouse of 158,000 sqm (1.7 million sqft) (including mezzanine) in Peckleton Lane LE9 9JU leased in 2016 (Hinckley and Bosworth); and
- Sofidel Warehouse of 60,000 sqm (645,000 sqft) (including mezzanine) in Waterside Road in Leicester, leased in 2014.

4.36 Table 11 illustrates the total take up over time by authority, annualised to estimate future needs. This assumes that all new occupants require new floorspace, which would not be the case, and that the rate of past take up continues into the future. Thus, this is indicative only.

Table 11: Annualised and Projected Takeup by Authority

Authority	Total take up 2014-19	Av. Annual take up	2019-36 requirement	2019-41 requirement
Blaby	184,083	30,680	521,560	674,960
Charnwood	44,450	7,408	125,936	162,976
Harborough	125,783	20,964	356,388	461,208
Hinckley and Bosworth	200,381	33,397	567,749	734,734
Leicester City	193,545	32,257	548,369	709,654
North West Leicestershire	778,424	129,737	2,205,529	2,854,214
Oadby and Wigston	24,626	4,104	69,768	90,288
Total	1,551,292	258,549	4,395,299	5,688,034

Source: CoStar, EGi, GL Hearn analysis

Rental Values

4.37 As shown in Table 12, rental values in and around Leicester have grown by 4% in prime locations and by 12% in secondary locations in recent years. Currently, new warehouses typically command around £6.25 psf. CoStar quoted an average rental value of £6.18 psf in the first quarter of 2020 in the Leicestershire market.

Table 12: Golden Triangle Rental Value Change, Large Warehouses

Area	H1 2018		H1 2020		% Change 2018-20	
	Prime	Secondary	Prime	Secondary	Prime	Secondary
Birmingham East	£6.50	£4.50	£6.50	£5.50	0%	22%
Coventry	£6.50	£4.50	£6.50	£5.75	0%	28%
Derby	£5.75	£3.50	£6.00	£4.00	4%	14%
Leicester	£6.25	£4.25	£6.50	£4.75	4%	12%
Nottingham	£5.75	£4.25	£6.00	£4.25	4%	0%

Source: Industrial and Logistics Rent Maps, Colliers (March 2020)

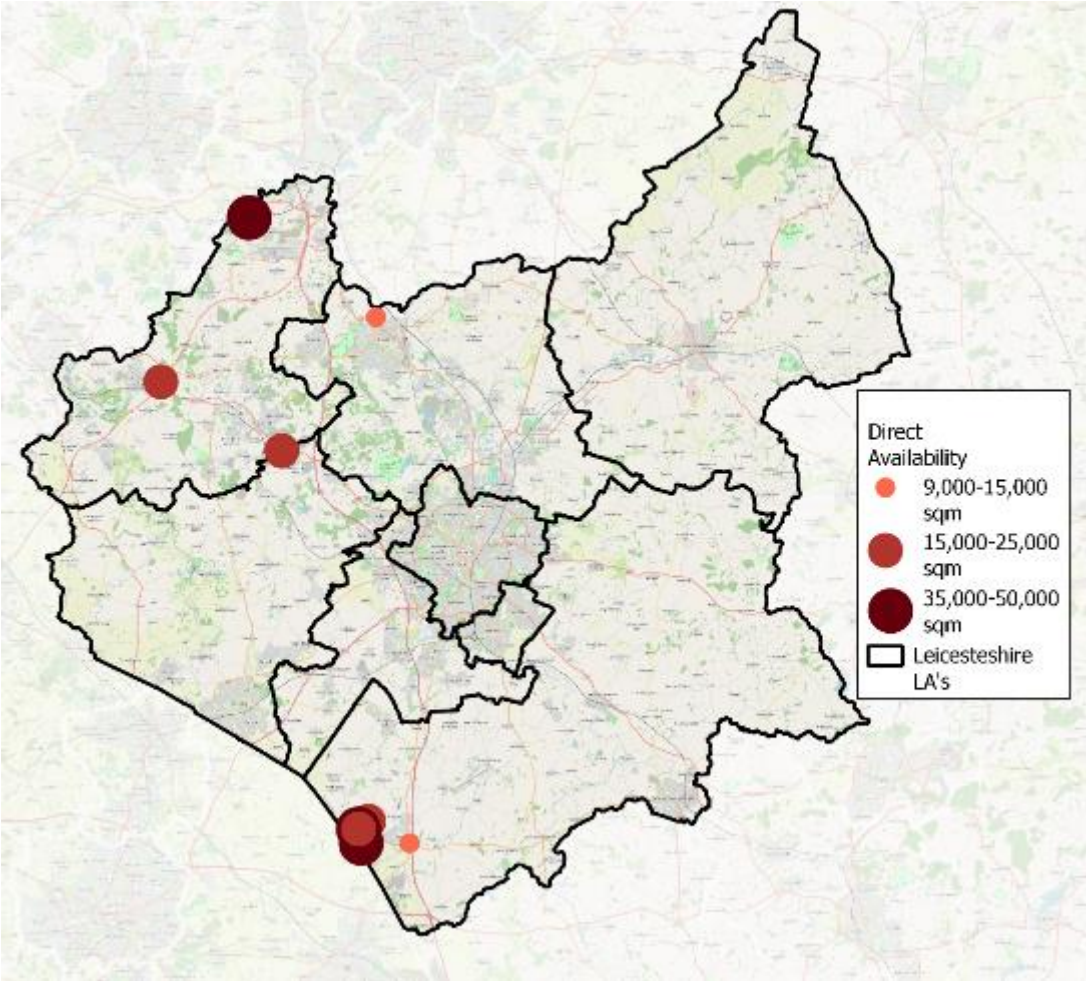
4.38 This rental growth has been driven primarily by demand from retailers and delivery specialists. The majority of property development in recent years has been pre-let, which has contributed to a lack of available supply and subsequently rising rental values.

Warehousing Availability

4.39 The pipeline supply is dealt with separately in section 6 based on local authority monitoring data.

4.40 Sites under construction or existing units advertised at April 2020 for occupational sale or lease have been mapped to show the spatial distribution across the FEMA, with a clear locational preference for the M1 and ancillary A-roads.

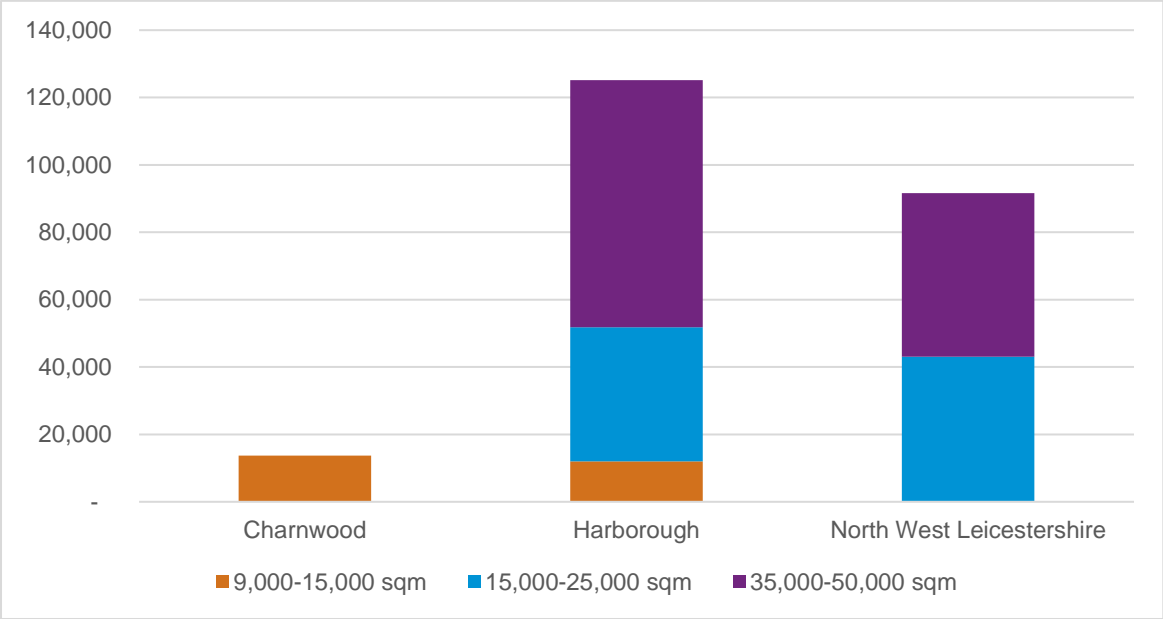
Figure 9: Industrial availability in Leicester & Leicestershire



Source: GL Hearn Analysis of EGi and CoStar Data (April 2020)

- 4.41 There is a total of 230,050 sqm through 9 units available directly across Leicester and Leicestershire April/May 2020 with 111,013 sqm relating to 5 newly built units. These include:
- Zorro Warehouse in Coalfield Way Ashby-De-La-Zouch of 22,071 sqm (237,600 sqft);
 - 225 Interlink in Beveridge Lane, Bardon of 20,967 sqm (225,690 sqft);
 - East Midlands Distribution Centre 525 (EMDC 525) of 48,626 sqm (523,400 sqft). This unit was bought by CWC Group in 2019, but this was an investment transaction, and the unit is currently available for lease;
 - Tornado 186 Warehouse of 15,843 sqm (170,500 sqft) in Magna Park built-in 2015/16; and
 - M1 Access in Lutterworth comprising of an over 11,000 sqm (120,000 sqft) warehouse with office floorspace above. The overall scheme relates to 11,986 sqm (129,000 sqft) built 2017/18.
- 4.42 There are also 4 existing and second-hand units available for leasing. These have been built between 1980 and 2006 with two of them being recently refurbished. In detail these include:
- Artform International Warehouse of 13,726 sqm (147,745 sqft) in Bishop Meadow Rd, Loughborough. This was built in 1980;
 - Hurricane Warehouse or also known as 4400 in Harrier Parkway in Magna Park. This is a 24,016 sqm (258,503 sqft) warehouse built-in 2001;
 - XDock 377 Warehouse of 35,031 sqm (377,070 sqft) Wellington Parkway in Magna Park built in 1993 but renovated in 2019; and
 - Quantum or 5320 Hawke Way in Magna Park. This is a warehouse of 38,240 sqm (411,613 sqft) built in 2006 and renovated in 2017.
- 4.43 The 9 directly available units are analysed according to their local authority and size band in Figure 10.

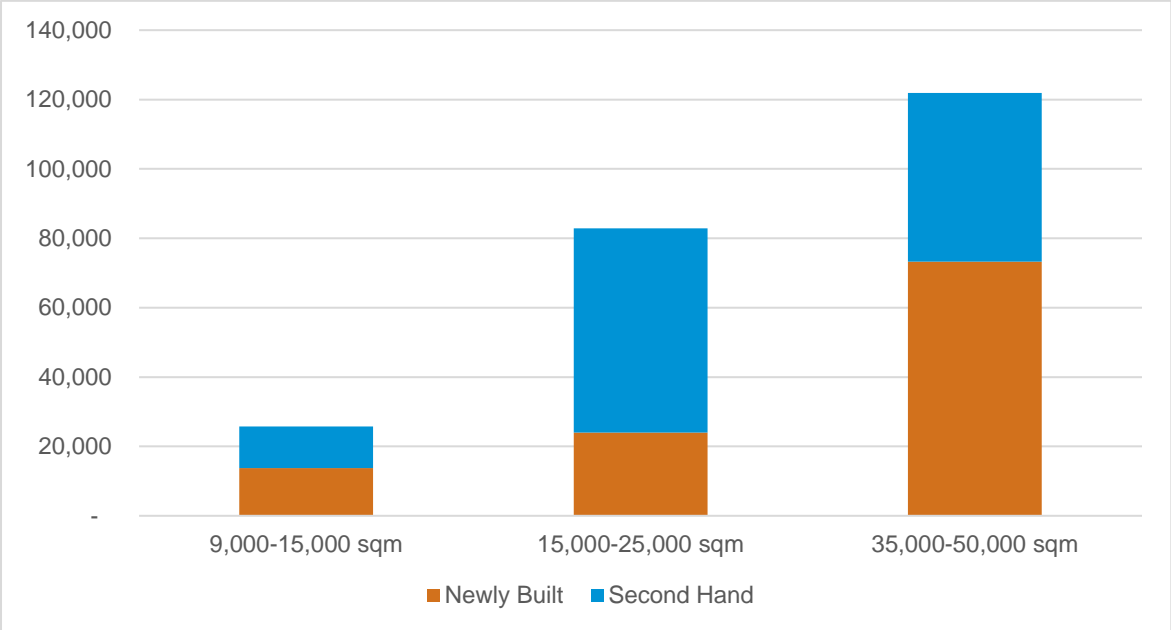
Figure 10: Direct availability across Leicester and Leicestershire by local authority



Source: EGI/CoStar/monitoring data – GL Hearn analysis

4.44 As presented below, 52% of direct availability relates to newly built stock with the remainder comprising second-hand stock. Agents noted that the “lifespan” of a warehouse is typically around 30 years before the units are functionally unfit to meet the modern standards required by premium occupiers. Secondary stock typically commands lower rents.

Figure 11: Direct Availability across Leicester and Leicestershire by size and grade



Source: EGI/CoStar/monitoring data – GL Hearn analysis

- 4.45 Years supply, a ratio which calculates current available floorspace divided past average annual take-up, is one metric which helps to demonstrate levels of vacancy in the market. A 1 year supply, for instance, would mean that the advertised space is equivalent to one year of take-up.
- 4.46 The analysis reveals that calculated against past average take-up 2014-19 there is a direct supply of 0.89 years across the County. This has been confirmed by agent consultation which discussed supply pressures across the strategic warehousing and logistics market. As strategic sites are more focused on being located in the Golden Triangle and less location-specific in terms of a local authority, it is expected that supply shortages in some local authorities can be covered by others with surpluses.

Table 13: Direct Years Supply, Leicester and Leicestershire County Local Authorities

	Take up (Average 2014-19) (sqm)	Direct Supply (sqm)	Years of direct supply
Blaby	30,680	n/a	-
Charnwood	7,408	13,726	1.85
Harborough	20,964	125,115	5.97
Hinckley & Bosworth	33,397	n/a	-
Leicester	32,258	n/a	-
North West Leicestershire	129,737	91,664	0.71
Melton	n/a	n/a	-
Oadby and Wigston	4,104	n/a	-
Leicester and Leicestershire County	258,549	230,505	0.89

Source: GLH Analysis of CoStar and EGi Data

Agent Consultation: Key Drivers and Trends

- 4.47 As part of the commercial property market assessment, GL Hearn contacted commercial property agents active in the FEMA and with knowledge of the wider Golden Triangle. In particular, they were asked about key drivers for demand and asked to rank factors such as size, location, along with proximity to other occupiers, freight and airport infrastructure. More broadly, agents were asked about gaps in supply and the future demand for the warehousing and logistics sector, taking into account factors such as Brexit, Coronavirus, e-commerce and climate change. Key findings from the consultation are summarised below.
- 4.48 Road accessibility was almost undoubtedly the most important factor for market demand. Access to the majority of the UK population within the shift of an HGV driver was cited to be critical. Motorway junctions, particularly along the M1 or at least a significant A-road, are considered high priorities when searching for space. Although strategic warehouse occupiers are comfortable being a reasonable distance from population centres, they still want to be accessible to labour pools which are essential for operations. Competition remains high in Leicestershire for labour and shortages are a key driver in automation.
- 4.49 Increasing demand for power is fast emerging trend in the warehousing occupier market driven by automation, electric vehicle charging and systems such as those for chilled goods. Units are typically undersupplied and alternatives such as photovoltaic roofs or other renewables are expected to be increasingly prevalent.

- 4.50 Airport and rail connectivity is seen as secondary to road needs at the present time, and is considered by agents to be highly occupier-specific, for example if the products require shipment via rail. Occupiers and the goods that require rail-served sites vary considerably, but can include products received from overseas at shipping ports. Occupiers moving into an estate with rail infrastructure without intending to utilise freight typically end up doing so. This can be seen in Birch Coppice in Tamworth, indicating that there are inherent cost savings for transporting these goods via rail instead of HGVs. Rail is also seen to have an element of “future proofing” as there are ever stricter requirements for the electrification of vehicles and other energy efficiency measures being anticipated across the sector.
- 4.51 Units with larger floorplates, for instance above 50,000 sqm, are almost entirely pre-let because of the risk associated with building speculatively on these units. For instance, an occupier seeking to fit out a large warehouse after construction would face costly designs multiplied across so many square metres. In addition, the larger floorplates have a smaller likely pool of occupiers, meaning that there is a high level of involvement from an early stage of the build-out.
- 4.52 Agents have also indicated that there is a trend towards higher ceilings within warehouses to accommodate mezzanine levels. This is known as a “clear height”, which allows for better storage and overall productivity through automated systems. Heights have risen in recent decades from a typical average of 10-12 metres now closer to 18-22 metres, with some very recent examples exceeding 30 metres. The heights not only allow for vehicle entry clearance but also for significant mezzanines, and upper level automation equipment. There is some industry discussion about the potential for heights, achieving greater volumes overall, to reduce total footprint requirements, however there is uncertainty on this point at the present time partly as different operators have very significant differences in their need for and ability to make use of further heights. Where significant mezzanine components are installed they are likely to contribute to total operational floorspace requirements.
- 4.53 Another trend that is currently limited but may gather pace is the increase in large ancillary office components within large warehouses. As warehouses footprints increase there is a natural tendency for larger office footprints as they tend to be proportionate to the warehouse i.e. 5-10%. With declining high street retailing, there is logic in bringing together back office online functions in the warehouse, particularly with lower office costs compared to office park locations. Ancillary office components of 5% in large warehouses of 46,500 sqm (500,000 sqft) would employ over 200 persons on typical office densities. Arcadia Group’s 37,000 sqm (400,000 sqft) facility at DIRFT has a 10% office component.

- 4.54 In the future, e-commerce is expected to grow. Agents were consulted in March and early April of 2020, and were already aware that coronavirus would be disruptive to deals transacted. They anticipated that the entirety of 2020 may have little activity for the sector, but moving to a medium to long-term increase in demand as consumers seek more goods online which will create a greater requirement above older warehouse stock.

5 EXISTING SRFI RAIL FREIGHT VOLUMES

5.1 This chapter underscored the level of goods that are moved via rail that would otherwise be serviced by road.

5.2 Table 14 shows the volume of intermodal rail traffic handled at the three Midlands SRFIs and the relatively new Doncaster iPort SRFI in 2019. This is derived from the record of planned services in the Working Timetable which operated during 2019 multiplied by estimated average cargo tonnages per intermodal train.

Table 14: Rail Freight Tonnes Lifted 2019

Terminal	Estimated tonnes-lifted (millions tonnes)		
	Origin	Destination	Total
DIRFT	1.1	1.1	2.2
BIFT (Birch Coppice)	0.4	0.6	1.0
Hams Hall	0.8	0.8	1.6
Doncaster iPort	0.2	0.3	0.5

Source: Estimated based on recorded train movements (WTT and Network Rail) and average tonnes/train

5.3 To put the above data into context, the combined traffic of 5.3 million tonnes handled between the four terminals would equate to around 350,000 HGV movements (average loading of 15 tonnes per HGV trip) or 105 million HGV-km assuming an average length of haul of 300km.

5.4 Data is not publicly available recording the proportion of this rail traffic which directly originates from or is destined for the warehousing on site or in the immediate hinterland (and therefore what passes via the terminal but then moves by road to/from further afield). Previous modelling work undertaken by MDST suggests that rail can realistically achieve a market share (on a per tonne-lifted basis) of around 25% at SRFIs. As noted in the forecasts of future need (Section 8, para 8.21), we would expect that each square metre of floor space at a NDC to handle around 6.5 tonnes of cargo per annum. On that basis, the floor space at the 4 SRFIs are currently estimated to receive and despatch around 8.5 million tonnes each year. Therefore, out of the inbound rail traffic of 2.8 million tonnes in 2019, around 2.1 million tonnes is likely to be destined for the on-site warehousing at each site (with the balance being for off-site distributors).

5.5 Table 15 shows the typical range of origins and destinations served from the above four SRFI terminals over the course of a week.

Table 15: Typical Intermodal Services – Origins and Destination

Terminal	Services to/from
DIRFT	Southampton
	Mossend
	Wentloog
	Tilbury
	Dagenham
	Grangemouth
	Teesport
	Mainland Europe
BIFT (Birch Coppice)	Felixstowe
	Southampton
Hams Hall	Felixstowe
	Southampton
	Seaforth (Liverpool Port)
	London Gateway
iPort Doncaster	Felixstowe
	Southampton
	Teesport
	London Gateway

Source: WTT

5.6 Overall, the data above demonstrates that modern intermodal terminals developed integral to large-scale warehousing (SRFIs) will generate significant volumes of rail freight traffic serving a range of destinations. This is traffic that would otherwise move by road haulage. Interesting to note that iPort Doncaster, which only opened in February 2018, handled 0.5 million tonnes by rail in 2019 and now serves four destinations. Teesport is only 140km from iPort yet it is able to sustain a twice daily intermodal service. SRFIs established in the late 1990s/early 2000s face the newly privatised rail market. Today, the market is more mature and faster growing, with shippers keen to invest in new rail services to the right terminals (which are being proposed to satisfy market demand and make financial returns rather than for planning gain). iPort and East Midlands Gateway have seen new rail services established fairly quickly. In the case of East Midlands Gateway, the terminal operator (Maritime) has made a deliberate decision to switch existing road-based traffic to rail where feasible (base load of established volume), hence the site has now reached four daily trains within 12 months of opening.

6 WAREHOUSE LAND SUPPLY AND SUPPLY TRAJECTORY, LEICESTERSHIRE AND 'GOLDEN TRIANGLE'

6.1 The constituent Leicestershire authorities and those comprising the wider 'Golden Triangle' as defined in Figure 1 have provided their current and future supply position regarding strategic warehouses of 9,000 sqm and above. Data for the Leicestershire authorities reflects the latest available at the time being the 2019/20 monitoring period, whereas the wider study area dates to 2018/19 due to data availability and collection timescales.

6.2 The below tables on supply include allocations, schemes permitted, pending permission at allocated sites or under construction at the last monitoring period, 31st March 2020 (with some limited updates to late spring / summer 2020). A more detailed breakdown of schemes is listed in Appendix C.

6.3 For the Leicester and Leicestershire authorities, Table 16 reports the 2019/20 monitoring period. A more detailed breakdown is provided in Appendix C. Information was primarily supplied in sqm and should be taken as accurate, whereas where not supplied, plot ratio assumptions have been included at a ratio of 0.4. Note that this supply differs from that used in demand supply balance for the traffic growth and replacement demand modelling, considered later in Section 8 of this report, due to different assumptions on market level availability, notably excluding pre-let units.

Table 16: Leicestershire Warehouse Land Supply 2019/20 (April 2020) (floorspace, sqm)

Local Authority	Location	Size (000's sqm)*	Plot (ha)**
Blaby	Enderby	99	25
Charnwood	Rothley	11	3
Harborough	Magna Park, Lutterworth	599	177
Hinckley and Bosworth	Burbage, Bardon Hill	227	57
Leicester	Leicester Distribution Park	9	2
North West Leicestershire	Kegworth, Bardon, Ashby De La Zouch, East Midlands Gateway, EMDC, Appleby Magna, Sawley Crossroads	836	148
Total		1,781	412

Source: authorities

* Excludes Hinckley National Rail Freight Interchange (Blaby District)

**Estimated where not supplied

6.4 An estimation of the trajectory of the supply components is set out below (with further detail in Appendix C). Whilst there is a spread across the short and medium term, the existing supply is focused on the next 10 years and more limited beyond.

**Table 17: Leicestershire Warehouse Land Supply Trajectory 2019/20 (April 2020)
(floorspace, sqm)**

Local Authority	Scheme	Size (000's sqm)	Delivery Period (years, estimate)
Blaby	Land to the West of St Johns, Enderby (Units 1,2,3,5)	99	2-5
Charnwood	Rothley Lodge	11	0-2
Harborough	Magna Park South, Lutterworth	279	0-10
Harborough	Magna Park North, Lutterworth	320	0-10 (+)
Hinckley and Bosworth	Nailstone Colliery	93	0-2
	Land East of Hinckley Island Hotel Watling Street Unit A/C	71	0-2
	Unit 1 Mountpark Phase II	62	0-2
Leicester	Leicester Distribution Park	9	0-2
North West Leicestershire	Kegworth, Citrus Grove	20	0-2
	Ashby-De-La-Zouch, Lounge Coal Disposal	68	0-5
	East Midlands Gateway	236	2-5
	A42 Appleby Magna	350	0-2
	East Midlands Distribution Centre Plots	53	0-5
	Sawley Crossroads	60	0-2
	Ellistown, Mountpark Phase II	50	0-2
Total		1,781	

Source: GL Hearn / Authorities

6.5 Across the wider Golden Triangle supply comprises a mix of allocations and schemes permitted / awaiting decision, including those under construction, with further details provided in Appendix D. Information was largely supplied in hectares and has been converted to sqm using a 0.4 plot ratio. Engagement with partner authorities has enabled an estimate of the supply trajectory which suggests that 40% is expected to be delivered in first 5 years and 60% in the following 5 years (or potentially beyond).

The above data suggests around 1.8 million sqm of future supply across Leicestershire County, excluding Hinckley National Rail Freight Interchange which is not consented. This is equivalent to around 6.9 years of take up based on the past annual average (in addition to around 1 year of currently available stock). The largest contributor of supply is Magna Park in Harborough.

Table 18: Wider Golden Triangle Warehouse Land Supply 2018/19

Local Authority	Submitted / Permitted (000's sqm)	Allocated (000's sqm)*	Total	Hectares**	Delivery Period (years, estimate)
Corby	242	452	694	418	5-10
Coventry	32	324	356	341	0-5
Daventry	687		687	345	5-10
Erewash			n/a	n/a	n/a
Kettering	383		383	241	0-5
Lichfield	297	93	390	118	0-5
North Warwickshire	80		80	10	0-5
South Northamptonshire***	728		728	417	0-10
Northampton	145		145	78	0-5
Nuneaton And Bedworth	35	352	392	98	5-10
Rugby	55	204	259	67	5-10
Solihull	111		111	27	0-5
South Derbyshire	267		267	67	0-5
Tamworth			n/a	n/a	n/a
Total	3,519	1,113	4,632	2,198	

Source: Authorities

* Derived from Ha at 0.4 plot ratio if not given

** Derived from sqm at 0.4 plot ratio if not given

*** A number of emerging allocations at South Northants are of undefined size (AL1-5). South Northants includes Northampton Gateway 560,000 sqm

6.6 The wider Golden Triangle reports around 4.6 million sqm of supply with the largest schemes as DIRFT III in Daventry followed by Northampton Gateway Rail Freight Interchange in South Northamptonshire.

7 ESTIMATES FOR FUTURE STRATEGIC WAREHOUSING NEED – LABOUR DEMAND AND COMPLETIONS TRENDS

7.1 Sections 7-9 review methodologies and outcomes for producing long term strategic warehousing needs which are summarised with recommendations in section 10.

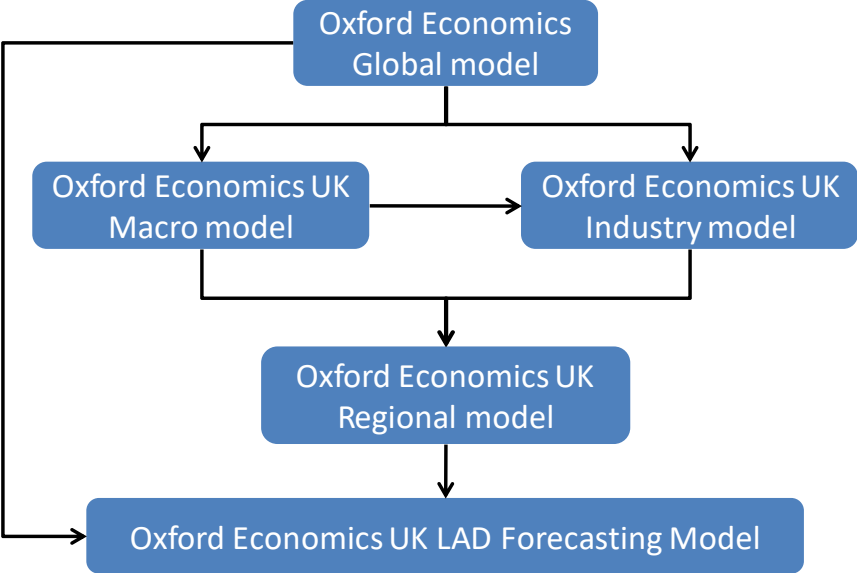
7.2 This section considers two models to forecasting future floorspace needs for warehousing, econometric forecasts for labour demand and past completions trends.

Labour Demand Model

7.3 Oxford Economics (OE) was commissioned by GL Hearn to provide detailed 2 digit baseline employment forecasts for Leicester and Leicestershire constituent local authorities in Spring 2020. The forecasts do take some account of the COVID-19 related effects which is causing contraction in economic output and uncertainty in outlook. A two-digit sector forecast was provided, the most detailed available.

7.4 The baseline model is the lowest level of the OE suite of forecasting models. Such a modelling framework ensures that global and national factors (such as developments in the Eurozone and UK Government fiscal policy) have an appropriate impact on the forecasts at local authority level. This framework ensures that the forecasts are much more than just an extrapolation of historical trends. Rather, the trends in the OE global, national and sectoral forecasts have an impact on the local area forecasts alongside the sectoral structure and past sector performance locally.

Figure 12: Hierarchical structure of Oxford Economics’ suite of models



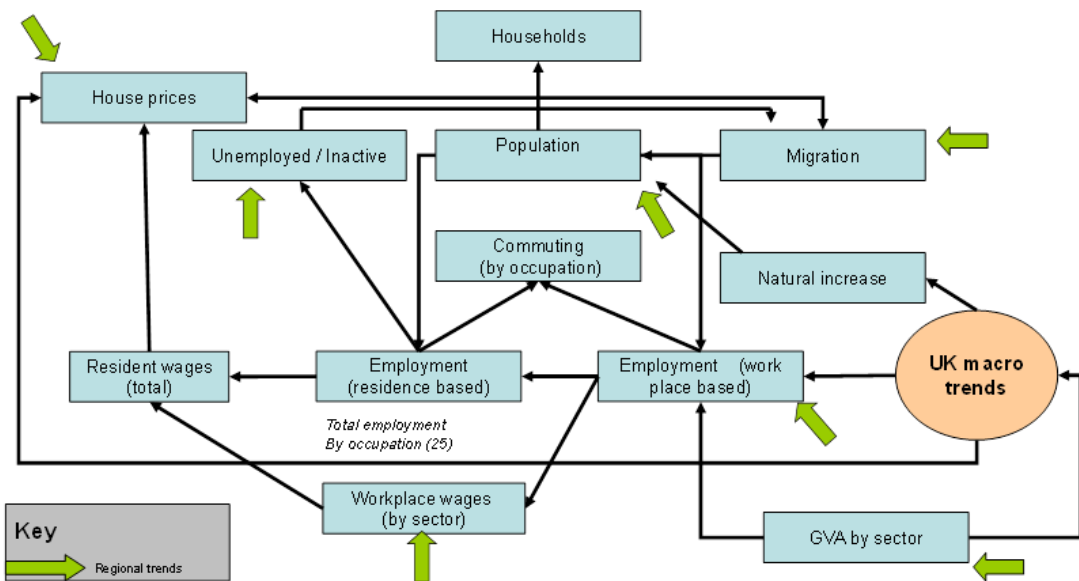
Source: Oxford Economics, 2020

7.5 The baseline forecasts for the FEMA and its constituent authorities are essentially shaped by three factors:

- International, national and regional outlooks - all the local area forecasts produced by OE are fully consistent with broader regional, national and international models and forecasts. This ensures global events that impact on the performance of UK local economies, such as the strength of global trade are fully captured in the forecasts for a local area. So too are national level growth and policies, whether that be the impact of monetary policy on consumer spending or government spending on locally provided public services;
- Historical trends in an area, which implicitly factor in supply side factors affecting demand, combined with the OE and GLH knowledge of local areas and the patterns of local economic development. This ensures for example, that we recognise and factor in to the forecasts any evidence of particularly high/low levels of competitiveness that local economies have in particular activities. It also means national policy programmes that have a particular local impact and that are very likely to happen; and
- Fundamental economic relationships which interlink the various elements of the outlook. OE’s models ensure full consistency between variables in a local area. For example, employment, commuting, migration and population are all affected by one another.

7.6 The forecasts are produced within a fully integrated system, which makes assumptions about migration, commuting and activity rates when producing employment and population forecasts. The main internal relationships between variables are summarised in Figure 13.

Figure 13: Main Relationships



Source: Oxford Economics, 2020

7.7 The starting point in producing employment forecasts for a local authority is the determination of workplace-based employees in employment in each broad sector. There are two key sources for this – ONS Workforce Jobs (WFJ) and the Business Register and Employment Survey (BRES). The WFJ series is reported on a quarterly basis, providing estimates of employee jobs by sector (based on the 2007 Standard Industrial Classification – SIC 2007) for the UK and its constituent government office regions. The BRES Survey is an annual survey of businesses which is used to estimate the employment levels by different sectors.

7.8 Within the OE model migration is expected to grow or decline in parallel with the employment total. If the employment total within an area is falling too fast, migration also falls as the model assumes that people would not be attracted into this area to live, given that the employment prospects are weak. This ensures that the relationship between the labour market outlook and the population outputs are inter-linked.

Disaggregating Growth

7.9 The Oxford Economic forecasts are based on a global view of growth which is translated to the UK, then the East Midlands region and then each local authority. Within the hierarchy the growth in the lower level in the hierarchy must add up to that of the level above within the baseline forecast.

7.10 How the national level of growth is translated to a regional and local authority level differs from sector to sector. Some of the sectors are driven predominantly by population estimates, others by total employment in the area and the remainder by the sector's performance relative to the regional performance (largely exporting sectors). The methods of sectoral projection are as follows, each of which are forecast based upon recent trends:

- Agriculture - share of the regional employment
- Mining and quarrying - share of the regional employment
- Manufacturing - share of the regional employment
- Electricity, gas, and steam - share of the regional employment
- Water supply; sewerage, waste management - share of the regional employment
- Construction - location quotient (LQ) based upon total employment
- Wholesale and retail trade - LQ based upon consumer spending
- Transportation and storage - LQ based upon consumer spending
- Accommodation and food service activities - LQ based upon consumer spending
- Information and communication - share of the regional employment
- Financial and insurance activities - share of the regional employment
- Real estate activities - LQ based upon total employment
- Professional, scientific and technical activities - LQ based upon total employment
- Administrative and support service activities - LQ based upon total employment
- Public administration and defence - LQ based upon sectoral employment per population
- Education - LQ based upon sectoral employment per population
- Human-health and social-work activities- LQ based upon sectoral employment per population
- Arts, entertainment and recreation - LQ based upon consumer spending
- Other service activities LQ based upon consumer spending

7.11 Because of the way national forecasts are disaggregated the baseline growth in any given local authority largely reflects the relative strength of the sectors expected to grow nationally. In practice this means that local authorities with a particular strength in their professional, scientific and technical sector and/or the administrative and support sectors (as the drivers of growth nationally) will see notable growth. Oxford Economics see the UK as having a comparative advantage in the professional, scientific and technical sector and given the nature of the sector it is difficult to achieve productivity gains, hence it is expected to continue to expand over the forecast period.

Baseline Forecasts

- 7.12 In the baseline scenario the economy is expected to grow by 1.4% per annum (GVA growth pa) to 2041. This is a decrease when compared to the growth rate from 2000-2018 which was 1.7% per annum.
- 7.13 The forecasts set out a growth of 26,920 jobs to 2031 and 35,323 jobs to 2041 for Leicester and Leicestershire. In order to understand the floorspace needs this must first be translated into full-time equivalent (FTE) jobs. This has been undertaken through interrogation of the detailed split between full and part-time work using BRES data at 2-digit SIC level. This results in a total of 21,000 FTE jobs to 2031 and 30,100 FTE jobs to 2041.
- 7.14 GLH has considered the proportion of employment in each of these sectors which is likely to take place in warehousing and industrial (B8) uses. We have calibrated our standard model which relates sectors and use classes for the Leicester and Leicestershire economy (and for each local authority) through interrogation of the composition of employment in key sectors⁹. The methodology has remained consistent from the 2017 HEDNA and the application of B8 employment on a two-digit level. This is used to derive the following forecasts of net growth in FTE employment by use class. Of note, B8 job requirement increases and decreases will be derived from all sectors and not just warehousing related.
- 7.15 The resultant FTE jobs growth by use class is shown below. For B8 use class employment growth, this corresponds to an increase of 1,044 FTE jobs to 2031 and an overall decrease of 635 FTE jobs by 2041.

Table 19: Full-Time Equivalent Jobs by Use Class ('000s)

	B1a/b*		B1c/B2*		B8		Non-B		Total	
	2020-31	2020-41	2020-31	2020-41	2020-31	2020-41	2020-31	2020-41	2020-31	2020-41
Leicester	3.9	6.7	-3.1	-5.7	0.2	-0.4	6.6	10.7	7.6	11.3
Blaby	2.1	3.8	-0.7	-1.2	0.0	-0.1	1.0	1.1	2.6	3.5
Charnwood	1.9	3.1	-1.2	-2.3	0.0	-0.3	2.8	3.8	3.5	4.4
Harborough	1.1	1.8	-0.5	-0.9	0.3	0.2	1.2	1.5	2.1	2.5
H&B	0.8	1.2	-1.1	-2.1	-0.1	-0.4	0.8	0.8	0.5	-0.4
Melton	0.2	0.2	-0.6	-1.2	-0.2	-0.5	0.2	0.1	-0.4	-1.4
NW Leics	3.4	6.4	-1.3	-2.4	0.8	0.9	2.3	3.5	5.2	8.4

⁹ This analysis is undertaken at 2-digit SIC level

O&W	0.2	0.4	-0.4	-0.8	0.0	-0.1	0.6	0.8	0.4	0.2
L&L	13.8	23.5	-9.1	-16.7	1.0	-0.6	15.6	22.2	21.4	28.5

Source: GLH Analysis of Oxford Economics Data

* data collated prior to Government change of use classes

- 7.16 To these figures we have applied standard employment densities taking account of the HCA Employment Densities Guide: 3rd Edition (2015). We have converted figures to provide employment densities for gross external floor areas. Consistent with the 2017 HEDNA, a density figure of 77 sqm per FTE employee is used for B8 floorspace. Whilst this figure is likely to be much lower than the density in strategic warehouses, it also reflects the smaller warehouse floorspace requirements in the authorities.

Table 20: B8 Employment Floorspace Need (sqm)

	2020-26	2026-31	2031-36	2036-41	2020-36	2020-41
Leicester	23,485	-10,115	-14,548	-32,929	-1,178	-34,107
Blaby	5,797	-2,624	-3,009	-6,517	164	-6,353
Charnwood	4,602	-6,241	-5,731	-12,115	-7,370	-19,485
Harborough	21,807	1,796	-3,000	-8,573	20,602	12,029
H&B	3,863	-8,018	-7,305	-16,024	-11,459	-27,484
Melton	-5,689	-9,178	-6,707	-14,333	-21,574	-35,907
NW Leics	49,373	13,698	2,289	6,121	65,361	71,482
O&W	247	-2,429	-2,212	-4,658	-4,394	-9,052
L&L	103,485	-23,111	-40,222	-89,029	40,151	-48,877

Source: GLH Analysis of Oxford Economics Data

- 7.17 The majority of authorities show an initial need, bar Melton. By 2031 floorspace is only growing to any real degree in North West Leicestershire and this has all but flattened by 2031. Only North West Leicestershire and Harborough require limited additional floorspace 2020 to 2041.
- 7.18 These are net changes and do not take account of frictional vacancy or replacement demand, such as from existing companies requiring upgraded floorspace.
- 7.19 To calculate the land requirements to support these net changes, we have applied a plot ratio of 40% for B8 floorspace. This generates the following requirement for net additional land to support jobs growth:

Table 21: Forecast B8 Employment Land Need (Ha)

	2020-26	2026-31	2031-36	2036-41	2020-36	2020-41
Leicester	5.9	-2.5	-3.6	-8.2	-0.3	-8.5
Blaby	1.4	-0.7	-0.8	-1.6	0.0	-1.6

Charnwood	1.2	-1.6	-1.4	-3.0	-1.8	-4.9
Harborough	5.5	0.4	-0.8	-2.1	5.2	3.0
H&B	1.0	-2.0	-1.8	-4.0	-2.9	-6.9
Melton	-1.4	-2.3	-1.7	-3.6	-5.4	-9.0
NW Leics	12.3	3.4	0.6	1.5	16.3	17.9
O&W	0.1	-0.6	-0.6	-1.2	-1.1	-2.3
L&L	25.9	-5.8	-10.1	-22.3	10.0	-12.2

Source: GLH Analysis of Oxford Economics Data

- 7.20 There is then an overall B8 need for an additional 10 hectares to 2031 and a surplus of need of 12.2 hectares to 2041. Only Harborough and North West Leicestershire show overall growth and these needs are dramatically less than in recent years.

Sensitivity Analysis (1)

- 7.21 B8 floorspace need using the labour demand model shows much lower future forecast needs compared to recent trends observed. Analysis of employment sectors has identified that this is caused by employment contraction in a range of industries outside of warehousing such as manufacturing and repair of motor vehicles.
- 7.22 GL Hearn considers that three 2-digit employment sectors are particularly related to the strategic warehouse and distribution market, being: Wholesale trade, Warehousing & support activities for transportation, along with Postal and courier services. As a result these sub-sectors alone have been isolated to test floorspace needs. The labour demand model has been re-run just using these sectors with the same full-time equivalents as before.
- 7.23 The resultant FTE jobs growth by 5 year period is shown below. This corresponds to an increase in 1,745 FTE strategic B8 jobs to 2036 and 1,835 jobs by 2041. North West Leicestershire is a key driver of jobs. Overall this is a notable departure from overall B8 need which forecasts a decline in the need for FTE jobs as a result of other less strategic sectors declining.

Table 22: Full-Time Equivalent Strategic B8 Jobs Change

	2020-26	2026-31	2031-36	2036-41	2020-36	2020-41
Leicester	176	40	-18	-31	198	167
Blaby	77	16	2	3	95	98
Charnwood	97	21	-3	-8	115	107
Harborough	263	55	-4	-30	314	284
H&B	128	17	-11	-29	135	106
Melton	19	-5	-10	-23	4	-19

NW Leics	550	223	89	194	861	1,056
O&W	22	4	-4	-7	22	14
L&L	1,331	372	42	68	1,745	1,813

Source: GLH Analysis of Oxford Economics Data

- 7.24 A density assumption of 95 sqm per FTE employee was used to arrive at estimated floorspace need in line with the most recent HCA Guidance (2015).

Table 23: Strategic B8 Employment Floorspace Need (sqm)

	2020-26	2026-31	2031-36	2036-41	2020-36	2020-41
Leicester	16,732	3,826	-1,737	-2,978	17,831	15,009
Blaby	7,283	1,548	212	276	8,568	8,830
Charnwood	9,178	2,018	-291	-744	10,331	9,627
Harborough	24,970	5,217	-335	-2,883	28,280	25,549
H&B	12,198	1,656	-1,013	-2,732	12,165	9,577
Melton	1,845	-467	-997	-2,180	361	-1,704
NW Leics	52,214	21,143	8,471	18,450	77,522	95,001
O&W	2,065	352	-355	-709	1,954	1,282
L&L	126,485	35,294	3,956	6,500	157,013	163,171

Source: GLH Analysis of Oxford Economics Data

- 7.25 In keeping with the same assumptions, a plot ratio of 40% was assumed.

Table 24: Sensitivity 1: Forecast B8 Employment Land Need (Ha)

	2020-26	2026-31	2031-36	2036-41	2020-36	2020-41
Leicester	4.2	1.0	-0.4	-0.7	4.5	3.8
Blaby	1.8	0.4	0.1	0.1	2.1	2.2
Charnwood	2.3	0.5	-0.1	-0.2	2.6	2.4
Harborough	6.2	1.3	-0.1	-0.7	7.1	6.4
H&B	3.0	0.4	-0.3	-0.7	3.0	2.4
Melton	0.5	-0.1	-0.2	-0.5	0.1	-0.4
NW Leics	13.1	5.3	2.1	4.6	19.4	23.8
O&W	0.5	0.1	-0.1	-0.2	0.5	0.3
L&L	31.6	8.8	1.0	1.6	39.3	40.8

Source: GLH Analysis of Oxford Economics Data

- 7.26 As a result, there is a total strategic B8 land need of 40.8 hectares across the Leicester and Leicestershire local authorities to 2041 (compared to -12.2 for all sectors) according to the baseline projections. Need is particularly driven by North West Leicestershire.

Sensitivity Analysis (2)

- 7.27 The baseline forecasts are derived from a model which draws down from national and regional forecast growth whilst allowing for the influence of local sectors. In some instances this can underplay local factors that influence growth at local authority level.
- 7.28 GL Hearn has reviewed the past rates of growth in the strategic warehousing driving sectors and compared that to the future projections.

Table 25: Average Annual Growth Rates, Warehousing Sectors

	1991-17	2001-17	2011-17	2020-36	2020-41
Leicester	-1.6%	-0.7%	-2.5%	0.2%	0.2%
Blaby	1.3%	-0.3%	-4.5%	0.3%	0.2%
Charnwood	1.0%	1.6%	0.8%	0.3%	0.2%
Harborough	6.7%	4.8%	-0.9%	0.3%	0.2%
H&B	3.6%	3.9%	4.1%	0.2%	0.1%
Melton	0.3%	1.3%	-2.6%	0.0%	-0.1%
NW Leics	4.5%	2.9%	0.1%	0.7%	0.6%
O&W	1.6%	2.4%	6.4%	0.2%	0.1%

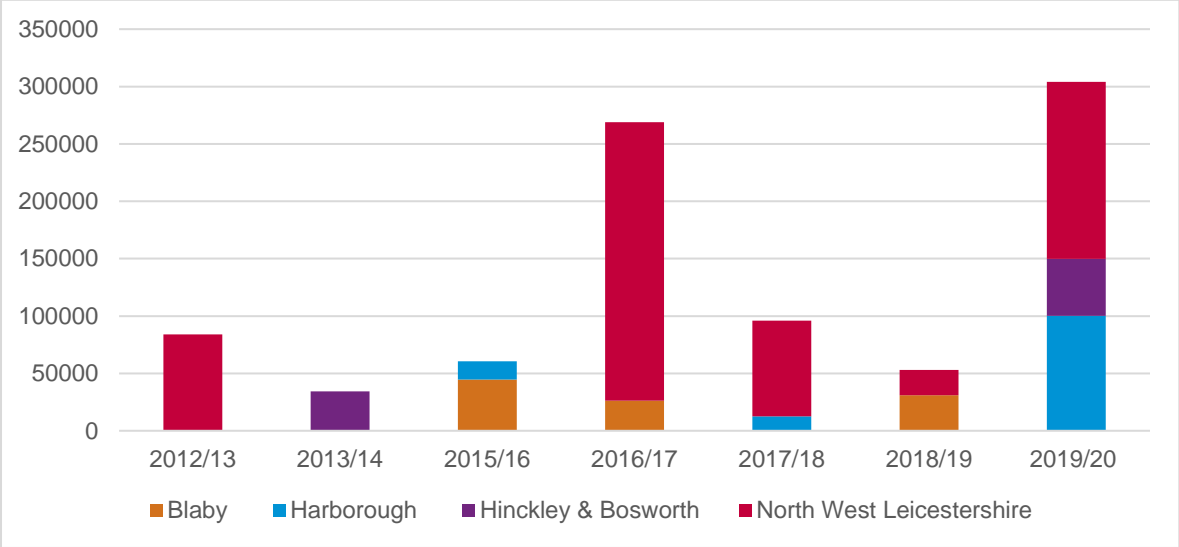
Source: GLH Analysis of Oxford Economics Data

- 7.29 The analysis shows a strong range in past employment change but a much greater conformity going forwards. In particular the 2001-17 cycle shows high employment growth in warehousing sectors albeit slowing from 2011 and broadly plateauing from 2020. Trends at a regional level are considered to have a high degree of influence over local authority level forecasts for warehousing employment.

Completions Trend Model

- 7.30 The constituent authorities provided completions trend data from 2012/13 which has been filtered to schemes of over 9,000 sqm. Only Blaby, Harborough, Hinckley and Bosworth and North West Leicestershire report results as per Figure 14. Note that these are gross completions.

Figure 14: Strategic Warehousing Completions (sqm)*



Source: Authority Monitoring Data
 *No completions recorded in 2014/15

7.31 The completions data has been annualised and extrapolated to 2036 and 2041 in terms of sqm and hectares in Table 26. This provides an indication of future need should development trends for the reported period be reproduced going forwards. 2012 onwards is considered a useful period given it aligns with the post-recession and an increasing rise in e-commerce which in part has been driving warehousing demand. A total of 1.9 million sqm or 409 hectares is forecast to 2041. What is notable is that Harborough had relatively few completions during this period, given Magna Park was largely complete through 1990-2006, however this will change going forwards with the permitted expansion of Magna Park. Conversely North West Leicestershire’s completions have been higher in the later period as indicated in Table 27.

Table 26: Forecast Completions to 2041

	Total 2012/13-19/20		Annual av. 2012/13-19/20		Forecast 2019/20-35/36		Forecast 2019/20-40/41	
	SQM	Ha	SQM	Ha	SQM	Ha	SQM	Ha
Blaby	102,050	27	14,579	4	233,257	62	306,150	81
N.W Leicestershire	586,305	116	83,758	17	1,340,127	264	1,758,916	347
Hinckley & Bosworth	83,770	28	11,967	4	191,474	65	251,310	85
Harborough	128,621	63	18,374	9	293,991	144	385,863	189
Total	900,746	234	128,678	33	2,058,849	534	2,702,239	701

Source: Authority Monitoring Data / GL Hearn

- 7.32 It is of note that the completions trend for the period 2012/13–2018/19 provides an average plot ratio of 0.4 based on data provided (2019/20 data not provided).
- 7.33 Supplementing the completions trend it is useful to review the total VOA monitoring data for the same period and previous. The VOA data captures all industrial floorspace including B1c, B2 and non strategic B8 (i.e. under 9,000 sqm) as well as large scale floorspace so is only a broad indicator of change. It also includes all losses as well as completions. Notwithstanding this it does provide a useful comparative benchmark on rates of change.
- 7.34 Table 27 reports the annualised change 2001/02 to 2018/19 and 2011/12 to 2018/19, projected forward to 2041. After removing authorities' losses to apply a growth only floorspace requirement, the recent trend data reports a requirement of 1.9 million sqm. This is lower than the authority monitoring completions data however the 2019/20 year reported by the authorities is high and not included in the VOA data at the time of writing. Using only the 2012/13 to 2018/19 large unit completions forecast to 2041 would be 2.1 million sqm, comparable to the VOA data (growth authorities only).

Table 27: Industrial Floorspace Trends, 2001/02-18/19 (sqm '000s)

	2001/02	2011/12	2018/19	2002-19 pa	2012-19 pa	2041 (2002-19 pa)	2041 (2012-19 pa)
Leicester City	3,083	2,605	2,439	-15*	-9*	-318*	-199*
Blaby	696	676	805	6	18	135	387
Charnwood	1,449	1,279	1,187	-15	-13	-324	-276
Harborough	1,089	1,240	1,324	14	12	290	252
Hinckley and Bosworth	1,158	1,065	1,147	-1	12	-14	246
Melton	457	484	508	3	3	63	72
North West Leicestershire	1,203	1,398	1,726	31	47	646	984
Oadby and Wigston	442	363	339	-6	-3	-127	-72
FEMA	9,577	9,110	9,475	-6	52	350	1,394
FEMA (growth only)						1,134	1,941

Source: VOA Business Floorspace Statistics, GL Hearn

* Losses for Leicester City reduced to 40% of actual figure going forwards - as highlighted previously, it is known that 60% of Leicester's loss occurred in SRA, outside of designated employment land

8 ESTIMATES FOR FUTURE STRATEGIC WAREHOUSING NEED – REPLACEMENT AND TRAFFIC GROWTH

8.1 This section aims to forecast future demand, and subsequently need for floorspace and land, for large scale warehousing facilities in Leicestershire using a modelling approach derived from the following key factors relating to new logistics facilities:

- The continual need to build new large-scale warehousing to replace existing capacity which will become life-expired (replacement build); and
- The need for additional floor space to handle freight traffic growth (growth build). This element therefore reflects the long-term growth in demand for goods in the wider economy.

8.2 Total new-build rates (demand) have been estimated. The outputs for this exercise are calendar years up to 2041 (as per the study Brief), though five-yearly intervals up to 2026, 2031 (to align with some Local Plans) and 2036 are also presented, using 2019 as its base year (in terms of existing floor space capacity and current traffic volumes). The 2019 floorspace is assumed as a year proxy and therefore a supply position begins at start 2020. The forecasts are for the county of Leicestershire and the East Midlands region (which will obviously include the outputs for Leicestershire).

8.3 Land use forecasting for other commercial sectors often seeks to relate employment growth to the need for additional floor space, using consistent and robust employment densities (Labour Demand model). This methodology is explored previously in this report but is considered to be unsuitable for the logistics sector for three reasons:

- Warehousing units have a much shorter functional or economic life than other types of commercial property e.g. office buildings. There is a consequent need to develop new units, much of which is simply replacing existing life-expired capacity on a like-for-like basis;
- There is no consistent or robust employment density ratio that can be applied to the B8 sector. Demand for floor space is primarily driven by cargo type, volumes and throughput rates, which in turn dictates employment requirements (numbers, skills etc.). Grocery retail has high throughput rates where goods are picked at less than pallet-load quantities, thereby requiring higher employment levels when compared with slower moving lines which are stored and re-distributed at pallet-level quantities. Consequently, warehouses with broadly the same quantum of floor space can have significantly different employment levels; and
- Increasing automation within warehouses, particularly for e-commerce, suggests future employment densities will be lower than today.

8.4 The Replacement and Traffic Growth (R&TG) methodology therefore seeks to overcome the issues of forecasts derived from employment growth.

Replacement Build

- 8.5 Most newly built floor space is a replacement for existing warehouse stock which is 'life expired'. This is for a number of reasons. Firstly, the useful economic life of a modern warehouse building is around 30 years, after which the building can be substantially refurbished and then re-let (e.g. either for warehousing or potentially other commercial/industrial uses) or demolished allowing the plot to be 'recycled' for new buildings (potentially new-build warehousing). While many older buildings may be physically sound (i.e. they are not physically obsolete), they can become functionally obsolete e.g. many older buildings cannot accommodate modern automated stock handling equipment, particularly that required for e-commerce, or transport equipment such as double-deck trailers. Essentially, buildings reach the end of their useful economic life and are no longer suitable for their original designed use, thereby necessitating a more modern direct replacement facility for the existing occupier.
- 8.6 A consequence of this process is that new sites need to be brought forward (or new plots at existing sites) in order to allow occupiers to re-locate to new buildings, thereby releasing the existing facility for refurbishment or demolition. It should be noted that this process also enables land adjacent to or within urban areas, which in all other respects are now poorly suited for strategic distribution (e.g. due to poor road connections, small/irregular shaped plots or housing close by) to be released for other more appropriate uses, including both employment and non-employment uses e.g. new residential developments.
- 8.7 Secondly, the logistics sector, when compared with 20-30 years ago, now has the ability to operate larger distribution centres. This has been facilitated by advances in modern ICT inventory management systems which have permitted much larger warehouses to be operated more efficiently than was previously the case. As a result, economies of scale can be gained through merging operations based at multiple sites to one new location. For example, 2 x 20,000 square metres warehouse operations are combined at one new 40,000 square metres facility – the new-build rate is 40,000 square metres but the net change will be zero on the theoretical basis that the old warehouses are demolished or in practice refurbished for commercial (potentially non-logistics) uses.
- 8.8 Finally, changing market conditions, both within specific companies/sectors and in the wider economy, means that warehouse operations might need to relocate in order to remain competitive. Occupiers who previously sourced goods from domestic suppliers but now predominantly import from Eastern

European and deep-sea markets may seek a new location at a rail-linked site in order to remain competitive.

- 8.9 A suitable example of these three issues is the on-line retailer *Very* (formerly *Shop Direct*). They have recently begun to close three older (functionally obsolete) warehouse units in the Manchester area. They are to be replaced by a modern purpose-built warehouse at East Midlands Gateway which can accommodate significant levels of automation. Economies of scale will be gained by merging three facilities into a single operation under one roof. The East Midlands Gateway location was selected as it gave them direct access to an intermodal rail terminal, initially to reduce transport costs from the deep-sea container ports though no doubt 'future proofing' with regards to de-carbonisation.
- 8.10 In order to estimate the 'replacement build' element up to 2031 and 2041 (i.e. floor space which will become functionally obsolete or in some cases physically obsolete), the existing stock of large-scale warehousing in the East Midlands region and Leicestershire needs to be considered. This was undertaken in Section 3 and showed that in 2019 the East Midlands region accommodated just over *9.3 million square metres* of floor space across 386 commercial properties. In Leicestershire itself, around *2.3 million square metres* of floor space across 100 commercial properties were identified.
- 8.11 On the basis that the useful economic life of a modern warehouse building is 30 years, up to 2031 (i.e. 2020 to the start of 2031) we could therefore expect around 37% of the existing warehouse stock in the region to require replacement (i.e. $11 \text{ years}/30 \text{ years} = 37\%$). Taking into account the stock age analysis this is reasonable, since 31% of current stock is pre 2000 (with a further 9% unreported) which would require replacement by 2031.
- 8.12 Likewise, up to 2041, we could expect around 70% of the existing warehouse stock in the region to require replacement (i.e. $21 \text{ years}/30 \text{ years} = 70\%$). Again, it appears reasonable considering that 64% of current stock in Leicester and Leicestershire was built pre 2010, plus 9% unreported. This can be considered the high 'replacement build' scenario.
- 8.13 We have considered a position where the rate of replacement begins to slow. This may extend the useful life to around 40 years. Typical profiling suggests that around 28% and 53% of the existing stock is estimated to require replacement up to 2031 and 2041 respectively. This can be considered the low 'replacement build' scenario. Considering the age of stock in Leicester and Leicestershire it

is possible that the rate could be even slower, as age analysis suggests that locally figures are closer to 22% and 40%¹⁰ however the general profile is used in the main model.

8.14 On that basis, Table 28 shows the estimated 'replacement build' rates.

Table 28: Existing Floorspace

Area	Existing Floorspace (000's sqm)
Existing floor space - Leicestershire	2,314
Existing floor space - East Midlands	9,262

Source: VOA

Table 29: Replacement Build Scenarios 2020 to 2041, Leicestershire and East Midlands

	2026	2031	2036	2041
High Replacement	<i>000's sqm</i>	<i>000's sqm</i>	<i>000's sqm</i>	<i>000's sqm</i>
Replacement build - Leicestershire	463	848	1,234	1,620
Replacement build - East Midlands	1,852	3,396	4,940	6,483
Low Replacement	-	-	-	-
Replacement build - Leicestershire	347	636	925	1,215
Replacement build - East Midlands	1,389	2,547	3,705	4,863

Source: MDS Transmodal

Table 30: % Replacement Assumptions by Year

Scenario	%	Year	%	Year
High	-	-	-	-
% replacement assuming 30 years economic life	20%	to 2026	53%	to 2036
Low	-	-	-	-
% replacement assuming 40 years economic life	15%	to 2026	40%	to 2036
	28%	to 2031	53%	to 2041

Source: MDS Transmodal

Growth Build

8.15 As alluded to above, demand for warehouse floor space is driven by the need to handle cargo. Therefore, future economic growth in the wider economy along with the forecast population increases will lead to a growth in the volume of consumer goods handled. This in turn will lead to increasing

¹⁰ Assumes that unknown / unreported stock age is in 'older' categories, which is typically the case.

demand for additional warehouse floor space. Consequently, new warehouses are constructed partly to accommodate growing traffic volumes over the long term (the 'growth build' element).

8.16 In order to estimate the growth build element two factors need to be considered, namely:

- For those commodities which pass through large scale distribution centres (i.e. excluding bulk and semi-bulk cargoes such as aggregates and forest products), the current (2019) volume which is delivered directly to large scale distribution centres in Leicestershire and the East Midlands region; and
- For those commodities which pass through large scale distribution centres, the forecast volumes (for the years to 2041) delivered directly to large scale distribution centres in Leicestershire and the East Midlands region.

8.17 As with the floorspace figures, the 2019 volume is a year representation, with forecasting starting calendar year start 2020 and being 21 years to 2041.

8.18 Both the current and forecast volumes (as described) have been produced using the MDS Transmodal *GB Freight Model*. This is an analytical tool which can estimate existing freight flows (by origin-destination, mode, commodity and port of entry/departure for international traffics) and generate forecasts for future years (on the same basis) under different policy and economic scenarios. It has been used to generate forecasts for the DfT, Network Rail, NIC and Transport for the North (TfN), and was used to produce the land use forecasts in the Leicester and Leicestershire SDS.

8.19 As noted in Section 2, MDS Transmodal have recently produced an updated set of rail freight demand forecasts for Network Rail for the years 2023, 2033 and 2043 (to inform their long term planning process). The forecast traffic volumes produced for this study are consistent with the 'central' scenario (Scenario E) outputs from the Network Rail forecasts¹¹. Table 31 shows, for those commodities which pass through large scale distribution centres, the total volume of cargo currently destined for Leicestershire and the proportion estimated to be delivered directly to large scale distribution centres. On the same basis, forecast volumes for the years up to 2041 are presented. Table 32 following shows the equivalent figures for the East Midlands region.

¹¹ While the Network Rail forecasts only published the expected rail demand, the GB Freight Model's structure and forecasting methodology means that associated road freight demand is also forecast simultaneously.

Table 31: Existing & Forecast Freight Flows for Distribution Centre Commodities – Leicestershire

	000s tonnes-lifted				
	2019	2026	2031	2036	2041
<i>Road</i>					
Destination Leicestershire - Total	28,172	30,984	32,993	35,430	37,867
Destination Leicestershire - To Warehouse*	12,677	13,943	14,847	15,943	17,040
<i>Rail</i>					
Destination Leicestershire - Total	0	290	497	648	798
Destination Leicestershire - To Warehouse	0	290	497	648	798
TOTAL - To Warehouse	12,677	14,233	15,344	16,591	17,838
Growth v 2019		1,556	2,667	3,914	5,161

Source: GB Freight Model

Table 32: Existing & Forecast Freight Flows for Distribution Centre Commodities – East Midlands

	000s tonnes-lifted				
	2019	2026	2031	2036	2041
<i>Road</i>					
Destination East Midlands - Total	106,179	115,350	121,901	128,452	135,002
Destination East Midlands - To Warehouse*	47,781	51,908	54,855	57,803	60,751
<i>Rail</i>					
Destination East Midlands - Total	1,402	2,220	2,804	3,504	4,204
Destination East Midlands - To Warehouse	1,402	2,220	2,804	3,504	4,204
TOTAL - To Warehouse	49,182	54,127	57,660	61,308	64,955
Growth v 2019		4,945	8,477	12,125	15,773

Source: GB Freight Model

*45% of road traffic (see below para 8.22 for explanation)

- 8.20 The forecasts, as described, indicate that for Leicestershire an additional 5.2 million tonnes can be expected to pass through large scale distribution centres in 2041 compared with 2019. Likewise, the equivalent figure for the East Midlands region is an additional 15.8 million tonnes over 2019 volumes. As above, the new-build forecasts are for full calendar years up to the start of the year shown e.g. for 2031 this represents replacement and traffic growth over an 11 year period up from the start of 2020.
- 8.21 For the road data, the total figure (for Leicestershire and the East Midlands) does not establish the volume of goods which are delivered directly to distribution centres. The GB Freight Model's baseline data for road transport flows is derived from the DfT's Continuing Survey of Road Goods Transport

(CSRGT). The CSRGT effectively records goods each time they are lifted from manufacturer/port to distribution centre to retail outlet, meaning that one tonne of cargo transferred from a port via a NDC and RDC to a retail outlet would be recorded as 3 tonnes in the CSRGT. The total volume, as described in the tables above, is therefore the sum of all cargo delivered into factories, NDCs, RDCs and retail outlets.

8.22 A further 'filter' has been applied to eliminate this double/triple counting. Previous work for the Leicester and Leicestershire SDS indicated that around *45% of road freight* traffic destined for the East Midlands was being delivered direct to a distribution centre (the remainder being delivered direct to stores or to other facilities). Following review, this figure appears to remain robust and has again been adopted for both the current and forecast road traffic flows destined for Leicestershire and the East Midlands. Applying a 'sense check', by relating the direct to warehouse volumes to the existing quantum of large scale distribution centre floor space, this suggests that each square metre of floor space handles around 6.5 tonnes of cargo per annum (on the basis that 85% of total floor space is utilised at average any one time and is likely to remain so). This is consistent with what we would expect at NDCs (stock holding role) and implies average dwell times of around 5-6 weeks. It is assumed that all inbound intermodal rail traffic will be destined for a distribution centre.

8.23 We have also undertaken a 'sensitivity test' of the freight traffic growth forecast. This has been developed to reflect an indicative potential increase in traffic growth resulting from heightened e-commerce trading occurring since the onset of the COVID-19 pandemic (taking place during the production of this report). In this case, the forecast traffic volumes quoted above for 2041 are estimated to grow by a further 15% (with volumes in the interval years interpolated between the higher 2041 forecast and the 2019 actual). This is shown in Tables 33 and 34 for Leicestershire and the East Midlands.

Table 33: Sensitivity Test Traffic Forecast (2041 Traffic Forecast + 15%) - Leicestershire

	000s tonnes-lifted				
	2019	2026	2031	2036	2041
<i>Road</i>					
Destination Leicestershire - Total	28,172	33,064	36,558	40,052	43,547
Destination Leicestershire - To Warehouse*	12,677	14,879	16,451	18,024	19,596
<i>Rail</i>					
Destination Leicestershire - Total	0	292	501	709	918
Destination Leicestershire - To Warehouse	0	292	501	709	918
TOTAL - To Warehouse	12,677	15,171	16,952	18,733	20,514

Growth v 2019		2,493	4,275	6,056	7,837

Source: GB Freight Model outputs + additional 15% to 2041

*45% of road traffic

Table 34: Sensitivity Test Traffic Forecast (2041 Traffic Forecast + 15%) – East Midlands

	000s tonnes-lifted				
	2019	2026	2031	2036	2041
<i>Road</i>					
Destination East Midlands - Total	106,179	121,794	132,947	144,100	155,253
Destination East Midlands - To Warehouse*	47,781	54,807	59,826	64,845	69,864
<i>Rail</i>					
Destination East Midlands - Total	1,402	2,494	3,274	4,055	4,835
Destination East Midlands - To Warehouse	1,402	2,494	3,274	4,055	4,835
TOTAL - To Warehouse	49,182	57,301	63,100	68,900	74,699
Growth v 2019		8,119	13,918	19,717	25,516

Source: GB Freight Model outputs + additional 15% to 2041

*45% of road traffic

- 8.24 On this basis, for Leicestershire an additional 7.8 million tonnes can be expected to pass through large scale distribution centres by 2041 compared with (end) 2019 (or a further 2.6 million tonnes annually over the standard traffic forecast). Likewise, the equivalent figure for the East Midlands region is an additional 25.5 million tonnes over 2019 volumes.
- 8.25 The growth in annual traffic (compared with 2019 levels) for both the main traffic forecast and the sensitivity test have subsequently been converted into the need for additional floor space i.e. the growth build element, using generally accepted 'conversion factors' which relate annual tonnage throughput and floor space at large scale 'high bay' type warehouses. Tables 35 and 36 show the forecast traffic growth alongside the additional floor space required to handle that growth.

Table 35: Forecast Traffic Growth and Additional Floor Space Required

	2026	2031	2036	2041
Leicestershire				
Traffic growth v 2019 (000s tonnes-lifted)	1,556	2,667	3,914	5,161
Additional floor space (000s sqm)	61	105	154	203
East Midlands				
Traffic growth v 2019 (000s tonnes-lifted)	4,945	8,477	12,125	15,773
Additional floor space (000s sqm)	195	334	477	621

Source: GB Freight Model

Table 36: Sensitivity Test Traffic Forecast and Additional Floor Space Required

	2026	2031	2036	2041
Leicestershire				
Traffic growth v 2019 (000s tonnes-lifted)	2,493	4,275	6,056	7,837
Additional floor space (000s sqm)	98	168	238	308
East Midlands				
Traffic growth v 2019 (000s tonnes-lifted)	8,119	13,918	19,717	25,516
Additional floor space (000s sqm)	319	548	776	1,004

Source: GB Freight Model outputs + additional 15% to 2041

Total New-Build

- 8.26 By combining the 'replacement build' and 'growth build' elements (four scenarios in total once the different high and low elements are combined), the total warehouse new-build which can be expected by 2041 can be calculated. This is shown in Table 37 for the four scenarios.

Table 37: Forecast New-Build Rates 2020 to 2041

	000s sqm			
	2026	2031	2036	2041
Leicestershire				
High replacement, forecast traffic growth	524	953	1,388	1,823
Low replacement, forecast traffic growth	408	741	1,079	1,418
High replacement, sensitivity test traffic growth	561	1,017	1,472	1,928
Low replacement, sensitivity test traffic growth	445	804	1,164	1,523
East Midlands				
High replacement, forecast traffic growth	2,047	3,730	5,417	7,104
Low replacement, forecast traffic growth	1,584	2,881	4,182	5,483
High replacement, sensitivity test traffic growth	2,172	3,944	5,716	7,487
Low replacement, sensitivity test traffic growth	1,709	3,095	4,481	5,867

Source: VOA, GB Freight Model and Consultant estimations as described

- 8.27 Based on this forecast methodology, for Leicestershire under the 'High Replacement, forecast traffic growth' scenario we can expect a gross new-build of just over 1.8 million square metres up to 2041. Note that the sensitivity test traffic forecast only adds a further 100,000 square metres to this total up to 2041. Likewise, under the 'Low Replacement, forecast traffic' scenario, 1.4 million square metres of gross new-build is forecast up to 2041. The equivalent figures for the East Midlands region are 7.1 and 5.5 million square metres respectively (and the sensitivity test only adds just under 400,000 square metres to the total up to 2041).

8.28 There are a number of points to note from Table 37 above. Firstly, the outputs represent the total quantum of new floor space which is forecast to be built up to 2041. It is not the 'net change' in floor space, which planners often consider. However, for large warehousing the gross new-build rate is the more important figure as, in most cases, new capacity will need to be accommodated at new sites albeit the recycling of existing sites is encouraged where feasible (see discussion in section 13). Secondly, at this stage the quantum of additional land needed to accommodate the floor space forecast has not been calculated; this is addressed further in Section 9 once existing plots/sites with consents are considered.

8.29 While 'high' and 'low' replacement forecasts have been considered above, it is the 'high replacement' scenario that should be considered as the preferred option going forward for planning purposes. This is for two principal reasons:

1. Market evidence suggests that while many existing older buildings may be physically sound, they are increasingly becoming functionally obsolete, or the locations themselves unsuitable. To a great extent, this situation is being driven by changes in the retail sector, and in particular the large growth rates for e-commerce (as described elsewhere in this report). Traditionally, the principal function of many NDCs in the Midlands was to hold stock at the 'pallet level' before its transfer to RDCs or direct to retail stores. Picking and handling is generally based around fork-lift truck type equipment moving full pallets to/from pallet racks. E-commerce, on the other hand, tends to be picked/packed at the individual consignment level (in an envelope or small box/package which is subsequently collected by Royal Mail or parcel couriers). The modern automated picking, handling and packaging systems required for these types of operations cannot be 'retro-fitted' into older buildings alongside the traditional NDC function e.g. the new M&S warehouse at Castle Donington was specifically commissioned and designed to handle e-commerce and slower moving store lines under the same roof, but it also replaced existing capacity at other sites. As discussed, further automation is potentially a consequence of future restrictions on recruiting labour from the EU.

Further, as discussed in the section on e-commerce, pure on-line retailers (or more likely their contracted parcel couriers) are seeking smaller purpose built 'cross-dock' type facilities close to urban conurbations where goods from NDCs (arriving by rail or large HGVs) can be transferred directly to LGVs/MGVs for final delivery to residential properties. This requirement is effectively replacing the traditional RDC warehouse for some retailers. While RDC and cross-dock locational requirements will be similar, with reasonable proximity to urban areas, it is the internal layout of the building that is different. RDCs include areas where goods can be stored (i.e. in racks), even if for short periods of time, whereas cross-docks are designed purely for the rapid transfer of goods between vehicles (lots of open space at ground floor level). Whether former RDC units can be re-furbished/re-purposed as cross-docks will depend on the structure of the individual building.

2. As discussed elsewhere in this report, the de-carbonising agenda will drive further demand for warehouse facilities which are served by the railway network. Long distance trunk-hauls from ports and to/from more distant domestic origins/destinations can then be undertaken by (predominantly) electric powered trains (as battery electric HGVs will not have sufficient range).

The freight flow forecasts (as described) showed expected continuing strong growth rates in the intermodal sector. Re-iterating the Shop Direct example, the East Midlands Gateway location was selected as it gave them direct access to an intermodal rail terminal (initially to reduce transport costs from the deep-sea container ports though no doubt 'future proofing' with regards to de-carbonisation).

- 8.30 Consequently, it is recommended that the area should plan on the basis of a faster rate of replacement-build. This should ensure the maintenance of Leicestershire's competitive position currently enjoyed alongside providing the market with a geographical spread of commercially attractive sites available to satisfy individual operator locational requirements.
- 8.31 Within the above context it is recognised that stock built since the 1990s (such as Magna Park) and since will be based in more desirable locations and have more potential to be refurbished for logistics or at least as secondary stock. Over the next decade as more of Leicester and Leicestershire's stock reaches a 30 year life span, trends in refurbishment and reuse will be clearer. This could lead to a slow down in the need for new sites as recycling increases. This highlights the importance of monitoring (section12) and is discussed further in section 13 in relation to employment trends.

9 TESTING DEMAND FORECASTS AND SUPPLY

9.1 This section considers the modal split of future needs identified under the replacement and traffic growth model and how this marries supply.

Rail Served Sites – Demand and Supply

9.2 As presented in the analysis of existing capacity (stock, see Section 3), EMDC is currently the only rail-served site in Leicestershire, providing 153,000 square metres or just over 6% of the county's capacity, albeit no train services currently operate (as described). This is broadly in-line with the national position. As noted, around 200,000 square metres across 5 units are currently being developed and brought into operation at East Midlands Gateway, which will increase the rail-served share. Across the East Midlands region, around 0.75 million square metres of floor space is currently located on a rail-served site, equating to around 8% of the region's stock (i.e. currently marginally ahead of the national position).

9.3 The national rail freight demand forecasts undertaken for Network Rail (as described) assumed that 26% of future new-build warehousing would locate at a rail-served site (Strategic Rail Freight Interchanges or SRFIs). This was understood to be broadly in-line with recent planning consents in England and Wales for large scale warehousing at the time the forecasts were produced (summer 2018). In the first instance, therefore, we have considered a scenario whereby 26% of the forecast Leicestershire and East Midlands floorspace need is developed at SRFIs.

9.4 However, the planning system should now be making provision for a much greater proportion of future large scale new-build floorspace to locate at rail-served sites across the region over the medium-long term. This is due to the following reasons, as discussed in the key drivers of change section.

1. National planning policy, principally para 2.27-2.36 of the NPPF, clearly expects large scale freight developments to be built at locations which have access to the railway network (or ports/inland waterways). The National Networks NPS also concludes that there is a 'a compelling need for an expanded network of SRFIs'

2. The large growth rates over the past decade in intermodal rail freight, particularly on flows from the deep-sea ports to the English Midlands and north of England. The national rail freight demand forecasts (as described) suggest this growth will continue to 2043. It is worth noting that these

forecasts have 'buy-in' from the wider freight industry and key stakeholders and can be considered the freight/logistics industry's long term demand forecasts.

3. The ability to access cost competitive rail freight services is increasingly becoming a key commercial requirement of the logistics industry, particularly for medium-longer distance trunk hauls between ports, NDCs and RDCs. The principal reasons are cost (full-length trains should offer a cheaper option between two rail-linked sites, even over relatively short distances) and HGV driver shortages. As outlined in the presentation of recent rail freight trends (in section 2), a number of major grocery retailers, port companies and road haulage operators now contract their own rail freight services. It is understood that *very.co.uk* selected East Midlands Gateway for their new NDC as it gave them direct access to an intermodal rail terminal, initially to reduce transport costs from the deep-sea container ports. The development of rail-linked strategic distribution sites is a crucial component in delivering the ability to access cost competitive rail freight services.

4. Perhaps most importantly, the de-carbonising agenda and the long-term need to de-carbonise road and rail freight is becoming a key issue generally (and for the logistics sector specifically). While the increasing use of rail freight has to date been driven by cost, this will become the key driving factor going forward. However, as noted by the NIC, de-carbonising HGVs will be 'challenging'; battery-electric HGVs are unlikely to provide the distance range currently provided by diesel powered freight vehicles, E-highways will require a significant investment, meaning they would only cover the strategic network, while there are significant issues concerning the production and distribution of hydrogen (for fuel cells).

9.5 Electrically hauled rail freight is currently the only proven technology that can transport freight over long distances with zero greenhouse gas emissions (assuming the electricity is generated by zero-carbon means). The ability to haul freight over long distances by rail to large scale warehouses, where it can then be transferred to battery-electric powered HGVs/LGVs for shorter distance final deliveries is therefore likely to become a key requirement for the logistics sector. The development of competitive rail-linked strategic distribution sites is a crucial component in meeting this requirement.

9.6 Taking this into account, we have therefore considered a scenario with a much greater proportion of future large scale new-build locating at rail-served sites, when compared with the current 6% or 26% scenario, to reflect these policy, commercial and de-carbonising requirements.

9.7 The *Leicester and Leicestershire SDS* considered the size of warehouse units currently located at the existing SRFIs in the East Midlands (DIRFT) and elsewhere (e.g. Hams Hall) alongside the size of units being planned for new SRFIs in the region. The SDS subsequently concluded that it was warehousing units above 25,000 square metres that will benefit from or be of a nature to be attracted to sites with rail terminal facilities. Analysis of the VOA data suggests that around 56% of the East Midland’s large scale warehouse stock is comprises units greater than 25,000 square metres. Further, it is large scale warehouses greater than 25,000 square metres that will require the large plot sizes that are being planned for and are available at SRFIs

9.8 We have therefore considered a scenario whereby at least 60% of future large scale new-build in Leicestershire and the wider East Midlands is located at a SRFI. A final scenario where 43% of future new-build locates at a SRFI, this being the mid-point between the 26% and 60% scenarios, has also been considered. Table 38 quantifies the three scenarios described (note that this table excludes any further margin for flexibility which is considered further in section 10).

Table 38: Total Forecast New-build at Rail-Served Sites (SRFIs) 2020 to 2041

	2020 to 2041 (000s sqm)	
	Leicestershire	East Midlands
<i>High Replacement, Forecast Traffic Growth</i>		
Total New-build	1,823	7,104
<i>Rail-served new-build at:</i>		
26%	474	1,847
60%	1,094	4,262
43%	784	3,055
<i>High Replacement, Sensitivity Test Traffic Growth</i>		
Total New-build	1,928	7,487
<i>Rail-served new-build at:</i>		
26%	501	1,947
60%	1,157	4,492
43%	829	3,220

Source: MDS Transmodal

9.9 For the ‘high replacement, traffic forecast’ and 60% rail-served scenarios, just over 1 million square metres of floor space will need to be developed at rail-served sites by 2041 in Leicestershire. The equivalent ‘mid-point’ rate indicates that just under 0.8 million square metres should be developed at rail-served sites to 2041. Likewise, for the East Midlands 4.3 million square metres can be expected

to be built at rail-served sites by 2041 under the 'high replacement, traffic forecast' and 60% rail-served scenarios.

9.10 We have therefore compared the rail-served new-build demand (above) against the quantum of floor space which will potentially be brought forward at SRFIs up to 2041 (supply). Table 39 shows the current position with respect to floor space development potential at:

- Existing rail-served sites with B8 consents where plots are available (i.e. not allocated to a specific occupier and being actively marketed by agents); and
- Sites where consent has recently been awarded but development/occupation has yet to commence.

9.11 The assessment of market availability and commitment was undertaken in April 2020 which forms the overall supply position. The supply position is taken to be that at the start of 2020, aligning with the needs model, although in reality it is April 2020 based on authority monitoring and market assessment at that time. Where sites or plots have been pre-let to an occupier before this point, (i.e. before a building is finished being built) these are excluded as they are not available on the market to other occupiers to meet need arising in the 2020-2041 forecast period. This leads to some differences between the supply assessment used in this model compared to the local authorities' completions monitoring. This is discussed further below and in section 10.

9.12 Non-strategic plots (i.e. where the warehouse would be less than 9,000 square metres) and land set aside for B1 uses have also not been included. The floor space figures shown are, in the case of existing sites with consents, the respective developer/agent estimates with respect to the size of unit that can be accommodated on vacant plots (sourced from their websites). For the new sites where consent has recently been awarded, the quantum of floor space is that referenced in the relevant planning application or DCO documentation (e.g. from the master plan).

Table 39: Rail-served Site Supply in Leicestershire and East Midlands – With Consents

Leicestershire	000s sqm
Existing Sites with Consents	
East Midlands Gateway	236
East Midlands Distribution Centre*	102
Total	338
East Midlands Regions	000s sqm
Existing Sites with Consents	
East Midlands Gateway	236
DIRFT Phase III	731
East Midlands Distribution Centre*	102
Consent – yet to be developed	
Northampton Gateway	560
Total	1,656
Permissions with pre-lets, excluded from supply	-

* On-site rail terminal but currently not served by rail services

Source: Developer/Agent websites and DCO Applications (Planning Inspectorate)

- 9.13 In Leicestershire, around 340,000 square metres can potentially be developed at SRFIs, while across the East Midlands just over 1.5 million square metres could be built. *East Midlands Gateway (SEGRO Logistics Park)* was granted its Development Consent Order (DCO) in 2016. Around 240,000 square metres are currently being developed and brought into operation, and the intermodal terminal recently commenced handling two trains per day from Felixstowe. Six plots potentially offering around 236,000 square metres of floor space remain to be developed. Plots at *East Midlands Distribution Centre* are currently being marketed and offer around 104,000 square metres for B8 development (EMDC 525 and Plot 3). Note that while the site contains a small intermodal terminal, there are currently no rail services operating to the site.
- 9.14 *Northampton Gateway* (promoted by Roxhill) was granted its DCO in October 2019. The scheme will provide around 560,000 sqm of floor space alongside a new intermodal terminal connected to the West Coast Main Line (Northampton branch). The site will be served from Junction 15 of the M1. At the existing SRFI at *DIRFT (ProLogis)*, the Phase III expansion was granted a DCO in July 2014. This will ultimately provide for around 731,000 square metres of floor space alongside a re-located (and expanded) intermodal terminal.
- 9.15 Table 40 consequently compares the forecast rail-served new-build to 2041 with the anticipated supply as described. The expected shortfall (i.e. where planned supply as detailed above is not able

to meet the forecast demand) is also shown. This has then been 'converted' into the amount of additional land (in hectares) that will need to be brought forward to accommodate this floorspace.

Table 40: Land Required at Rail-served Sites and Potential Site Supply 2020 to 2041*

Leicestershire	2020 to 2041 - % rail-served		
	26%	60%	43%
High Replacement, Forecast Traffic Growth			
New-build (000s sqm)	474	1,094	784
Supply (000s sqm)	338	338	338
Balance (000s sqm)	-136	-756	-446
Additional Land required (ha)	54	302	179
High Replacement, Sensitivity Test Traffic Growth			
New-build (000s sqm)	501	1,157	829
Supply (000s sqm)	338	338	338
Balance (000s sqm)	-163	-819	-491
Additional Land required (ha)	65	328	196
East Midlands	2020 to 2041 - % rail-served		
	26%	60%	43%
High Replacement, Forecast Traffic Growth			
New-build (000s sqm)	1,847	4,262	3,055
Supply (000s sqm)	1,656	1,656	1,656
Balance (000s sqm)	-191	-2,606	-1,399
Additional Land required (ha)	76	1,042	560
High Replacement, Sensitivity Test Traffic Growth			
New-build (000s sqm)	1,947	4,492	3,220
Supply (000s sqm)	1,656	1,656	1,656
Balance (000s sqm)	-291	-2,836	-1,564
Additional Land required (ha)	116	1,134	626

Source: DCO Applications (Planning Inspectorate) and Developer websites

* Plot ratio of 0.25 assumed

- 9.16 For Leicestershire, the 'high replacement, traffic forecast' and 60% rail-served scenario indicates that projected supply will not be able to meet the forecast demand at rail-served sites up to 2041 (a short-fall of around 760,000 square metres of floor space). Similarly, the short-fall is around 450,000 square metres on the basis that 43% of future demand locates at rail-served sites (excluding any margin for flexibility as discussed in Section 10).

- 9.17 Analysis of recent applications/consents suggests that the plot ratio (i.e. floor space to overall site size) is less than 30% at a SRFI and once the rail terminal and any 'green' screening or landscaping is accounted for it is typically around 25%, see Appendix F. Based on a ratio of 0.25 (including landscaping), the amount of additional land that will need to be brought forward at rail-served sites in Leicestershire (in order to meet the forecast demand) is between 179ha (43%) and 302ha (60%), in each case for the 'high replacement, traffic forecast' scenario, excluding any margin for flexibility. Depending on size, this suggests one or two SRFIs will need to be brought forward within Leicestershire up to 2041.
- 9.18 This shortfall could be fulfilled through the *Hinckley National Rail Freight Interchange (NRFI)*, a SRFI being promoted by Tritax Symmetry adjacent to Junction 2 of the M69 and alongside the Leicester to Nuneaton main line. Covering around 185ha of active flat area (336 ha overall), an integral intermodal terminal is planned for the site serving around 650,000 square metres of large-scale floor space at ground level (additional mezzanine space is also planned). As the scheme is larger than 60ha, it is classed as a nationally significant infrastructure project (NSIP) and consent has to be sought via a DCO. The scheme is formally listed with the Planning Inspectorate (PINS) as an NSIP at the 'Pre-application stage' in Summer 2020, although submission of the draft DCO is expected in Q4 of 2021. Two rounds of informal developer led pre-application consultation have taken place (October-December 2018 and July-September 2019) with further statutory consultation required under DCO subject to submission. Should the DCO be granted, the forecast shortfall for Leicestershire would effectively be filled under the 43% rail served scenario.
- 9.19 As discussed in Section 10 of the report, it is considered prudent to add further margin for flexibility. This does affect the balance and increases the floorspace shortfall to 723,000sqm for the High replacement scenario or 768,000sqm for the High replacement / Sensitivity scenario. Regardless, this could be largely fulfilled by the HNRFI.
- 9.20 Across the East Midlands region as a whole, the 'high replacement, traffic forecast' and 60% rail-served scenarios indicate that projected supply will not be able to meet the forecast demand at rail-served sites up to 2041 (a short-fall of around 2.6 million square metres of floor space). Similarly, the short-fall is around 1.4 million square metres at SRFIs on the basis that 43% of future demand locates at a SRFI. On the same basis, this suggests between 3-4 SRFIs will need to be brought forward up to 2041 in addition to those currently being planned.

- 9.21 In terms of filling this shortfall, in addition to Hinckley NRFI developer Goodman is still understood to be progressing its planned SRFI at Etwall near Derby (*East Midlands Intermodal Park*), albeit its DCO application is still at the 'Pre-application' stage with PINS (formal consultation has yet to take place). This scheme, covering around 255ha, should provide around 485,000 square metres of floor space alongside a new intermodal terminal.
- 9.22 A further SRFI scheme near Northampton (*Rail Central*) is being promoted by a Gazeley-Ashfield Land joint-venture. However, its DCO application was formally withdrawn during Autumn 2019, principally concerning the scheme's impact on highway capacity at Junction 15a of the M1 (though given that the Northampton Gateway scheme has been granted a DCO, rail capacity may also be an issue, at least until HS2 opens). It is not known whether a revised scheme will be submitted, albeit it is likely that the process will need to recommence at an earlier stage (including re-running the formal consultation). Rail Central would provide a further 700,00 square metres of floor space.
- 9.23 Table 41 summarises the site supply position once these 3 potential schemes in the in the public domain are also accounted for. Assuming all three schemes in the East Midlands are granted DCOs, at least one additional SRFI in the East Midlands is likely to be required in order to meet the 60% of new-build demand to rail-served sites.

Table 41: Potential Site Supply 2041 – Leicestershire and East Midlands

Leicestershire	Floor Space and Land Available	
	000s sqm	Ha
Existing Sites with Consents		
East Midlands Gateway	236	58
East Midlands Distribution Centre*	102	20
Total – with consents	338	78
DCO being considered		
Hinckley NRFI	650	226
East Midlands		
Existing Sites with Consents		
East Midlands Gateway	263	58
DIRFT Phase III	731	345
East Midlands Distribution Centre*	102	20
Consent – yet to be developed		
Northampton Gateway	560	219
Total - with consents	1,656	642
DCO Potential		
Hinckley NRFI	650	185**
East Midlands Intermodal Park	485	255
Rail Central	700	294
Total - potential	1,835	734

* On-site rail terminal but currently not served by rail services

** Level land area although DCO application area a total of 336 ha

Source: Developer/Agent websites and DCO Applications (Planning Inspectorate)

Road Only Sites – Demand and Supply

9.24 Having accounted for forecast demand and expected supply at SRFIs in Leicestershire, Table 42 shows the consequent forecast demand to 2041 for floor space at non rail-served (road only) sites. Given the considerable number of regional road-based schemes as discussed in section 6 and Appendix D, an East Midlands position is not considered.

Table 42: Total Forecast New-build and Road Only New-build to 2041 (High Replacement) – Leicestershire

	2020 to 2041 (000s sqm)
High Replacement, Forecast Traffic Growth	
Total New-build	1,823
Road only New-build at:	
26% rail-served	1,349
60% rail-served	729
43% rail-served	1,039
High Replacement, Sensitivity Test Traffic Growth	
Total New-build	1,928
Road only New-build at:	
26% rail-served	1,427
60% rail-served	771
43% rail-served	1,099

Source: MDS Transmodal

9.25 Assuming 60% of new-build is developed at rail-served sites, this suggests that 729,000 square metres of floor space will need to be developed by 2041 across Leicestershire at road-only connected sites. The corresponding figure for 43% of new-build to rail-served sites is just over 1 million square metres. These figures exclude any margin set out in Section 10.

9.26 As per above, we have therefore compared the new-build demand which can be expected at road-only sites (above) against the quantum of floor space likely to be made available up to 2041 (supply). Table 43 shows the current position with respect to:

- Units recently completed / renovated and are currently vacant and awaiting a tenant/occupier (speculative);
- Plots currently available at existing sites with B8 consents but development/occupation has yet to commence; and
- Plots where a consent has yet to be awarded, but the site is allocated for B8 in the respective local plan.

- 9.27 As with the rail based supply assessment, the data was collated during the early part of 2020, however the supply position is taken to be that at the start of 2020 to align with the needs model, although in reality it is April 2020. Where sites or plots have been pre-let to an occupier before that date, these are excluded as they are not available on the market to other occupiers to meet need arising in the 2020-2041 forecast period. In the case of the road based supply this leads to substantial differences between the supply assessment used in this model compared to the local authorities monitoring (details in Appendix C).
- 9.28 The figures quoted represent the respective developer estimates with respect to the size of unit that can be developed (sourced from their websites) or the quantum of floor space that is referenced in the relevant planning application (e.g. from the master plan) which has been checked against authority monitoring for permissions. Non-strategic plots (where the warehouse is or would be less than 9,000 square metres) and plots/sites allocated for B1/B2 were not included in the assessment.

Table 43: Site Supply Road Only– Vacant Units and Plots with B8 Consents (exc pre-lets)

Local Authority and Site	000s sqm
<i>Hinckley and Bosworth</i>	
Unit 1 Mountpark Phase II	62
<i>Blaby</i>	
Land West of St Johns Enderby	99
<i>Charnwood</i>	
Rothley Lodge, Loughborough Road, Rothley	11
Artform International, Loughborough (built, available)	14
<i>Harborough</i>	
Tornado 186 Magna Park (built, available)	16
Magna Park South (Glebe Farm)*	279
Magna Park North (Mere Lane)**	320
M1 Access, Lutterworth (built, available)	11
X Dock 377, Magna Park (built, available)	35
Quantum, Magna Park (built, available)	38
Hurricane Warehouse (4400) Magna Park (built, available)	24
<i>Leicester</i>	
D&B Leicester Distribution Park	9
<i>North West Leicestershire</i>	
225 at Interlink, Beveridge Lane, Bardon (built, available)	21
Zorro, Coalfield Way, Ashby-De-La-Zouch (built, available)	22
Former Coal Lounge Disposal Point (built, available)	62
Unit 2, Mountpark Phase II (built, available)	50
Total	1,073
Permissions with pre-lets, excluded from supply	552

Source: Planning applications, developer estimates, CoStar availability April 2020

* Up to 8 plots

** Up to 7 plots

Figures may not sum due to rounding

- 9.29 This suggests that 780,000 sqm of future road-only sites will be available based on permissions alongside 293,000 of newly developed or recently refurbished stock currently available. A further 552,000 is currently being brought forward as pre-let to an occupier and are excluded under this model as not available on the market to other occupiers to meet need arising in the 2020-2041 forecast period. This leads to some differences between the supply assessment used in this model compared to the local authorities' completions monitoring.

- 9.30 Table 44 consequently compares the forecast road-only new-build to 2041 with the anticipated site supply currently with consents.

Table 44: Total New-build at Road Only Sites and Potential Site Supply 2020 to 2041*

Leicestershire	2020 to 2041 - road only at % rail-served		
	26%	60%	43%
High Replacement, Forecast Traffic Growth			
New-build (000s sqm)	1,349	729	1,039
Supply (000s sqm)	1,073	1,073	1,073
Balance (000s sqm)	-276	344	34
Additional Land required (ha)	79	NA	NA
High Replacement, Sensitivity Test Traffic Growth			
New-build (000s sqm)	1,427	771	1,099
Supply (000s sqm)	1,073	1,073	1,073
Balance (000s sqm)	-354	302	-26
Additional Land required (ha)	101	NA	7

* Assumes plot ratio of 35%

- 9.31 Analysis of recent applications/consents suggests that the plot ratio (i.e. floor space to overall site size) is around 35% at road-only sites once any 'green' screening or landscaping is accounted for, as set out in Appendix F. This is lower than the 40% seen in developments completed 2012-19 likely to be due to increased landscape and screening matters.
- 9.32 Using the 'high replacement, traffic growth sensitivity' and 60% rail-served scenario, it would appear that Leicestershire has sufficient sites with consents and in the pipeline to accommodate expected demand to 2041 if all capacity was completely used. However, using the 43% rail-served scenario there is a need for 26,000 sqm or 7ha; and at the 26% rail-served scenario, 354,000 sqm or around 101ha of land will need to be brought forward to 2041. This model assumes all capacity is used up which is neither realistic or desirable, since vacancy in the market is necessary to ensure choice and churn for occupiers and market efficiency. A margin for flexibility is set out in Section 10 below.
- 9.33 Given that around 60% of the supply is located around the Magna Park development in Harborough, in order to provide the market with a choice of sites with a suitable geographical spread, it would be prudent to continue bringing forward further sites up to 2041 elsewhere in the county. This is addressed further in the Future Development – Areas of Opportunity, Section 11.

9.34 In order to maintain and enhance the competitive position currently enjoyed by the region/sub-region, it is considered vitally important that the market in future is offered a geographical spread of commercially attractive sites available to satisfy individual operator locational requirements. Sites should therefore be brought forward at various locations across Leicestershire at any one time. Related to this conclusion, it is also important that the outputs from the land-use forecasting exercises are not viewed as a maximum level of development or cap.

10 FUTURE WAREHOUSE FLOORSPACE GROWTH SCENARIOS SUMMARY

10.1 This section initially summarises the modelling and resulting forecasts for large warehouse need to 2041; and then identifies the preferred scenarios to test further in terms of their labour market effects (considered later in Section 13).

Completions Trend Model

10.2 The client authorities provided completions data from 2012 which has been filtered to schemes of over 9,000 sqm. Only Blaby, Harborough, Hinckley and Bosworth and North West Leicestershire report any delivery of this magnitude with the majority focused on North West Leicestershire.

10.3 The completions data has been annualised and extrapolated to provide an indication of the future need for this type of accommodation should development trends for the reported period be reproduced going forwards. As set out in Table 45 a total of 2.7 million sqm or 701 hectares is forecast to 2041 (gross completions). High completions in 2016/17 and 2019/20 drive the overall rate.

10.4 This level of forecast need can be compared with a current total supply of 2.0 million sqm, when considering all permitted schemes (Appendix C) plus available units.

Table 45: Forecast Completions 2020 to 2041

	Total 2012/13-19/20		Annual		2019/20-35/36		2019/20-40/41	
	SQM	Ha	SQM	Ha	SQM	Ha	SQM	Ha
Blaby	102,050	27	14,579	4	233,257	62	306,150	81
N.W Leicestershire	586,305	116	83,758	17	1,340,127	264	1,758,916	347
Hinckley & Bosworth	83,770	28	11,967	4	191,474	65	251,310	85
Harborough	128,621	63	18,374	9	293,991	144	385,863	189
Total	900,746	234	128,678	33	2,058,849	534	2,702,239	701

Source: Authority Monitoring Data / GL Hearn

10.5 Supplementing the completions trend is VOA monitoring data which provides a useful sense check. After removing developments in “losses-only” districts to apply a positive growth floorspace requirement, the recent trend data reports a requirement of 1.9 million sqm. All industrial floorspace in these authorities as well as small unit completions will be included in this data. Differences between completions trends and VOA are partly explained by 2019/20 high completions not yet reported by VOA.

Table 46: Industrial Floorspace Trends, 2001/02-18/19 (sqm '000s)

	2001/02	2011/12	2018/19	2002-19 pa	2012-19 pa	2041 (2002-19 pa)	2041 (2012-19 pa)
Leicester City	3,083	2,605	2,439	-38	-24	-796	-498
Blaby	696	676	805	6	18	135	387
Charnwood	1,449	1,279	1,187	-15	-13	-324	-276
Harborough	1,089	1,240	1,324	14	12	290	252
Hinckley and Bosworth	1,158	1,065	1,147	-1	12	-14	246
Melton	457	484	508	3	3	63	72
North West Leicestershire	1,203	1,398	1,726	31	47	646	984
Oadby and Wigston	442	363	339	-6	-3	-127	-72
FEMA	9,577	9,110	9,475	-6	52	-126	1095
FEMA (growth only)						1,134	1,941

Source: VOA Business Floorspace Statistics, GL Hearn

Labour Demand Model

10.6 Oxford Economics has provided forecasts of future labour demand to 2041. These have been used to derive future requirements for B8 Class floorspace. Employment sectors related to strategic warehouse growth have been isolated resulting in a total need of 163,000 sqm to 2041 (40.8 ha) driven by the requirements of North West Leicestershire.

10.7 However, given recent trends and market feedback this is considered to underestimate future needs as:

- It fails to account for replacement demand;
- There are wide variations in employment densities for large warehouses;
- There is a tendency for warehouse jobs to be attributed to other sectors (such as wholesale and retail), as identified later in this report drawing on our analysis of major distribution parks; and
- There is uncertainty regarding econometric techniques for locally unique sectors (constraining locally exceptional growth rates to regional / national performance).

Replacement and Traffic Growth Model

10.8 This land use forecast model is derived from the following key factors relating to new logistics facilities:

- The continual need to build new large scale warehousing to replace existing capacity which has become life-expired (replacement build); and

- The need for additional floor space to handle traffic growth (growth build). This element therefore reflects the long term growth in demand for goods in the wider economy.

10.9 By combining the ‘replacement build’ and ‘growth build’ elements, the total warehouse new-build requirement to 2041 can be calculated. We have also undertaken a ‘sensitivity test’ based on the forecast traffic volumes quoted above for 2041 increasing by a further 15% reflecting faster increases in e-commerce, Brexit and other drivers related to heightened cargo transportation and its resulting floorspace need.

10.10 Based on this forecasting methodology the ‘High Replacement’ scenario calculates a gross new-build of 1.8 to 1.9 million sqm to 2041 in Leicestershire.

Table 47: Forecast New-Build Rates 2020 to 2041 and Associated Land Requirements

<i>Leicestershire</i>	000s sqm			
	2026	2031	2036	2041
High replacement, forecast traffic growth	524	953	1,388	1,823
Low replacement, forecast traffic growth	408	741	1,079	1,418
High replacement, sensitivity test traffic growth	561	1,017	1,472	1,928
Low replacement, sensitivity test traffic growth	445	804	1,164	1,523

Source: VOA, GB Freight Model and Consultant estimations as described

Margin for Flexibility

10.11 It is widely accepted convention in land use planning for employment to use a margin for flexibility. This covers a number of matters:

- To add a safety margin for factors such as delays in some sites coming forward for development which can take up to 5 years for major schemes.
- To generate a contingency factor, providing an additional land buffer so that supply is not too tightly matched to estimated demand, and so that shortages of land do not arise if future demand turns out to be greater than the forecasts, given the uncertainties in the forecasting process,
- It reflects the accepted convention that property markets function most efficiently with a vacancy rate of between 5% and 10%. This allows for churn and choice in the marketplace. Property market analysis for the strategic warehousing sector has indicated a tight market in recent years, both in qualitative and quantitative reporting.

10.12 In line with broader employment land convention, a margin of 5 years is considered appropriate based on completions trends. This margin is applied to the forecast traffic growth and replacement demand

model below. The margin can also be applied to the labour demand model, however given the labour demand model needs figure reported is so substantially less than the other techniques, the exercise is not warranted. The application of a margin to a completions trend is less consistent in employment forecasting particularly when using a gross completions trend (such as here) as the net change (when losses of units are factored in) tends to be lower and represents the functional utilisation of floorspace, thus implying a gross completions trend builds in some headroom by default.

Table 48: Forecast New-Build Rates 2020 to 2041 and Associated Land Requirements including margin (000s sqm) - Leicestershire

Leicestershire	2041 base	5 yr margin	Total
High replacement, forecast traffic growth	1,823	643	2,466
Low replacement, forecast traffic growth	1,418	643	2,061
High replacement, sensitivity test traffic growth	1,928	643	2,571
Low replacement, sensitivity test traffic growth	1,523	643	2,166

Source: GLH

- 10.13 As shown in Table 48 above the inclusion of a margin results in a total need of between around 2.1 million and 2.6 million sqm.

Model Summary and Preferred Scenarios for testing

- 10.14 Table 49 draws together the various models outputs, including margin where applicable.

Table 49: Summary of modelled scenarios

Model	2020-2041 Needs 000s sqm	Comments
High replacement, central traffic growth	2,466	Reflects accepted traffic growth and new technology needs in stock replacement, with margin.
Low replacement, central traffic growth	2,061	Reflects accepted traffic growth and assumes longevity in stock, with margin, with margin.
High replacement, sensitivity test traffic growth	2,571	Increases traffic growth and assumes new technology requires stock replacement, with margin.
Low replacement, sensitivity test traffic growth	2,166	Increases traffic growth and assumes longevity in stock, with margin.
Completions trend	2,702	Reflects large warehouse floorspace delivery over the 2012-19 period, projected forwards.
VOA trend	1,941	Models growth only districts 2011-18 projected forwards, all warehouse and industrial stock including losses
Labour demand	-50	Assumes baseline model for all sectors
Labour demand sensitivity	163	Assumes baseline model for warehouse and related sectors for growth only districts

Source: GLH

10.15 Taking into account the above, the following scenarios are recommended for testing in terms of their employment (job) implications as they represent the upper and lower extremes of the forecasts for future need that are considered reasonable in the context of the drivers set out in Section 2, after discounting the implausible labour demand modelling:

- **Low growth scenario: Low replacement demand, central traffic growth**
- **High growth scenario: High replacement demand, higher sensitivity traffic growth**

10.16 In terms of developing an overall recommended preferred scenario for planning policy development, the correlation between the completions trend (2.7m sqm) and the high replacement demand with higher sensitivity test on traffic growth plus margin (2.6m sqm) provides an indication of a suitable level of development to plan for.

10.17 In testing this further, the 2014 Strategic Distribution Study forecast the total new-build rate to be 762,000 sqm (of which growth build represented 87,000 sqm) for the period 2014 to 2021. This equates to around 109,000 sqm per annum total. By comparison, the 2014/15 to 2018/19 completions identified an average of 96,000 sqm per annum. Strong completions in the 2019/20 monitoring period increase the average to 156,000 sqm since 2014/15, with the overall average for data provided 2012/13 to 2019/20 being 129,000 sqm, being around 15% higher than the

Replacement & Traffic Growth model. This does highlight issues in the use of relatively short run completions trend data, but provides a broad sense check that the forecasting models are useful and reliable.

- 10.18 Overall, the use of the Replacement & Traffic Growth model for forecasting appears most reasonable going forwards which in this 2020 study equates to 99,000 sqm per annum rising to 122,000 with a margin for flexibility. The **high replacement demand, higher sensitivity traffic growth figure of 2,571,000** is therefore recommended for planning policy development.

Forecast Demand Preferred Scenario and Future Site Supply

- 10.19 Site supply has been tested against the traffic growth and replacement demand models set out above.
- 10.20 Scenarios have been considered whereby at least 60% of future large-scale new-build in Leicestershire and the wider East Midlands is located at a rail-served site (SRFI) by 2041. Given the increasing importance of the de-carbonising agenda, this should be considered as the preferred option going forward for planning purposes. However to allow for a process of movement towards this position over time, a mid-point between the 26% (the national rail freight demand forecasts undertaken for Network Rail assumed that 26% of future new-build would locate at a rail-served site) and 60% scenarios, being 43%, has been considered as the most deliverable.
- 10.21 Table 50 sets out the forecast rail-served new-build need to 2041 for the mid-point (43%) with the anticipated site supply including sites with an outstanding consent and future site considerations. Taking into account a margin for flexibility, derived from 43% of total margin, this shows a shortfall of 723,000 to 768,000 sqm, which when converted into land at the required plot ration of 0.25 results in additional land requirement of between 290 and 307 ha depending on the sensitivity applied, with the higher rate recommended to be used for planning policy development.

Table 50: Rail - Forecast Demand and Site Supply - Leicestershire

	2020 to 2041 - 43% rail-served	
	<i>High Replacement, Forecast Traffic Growth</i>	<i>High Replacement, Sensitivity Test Traffic Growth</i>
New-build (000s sqm)	784	829
Supply (000s sqm)	338	338
Balance (000s sqm)	-446	-491
Balance (000s sqm) inc margin	-723	-768
Additional Land required (ha)*	290	307

Source: MDS Transmodal

*Plot ratio of 0.25 assumed

- 10.22 As noted previously, the shortfall could essentially be fulfilled through the *Hinckley National Rail Freight Interchange (NRFI)*, a SRFI being promoted by Tritax Symmetry adjacent to Junction 2 of the M69 and alongside the Leicester to Nuneaton main line. The integral intermodal terminal is planned for the site serving around 650,000 square metres of large scale floorspace at ground level (with a further 200,000 sqm of mezzanine). Should the DCO be granted, the forecast shortfall 2020 to 2041 for Leicestershire would effectively be met.

Non-Rail Served Sites

- 10.23 Having accounted for forecast demand and expected supply at Strategic Rail Freight Interchanges in Leicestershire, Table 51 shows the consequent forecast demand 2020 to 2041 for floor space at non rail-served (road only) sites, including a margin for flexibility being 57% of total margin.
- 10.24 As Table 51 sets out, using the '43% mid-point' rail-served scenario, around 95-112 ha of land will need to be brought forward 2020 to 2041 with the higher amount recommended to be used for planning policy development. Given this need it would be prudent to continue to bring forward further sites, to make up the shortfall. This is addressed further in the Future Development – Areas of Opportunity section.

Table 51: Land Required at Road Only Sites and Potential Site Supply 2020 to 2041

	2020 to 2041 43% road-served	
	<i>High Replacement, Forecast Traffic Growth</i>	<i>High Replacement, Sensitivity Test Traffic Growth</i>
New-build (000s sqm)	1,039	1,099
Supply (000s sqm)	1,073	1,073
Balance (000s sqm)	34	-26
Balance (000s sqm) inc margin	-333	-393
Additional Land required (ha)	95	112

Source: MDS Transmodal

*Plot ratio of 0.35 assumed

- 10.25 As noted previously, the supply assessment here excludes sites being brought forward that are pre-let to occupiers, and is focused on available sites able to meet newly arising need. Including the additional 540,000 sqm of pre let would suggest that there is no additional road based need 2020 to 2041 which in reality is unlikely to be the case.

Key risks and assumptions

- 10.26 The key assumptions are implicitly covered in the method sections but revisited here:

Low growth (central traffic model)

- That warehouse units need to be replaced after 40 years of operation.
- That traffic growth occurs in line with the central forecasts

High growth (traffic higher sensitivity)

- That warehouse units need to be replaced after 30 years of operation.
- That traffic growth occurs in line with a 15% increase on central forecasts which allows for faster growth in tonnage shipped which is assumed to be driven by e-commerce requirements and potential stockpiling related to Brexit and COVID-19.

Completions trends

- That the 2011/12 to 2019/20 is representative of longer term need.

- 10.27 The key risks to this approach are identified as:

- 10.28 **COVID-19:** This may lead to a short to medium term recession, particularly after the end of furlough support, that reduces the overall volume of goods required in the UK particularly for comparison goods and reduces floorspace needs. However, it could equally lead to greater rates of stock holding to mitigate for potential supply chain shortages, therefore increasing large warehouse requirements.

- 10.29 COVID-19 has certainly increased e-commerce trends. However, this is more likely to put pressure on last mile facilities rather than large NDCs, since e-commerce affects the distribution model and point of delivery rather than total goods sold (i.e. shift from shop to delivery).
- 10.30 **Brexit** may also affect the warehousing sector. A reduction in labour supply will put pressure on automation capabilities. This in itself could lead to warehouse efficiencies which cuts down total footprint through stacking / mezzanines.
- 10.31 **Replacement demand** issues are explored in more detailed in Section 13, which notes there is some evidence that more recently built warehouses post 1990 have a longer lifespan or at least are able to be repurposed for alternate similar uses. This may reduce the replacement demand component of future need. At present evidence suggests that the higher rate associated with 30 years replacement is most appropriate, given the fast-changing needs of the sector and the overall correlation of this model with recent completion trends. However, towards the 2030 period and beyond, the rate of additional need may begin to slow down as stock lifetime extends to 40 years or more. Given the fast-changing nature of the sector in general the role of monitoring (Section 12) is important.
- 10.32 **Plot ratios** are used to indicate the additional land required to accommodate the sqm forecast need and historically have been assumed at 40% of floorspace to land. This is broadly maintained on average for completions during the 2012-19 period. However, industry feedback and evidence of the most recent applications and permissions (Appendix F) identifies a move towards greater land take to deal with landscaping requirements and green screening. Further standing space may also be needed for vehicle charging in the future subject to future technologies. Biodiversity offsetting may also increase red line boundaries. Our future requirements model assumes 35% plot ratio for road based sites and 25% for rail-served, taking account of an additional area required for the rail head itself and additional landscaping.
- 10.33 **Completions:** the 2012/13 to 2019/20 period has seen 2 years of substantial completions – without the inclusion of 2019/20 the average annual completions rate used, and accordingly the need forecasted in this model, would be substantially less. In recent years the build out has been high in North West Leicestershire, as East Midlands Gateway and Distribution Centre have provided major development opportunities broadly taking over from Magna Park's resource build out through the 1990s/2000s. The planning pipeline trajectory assessment of some 1.8 million sqm (table 16) suggests that the next decade may equal or potentially exceed the recent past in completions,

responding to demand generated by new technologies, distribution methods and trading platforms. This could later lead to a slowdown in the 2030s as the market stabilises. On balance this suggests that the current completions trend is reasonable to assume for the medium term but it isn't expected continue at this level in the long term to 2041.

- 10.34 **Recommendations for planning policy:** long term modelling carries inherent risks in its accuracy; a triangulation of techniques has been used here to generate a reasoned approach. The highest rate (completions trend) has not been recommended but the highest of the traffic growth models has. This figure is not considered a maximum or minimum as market requirements may change over time. There is a need for a geographical distribution of sites to generate choice and balance, as explored in section 11.

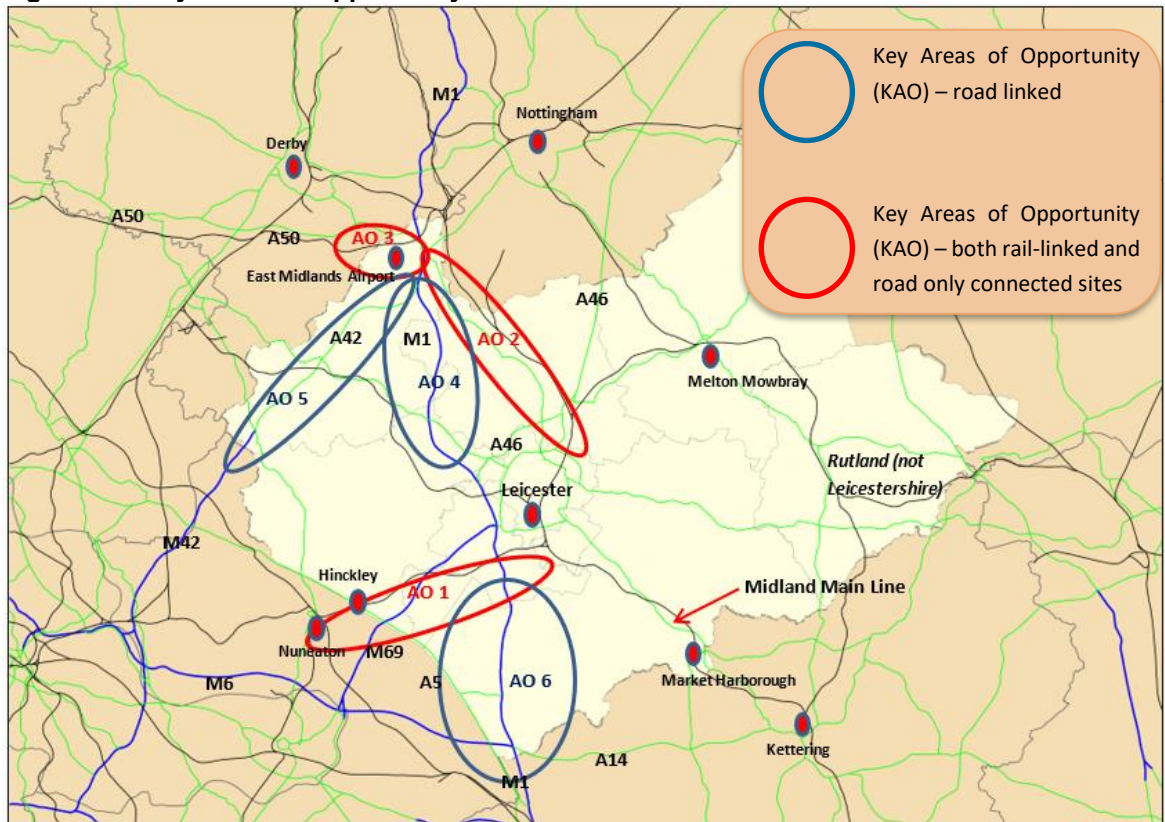
11 FUTURE DEVELOPMENT – AREAS OF OPPORTUNITY

- 11.1 Given the shortfall in land required to accommodate floorspace need to 2041 identified in the land-use forecasts section, we have identified general broad areas across Leicestershire where new strategic logistics sites should be located (Areas of Opportunity). These broad areas would be suitable to house sites of the size, scale, location and transport connectivity required by the market. Note that this is a high-level exercise where general broad areas are identified; the analysis does not consider, assess or recommend specific sites or consider other planning constraints (e.g. flooding, highway capacity) that would inform the allocation of sites in Local Plans or wider policy aspirations such as decarbonisation.
- 11.2 The following criteria have been used to identify the broad areas of opportunity:
- Good connections with the strategic highway network;
 - Good connections with the railway network;
 - Appropriately located relative to the markets to be served; and
 - Is accessible to labour and located close to areas of employment need.
- 11.3 Good connections to the strategic highway network are defined as being an area served by motorways and long-distance dual carriageways, or within a reasonable distance of such routes by non-strategic highways suitable for conveying HGVs. Areas are also deemed to meet this criteria if they are to be served by such routes given the delivery of the known highway infrastructure upgrades outlined in Section 2.
- 11.4 Good connections to the railway network are defined as being:
- Served by a railway line offering a generous loading gauge (minimum W8)¹² or those routes which are likely to be upgraded in the future;
 - Served by an electrified railway line or within a short distance of an electrified railway line, or served by a route which is likely to be electrified over the long term; and
 - Served by a railway line providing connections to major ports of entry (e.g. Felixstowe, Southampton, Folkstone/Channel Tunnel etc.) and key domestic destinations (e.g. Scotland) which are reasonably direct or avoids the need to use circuitous routes.
- 11.5 Given the expected railway enhancements described in Section 2, for Leicestershire this effectively means being served by the following corridors:
- Midland Main Line Market Harborough to Trent Junctions via Leicester; and
 - Peterborough to Nuneaton via Syston, Leicester and Wigston

¹² For intermodal rail freight, W8 is the minimum clearance required. W9 or better preferred (and was referred to in the 2014 Strategic Distribution Study), though modern low deck wagons recently developed are perfectly adequate for moving tall containers on W8 routes.

- 11.6 Broad areas which meet all of the criteria have been identified as 'Areas of Opportunity' likely to be suitable for accommodating SRFIs and road-only connected strategic logistics sites.
- 11.7 Those areas meeting all of the criteria with the exception of 'good connections to the railway network' have also been identified; these are potential 'Areas of Opportunity' suitable for road-only based strategic distribution.
- 11.8 The 'Areas of Opportunity' are identified as below and illustrated in Figure 15 following:
- Areas of Opportunity – SRFIs and road-only connected strategic logistics sites:
 - Area 1 – between Leicester and Hinckley, broadly following the M69 and Leicester-Nuneaton train line transport corridors and part of M1;
 - Area 2 – between Syston and Ratcliffe-on-Soar, broadly following the A6, M1 and Midland Main Line transport corridors, and incorporating Loughborough; and
 - Area 3 – between Ratcliffe-on-Soar and Castle Donnington/border with Derbyshire, broadly following the A50, M1, the Midland Main Line and the freight only line connecting the Midland Main Line (at Trent Junctions) to the Derby-Birmingham train line.
 - Areas of Opportunity – road only connected strategic logistics sites:
 - Area 4 – to the north west of Leicester, broadly following the M1 and A511 transport corridors, incorporating Coalville and Shepshed;
 - Area 5 - the A42 transport corridor, incorporating Ashby-de-la-Zouch; and
 - Area 6 – M1 corridor south of Leicester.
- 11.9 These areas capture the key strategic road network and include the majority of the existing distribution parks. Areas 1, 2 and 6 are less well served particularly nearer to Leicester (i.e. Blaby and Charnwood).
- 11.10 It is noted that the figure shows that the majority of North West Leicestershire is within one or other Area of Opportunity, due to the multi directional accessibility, however the actual potential is much more limited however once basic constraints are added.

Figure 15: Key Areas of Opportunity



NB: Boundaries of key areas are not definitive and are shown for indicative purposes only

Phasing and Deliverability

11.11 We do not consider there to be a hierarchy of Areas of Opportunity (all areas equally meet the criteria listed). However, in order to maintain and enhance Leicestershire’s competitive position, it is important that the market in future is offered a geographical spread of commercially attractive sites across Leicestershire in line with the build-out trajectory of existing supply available to satisfy individual operator locational requirements. Different occupiers have differing needs - cargo origins, location of end users, proximity to labour markets. So land supply should reflect these differing locational requirements. Future provision should not be concentrated or focused on one particular Area of Opportunity. For this reason, it will be important that:

- Local plans and allocations ensure a supply of vacant plots at strategic sites in at least two of the Areas of Opportunity simultaneously ideally across road and rail; and

- New land should initially be allocated in those Areas of Opportunity where there is an identified under-supply of strategic sites, ahead of those Areas of Opportunity which are currently well provided for.
- 11.12 It will be important that an appropriate system is in place to monitor at county level progress in site allocation, consents and take-up over time at the county level (see section 12). This will then allow further strategic sites to be brought forward in those existing well provided for Areas once current supply has been exhausted, thereby maintaining the required geographic spread. Recent planning consents around Magna Park (totalling around 0.6 million square metres – see site supply analysis, section 6) suggests that Area 6 is, currently, reasonably well provided for in terms of strategic sites. The site supply analysis also noted that around 60% of road-only sites in Leicestershire are located around Magna Park in Harborough. As noted, this should not preclude future allocations in this Area, albeit in the later part of the timeframe considered by this study (post 2031).
- 11.13 It is recognised that the Areas of Opportunity identified include a number of existing distribution parks and supply including Bardon Hill, East Midlands Gateway and East Midlands Distribution Centre which are all located in North West Leicestershire.
- 11.14 That notwithstanding, these units may still fail to meet the increasingly demanding requirements of modern prime distributors, resulting in the need for new units and sites to be considered. As indicated in paras 117-118 of the NPPF, the re-use of existing land through the refurbishment of units should be encouraged. Monitoring over the coming 5-10 years will provide more certainty on longevity and replacement demand matters including any realistic allowance to be applied for recycling of expired units or plots in future.
- 11.15 Proximity to labour markets continues to be a critical driver for warehousing activities. Analysis in Section 14 of this report suggests that Leicester City, with the largest population in the county, provides a relatively low proportion of warehousing labour to major parks elsewhere in the county.
- 11.16 There may be an opportunity for future development to take advantage of this labour pool particularly in Areas of Opportunity 1 and 2 as indicated in Figure 15. Area 1 broadly includes coverage of a proposed new junction on the M1, as set out in the Leicester and Leicestershire Growth Strategy 2018. If funding is secured, this may generate a new focal point for warehousing development that can directly access the Strategic Road Network and the City of Leicester's labour supply.

11.17 When new local plan allocations are being considered, a criteria-based approach should be adopted when identifying and assessing potential new sites for large warehouses. Based on the analysis throughout this document and from the previous SDS, sites considered to be appropriate for hosting strategic distribution are those which meet the following criteria:

- Good connections with the strategic highway network – close to a junction with the motorway network or long-distance dual carriageway. Motorway/dual carriageway junctions and the approach routes should have sufficient network capacity;
- Appropriately located relative to the markets to be served;
- Offers modal choice; is served by a railway line offering a generous loading gauge (minimum W8), available freight capacity and connects to key origins/destinations directly without the requirement to use long circuitous routes;
- Is sufficiently large and flexible in its configuration so that it can accommodate an intermodal terminal and internal reception sidings;
- Is sufficiently large and flexible in its configuration so that it can accommodate the range of sizes of distribution centre warehouse units now required by the market;
- Is served from an electricity supply grid with sufficient capacity to permit the charging of large fleets of battery-electric freight vehicles simultaneously, or part of the electricity supply grid which can be upgraded (network reinforcement) relatively easily and at a reasonable cost;
- Is accessible to labour, including the ability to be served by sustainable transport, and located close to areas of employment need; and
- Is located away from incompatible land-uses.

11.18 Given that it is unrealistic in both planning and logistics demand terms to expect all new large scale distribution activity to locate at a directly rail-served strategic logistics site, appropriate road only sites can therefore be considered ones which meet all the other criteria outlined above bar the modal choice requirements (i.e. third and fourth criteria). It is also noted that ecological surveys alongside other studies e.g. flood risk, will also be required to ensure that potential sites are suitable for hosting large warehouses.

11.19 In order to ensure that there is a sufficient pipeline of sites (across the Areas of Opportunity identified), new land meeting the criteria outlined above should be identified and allocated in the following sequential order, namely:

- The extension of existing strategic distribution sites, both rail-served and road-only connected. For existing rail-served sites, this should only be permitted where there is spare capacity available at the existing rail freight terminal or capacity can be enhanced as part of any extension. Likewise, site extensions should only be permitted where there is adequate road capacity serving the site and at adjacent motorway/dual carriageway junctions or capacity can be enhanced as part of any extension;

- In circumstances where rail-served sites cannot be extended, local plans should consider satellite sites (which shall be located close to the existing strategic distribution sites) which meet the site selection criteria and could utilise the existing rail freight infrastructure at the core site. A prerequisite for satellite sites to be considered should be spare rail capacity being available at the core site rail terminal or capacity that can be enhanced as part of any satellite development;
 - Identifying suitable new strategic distribution sites on previously developed land which meet the site selection criteria; and
 - Identifying suitable new strategic distribution sites on greenfield land which meet the site selection criteria.
- 11.20 To enable the potential of strategic distribution sites to be realised, the following uses should not normally be permitted at strategic distribution sites;
- Class E (former B1) uses (unless ancillary)
 - B2 General industrial (unless ancillary)
 - Un-related smaller units.
- 11.21 Back-office functions and telephone call-centres related to the fulfilment of orders from the attached warehouse or product returns from customers to that warehouse should be considered as ancillary
- 11.22 It is acknowledged that the principal use of strategic logistics sites will be for B8 uses. However, 'just in time' production and processing units with substantial elements of storage and distribution (30%+ for production and processing) should be permitted. It is also relevant that there are many more large units which have B2 and B8 activities being undertaken within a single building which also offer a significant number of employment opportunities. Other uses will not be acceptable on strategic logistics sites.
- 11.23 One of the functions of strategic logistics sites will be the ability to offer larger plot sizes to be able to accommodate the large footprint buildings increasingly required by the market. It would therefore conflict with their wider objectives if smaller units were developed which compromised the size of available plots. It is therefore recommended that a minimum unit size of 9,000 square metres be imposed to address this.
- 11.24 In order to complement the above, from a market perspective it would be beneficial for local plan policies to identify the characteristics and expectations for strategic logistics sites to inform developers/occupiers. These should include:
- 24/7 unrestricted operating hours (see Section 16 also);
 - Good road and rail freight access (for those sites which will be rail-served);

- The ability to deliver high-bay warehousing at least 20m height;
- Preferred plot ratios being a minimum of 0.25 for rail and 0.35 for road and building sizes of over 9,000 sqm;
- Capacity of the electricity grid connections, stance on renewable energy generation;
- Servicing requirements and HGV parking standards (see Section 15 also);
- Phasing of infrastructure and periphery landscaping requirements;
- Green transport initiatives and public transport expectations; and
- Noise/lighting expectations.

11.25 The advice presented in the Leicester and Leicestershire SDS covering the 'Duty to Co-operate' requirement and the need to take forward land use strategies and allocations on a long-term collaborative basis remains valid (Section 4 – SDS Final Report). This included the formation of a strategic distribution sites selection task group to identify and discuss opportunities and determine the most suitable sites to bring forward in local plans.

11.26 For the purposes of this report, the floorspace needs and areas of opportunity are all targeted at strategic warehouses of 9,000 sqm and above. Such facilities are more typical to the National Distribution Centre role that Leicestershire provides as part of the Golden Triangle.

11.27 However, it is recognised that there is an increasing need to provide last mile distribution facilities for sub-regional and local distribution. These facilities typically range from 25,000 to 50,000 sqft (2,300 to 4,600 sqm) or where larger would not normally exceed 9,000 sqm. As set out in section they 16 can also be much smaller when fitting into the tighter grain of urban areas. The requirement for such facilities is likely to increase going forwards with a greater emphasis on online retailing.

11.28 The role of these facilities is typically to receive HGV shipments for cross docking into delivery LGVs which serve a distribution area. Last mile facilities typically locate on the edge of urban areas where access to both the SRN and local road network is good and journey distances are suitable for electric vehicles. DPD's 65,000 sqft facility on Kirby Road, Glenfield west of Leicester is understood to play such a role. The increased demand for more specific time slots and electric vehicles in dense urban areas promotes smaller facilities with all electric or bicycle delivery (see section 16).

12 MONITORING

- 12.1 In order to effectively and consistently monitor warehousing and logistics sector development, it is recommended that data monitoring and collection are actively pursued beyond the individual authority level. The most useful area to be considered would be the Leicester and Leicestershire authorities given the existing working relationships between authorities and the nature of the requirements of this study. Consideration could be given to a longer list of authorities (being those in Table 18, the Wider Golden Triangle area) establishing a significant sub regional data pool with broader coverage particularly given the logistics parks at DIRFT, Hams Hall, Northampton Gateway etc,
- 12.2 In the first instance the roles and responsibilities for this need to be defined with a particular organisation and/or individual collecting and managing data. The individual planning authorities will need to feed in data to the appointed managing organisation.
- 12.3 The following data sets are recommended for collation, the majority of which should be obtainable through the development control officers or planning policy teams:
- Collate existing supply data in terms of allocations and permissions (information in section 6 / Appendix C of this report provides a starting point being March 31st 2020 monitoring)
 - Identify new applications for sites with units over 9,000 sqm + of B2/B8 noting:
 - Validation date;
 - Permitted date;
 - Completed date;
 - Whether allocated / unallocated site;
 - Whether Rail / Non rail serving;
 - Whether in an opportunity area or not;
 - Whether Greenfield / brownfield type and if brownfield the nature of previous use (enabling a record of refurbishment where relevant)
 - Any known employment data provided with applications
 - Building heights
 - Ancillary floorspace where known
 - Any information available regarding size and type (speculative, pre-let) of units
 - Any applications involving losses of existing floorspace of at least 9,000 sqm+ B2/B8 use
 - Record completed SQM floorspace (i.e. completions) - including mezzanine¹³ - and Ha of plots, with sqm the primary measure of the two.

¹³ Mezzanines play an increasingly central role in logistics functions and should be able to contribute to overall floorspace need

- 12.4 The completed sqm of floorspace is considered the single most important aspect of the monitoring to enable a record of total new floorspace added. The overall need figure of 2,571,000 should be used for planning policy monitoring comprised of the separate rail (1,106,000 sqm inc margin) and road (1,466,000 sqm inc margin) components. The current proportion of rail accessible warehousing is considerably below 43% and may not achieve the expected levels of take up until later in the study period. Flexibility should therefore be applied to the timescales for road / rail split set out in this report (tables 72 & 73 for example).
- 12.5 The gross gains (completions) are the monitoring target rather than net change from the baseline stock position (reported as a baseline position of 2,144,000 sqm March 2020). This is as the model assumes some loss of older stock - being the replacement demand component.
- 12.6 It is acknowledged that the consistency between modelling methods / dates and monitoring dates are imperfect, as the preferred needs model is calendar year (driven by traffic growth and VOA data, although uses a market assessment dated April 2020) and authority monitoring is financial year. For ease, it is recommended that the needs monitoring is aligned to the financial monitoring period for that year ie 1/4/2020 to 1/4/2041. A further complication relates to the exclusion of pre-lets (supply not yet completed with a committed occupier as of April 2020) from the preferred needs modelling methodology. Therefore supply for pre-lets and its completion should be excluded from contributing to the overall need identified here, whilst still being recorded by authority monitoring reports.
- 12.7 If an online system is developed for collecting information it may be possible for officers to enter the data at the point of receipt, for example, at the same time they upload to the local planning portal. Otherwise, it is recommended that the data is collected quarterly to provide a useful tool for considering large scale applications across the county and informing policy review on an ongoing basis.
- 12.8 Given the importance of replacement demand unit requirements in assessing future needs the monitoring of any losses or refurbishments should be reported. However, there may be instances where losses are not readily monitored through the planning system depending on the original permission and what works might be needed to change the unit's operation. Permitted Development Rights may not be monitored completely. The authorities may benefit from site surveys of major parks on annual or alternate years to maintain a register of site activity. It may also be possible to pursue this monitoring through VOA data records.

- 12.9 It would also be useful for officers to understand the marketplace in terms of take-up of units, net absorption (total additional occupied space in a year after new occupants and lease breaks) and availability across Leicester and Leicestershire and possibly across both the East and West Midlands. This data is normally accessed via paid-for systems such as CoStar or EGi Radius. Consultants could provide this for a limited fee on a quarterly or less regular basis. A number of large agents also produce regular reports on the state of the regional industrial / warehouse markets which are published free of charge.
- 12.10 In addition, it may be useful to have a greater degree of engagement with the private sector. Industry events such as a short breakfast briefing could be held bi-annually with development industry (agents, developers, consultants) to discuss the state of the Leicestershire / Golden Triangle warehousing market. Attendees could be invited to make short presentations on a topic or their views of the market and officers providing a similar perspective.

13 FLOORSPACE SCENARIO IMPLICATIONS ON EMPLOYMENT

13.1 This section of the report considers the labour market implications of the low and high preferred scenarios, those being:

- **Low scenario:** Low replacement demand, central traffic growth: 1,418,000 sqm to 2041 (excluding margin)
- **High scenario:** High replacement demand, higher sensitivity traffic growth: 1,928,000 sqm to 2041 (excluding margin)

13.2 As the margin is intended to provide choice, flexibility and vacancy it is assumed that this would not be built out in full, however the implications are considered below.

13.3 The commentary on this section on employment and related housing implications should be viewed as indicative and used in conjunction with other studies and assessments on employment, population and housing change including the government's standard methodology.

Job Creation

13.4 The first step is to assess employment creation through warehousing growth.

Employment Densities

13.5 For large scale warehousing employment, the density of 95 sqm per FTE employee is assumed as a starting position. This aligns with the 2015 HCA Density Guide for NDCs. It also aligns with the 2018 Prologis study of their occupiers (see section 14). It is of note that in the Prologis study for occupiers over 9,000 sqm the density decreases to 100 sqm per employee and for units of over 20,000 sqm the density decreases to 110 sqm per employee. In some cases, warehouses are reported to have a density of up to 350 sqm per employee.

13.6 For a number of reasons, it is expected that employment densities at large scale warehouses will decrease in the future. For example, Brexit is likely to decrease the available labour market supply in a sector where competition is already high. Such a shortage of labour is likely to encourage automation particularly as the size of the largest units continues to rise.

13.7 Engagement with stakeholders suggests that average employment densities could fall by 50-100% due to efficiency gains over the next twenty years. A 50% improvement in efficiency by 2041 would result in an employment density of 143 sqm per employee. A mid-point of the current and potential densities would be 119 sqm per employee and is used as an average guide for future development

across the period as a whole, but that anything up to 143 sqm could be realistic given the increasing scale of units.

Traffic growth and replacement demand employment

- 13.8 As purpose-built large-scale warehouses were developed from the late 1980s onwards through to the 2000s, the older facilities subsequently vacated by occupiers were demolished and the land re-occupied. In many cases this was for non-employment uses (such as housing) or other employment uses not related to the logistics sector (e.g. retail).
- 13.9 This was principally due to older facilities often being physically obsolete or being poorly located for modern logistics facilities (e.g. close to residential or accessed by unsuitable roads). In these circumstances, new-build warehousing was, in-part, a direct replacement for the floorspace capacity subsequently demolished elsewhere.
- 13.10 Likewise, existing staff either directly transferred to the new replacement facility or left the logistics sector and were replaced on a one-for-one basis. Employment growth was therefore a function of any resultant net increase in floorspace (the growth build element).
- 13.11 However, warehousing developed since the 1990s which is now being vacated is in a different position. These buildings are generally in good physical condition (albeit some fixtures such as cladding, insulation and life-expired electrical systems will often need replacing) and are normally well-located, being on purpose-built industrial estates and near to motorway junctions.
- 13.12 However, their size and configuration often means many of them are now unsuited to occupiers moving large volumes of consumer cargo. This reflects a number of trends in the requirements for new industry stock including:
- Heights moving from 10-12 m to 15-21m. Automation can allow operating heights of 22m to 30m above the reach of a forklift truck¹⁴ with significant mezzanine operations. Proligis DIRFT 535 unit is 21m high.
 - Automation has a high-power requirement which will require a new or significant refurbishment of existing units.
 - Diminishing labour availability due to competition and the potential contraction of European labour due to Brexit means automation and future proofing is essential for many operators.
- 13.13 Older warehouses have therefore become increasingly functionally obsolete, and subsequently difficult to let to many occupiers in their current form. In order to attract more modern and

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<https://www.avisonyoung.co.uk/documents/38901/59345308/The+rising+warehouse+-+man+and+machine.pdf/5f2b30ae-94bb-482f-b2f1-11390698c884>

technologically advanced warehousing operators and maintain a competitive advantage there needs to be an adequate supply of the most modern facilities.

- 13.14 Notwithstanding, it is often not financially viable to redevelop units and second-hand rental values can continue to be achieved therefore owners are not prepared to sanction the demolition of what are otherwise physically sound buildings. They may also be in locations not suited to residential for example, if adjacent or within wider distribution parks. It is of note that an estimated 80% of Leicestershire's warehousing stock has been delivered since 1990 with a considerable volume of Magna Park developed out through the 1990s.
- 13.15 In order to continue generating income from vacated warehouse units, owners have often sought to re-structure them for other uses during any post-occupancy refurbishment. This can include a range of approaches including dividing what was hitherto one building into multiple units for re-letting e.g. a 25,000 square metre warehouse could be divided into 4 x 6,250 square metre units. These multiple units will then be re-let for smaller scale storage, general industrial usage, business-to-business retail (e.g. cash and carry, building trade) or low-level manufacturing.
- 13.16 It is recognised that older units built since the 1990s and more so since 2000 onwards may increasingly see a tendency towards refurbishment and re-use for distribution, particularly where located in prime distribution parks. It is of note for example that an estimated 80% of Leicestershire's warehousing stock has been delivered since 1990 (see table 10) with a considerable volume of Magna Park developed out through the 1990s. The ability for such units to contribute to the demands of modern distribution needs should be monitored (see section 12) and inform future updates of modelled need, particularly as some of these units will shortly be reaching a 30 year life span. This will influence the rate of replacement demand, which could move from the recommended 30 year assumption to 40 years as well as influence the expectation of sites being recycled rather than always requiring new land.
- 13.17 Overall it is likely that larger units even where no longer facilitating prime distribution are increasingly likely to continue to host employment (potentially still in the logistics sector, albeit not necessarily in large scale warehousing). In such circumstances, the 'replacement' element of any subsequent new-build will generate employment growth, rather than just the net increase in floor space which is theoretically re housing occupiers needing new space.

- 13.18 Consider the 'High replacement, higher sensitivity traffic growth' scenario for the land use forecasts, requiring 1,928,000 sqm to 2041. We would expect, as a starting point, the 'growth build' element (net floorspace increase) to generate new jobs at around 95 sqm per full-time equivalent (FTE) as per density A in Table 52.
- 13.19 The 'replacement build' component employment generation is considerably less certain. As noted the principle of replacing old for new stock suggests that there would be no overall net gain in employment as occupiers move from old to new stock – this would in fact decrease with falling densities. The matter of net gains relies therefore on the future use of the older stock being replaced as it falls out of primary strategic distribution. It is estimated that around 50% of stock being replaced will continue to host some form of employment – monitoring over time will provide greater insight into this rate. The 50% estimate is based on evidence that 70% of stock requiring replacement under the 30 year model (pre 2010 units) are based in Harborough (the majority, being 50%) and in North West Leicestershire (20%) (as set out earlier in table 10). If we assume that most, but not all, of these units are retained for employment, whereas few units in other authorities are, then 50% is a reasonable approximation. Under this assumption the density for the replacement element employment is 190 sqm per employee (being half 95 sqm per employee). For ease it is assumed that employment in the replacement demand occurs at the original rate and continues in the warehousing or similar sector.
- 13.20 Table 52 reports the modelled employment outcomes based on the above assumptions being:
- The traffic growth (net gain) element will generate 1,600 - 2,000 jobs under the central scenario and 2,500 to 3,100 jobs under the higher sensitivity scenario.
 - The replacement demand element is estimated to generate 3,600 – 6,400 jobs under the low replacement scenario and 4,800 to 8,500 jobs under the high scenario depending on densities. This includes a fall in employment for those 're occupying' new replacement demand premises at a lower density than in older stock. There is less certainty regarding employment generation for this element.
 - The margin could account for an extra 5,100 – 6,400 jobs. Given the role of the margin is to allow for choice, flexibility and vacancy it is not realistic that this element would be developed in full. For the purpose of this exercise it is assumed that 50% of the margin is developed and it is assumed that the margin is all net growth although this could fall by around 1,500 jobs if replacement demand is a driver at the same rate as total need.
 - In terms of indirect and induced employment we assume a multiplier of 1.25. This takes the HCA Additionality Guide (Fourth Edition, 2015) average composite multiplier for all interventions / effects at the sub regional level. Displacement is assumed to be dealt with through the replacement demand model and leakage considered in the FEMA analysis that follows. We note the potential for double counting as it is likely that indirect supply chain employment generation is likely to be captured in part in replacement demand occupiers – for example HGV / LGV

automotive repair occupiers at former warehouse units. As such the indirect employment figures should be treated with caution.

Table 52: Scenario employment generation

Type	TG central (1)	TG high (2)	RD low (3)	RD high (4)	Total low (1+3)	Total high (2+4)	Margin @50%	Total low + margin	Total high + margin
Base floorspace (sqm)	203,000	308,000	1,215,000	1,620,000	1,418,000	1,928,000	321,695	1,739,695	2,249,695
95% GEA:GIA (sqm)	192,850	292,600	1,154,250	1,539,000	1,347,100	1,831,600	305,610	1,652,710	2,137,210
Employment density A	95	95	190	190	-	-	95		
Direct employment generated A	2,030	3,080	6,395	8,526	8,425	11,606	3,217	11,642	14,823
Employment density B	119	119	236	236	-	-	119		
Direct employment generated B			-2,450*	-3,267*					
Indirect employment A	1,624	2,464	3,625	4,833	5,249	7,279	2,754	7,823	9,871
Indirect employment B	508	770	1,599	2,132	2,106	2,902	804	2,106	3,706
Total employment A	406	616	906	1,208	1,312	1,824	643	1,956	2,468
Total employment B	2,538	3,850	7,993	10,658	10,531	14,508	4,021	13,748	18,529

Source: MDS Transmodal

- 13.21 Taking into account direct employment creation and assuming a decrease in employment densities over time, the estimated total employment for the **low growth scenario is 1,624 full time equivalents (net growth), 3,625 (replacement demand) and 2,754 through the margin, totalling 7,823; and for the high growth is 2,464 (net growth), 6,395 full time equivalents (replacement demand) and 2,754 margin, totalling 9,871.** It is of note that the traffic growth driven element is

expected to generate warehousing related employment, whereas the replacement demand element could manifest in this or alternate employment. For the purpose of this exercise it is assumed all employment growth is warehousing or related and as table 69 indicates the distribution parks record a range of employment types.

Types of job growth

- 13.22 Forecasting jobs, skills and occupation for a fast-changing sector 20 years ahead is fraught with uncertainty. Below we use current data and trends to provide an estimated profile, this should be read as indicative.
- 13.23 Sector studies by the industry indicate that the skills most required in the future will be drivers, managers, mechanical engineers, electrical engineers and computer specialists.
- 13.24 The following section (14) provides an analysis of the breakdown of the current warehousing employment in terms of sector, skills and occupation. This can be projected against the expected (direct) employment growth by scenario to estimate the future employment types, notwithstanding changes in the future.

Job type

- 13.25 Drawing on the 2018 Prologis occupant survey it is suggested that under the decreased densities (Forecast B above) model the 9,871 direct jobs under the high growth scenario could generate around 2,549 office jobs and 1,299 manager jobs, as reported in Table 53 (Forecast B). This assumes that the current ratios across staff types in moving from 95 sqm per employee to 119 sqm per employee are continued. Forecast B(i) assumes that all efficiency savings are made in warehouse floor staff, thus increasing employment across the range of other types. This would suggest some 3,1292 jobs in offices and 1,628 manager jobs.

Table 53: Future warehousing job type (assumes 119 sqm per FTE)

	Office	Warehouse	Driver	Manager	Other	Total
2018 Prologis survey (9,000 sqm+)*	26%	46%	9%	13%	7%	100%
Low growth Forecast A	2,020	3,579	679	1,030	515	7,823
Low growth Forecast A(i)*	2,530	2,507	851	1,290	645	7,823
High growth Forecast B	2,549	4,516	857	1,299	650	9,871
High growth Forecast B(i)*	3,192	5,657	1,074	1,628	814	9,871

Source: Prologis 2018 / GL Hearn

(i) assumes all density efficiencies in warehouse staff

* figures adjusted from published survey to remove units under 9,000 sqm

- 13.26 Given the change in employment profile brought about by decreases in warehouse staff (from around 70% in 2006 to under 50% in 2018) Forecast B(i) is plausible and could indicate that the rate of decrease for warehouse staff in fact occurs more rapidly. However, in the 2010 – 2018 period, the proportion of warehouse staff has been more steady according to Prologis.
- 13.27 At present automation is occurring in a number of ways, notably in picking; automated vehicles such as forklift replacements; and inventory management. Whilst this theoretically allows for a lower intensity of labour use, at present the decrease has been limited because for example as person 'packers' still match automated 'pickers' and rather automation increases overall efficiency.
- 13.28 There is also considerable diversity in the employment needs of large-scale warehouse occupiers. These range from 3PL distributors to automotive distribution, food and clothing. Each has different requirements that might include refrigeration or the ability to cope with particularly large or heavy goods throughput. Each therefore has a specific range of technical labour requirements.
- 13.29 There is no current conclusive view on the way future employment will change in warehouses however labour competition remains high in the Golden Triangle and the sector is working pre-emptively to future proof.
- 13.30 In terms of part time and full-time work, analysis of 2018 data from BRES for the Leicestershire warehousing workforce suggests that 91% are full time and 9% part time work, increasing to 13% incorporating wholesale activities. This compares with 22% part-time reported in the Prologis 2018 occupier survey, although previous surveys were at 12% and 11%.
- 13.31 Whilst a decrease in warehouse floor jobs over time may lead to a reduction in part time workers, as a national trend all jobs are seeing greater flexibility in part-time working which may dilute the industry specifics.

Skills

- 13.32 Forecasting skills and occupation types in the future is equally indicative. With limited evidence, we have drawn on the 2011 Census for employment at existing distribution parks (set out in section 14), providing an estimated baseline skills profile for future jobs as set out below.

- 13.33 This is then rebased to the efficiency assumptions referred to above under Forecast B, where decreases in employment resulting from density decreases only apply to warehouse operatives (30% reduction), split across 'level 1' and 'no qualifications'.

Table 54: Future warehouse employment skills profile (assumes 119 sqm per FTE)

	Distribution Parks 2011	Future employment (low)	Future employment (high)	Rebased (low)	Rebased (high)
	100%	7,823	9,871	7,823	9,871
Level 4+ qualifications	23%	1,799	2,270	1,949	2,459
Level 3 qualifications	14%	1,095	1,382	1,186	1,497
Level 2 qualifications	19%	1,486	1,875	1,610	2,031
Level 1 qualifications	18%	1,408	1,777	1,197	1,510
Apprenticeships / other	12%	939	1,185	1,017	1,283
No qualifications	13%	1,017	1,283	864	1,091

Source: Census 2011 / GL Hearn

- 13.34 The resulting increase is then redistributed across other qualification levels. This results in a split of 40% of staff in level 3 / 4 qualifications (degree and above) and 60% in level 2 or below. For comparison across all industries the current rate is 46% level 3 / 4.

Occupation

- 13.35 Following the same method as above we have estimated a future occupation profile for warehousing. This assessment is again vulnerable to error given increasing automation in the sector and the types of skills required. As a result, the occupations have been merged into bands as below.
- 13.36 We initially estimate a projection of the 2011 profile and then rebase this to an adjusted profile which assumes efficiency gains (reduced growth) due to density decreases in occupations 7-9. This calculation suggests that in the future 35% of warehouse jobs will be in the top 3 occupation bands compared with 47% for all industries (2019). This is a significant increase from 28% at present and represents a notable improvement in the quality of jobs on these sites. Conversely, lower band occupations would fall from 46% to 32%, comparable to all industries in 2019.

Table 55: Future warehouse employment occupation profile (assumes 119 sqm per FTE)

Occupation band	Distribution Parks 2011	Future employment (low)	Future employment (high)	Rebased (low)	Rebased (high)
1.2.3. Manager / Professional / Technical	28%	2,190	2,764	2,772	3,497
4.5.6 Admin / trade / other	26%	2,034	2,566	2,532	3,195

7.8.9. Sales, operatives, elementary	46%	3,599	4,541	2,519	3,178
Total	100%	7,823	9,871	7,823	9,871

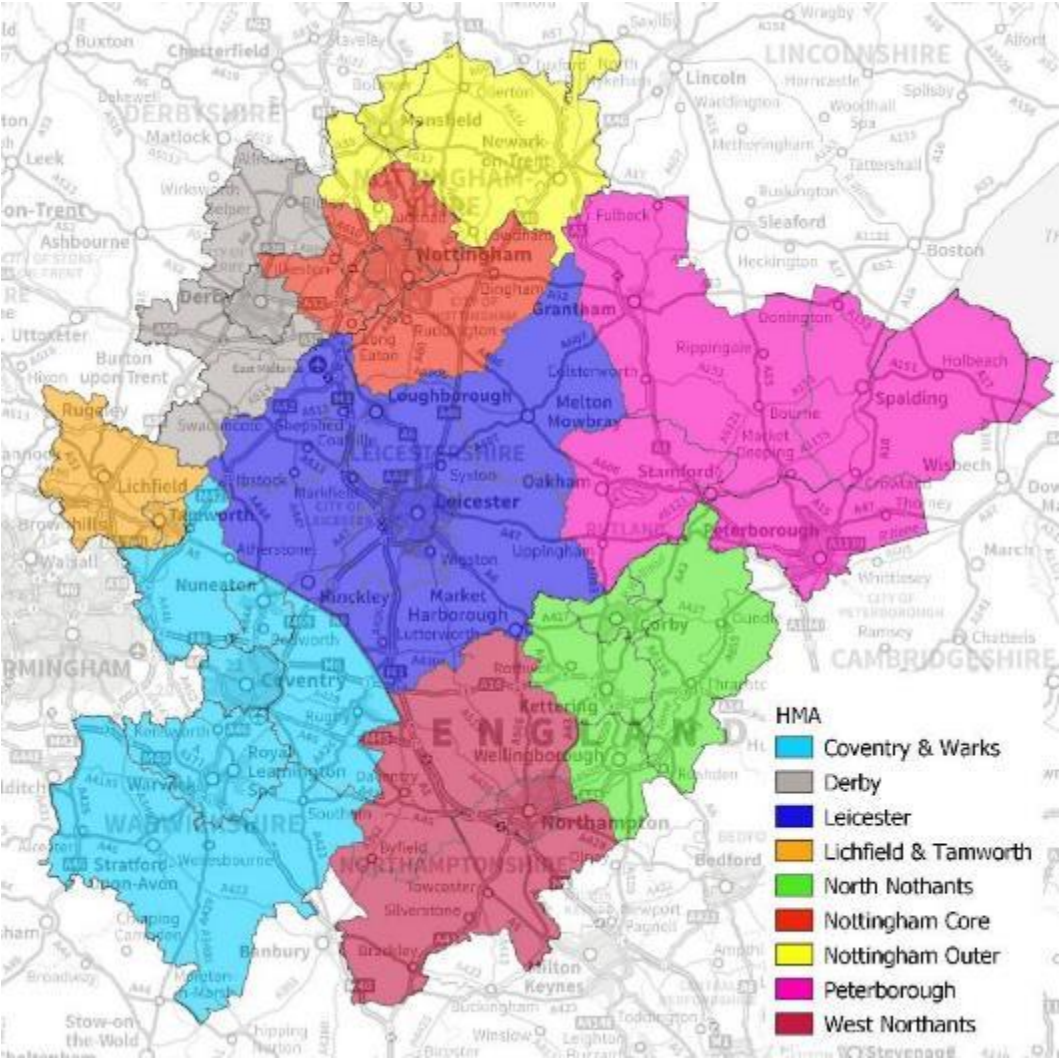
Source: Census 2011 / GL Hearn

Effects on the FEMA and adjacent FEMAs

- 13.37 The purpose of this section of the report is to examine the potential impact on labour markets and commuting in Leicester and Leicestershire as well as areas surrounding it as a result of the forecast warehousing growth to 2041.

- 13.38 We have established the surrounding local authorities and the Housing Market Areas in which they reside. These are defined by the relevant SHMA documents for those authorities. As the map in Figure 16 below shows the 13 adjoining authorities to Leicestershire reside in 8 HMAs. These HMAs cover 30 local authorities in total.

Figure 16: HMA Surrounding Leicestershire



Source: GLH based on OS data

13.39 The next step in the process is to examine the likely number of forecast jobs in Leicestershire which will be taken up by residents in each HMA. To do this we have drawn on commuting patterns from the 2011 census. While this is somewhat dated it is the only robust and nationally available dataset. Although the analysis in section 14 takes into account major distribution park employment patterns, this also relies on 2011 Census data. The future patterns modelled below are based on all commutes, assuming without prejudice the future supply locations. More detailed analysis could be undertaken of individual locations of demand / supply when known and may benefit the preparation of local plans.

13.40 As set out in Table 56 the vast majority of jobs (84%) in Leicester and Leicestershire in 2011 are taken up by Leicester and Leicestershire residents. Around 4.2% of the current workforce reside outside of the study area and its immediately adjacent HMA, with only Birmingham and East Staffordshire providing more than 1,000 workers.

Table 56: Location of Residence of those Working in Leicester and Leicestershire (2011)

Usual Residence	L&L Workforce	% L&L Workforce
Leicester & Leicestershire	326,133	83.7%
Nottingham Core	13,308	3.4%
Coventry and Warwickshire	12,146	3.1%
Derby	10,062	2.6%
Peterborough	3,223	0.8%
North Northants	2,269	0.6%
West Northants	2,192	0.6%
Nottingham Outer	1,681	0.4%
Lichfield & Tamworth	1,359	0.3%
Elsewhere	17,075	4.4%
Total	389,448	100.0%

Source: ONS, 2011 Census

13.41 The largest percentage of jobs taken up by residents outside of the study area are those by residents in the Nottingham Core, Coventry and Warwickshire and Derby HMAs, with all other HMAs providing less than 1% of the workforce.

13.42 Within the confines of this report, we rely on the 2011 Census data and without prejudice of future supply. In reality warehouse worker drive times are typically 30 minutes and no more than 45 minutes as confirmed by stakeholders engaged during this study. A more accurate model of future warehouse worker origins would use this data to generate travel to work areas for future supply locations and this is how many operators approach an assessment of unit viability. East Midlands Gateway for example is reportedly popular given its north south / east west accessibility. This can be seen through Census based modelling in section 14.

13.43 To test the spatial effects of the anticipated warehousing employment growth we firstly need to translate the additional 7,823 FTE jobs from the low growth and 9,871 FTE jobs from the high growth scenarios to total jobs. To do this we have assumed that 11% of all distribution jobs are Part-Time and 89% are full time, in line with current BRES 2018 data on warehousing employment in

Leicestershire. If we further assume that all part-time jobs are the equivalent of half a full time job. This results in the FTE jobs being the equivalent of 88.5% of total jobs. As a result the total jobs for each scenario is 8,840 to 11,154 respectively.

- 13.44 As Table 57 sets out, if these additional jobs are taken up by residents in the same way as they did in 2011 (acknowledging the identified limitations) then 7,403 and 9,341 of the additional jobs in the low and high scenario will be taken up by Leicester and Leicestershire residents.

Table 57: Potential Location of Residence for workforce taking up additional Jobs.

Usual Residence	Low Growth	High Growth
Leicester & Leicestershire	7,403	9,341
Nottingham Core	302	381
Coventry and Warwickshire	276	348
Derby	228	288
Peterborough	73	92
North Northants	52	65
West Northants	50	63
Nottingham Outer	38	48
Lichfield & Tamworth	31	39
Elsewhere	388	489
Total	8,840	11,154

Source: GLH, based on ONS data

- 13.45 Outside of the study area, all HMAs would send less than 400 residents in the high growth scenario. Only 4 HMAs would send more than 100 residents in the high growth scenario and only 3 HMAs in the low growth scenario.
- 13.46 With Leicester and Leicestershire providing the expected bulk of the workforce, there will be a need to understand how this interrelates with other expected employment growth and the balance of housing need generated from the standard methodology or Local Plan targets.

Local Authority Commuting Analysis

- 13.47 At a local authority level, the strongest flows into the study area from neighbouring HMAs based on all 2011 commuters are:
- From the Nottingham Core HMA
 - Rushcliffe to Charnwood

- Erewash and Nottingham to NWL
- From the Coventry and Warwickshire HMA
 - Nuneaton and Bedworth to Hinckley and Bosworth and Harborough
 - Rugby to Harborough
- From the Derby HMA
 - From Derby and South Derbyshire to NWL
- From the North Northants HMA
 - Kettering to Harborough

13.48 These major flows, and the more detailed local authority patterns, would suggest that the impact on traffic and travel would be minimal with the likely increases only being notable on the following major routes – subject to change based on final locations for additional supply:

- The A6/A50 between Derby and the M1
- The A6 between the M1 and Loughborough and Kettering and Market Harborough
- The A47 and A5 between Nuneaton and Lutterworth
- The A426 between Rugby and the M1
- The A14 between Kettering and the M1
- The M69 between Coventry and Leicester

13.49 In most cases, these are major routes and would likely have some spare capacity. Furthermore, any impact can also be reduced through encouraging increased use of public transport or other initiatives such as car-sharing for example as referred to in section 11 (para 11.24).

Housing Implications

13.50 Some of the additional workforce associated with warehouse growth may also require accommodation. We have made a high-level assessment of the housing need associated with the scale of additional residents working in Leicester and Leicestershire. To do this we have based it on the average number of adults in each household.

13.51 Recognising that the growth in jobs will not necessarily result in an increase in the same number of employed residents we have made an adjustment for double jobbing i.e. some people will have more than one job.

13.52 We have used the Annual Population Survey to identify the percentage of people in each local authority that have a second job. Based on long term trends (2004 to 2020) around 4% of the national workforce have more than one job. We have applied the local rates to the outputs of the previous

table. This shows an increase in the number of residents in employment of 8,482 in the low scenario and 10,702 in the high scenario.

- 13.53 The next step examines economic activity rates and recognises that there will be additional population who do not take up one of the additional warehousing jobs will also move to the area. As this is a high level assessment the calculation does not go into the same level of detail as similar approaches set out in a housing market or needs assessment - for example we have not taken into account different levels of economic activity for different age groups nor projected increases in economic activity which would alter the overall need.
- 13.54 We have again looked at the Annual Population Survey to identify the % of adults aged over 16 that are economically active. This is then applied to the number of residents in employment (8,482 in the low scenario and 10,702 in the high scenario) to get to a number of adults in the population.
- 13.55 At national level economic activity in those aged 16 and over has been around 64%. Although within Leicester and Leicestershire this ranges from 62.6% in Melton and North West Leicestershire to 68.7% in Charnwood. We have used an average rate over the last 6 reporting periods, this includes the year to June 2020 and therefore would pick up some Covid-19 related reductions in activity. When applied these rates result in an increase in population aged 16 and over of 13,006 in the High Scenario to 16,411.
- 13.56 To translate this growth in the adult population to a housing need we have followed a similar calculation used by the housing delivery test in calculating the number of homes being released by C2 bedspaces to C3. These calculations have been run at a local authority level and aggregated to an HMA level. The average number of adults per household ranges from 1.79 per household in Wellingborough to 1.9 per household in Lichfield
- 13.57 As Table 58 sets out the housing impact of the additional growth in the HMA ranges from 271 dpa to 342 dpa. In neighbouring HMAs the growth ranges from 1 to 15 dpa over the period 2020 – 2041. Only 3 HMA would be required to deliver double figures per annum and this would be divided across their local authorities.

Table 58: Housing Impact of Jobs Growth by HMA and Scenario

HMA	Low Scenario (2020-2041)	High Scenario (2020-2041)	Low Scenario Dw Per Annum	High Scenario Dw Per Annum
Leicester & Leicestershire	5,700	7,192	271	342
Nottingham Core	252	241	12	15
Coventry and Warwickshire	221	279	11	13
Derby	174	220	8	10
North Northants	57	72	3	3
Peterborough	47	59	2	3
West Northants	40	50	2	2
Nottingham Outer	32	40	2	2
Lichfield & Tamworth	24	31	1	1
Other, combined	322	406	15	19
Total	6,869	8,184	327	390

Source: GLH based on ONS data

13.58 In all cases, the identified figures above would only make up a very small percentage of the overall housing need as calculated using the standard method and are intended as an indicative guide. There is potential for this to change subject to the final choice of locations for additional sites to address shortfall for floorspace needs to 2041 as well as final employment required.

13.59 As noted above, with Leicester and Leicestershire providing the expected bulk of the workforce, there will be a need to understand how this interrelates with other expected employment growth and the balance of housing need generated from the standard methodology or Local Plan targets.

Latent Workforce

13.59 As well as delivering additional housing there is also a sizeable population in the study area and the surrounding local authorities who, as of December 2019, were economically inactive but wanted a job. While we recognise that not all of these people will be suitable for employment within the sector there is clearly a latent workforce who could take up at least some of the additional jobs resulting from warehousing growth and limit any upward pressure on housing.

13.60 Across the East Midlands, this totalled 146,700 people of which c.34,000 were resident within the study area. As Table 59 sets out there is a large number of residents (107,000 in total) in the

immediately adjacent HMAs who could take up some of the additional jobs in the study area without necessitating an additional home being built for them.

Table 59: Economically inactive who want a job by HMA (year to Dec 2019)

HMA	Economically inactive who want a job
Leicestershire	33,900
Nottingham Core	23,800
Derby	14,000
Lichfield & Tamworth	4,100
Coventry & Warwickshire	23,200
West Northants	9,400
North Northants	9,400
Peterborough	11,600
Nottingham Outer	11,700

Source: Annual Population Survey, 2020

14 LABOUR AND SKILLS

14.1 A further analysis has been undertaken to understand the changing labour market for large scale warehousing in Leicester and Leicestershire.

Commuting patterns

14.2 To examine the labour force within the logistics sector influencing the study area we have identified a number of major distribution parks based on their overall size and significance, these are:

- **Prologis DIRFT**, Daventry
- **Hams Hall**, North Warwickshire
- **Birch Coppice**, North Warwickshire
- **East Midlands Distribution Centre (EMDC)**, North West Leicestershire
- **East Midlands Gateway**, North West Leicestershire
- **Bardon Hill**, North West Leicestershire
- **Magna Park Lutterworth**, Harborough

14.3 To examine the existing commuting patterns we have used as a proxy for Park boundaries the Middle Super Output Area (MSOA) in which they reside. In most cases there is some employment in these MSOAs outside of the parks themselves but these will be a minor contributor to the total jobs figure. We have then used Census 2011¹⁵ data, being latest available dataset, to identify where the workforce in these MSOAs were originating.

14.4 To examine the employment numbers on these parks we have used 2018 BRES data for the more tightly defined Lower Layer Output Area (LSOAs). It is important to note that even LSOAs go beyond park boundaries and count employment outside the parks. This is highlighted where the case is material.

14.5 Despite the more recent job numbers and the slightly different boundaries we have assumed that the same commuting patterns are maintained for the 2018 data at the LSOA level as was the case in 2011 for the MSOA level. For brevity, only the local authorities with over 200 commuters are shown in the tables below.

14.6 DIRFT is located in north Daventry on the M1. The majority of employees come from Daventry and Rugby (51% combined). Residents of Coventry and Northampton make the next largest contributions

¹⁵ WU01EW - Location of usual residence and place of work by sex (MSOA level)

to the workforce supported by the major motorway links. Further development of DIRFT is expected in the future. The LSOA examined does include a large rural hinterland to the park.

Table 60: Prologis RFI DIRFT

Commuter LA	# of Employees Commuting
Rugby	1,982
Daventry	1,180
Coventry	623
Northampton	454
Nuneaton and Bedworth	266
Leicester	247
Total	6,180

Source: Census 2011, BRES (2018), GLH Analysis

- 14.7 Hams Hall is located in the west of North Warwickshire on the edge of the Birmingham conurbation on the M42 / M6. Birmingham supplies the largest labour pool almost double that of the next largest from Tamworth. Alongside North Warwickshire these three local authorities combined provide 59% of the workforce. The LSOA does include a large rural hinterland to the park.

Table 61: Hams Hall

Commuter LA	# of Employees Commuting
Birmingham	2,863
Tamworth	1,447
North Warwickshire	1,241
Solihull	793
Lichfield	406
Walsall	325
Sandwell	324
Total	9,365

Source: Census 2011, BRES (2018), GLH Analysis

- 14.8 Birch Coppice is located in the north west of North Warwickshire on the edge Tamworth and the M42/ A5 intersection. Tamworth and North Warwickshire supply the largest labour pool making up 53% of workforce, followed by Birmingham.

Table 62: Birch Coppice

Commuter LA	# of Employees Commuting
Tamworth	2,670
North Warwickshire	2,174
Birmingham	930
Nuneaton and Bedworth	648
Lichfield	385
Walsall	246
Total	9,195

Source: Census 2011, BRES (2018), GLH Analysis

- 14.9 East Midlands Distribution Centre (EMDC) is located in the north of North West Leicestershire, adjacent to Castle Donington and near the A50 / M1 interchange and East Midlands Airport. Given the accessibility, workers come from a range of origins including North West Leicestershire, Derby and Erewash.

Table 63: EMDC

Commuter LA	# of Employees Commuting
North West Leicestershire	616
Derby	538
Erewash	436
South Derbyshire	283
Charnwood	215
Total	3,375

Source: Census 2011, BRES (2018), GLH Analysis

- 14.10 Similarly East Midlands Gateway is located in the north of North West Leicestershire, adjacent to East Midlands Airport / Castle Donington and near the A50 / M1 interchange. Workers come particularly from North West Leicestershire, Charnwood, Derby and Erewash. It is of note that the LSOA includes part of the airport as well as Castle Donnington itself, the count therefore is likely to over represent employment in distribution in this instance.

Table 64: East Midlands Gateway

Commuter LA	# of Employees Commuting
North West Leicestershire	2,100
Charnwood	1,401
Derby	937
Erewash	859
Nottingham	630
Rushcliffe	584
South Derbyshire	398
Broxtowe	376
Leicester	219
Total	10,030

Source: Census 2011, BRES (2018), GLH Analysis

- 14.11 Bardon Hill is located in the south east of North West Leicestershire, adjacent to Coalville and near the A511 / M1 interchange. Workers come particularly from North West Leicestershire (46%) with the second largest number coming from Leicester.

Table 65: Bardon Hill

Commuter LA	# of Employees Commuting
North West Leicestershire	2,324
Leicester	502
Hinckley and Bosworth	476
Charnwood	465
Total	5,080

Source: Census 2011, BRES (2018), GLH Analysis

- 14.12 Magna Park is located near Lutterworth in the west of Harborough district near the A5 / M1 / M6 interchange. The workforce is drawn particularly from Harborough and Leicester (36%). The LSOA does include a large rural hinterland to the park.

Table 66: Magna Park Lutterworth

Commuter LA	# of Employees Commuting
Harborough	1,358
Leicester	1,249
Hinckley and Bosworth	884
Blaby	707
Nuneaton and Bedworth	644
Rugby	606
Coventry	527
Oadby and Wigston	202
Total	7,310

Source: Census 2011, BRES (2018), GLH Analysis

- 14.13 Table 68 below brings together all assessed park employment data (reporting authorities providing up to 1,500 employees or 65% of total). North West Leicestershire, hosting a number of major parks, provides the largest employment segment. Tamworth, Birmingham and North Warwickshire are next due to Hams Hall and Birch Coppice. Rugby supports DIRFT and the remaining authorities provide for a range of parks more centrally in Leicestershire.
- 14.14 The data does not seek to accurately report all warehouse employees, as it is for a select number of parks, is based on 2011 commute patterns and uses destination areas that encompass areas beyond the parks. Therefore, it should be used as a guide rather than definitive.

Table 67: All assessed parks

Commuter LA	# of Employees Commuting
North West Leicestershire	5,349
Tamworth	4,241
Birmingham	3,992
North Warwickshire	3,635
Rugby	2,679
Leicester	2,305
Charnwood	2,302
Hinckley and Bosworth	1,915
Nuneaton and Bedworth	1,818
Harborough	1,661
Derby	1,611
Coventry	1,527
TOTAL	50,535

Source: Census 2011, BRES (2018), GLH Analysis

- 14.15 Expansion / development is expected at a number of these parks (see supply analysis in section 6) , including Magna Park, EMDC and DIRFT. Assuming similar commuter patterns this would seek to draw further labour from Harborough, Leicester, North West Leicestershire, Rugby and Daventry respectively.
- 14.16 Within the Leicestershire authorities North West Leicestershire, Leicester and Charnwood provide the greatest workforce. However, given the higher population and centrality to the county, Leicester provides a relatively lower proportion of the workforce to these parks than one might expect.

Labour force composition

- 14.17 In order to consider the composition of the warehouse and logistics workforce in terms of skills and occupation a number of factors have been examined, these are set out below.

Employment by sector

- 14.18 The employment data derived from the MSOA/LSOA of the large distribution parks assessed above has been aggregated and considered further, as to a large extent, there is confidence in the workforce being largely dedicated to warehouse and logistics activity, and up to date for 2018 (with EMDC / airport being the exception in terms of area of assessment boundaries). The aggregation of these areas also dilutes the impact of any other non-logistics sectors.
- 14.19 To demonstrate this, the park employment data has been collated in terms of the most prominent 2-digit standard industrial classification (SIC) sector, providing insight into the types of activities in these parks. As shown in Table 68, warehousing and support activities are a major contributor to total employment in these areas, followed by wholesale trade and employment activities (temporary employment through recruitment agencies) then retail, wholesale, postal and land transport, all in total accounting for 61% of employment compared with 25% across the study area employment as a whole.

Table 68: Key Industrial Estates Workforce Breakdown

2-digit industry	# Employees
52: Warehousing and support activities for transportation	9,050
46: Wholesale trade, except of motor vehicles and motorcycles	4,675
78: Employment activities	4,610
47: Retail trade, except of motor vehicles and motorcycles	3,555
45: Wholesale and retail trade and repair of motor vehicles and motorcycles	3,205
53: Postal and courier activities	2,890
49: Land transport and transport via pipelines	2,735
70: Activities of head offices; management consultancy activities	1,930
29: Manufacture of motor vehicles, trailers and semi-trailers	1,670
55: Accommodation	1,410
56: Food and beverage service activities	1,345
80: Security and investigation activities*	1,050*
51: Air transport*	1,000*
Total	50,535

Source: BRES (2018), GLH Analysis

* likely to be attributable to East Midlands Airport rather than warehousing activities

- 14.20 Whilst these sectors are perhaps not unexpected, this analysis does suggest that a number of sectors, such as retail, could be considered a warehousing based activity but not warehousing specifically on its own. Of note around 4% of employment is reported in head offices and management consultancy.

Industry insight

- 14.21 Anecdotal evidence from industry stakeholders gathered as part of this study suggests a tight labour market for warehousing employees across Leicestershire, particularly for floor based staff. Competition between occupiers is high and small wage differentials can make a difference in recruiting and retaining staff, as can the quality of facilities at the employment premises. For example, parks or occupiers able to provide quality food and beverages on site or offer commuting support (buses, vouchers etc) are seen as advantageous.
- 14.22 Competition is such that occupiers will intentionally not take leases in distribution parks where particular competitors locate as they cannot compete with their staffing offers. This reinforces the importance of diversity in availability of premises to allow for market choice.
- 14.23 HGV drivers are currently considered to be particularly lacking, with anecdotal reports being that many are aged over 50 with younger workers not being attracted to the role and exacerbated by reductions in East European staff following the Brexit referendum. This has led to upward pressure on salaries and achieved wages of £50,000 pa and above for the role.
- 14.24 Prologis provide regular reports on the nature of distribution warehouse employment, the latest being in 2019¹⁶. This provides insight into jobs by type and density. Table 69 sets out the results for 2006 and 2018 and includes separate analysis of large 9,000sqm+ occupants.
- 14.25 The data reports that since Prologis began surveying their occupier's employees, in 2006 the percentage of warehouse floor workers has decreased and other categories increased, most notably office staff rising from 11% in 2006 to 25% by 2018. In contrast, managerial employment has increased from 7% in 2006 to 12% in 2018. The 2018 data for warehousing over 9,000 sqm is comparable to all units surveyed.

Table 69: Prologis occupier employment profile

Year / respondents	Warehouse	Driver	Office	Manager	Other	Total	Part Time	Full Time
2006	66%	12%	11%	7%	4%	100%	12%*	88%*
2018 (33)	49%	8%	25%	12%	6%	100%	21%	79%
2018 (9,000 sqm+) (24)	46%	9%	26%	13%	7%	100%	23%	77%

Source: Prologis

* 2010 data as question not asked in 2006

¹⁶ Prologis: 'Delivering the future: the changing nature of employment in distribution warehouses' (2019)

- 14.26 Table 69 also indicates an increasing tendency for part-time work within the industry with the percentage of jobs almost doubling within the last 12 years.
- 14.27 Employment densities have varied over time. In 2006 Prologis reported 95 sqm per employee was typical, increasing to 77 sqm at 2010 again at 2014. However, as of 2018 the densities have reverted to 96 sqm per person.
- 14.28 For large scale warehouses over 9,000 sqm the average employment density was 100 sqm per employee in 2018 but decreasing with even larger units some of which occasionally exceed 300 sqm per employee.
- 14.29 Whilst the data is based on a select number of national occupants, it is a useful record and suggests both that distribution warehousing is requiring a greater level of skilled employment overall; and that employment densities of 100 sqm or above can be reasonably expected in larger warehouses.
- 14.30 In addition, the Skills and Employment Report 2020 produced by Logistics UK Policy also provides useful information about the logistics industry employment. Key highlights include:
- The UK is (at 2020) facing a driver shortage of 76,000. The driver shortage is not just a problem for the UK; there is an estimated driver shortage of 36% across Europe.
 - Over the last 4 years (2015/16 to 2019/20), of those working in logistics the highest employment increases by occupation have been: electrical engineer employment, which has increased by 89.1%; purchasing managers increasing by 48.3%; and transport and distribution managers by 23.7%.
- 14.31 These trends are expected to continue in the future with the automation process requiring more skilled employment to service equipment and less of a need for floor staff. In addition, there is an increasing tendency for large scale warehouses to incorporate ancillary office space to provide a key role in business planning of other management functions.

15 HGV PARKING

15.1 A road freight vehicle's normal day-to-day activities can essentially be divided into three categories, namely:

- Being physically driven on the highway network, either carrying goods between origin/destination or running empty (empty re-positioning, trip to a workshop etc.);
- Stationary periods for operational reasons. This includes loading and discharging goods, workshop visits (maintenance) and vehicles parked at depots when not required, such as at weekends. In most cases, these types of stationary activity take place off the public highway (Operator Licences stipulate that freight vehicles are parked on suitable private land when not in use), the main exception being the delivery of goods into urban areas where road-side parking is sometimes required during the delivery process; and
- Stationary periods for non-operational reasons.

15.2 It is the third category, namely when road freight vehicles are required to park for non-operational reasons while away from their home depots, that can result in inappropriate parking and subsequent wider impacts, given the absence of suitable off-road parking facilities.

15.3 Road freight vehicles come in a range of types and sizes, though for regulatory purposes they can essentially be divided into four broad categories, namely:

- Light vans up to 3.5 tonnes gross vehicle weight (gvw);
- Medium sized rigid goods vehicles up to 7.5 tonnes gvw;
- Large rigid goods vehicles up to 32 tonnes gvw; and
- Large articulated goods vehicles (tractor unit hauling a semi-trailer) or large rigid goods vehicle towing a trailer up to 44 tonnes gvw.

15.4 Given their size and operational deployment characteristics, the main impacts associated with the parking of road freight vehicles for non-operational reasons are generally linked to the third and fourth categories of freight vehicle. However, it should be noted that the growth of e-commerce has led to increasing freight operations using light vans. While not much larger than cars (and they can be driven on a standard car driving licence), many off-highway car parks are inaccessible to light vans e.g. many have height restrictions to prevent access by travellers. Consequently, these types of vehicle also need to park on the highway.

15.5 There are three broad reasons why lorries need to park for non-operational reasons when they are away from their home depots.

1. Legally Required Breaks and Rest

- 15.6 The amount of time that a driver of a freight vehicle can drive and work are strictly regulated by the Drivers Hours Regulations or the GB domestic rules.
- 15.7 The Driver Hours Regulations are the principal set of laws governing day to day working time and break/rest period requirements. They cover drivers of most goods vehicles over 3.5 tonnes gvw when driving anywhere in the EU, an EEA country or Switzerland. The Regulations impose the following mandatory breaks and rest periods.
- A *break* period of at least 45 minutes must be taken after 4.5 hours driving;
 - A driver must have at least 11 hours *daily rest* between working shifts. This may be reduced to 9 hours three times per week; and
 - A driver must have at least 45 hours *weekly rest* between finishing work one week and starting work the next week. This may be reduced to 24 hours if a driver is away from his/her home base, however a driver must compensate for any reduced weekly rest periods by taking additional rest periods over subsequent weeks
- 15.8 Drivers of freight vehicles under 3.5 tonnes gvw follow the *GB domestic rules*, which limits daily driving to 10 hours. The requirement to take break periods under the *Working Time Directive* also applies.
- 15.9 Given the inherent nature of driving work, it is generally not possible for drivers of freight vehicles to take break periods at their home depots. Consequently, there is a need for drivers to park their vehicles while these break periods are undertaken. Break periods can be taken in the vehicle, however it must be stationary and the engine switched off if the driver is operating the vehicle alone (when vehicles have two drivers, breaks can be taken while the vehicle is driven by the second driver). Additionally, if drivers cannot return to their home depots at the end of a working shift, then there is a need to take the *daily rest* requirements out on the road. Again, drivers require suitable places to park (rest periods can be taken in a vehicle, but it must be stationary, and the engine switched off). In most cases drivers would use the vehicle bunk to sleep. While *daily rest* periods are predominantly taken over-night, statutory driving *breaks* take place across the 24-hour period (drivers on night shifts also need to take breaks, albeit 'demand' is higher in the daytime when more vehicles are on the road).

2. Waiting for Delivery/Collection Time Slots

- 15.10 Distribution centres and factories generally operate 'time window' systems for the inward delivery of goods. For example, a distribution centre will plan inbound deliveries during the daytime in order to replenish stock before that evening's outbound deliveries. Such a system also spreads inbound

deliveries over an extended time period. Otherwise, all inbound deliveries could arrive at the same time, causing congestion both inside and outside the distribution facility. A vehicle delivering to such a facility will usually be allocated a time slot during which the goods must be delivered, and in many cases the time slot can be as tight as plus/minus 10 minutes.

- 15.11 Missing an allocated time slot can result either in deliveries being rejected or the vehicle having to wait a considerable period of time before the load will be handled. In view of journey time un-reliability issues (highway network congestion), many freight operators consequently factor-in additional recovery time into their operating schedules to ensure that vehicles arrive on time and meet the allotted time slot. As a result, incident-free journeys mean that freight vehicles will often arrive early for their allocated time slot.
- 15.12 Consequently, there is a need for drivers to park freight vehicles a short distance from the delivery location and wait until their allotted delivery times. Early arrivals are generally not accepted; due to internal space issues most factories and distribution centres do not normally provide pre-delivery parking areas for vehicles which arrive early. Where feasible, drivers will plan to take their statutory break requirements while waiting for a delivery time slot. However, combining the two in this manner will not always be the case from an operational perspective.

3. Driver Amenities and Welfare

- 15.13 As with all employees, freight vehicle drivers are entitled to a healthy working environment. This includes the ability to undertake break periods (as noted above are statutory) and access to basic amenities, such as toilets, facilities to wash and access to food and drink refreshments during those break periods. While drivers are out on the road, it is obviously not possible to access such facilities that may be available at their home or destination depots. Consequently, there is a need for drivers to park their vehicles in order to gain access to such amenities.

Parking for Non-operational Reasons – Spatial Implications

- 15.14 It can be seen from the above that in most cases the need to park freight vehicles for non-operational reasons is short-term in nature. On average, freight vehicles would not need to park for more than one hour as drivers completed their statutory break period, ate a snack or visited the toilet. The exception to this is when drivers are required to undertake a daily rest period, which can be up to 11 hours and in most cases overnight (long-term need).

- 15.15 The first two reasons of parking need, namely *breaks/rests* and *waiting for delivery time slots*, could in the first instance suggest two different locational characteristics. Drivers needing to park in order to comply with driving break or daily rest requirements are more likely to require parking facilities located a short distance from the strategic highway network. This consequently ensures that any 'diversion' away from the strategic highway network is minimised. Conversely, drivers arriving early for a distribution centre delivery time slot will require parking facilities within a few minutes drive of their final delivery destination. This implies a need for parking facilities located close to or within major freight generating locations, such as an industrial estate or logistics park.
- 15.16 However, it is generally the case that major freight generators are located close to junctions on the strategic highway network (this being the case in Leicestershire, such as Magna Park). This consequently suggests freight vehicle parking facilities catering for drivers waiting to undertake deliveries can also provide for drivers needing to park in order to comply with driving break or daily rest requirements (with minimum diversion from the strategic highway network). Driver/vehicle throughput would also be maximised, which will be important should revenue need to be raised to cover running costs.
- 15.17 The third category of need, access to amenities, should therefore be considered non-locational in nature, and a need linked to the other two requirements. In this case, the level of amenity provision is related to whether the parking facility is providing short-term or long-term parking need. Drivers undertaking short-term parking should, as a minimum requirement, be provided with a safe parking area incorporating toilet and washing facilities, with the provision of light food and drink refreshments probably a 'nice to have' addition.
- 15.18 However, drivers undertaking long-term parking (overnight rest) require access to a higher level of amenities. As a minimum requirement, this should include the use of toilet and shower facilities and the ability to obtain a hot evening meal (either on-site or within a short walk). The provision of some form of 'entertainment' (bar, televisions etc..) could be considered a 'nice to have' addition. As per above, locating such facilities adjacent to the strategic highway network are more likely to be commercially viable, given that there would be a passing trade critical mass. As noted above, while *daily rest* periods are predominantly taken over-night, statutory driving *breaks* and *waiting for delivery time slots* take place across the 24-hour period. It is therefore vital that suitable sites are located where access is available 24 hours a day.

Consequences of Parking at Inappropriate Locations

- 15.19 The need to park freight vehicles, as described above, clearly implies a requirement for some form of 'parking space' where vehicles can be parked. Given a deficit of suitable lorry parking facilities in a particular area, this effectively forces road freight vehicles to park inappropriately on the public highway or at other unsuitable locations. The environmental consequences of this, for vehicles which can be up to 18.5m in length, include:
- Parking on the side of a highway and as a result impeding traffic flow, possibly causing congestion;
 - Parking at locations which are incompatible with the noise and exhaust pollution (running engines, refrigeration units) emitted by lorries e.g. residential area;
 - Causing damage to pavement or footpath infrastructure; and
 - Parking vehicles at locations which is not suited to the visual intrusiveness of lorries.
- 15.20 In addition, security issues and the concept of 'lorry crime' cannot be ignored. Organised criminals have in the past targeted freight vehicles, or to be more exact the contents of vehicles, as a source of goods from which to make money. Freight vehicles carrying high value and retail goods have been major targets, particularly goods which are then difficult to trace and can easily be re-sold on the black market or popular internet auction sites. Goods vehicles parked at isolated lay-bys or patches of waste land are obviously an easy target for criminals. The provision of off-road lorry parks with some form of security measures in place can thus be seen as a major weapon in the fight against lorry crime. At a basic level, this would include perimeter fencing, night-time lighting and CCTV, alongside the 'security' in numbers that comes with numerous freight vehicles being parked together. Barrier controlled entry should be considered for larger over-night parking.
- 15.21 Less obvious consequences of a lack of suitable parking facilities concerns the general working environment of goods vehicle drivers. For most employees based at one permanent work location, access to toilet and food and drink refreshment facilities is taken for granted. However, for goods vehicle drivers, the availability of such basic amenities is more problematic. Even if a driver finds a location where it is possible to park his/her vehicle which does not result in serious environmental consequences, there are unlikely to be toilet facilities available. In addition, not being able to access food or drink refreshments could potentially impact on a driver's ability to drive his/her vehicle in a safe manner. This situation is obviously not conducive to a safe and healthy working environment or road safety. Further, many roadside outlets selling food and drink (e.g. Costa, KFC etc..) are often accessible only by private car.

- 15.22 This situation also has potential long term economic consequences for the haulage industry. As previously noted, a shortage of qualified HGV drivers is one of the major challenges currently facing the industry. One of the reasons underlying these shortages and impacting (in a negative way) on current recruitment initiatives is the perceived poor working conditions compared to other similar level jobs. If recruitment into the industry is to be increased, then HGV driving will have to be promoted as an attractive career option with a safe and healthy working environment. The inability to access toilet facilities on a daily basis, as opposed to the use of a clean washroom, is hardly likely to attract potential employees. The provision of good parking facilities with basic amenities could assist the promotion of the industry and aid recruitment of new workers. Another key (and related) challenge is the recruitment of more female drivers into an industry which is still predominantly male.
- 15.23 A national survey of overnight lorry parking was undertaken in 2017 for the DfT (by consultants AECOM). The purpose of the survey was to provide a clear picture of the demand for lorry parking and facilities, including their capacity and utilisation, as well as other indicators of demands such as lorry parking in laybys and on industrial / retail estates. On a regional basis, the study quantified existing parking capacity at dedicated overnight lorry parks (e.g. MSAs, which were classified as 'on-site' parking). Current demand for parking was also established, at on-site facilities and within industrial estates and in lay-bys (classified as 'off-site' parking, which are considered to be unsuitable). Any surplus or deficit of parking capacity was subsequently identified, including the level of parking at unsuitable off-site locations. Work included both desk-top research and primary surveys.
- 15.24 The results for the East Midlands region are shown in Figure 17 (extracted from the National Survey report).

Figure 17: East Midland National Survey Report

East Midlands Regional Overview				
	On-site	Laybys	Industrial Estates	Total
Total Number of Vehicles Parked	1,550	921	561	3,032
Foreign vehicles (%)	20	24	28	24
Number of Sites	49	470	115	634
Utilisation	72%			
Lorry Park Capacity	2,167			
Excess vehicles	(Total Number of vehicles parked – Capacity = Excess)			865

Source: National Survey Report

- 15.25 For the East Midlands, the survey estimates that there is currently capacity for 2,167 HGVs at on-site parking facilities. Overnight demand is just over 3,000 HGVs per night, equating to an overall shortfall in capacity of around 865 HGVs. The area around Magna Park was specifically noted as being a ‘parking shortage hotspot’.

HGV Parking – Facilities Required

- 15.26 Drawing together all of the above, this implies a requirement to potentially develop two types of freight vehicle parking facility in the Leicestershire area to account for both current and potential future shortages to 2041. These are shown in Table 70.

Table 70: Types of Freight Vehicle Parking Facility in Leicestershire

Type	Minimum Requirements	Optional
Short-term Parking	<ul style="list-style-type: none"> • Perimeter fencing, CCTV recording and night-time lighting • 15 x 18.5m parking spaces • Toilets • 24 hour access • Waste and recycling facilities 	<ul style="list-style-type: none"> • Snack food and drink refreshments • Wi-fi
Short and long-term Parking	<ul style="list-style-type: none"> • Perimeter fencing, barrier entry, CCTV recording and night-time lighting • 50 x 18.5m parking spaces • Toilets and showers • Hot food and drink refreshments, either on-site or within a short walking distance • 24 hour access • Waste and recycling facilities 	<ul style="list-style-type: none"> • Bar, TV, entertainment etc. • Fuel sales • Wi-fi

Source: MDS Transmodal

15.27 *Short-term* parking facilities would be aimed solely at drivers seeking somewhere to park while awaiting distribution centre timeslots or undertaking statutory breaks up to 1 hour in length. On that basis they should, as a minimum requirement, be provided with toilet facilities. Perimeter fencing, CCTV and night-time lighting would offer the perception that it is a safe and secure place to park, particularly after dark (addressing the crime and safe working environment issue). Parking for at least 15 HGVs should be provided. This is partly based on the experience at existing short-term facilities nationally. Also, to address the security/crime issues identified, isolated facilities with only one or two HGVs parking should be avoided (safety in numbers concept). Provision of light food and drink refreshments and wi-fi internet access would be ‘nice to have’ additions.

15.28 *Short and long-term* parking facilities would also be aimed at drivers seeking somewhere to park while awaiting timeslots or undertaking statutory breaks. However, they would also simultaneously accommodate drivers seeking parking for daily rest periods (up to 12 hours), which will predominantly be over-night. As many drivers will be parking overnight, as a minimum requirement they should offer toilet and shower facilities, alongside the ability to obtain a hot evening meal (either on-site or within a short walk). In addition to the fencing, CCTV and lighting security measures outlined, entry should be via a security controlled barrier (either to the whole site, though as a minimum requirement to a separate overnight parking area within the site). Ideally, the short-term parking area would be separate from that where over-night parking is provided (to minimise disturbance). The provision of some form of ‘entertainment’ (bar, televisions etc.), wi-fi and fuel sales could be considered optional

additions. Both types of facility should have facilities where drivers can dispose of waste (recyclable materials and 'black bag' waste).

- 15.29 Short and long-term facilities should provide parking for at least 50 HGVs. This is based on capacity provided at existing overnight HGV parking facilities. Table 71 provides some examples of the facilities provided at a selection of existing dedicated overnight truckstops in northern and central England. As noted above, while *daily rest* periods are predominantly taken over-night, statutory driving *breaks* and *waiting for delivery time slots* take place across the 24 hour period. It is therefore vital that both types of facilities are located where access is available 24 hours a day.

Table 71: Examples of Facilities Provided in overnight truckstops

Truck Stop and Location	Number Parking Spaces	Main Facilities	Overnight Parking Fee
Exelby Leeming Bar	85	Security, café, toilets, showers, shop and fuel	£17 with meal voucher
Rugby	240		£18.50
Lymm Truck Stop	300		£17.00
Heywood Distribution Park	200		£7.50
Ellesmere Port	48		£15 with meal voucher
Carnforth	360	Security, café, toilets, showers, shop, TV room and fuel	£8.00
Golden Fleece (J42 M6)	50	Security, café, toilets, showers, shop and fuel	£8.00
Penrith	160		£14.00
Cleveland Truck Stop	250		£12.00
A19	20		£8.00

Source: MDS Transmodal

Need and Facility Development in Leicestershire

- 15.30 Identifying the precise need in Leicestershire, in terms of the type of parking facilities required, capacity and location, alongside devising the potential delivery models (finance, planning and operations) is a fairly extensive process. It will be necessary to conduct significant survey work, including establishing existing HGV parking capacity in the county and identifying the locations where issues currently arise associated with inappropriate HGV parking (and hence where facilities are required to mitigate those issues). Modelling will need to be undertaken to determine likely daily demand alongside further survey work (desk-based and onsite visits) to identify the most suitable

sites for accommodating the established need. Advice will also need to be drafted with respect to Local Plan policies. The delivery of supply in the pipeline (section 6) and new provision (to meet shortfall to 2041) are both opportunities to ensure sufficient facilities provision at sites and to encourage the provision of new /improved parking facilities as well as facilities to meet the decarbonisation agenda.

- 15.31 These tasks are beyond the scope and budget of this study. It is therefore recommended that the issue of future HGV parking provision in Leicestershire be acknowledged in relevant growth plans and transport strategies for Leicester and Leicestershire, and a consideration in respect of future development via policy in Local Plan.

16 PLANNING POLICY AND DISTRIBUTION DEVELOPMENT

16.1 A review has been undertaken in terms of enabling the delivery of distribution development and the optimisation of freight and congestion.

Providing facilities: Last mile / Point of delivery

16.2 Currently, the best practice in planning policy for last-mile logistics is occurring in government bodies across London. This is primarily due to the critical lack of industrial land, combined with high congestion and emissions restrictions along with a strong e-commerce market. However, these policies will continue to be more significant in cities across the country as consumer demand increases.

16.3 The need to identify and plan for the requirements of the logistics sector has been brought into sharper focus through the February 2019 revisions to the National Planning Policy Framework (NPPF) (Paragraph 82). It also stipulates in Paragraph 107 that there should be consideration in providing adequate overnight lorry parking facilities, to reduce the risk of parking in locations where parking is unavailable or could cause a nuisance to neighbouring uses. Thus, the NPPF is clear in recognising the varied needs of logistics at different points in the supply chain and encourages plan makers to consider these when allocating warehousing and logistics floorspace.

16.4 Within the Planning Practice Guidance (PPG) on Housing and Economic Development Needs Assessment¹⁷ states that local authorities should understand the extent to which their land provisions support the needs of not only larger footprint buildings, but also SME's and more localised last mile facilities.

16.5 A recent Lichfields study¹⁸ reports that "84% of participants reported that their authority's Local Plan includes policies or objectives that relate to the needs of logistics sector. This falls to just 27% when considering last mile logistics specifically".

16.6 There are more limited examples of these policies being enacted in various local authorities as outlined below.

¹⁷ Paragraph: 031 Reference ID: 2a-031-20190722

¹⁸ "Going the last mile: Planning for last mile logistics" Lichfield's, Oct 2018

London Plan

16.7 There are explicit provisions for last mile distribution in the London Plan. Policy E4 of the London Plan states that retention and provision of industrial capacity should be prioritised in locations that:

- ...are suitable for 'last mile' distribution services.

Lambeth Council

16.8 **Policy T8** in the Lambeth Local Plan encourages that last mile logistics schemes will be supported if they reduce the number of HGV's on the road or the emissions from the vehicles. This is especially the case with urban consolidation centres (see below), which then utilise fewer polluting modes of transportation such as bikes or electric vehicles. Lambeth Council is an example in which there are specific provisions in place to reduce congestion and make final-mile delivery be more compatible with other uses.

Consolidation Centres

16.9 Urban consolidation centres (UCCs) are units that gather large quantities of goods for last mile distribution in urban areas. They combine loads together to be delivered into locations utilising a single rather than multiple vehicles. These range from very large to micro footprints. In 2014, the London boroughs of Camden, Enfield, Islington and Waltham Forest opened a 2,000 sqft (185 sqm) consolidation centre in Edmonton with access to the strategic road network. This receives goods on behalf of the councils and prepares them for onward delivery to their sites utilising two low emission (Euro V) trucks.

16.10 The introduction of small units in higher density urban locations micro logistics sites are expected to become increasingly common due to increasing land values and sustained demand.

16.11 One such example is in the London Borough of Westminster, where DPD (a third-party logistics provider) has a fully electric fleet, including electric Fuso eCanter 7.5t vehicles that feed parcels into the depot. Further down the chain to last mile, 10 Nissan eNV200 all-electric vans make 120 stops a day to the surrounding area, along with eight micro-vehicles from Paxster, a Norwegian manufacturer. All vehicles are stored for charging on site, so the building had to be refitted to include adequate charging facilities.

16.12 DPD noted that there are external infrastructure issues to address in order to support an all-electric fleet of vehicles across London.

Figure 18: DPD Vehicles



Source: DPD

16.13 Examples like DPD show a template for how logistics can cohabitate peacefully in dense urban areas and next to residential uses, whilst also easing congestion and pollution. Councils can actively encourage these uses and consider the unique infrastructure required to ensure that these companies can decarbonise further.

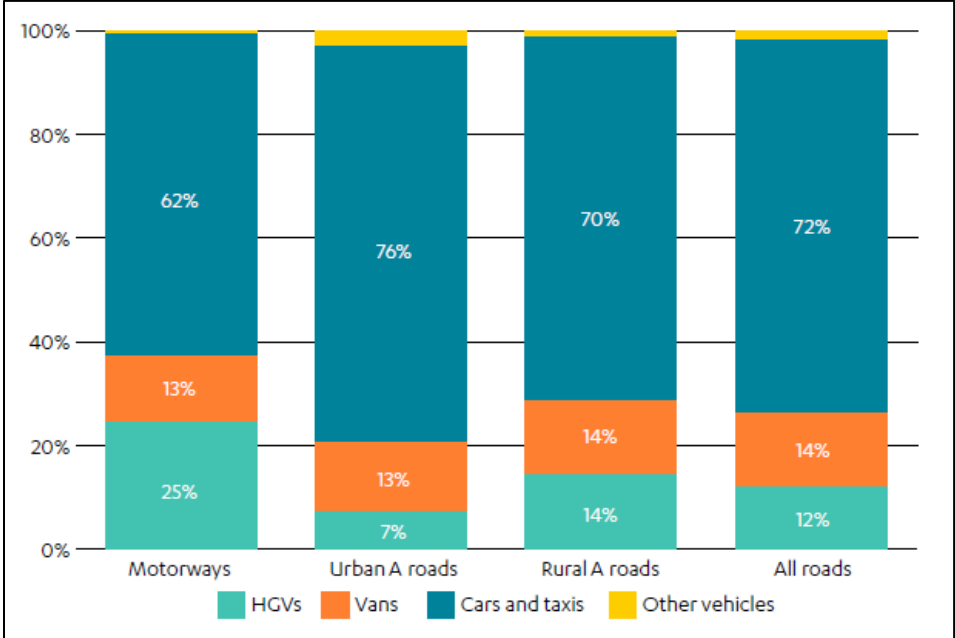
16.14 It is thus recommended that the authorities support and encourage through local plans final mile delivery utilisation of sustainable methods of transportation such as bikes and electric vehicles. This will encourage reduced congestion and better compatibility with other uses such as housing. These lower impact modes of transport can also help to combat noise and traffic pollution in urban centres. Across the county it is most likely that this will be applicable to Leicester City where consideration could be given to supporting appropriate provision for last mile distribution in urban areas.

Freight Optimisation

Congestion Management

16.15 Overall, only 5% of all vehicle kilometres in Great Britain are currently completed by HGVs, and just under half of HGV kilometres are undertaken on motorways. Translated into road capacity, around 12% of road traffic is accounted for by HGVs, rising to 25% on motorways. This is illustrated in Figure 19 taken from the National Infrastructure Commission (NIC) report *Better Delivery: The Challenge for Freight*, showing the current use of road space by vehicle type. In addition to contributing a low proportion of vehicle traffic to the network, it is also the case that HGVs are typically used on the highway network less intensively during the morning and evening peak periods (conversely using the network more intensively overnight).

Figure 19: Road Space Used by Vehicle and Road Type



Source: NIC, Better Delivery – The Challenge for Freight 2019

16.16 Highway network congestion is a significant problem and one that is likely to continue over the long-term (recent falls in road traffic volumes due to Covid-19 are expected to be short-term). However, while the data presented above would suggest that HGV operations cannot be regarded as the main cause of congestion, the sector as a whole is significantly impacted by it. Just-in-time manufacturing production lines can be temporarily halted if goods are delivered late and distribution centres operating on tight time-windows will often reject deliveries if they are delayed (with a consequent impact on retail outlet stock levels). Quoting research undertaken to inform the NIC Better Delivery

report in 2019, the document estimates that the cost of congestion to the freight industry is currently between £3-6 billion per annum.

- 16.17 Just under 15% of current road capacity is accounted for by LGVs (vans). However, van traffic represents the fastest growing sector. The NIC estimate that between 2000 and 2017, van kilometres increased by 56%. In London, despite car and HGV traffic declining over recent years, vans are generating an overall increase in road traffic. Unlike HGVs, van traffic also competes for road space during the morning and evening peaks. Despite the increase in e-commerce reported elsewhere in this document, most van traffic is actually related to the service sector (electricians, plumbers, builders etc.). Only a minority of vans are conveying freight in the technical sense; the NIC estimate that only 25% of van mileage is for the collection or delivery of goods. Small to medium size vans have essentially replaced the use of estate cars for conveying parts, equipment and tools (many estate models are now branded at the high-end of the car market).
- 16.18 Managing network congestion is primarily a matter for *highway engineering* (and therefore beyond the scope of this report). This includes the provision of new capacity alongside measures and technology which are designed to make better use of existing capacity e.g. smart motorways and junction enhancements. Some authorities have introduced road pricing as a tool to manage road congestion (principally TfL). Longer-term, the NIC is understood to be investigating options for wider implementation of road pricing as a means of better managing congestion. Given the competitive advantage / national role in logistics that the county plays, managing network congestion and reducing its effects on freight should be suitably acknowledged in Transport Plans.
- 16.19 However, the planning system (and by extension planning policy) as it relates to the development of large-scale warehousing, can have a role to play in mitigating the negative impacts of highway network congestion. This is likely to fall into five broad areas.

1. Promoting and facilitating modal shift; transferring freight currently moved by road haulage to other more sustainable modes. As noted by the NIC Better Delivery report, only rail currently offers a credible alternative for some types of road freight in terms of network coverage, speed and cost of haulage. To enable modal shift, planning policy should therefore be planning for and supporting a significant expansion in the quantum of large scale warehouse floor space that is located at suitable rail-served sites. In this respect, reference should be made to the NPPF and National Network NPS summaries already provided elsewhere in this report.

2. Planning policy should ensure that large scale warehouse developments are located in areas which permit HGV and LGV arrivals/departures across the 24-hour period (and likewise 7 days

per week). This includes ensuring that when sites are allocated in local plans for large scale warehousing, they are located close to the strategic road network (and other roads capable of accommodating large volumes of HGVs) and away from incompatible land uses such as residential areas. Policies in local plans should ensure that when planning consent is awarded for large scale warehouse developments, they do not include conditions which restrict the times of day when HGVs and LGVs can arrive or depart. In order to maximise journey time reliability, operators will where feasibly seek to despatch loads at times when the road network is used the least by other road users i.e. outside peak hours and overnight. It is therefore important that access to the highway network from large scale warehousing by HGVs and LGVs is permitted 24/7.

3. Planning policy should ensure that non-warehouse end delivery locations, particularly those in urban areas, are able where feasible to accept deliveries of cargo across the 24-hour period. This will include deliveries to factories and retail outlets. While not directly related to the development of large-scale warehouses, such policies should ensure that HGVs and LGVs based at distribution centres can avoid using the highway network at the most congested times of the day (i.e. outside peak hours and overnight).

In many cases, non-warehouse receivers of freight are able to accommodate deliveries during the evening and night (security or other staff will be on-site). However, conditions are often attached to planning consent decisions which prevent or make it extremely difficult to undertake deliveries during the evening or overnight at such locations. Such conditions are understandable where delivery points are located in close proximity to residential areas, though some authorities have attached conditions as a matter of course and sometimes post-development (when a residential scheme is built near an established industrial area).

Planning policy should therefore seek to allocate sites for developments which receive goods (e.g. manufacturing and retail) at locations where deliveries across the 24-hour period can be accommodated without conflicting with incompatible land uses such as residential areas. Policies in local plans should direct that planning consent decisions do not include attached conditions preventing deliveries during the evening and overnight, except where absolutely necessary. The default position should be no time restrictions; only where deliveries may cause conflict with nearby residential areas and when mitigation measures are not appropriate should conditions be attached restricting evening and overnight deliveries. Policies should be flexible, allowing operators to demonstrate that night-time deliveries can be undertaken with mitigation measures while still protecting nearby residents from noise or light pollution before any time restrictions are imposed (say at reserved matter stage). Mitigating measures include the use of low-noise tail-lifts and roll-cages, plug-in reefer units rather than diesel generators and sound-absorbing screens etc.

4. Planning policy should ensure that large scale warehouse developments include areas where HGVs and LGVs have facilities to park off the highway, either before or after deliveries and when drivers are taking statutory breaks. This will ensure that roads within, close to and surrounding large scale warehouse developments are able to remain 'free-flowing' at all times (i.e. not obstructed by parked HGVs). In this respect, reference should be made to the NPPF and National Network NPS summaries already provided elsewhere in this report.

5. Urban Consolidation Centres. Urban consolidation centres are where multiple freight operators (3PLs and own account operators) initially deliver goods into a warehouse type facility located on the urban fringe. The goods are consolidated and then reloaded onto freight vehicles for the final delivery into the urban area. In theory, such facilities allow multiple part-loaded freight vehicle trips into the urban centre to be replaced with fewer but fuller vehicles (and given the short distances involved this part of the delivery process could also be undertaken by battery electric vehicles). However, take-up to date has been very limited and mainly where special/specific circumstances have necessitated consolidation (e.g. at Heathrow Airport where goods need to be security scanned before delivery into the airside passenger terminals).

16.20 Take-up of urban consolidation centres has been limited for three main reasons:

- The consequent additional handling and transport leg adds further costs into the end-end supply chain (compared with direct deliveries). The consolidation centre operator would naturally make a charge to the transport operator for the handling and subsequent re-distribution (note the Heathrow consolidation operation is effectively funded by the airport's security arrangements, which ultimately are recharged back to passengers via their airline tickets). The NIC has suggested that they are unlikely to be commercially attractive without support from the public sector;
- Many retail outlets are already receiving a full load on each delivery. Using a consolidation centre would mean that goods are discharged from one full HGVs only to be reloaded onto a subsequent full HGV; and
- It is also the case that that freight operators, particularly 3PLs and those in the parcels sector serving e-commerce, are already consolidating cargoes from multiple shippers, meaning vehicles are already loaded efficiently and trips minimised

16.21 Further large-scale take-up of Urban Consolidation Centres is unlikely, meaning they will not have a significant impact in mitigating highway congestion. However, where special/specific circumstances have been demonstrated and necessitate some form of consolidation, this should be accommodated within local plan policies. As per above, such facilities should be located in areas where HGV and LGV arrivals/departures across the 24-hour period are permitted. Sites should therefore be allocated in local plans which are close to the strategic road network and away from incompatible land uses such as residential areas. Policies in local plans should ensure that planning decisions do not attach conditions restricting the times of day HGVs and LGVs can arrive or depart.

16.22 It should be noted that Urban Consolidation Centres (as described) are not the same as the cross-dock facilities located close to major urban areas that are operated by e-commerce retailers or their appointed distribution operators (such as a 3PL or the major parcel couriers). The latter are operated by a single transport provider, albeit cargo passing through them is often a consolidation of goods from multiple shipper clients. They are also designed to facilitate the transfer of goods from fully

laden HGVs to fully-laden vans. The transport provider is the consolidator and in doing so will have maximised vehicle fill and minimise the number of trips required.

Freight Optimisation

- 16.23 Road haulage operators will seek to run vehicles fully loaded most of the time as part of their normal day-to-day activities. Once an initial delivery of goods has been completed, operators will normally seek a further shipment of goods, known as a return load or backload, to avoid a HGV having to return home empty. To minimise empty running, the backload will ideally originate close to the location of the initial delivery. Likewise, the delivery point for the backload will be close to the vehicle's final destination.
- 16.24 Triangulation may also occur, where a HGV will deliver and collect a series of loads throughout a shift (again with the empty running between delivery and subsequent collection minimised). Another type of delivery process is the multi-drop operation (sometimes called 'milk-round' deliveries). This is where a freight vehicle will depart from its point of loading (e.g. distribution centre or cross-dock facility) with consignments for multiple end-users, only returning to point of origin once all deliveries have been completed. Operators will normally plan routes and match loads to vehicles to minimise empty running after the final delivery.
- 16.25 HGV empty running in 2018¹⁹ was 29.2% (defined as vehicle kilometres driven empty, source: DfT Road Freight Statistics). This figure has remained pretty constant for the past two decades, only altering by 1-2% above or below this figure each year. Some road haulage operations, by their nature, have to incorporate empty running as part of their normal day-to-day activities. This includes deliveries of products in specialist tankers or trailers, such as petroleum or flour, where other commodities cannot be conveyed, or contamination would result. The need to return empty pallets and roll-cages can also prevent the collection of backloads. Trips can also be over short distances, where returning to the point of loading is more cost effective than seeking a return load.
- 16.26 However, the fact that empty running has remained constant over the years indicates that the road haulage industry operates reasonably efficiently, and empty running is being kept to the absolute minimum except for those operations where it is not possible or feasible. The high cost of diesel fuel is probably a key contributory factor explaining this position.

¹⁹ The latest year full data is available

- 16.27 Another key contributory factor is that it is now common practice for retailers and manufacturers to out-source much of their transport and other logistics functions to specialist service providers known as third party logistics operators or 3PLs. This has resulted in multiple shippers, often direct competitors, in having transport contracts with the same 3PL and consequently despatched cargo ends up being handled by the same 3PL operator. Other than where operating or contractual issues prevent it, 3PLs will optimise use of their transport fleets through performing load-sharing, multi-drop and backload operations for these different client retailers or manufacturers to ensure vehicles run fully laden and to reduce empty running. This can include a 3PL's HGV completing a delivery for one retailer and subsequently collecting a backload from a competitor retailer close by. The main parcel couriers, such as DHL and DPD, convey cargo from competitor e-commerce retailers on the same goods vehicle and via the same distribution centre.
- 16.28 Further, 3PLs will actively collaborate by sub-contracting cargo loads to one another (known as horizontal collaboration), thereby reducing empty running or ensuring vehicle fill. For example, one operator could be conveying cargo from A to B, whereas the second operator has a contract to move goods from B to A. If both transport operators decide to move the goods themselves by road haulage, they would need to re-position their vehicles back to their respective origins, running empty on the return legs. However, the two operators could collaborate whereby the second operator sub-contracts the consignment to the first operator, thereby ensuring that the first operator's goods vehicle runs 'full' in both directions. ICT is also used to optimise vehicle load planning, both within individual 3PLs and between operators. By their nature, therefore, 3PLs can be considered as a freight optimisation tool.
- 16.29 Freight optimisation is therefore primarily a *commercial or economic* matter for transport operators (and therefore beyond the scope of this report). They have a commercial incentive to do so, otherwise they would not generate a return and eventually go out of business. However, the planning system (and by extension planning policy) can aid this commercial process through planning for and supporting the co-location of manufacturers and large scale distribution warehouses in close proximity, thereby maximising opportunities for load-sharing and backloading (and reducing the empty running distance between delivery and collection points). Policies in local plans should therefore ensure that large scale warehouses are developed at purpose build distribution parks with a multitude of occupiers, such as *East Midlands Gateway SRFI* or *Magna Park*, rather than as stand-alone facilities. Further, in the case of rail-served sites the establishment of multiple

manufacturers/distributors at the same location generates the critical mass required to sustain frequent full-length train services to a variety of destinations.

17 CONCLUSIONS & RECOMMENDATIONS

17.1 This study has considered a wide range of topics related to the large-scale warehousing sector and specific to Leicester and Leicestershire. Key findings and recommendations are set out below.

17.2 Drivers for change:

- The key drivers for change in logistics are considered to be the growth of e-commerce, decarbonisation efforts for zero-emissions road and rail freight vehicles and disruptive new technologies.
- **Decarbonisation:** The road and rail freight sectors must decarbonise by 2050 if the UK is to meet its climate change obligations. For smaller road freight vehicles (i.e. LGVs or vans), battery electric vans are emerging as a viable zero emission alternative.
- Decarbonising HGVs will be 'more challenging', though three key options are emerging as the most promising alternatives, namely e-highways, battery electric and hydrogen fuel-cells.
- New warehousing developments will need to be located where existing grid capacity is sufficient or could be upgraded (network reinforcement) relatively easily, supporting decarbonisation as well as the higher power needs of automating processes.
- Electrification is considered to be the only realistic solution for decarbonising rail freight operations. For the East Midlands, Network Rail's TDNS recommends that all lines be electrified, including the MML north of Market Harborough (the planned limit of electrification under the currently funded scheme).
- The National Infrastructure Commission recommend government require electricity distribution network operators to map out the infrastructure upgrades and opportunities for alternative solutions, such as energy storage, required to enable large scale freight van charging at depots.
- **E-commerce:** At the end of 2019, e-commerce accounted for 19% of all retail sales. During the peak of the Covid-19 pandemic, it reached 33% albeit this fell-back to 27% once non-essential retail outlets re-opened. The expected continual growth of e-commerce is likely to drive further investment in new infrastructure, in particular for:
 - Very large-scale units. The East Midlands central location to the country at large means it will almost certainly be a sought-after location for such facilities; and
 - Smaller units to operate as cross-dock facilities. The large urban centres of Leicester, Nottingham and Derby also implies demand for such facilities in the Leicestershire area
- Overall, the locational advantages of the golden triangle are unlikely to diminish. Leicestershire remains capable of meeting both rail-served and non-rail-served needs

17.3 Planning for future floorspace:

- The most critical component of this study has been to recommend a future volume of warehouse floorspace and area of land required to accommodate it that should be planned for from 2020 to 2041. A number of techniques have been tested and there is a strong correlation between the 2012-19 completions trend and high replacement demand model with sensitivity (higher) rate of traffic growth.

- **It is recommended that the authorities plan for around 2,570,000 sqm of additional floorspace permissions to 2041** (including a flexible margin of 643,000 sqm based on average 5 yr completions).
- Current levels of stock at 2020 are 2,314,000 sqm. **The balance of needs to 2041 (road and rail) is 1,160,000 sqm, after taking into account current supply, which authorities should use as a figure for planning policy requirements.** The balance of needs is equivalent to around 50% of existing stock however this is not equivalent to a 50% gain by 2041 as some older stock is expected to be lost. Pre lets (as of April 2020) count for around 552,000 sqm but are excluded from this balance as will not be available to meet newly arising need.
- Based on 43% of future need at rail served sites, which reflects an expected increase in rail orientated freight in the future, **there is a shortfall of 768,000 sqm (307 ha) at rail served sites which should be planned for** (including margin) after taking into account existing supply. This would largely be met by the proposed Hinckley NRFI should it be permitted.
- Based on 57% of future need at non-rail (i.e. road) served sites, **there is a shortfall of 392,000 sqm (112 ha) at non-rail served sites which should be planned for** (including margin) after taking into account existing supply. For scale, this is less than the extension of Magna Park North of over 400,000 sqm.

Table 72: Rail - Forecast Demand and Site Supply 2020-2041 - Leicestershire

Rail-served Sites – for Planning	2026	2031	2036	2041
Rail-served (43% of all new build req.) (sq.m 000's)	237	434	632	829
Margin for flexibility (43% of 5-year completions) (sq.m 000's)	79	145	211	277
Total requirement (sq.m 000's)	316	579	842	1,106
Rail-served supply (at 2020) (sq.m 000's)	338	338	338	338
Balance (sq.m 000's)	22	-241	-504	-768
Indicative Additional Land required (Ha @ 25% plot ratio)	N/A	96	202	307

Table 73: Non-Rail - Forecast Demand and Site Supply 2020-2041 – Leicestershire

Non rail-served Sites for Planning	2026	2031	2036	2041
Non rail-served (57% of all new build req.) (sq.m. '000s)	314	576	837	1,099
Margin for flexibility (57% of 5-year completion) (sq.m. '000s)	105	192	279	367
Total requirement (sq.m. '000s)	419	768	1,117	1,466
Non rail-served supply (at 2020) (sq.m. '000s)	1,073	1,073	1,073	1,073
Balance (sq.m. '000s)	655	306	-43	-392
Indicative additional Land required (Ha @ 35% plot ratio)	N/A	N/A	12	112

Section Summaries

- 17.4 **COVID 19:** This report has largely been undertaken through spring 2020 during the time of the onset of the COVID-19 global pandemic. Whilst not directly affecting the production of the study itself, it has had implications for a number of the underlying indicators. 'Lockdown' has forced retail store closures and a greater move towards online retailing and e-commerce, accelerating the trend to several years ahead of forecast. Food delivery retailing in particular has become more stretched. Whilst directly the shift will have a greater effect on last mile rather than NDC facilities, there is also understood to be a greater pressure on total stockholding as well as a desire for businesses to future proof, for example through automation. Different market segments will have experienced dramatically different effects, with a slowdown in car parts or aviation with a faster take up in food delivery. A recession that may follow through 2021 would also slow down demand. The study seeks to take a 'long view' across the period to 2041 in the modelling.
- 17.5 **Warehousing property market:** The property market indicators in the study area point to an ongoing high level of demand for large scale warehousing which has been particularly concentrated in North West Leicestershire in recent years. Availability across Leicestershire is limited however there is future supply, particularly at Magna Park.
- 17.6 **Current stock and pipeline:** According to data extracts from the VOA records, Leicester and Leicestershire currently host around 2,314,000 sqm of large warehousing units across 100 properties. A list of properties has been refined with the host authorities indicating around 2,144,000 is a more accurate position. **This updated list of 97 records is recommended as being used as a start point for future monitoring** (provided separately).
- 17.7 **Development pipeline across the study area and wider Golden Triangle:** The current pipeline for largescale warehousing development is around 1,781,000 sqm of which around 600,000 sqm is at Magna Park in Harborough, 800,000 sqm in North West Leicestershire and 200,000 sqm in Hinckley and Bosworth. These figures are higher than the supply used in the needs modelling which excludes pre-let units, accounting for 552,000 sqm of which nearly 65% is the 350,000 sqm Appleby Magna scheme for Jaguar Land Rover. The majority of the existing supply is expected to be occupied in the next 10 years, with little provision for the post 2030 period at present. Across the wider midlands study area, an estimated additional 4.6m sqm of supply is anticipated of which the largest contributors are South Northamptonshire, Corby and Daventry. Trajectory information suggests that this wider

supply may also be delivered and potentially occupied over the next decade and therefore a particular focus should be identifying sites to address a shortfall in the period 2031-2041.

- 17.8 **Replacement demand:** One of the components of future need is that older warehouses need to be replaced over 30-40-year life times. Whilst units built in the 1990s will soon theoretically be reaching the end of their life, there is little sign of redundancy in the study area. These units still have capital and rental value but see a change towards second tier operators or alternative uses as they fail to meet the most modern requirements that facilitate the latest technologies, automation, size and scale. This identifies the importance of providing new-build stock to remain competitive in the sector. However through the next decade there is potential for older units to be refurbished to a quality that satisfies Grade A requirements. **It is recommended that stock reuse be monitored**, as if achievable this could lead to a reduction in the need for new sites as old units are recycled.
- 17.9 **Planning policy monitoring:** Monitoring strategic warehousing development in a co-ordinated manner across the county will enable a more joined up approach to future planning. **It is recommended that a series of indicators are monitored** including new floorspace permissions and (most importantly) completions, whether units are road or rail served, any ancillary floorspace, greenfield / brownfield and the refurbishment of existing stock. It is also recommended that intermittently market reports are provided to review current levels of demand in terms of take up of units and stock availability across Leicester and Leicestershire and possibly the wider study area.
- 17.10 There is also a need to consider future needs for non-strategic warehousing such as last mile delivery facilities which are anticipated to play an increasing role in fulfilling customer needs in the future. These are typically located in or around urban areas and more likely to see an earlier shift to light goods electric vehicles compared to HGVs.
- 17.11 **Road / rail split:** Alongside e-commerce, de-carbonisation is a key issue for the logistics sector. This in part, alongside the efficiency benefits of rail, is seeing an increasing move and demand for rail served distribution locations. East Midlands Gateway has a SRFI, as does Prologis DIRFT and Hams Hall. A DCO is expected for the Hinckley NRFI and Northampton Gateway SRFI has DCO consent. At present the Leicestershire and East Midlands warehousing stock is largely road based but it is expected that this will continue to change over time. The decarbonisation agenda means such change is essential given the volume of goods capable of being moved on rail freight. However, this change will take time and this study seeks to take a balanced view in terms of the rate that this can occur,

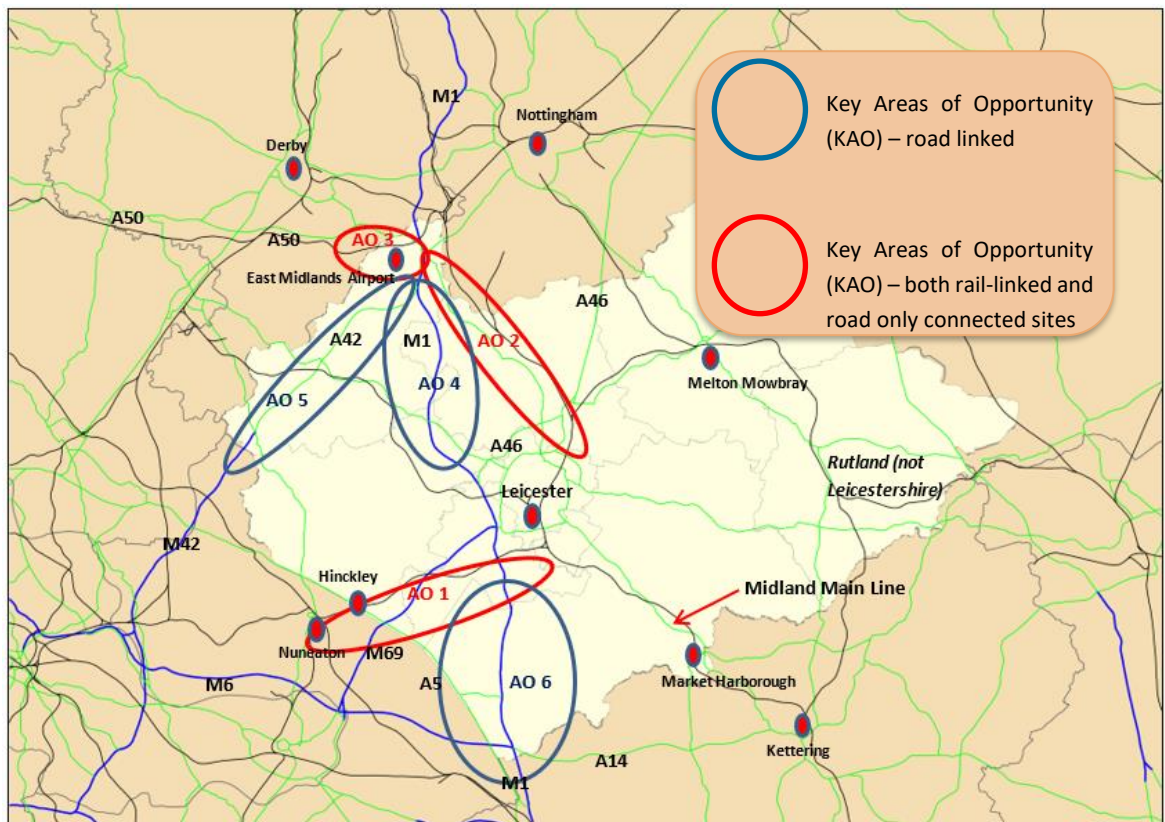
recognising that for many occupiers road access remains paramount. An optimum position at 2041 would be that 60% of new warehouses are provided at rail served sites however planning for an average of 43% builds is a graduated rate of achieving this.

17.12 **Locations for growth:** 6 'Areas of Opportunity' are identified as below and illustrated on the map following:

- Areas of Opportunity – SRFIs and road-only connected strategic logistics sites:
 - Area 1 – between Leicester and Hinckley, broadly following the M69 and Leicester-Nuneaton train line transport corridors and part of M1;
 - Area 2 – between Syston and Ratcliffe-on-Soar, broadly following the A6, M1 and Midland Main Line transport corridors, and incorporating Loughborough; and
 - Area 3 – between Ratcliffe-on-Soar and Castle Donnington/border with Derbyshire, broadly following the A50, M1, the Midland Main Line and the freight only line connecting the Midland Main Line (at Trent Junctions) to the Derby-Birmingham train line.
- Areas of Opportunity – road only connected strategic logistics sites:
 - Area 4 – to the north west of Leicester, broadly following the M1 and A511 transport corridors, incorporating Coalville and Shepshed;
 - Area 5 - the A42 transport corridor, incorporating Ashby-de-la-Zouch; and
 - Area 6 – M1 corridor south of Leicester.

17.13 These areas capture the key strategic road network and include the majority of the existing distribution parks. Areas 1, 2 and 6 are less well served particularly nearer to Leicester (i.e. Blaby and Charnwood).

Figure 20: Key Areas of Opportunity



NB: Boundaries of key areas are not definitive and are shown for indicative purposes only

- 17.14 Where possible existing stock, particularly at established distribution parks, should be reused and recycled subject to the constraints of the replacement demand issues noted above. Sequentially it is recommended that existing sites are sufficiently exhausted followed by extensions of these sites, satellite sites near existing sites, then brownfield and finally new greenfield sites. The 6 Areas of opportunity are recommended to meet any additional shortfall in requirements.
- 17.15 **Labour requirements:** Assessment of existing large distribution park labour markets demonstrates a draw across statistical boundaries along artery routes, with Leicester and Leicestershire providing the expected bulk of the workforce. A 30 minutes' drive is typical for warehousing staff. Competition for labour is tight in the study area and labour availability is a metric operators use in assessing unit locations. The current evidence is that 95 sqm per employee is useful as a job density for larger warehouses. 'Horizon scanning' suggests that this may change in the future due to automation and

this report tests an decrease of 50% in density over the forecast period. It also considers differing skill requirements, suggesting a shift away from the current 50% of warehouse floor staff to around 30%. This is paralleled by a rise in office and technical skills able to manage and service robotics and support back office e-commerce functions.

- 17.16 Based on a series of assumptions it is estimated that warehousing jobs creation could be up to 9,871 full time equivalents by 2041 (under the High Replacement, Sensitivity Test Traffic Growth scenario), comprising 2,464 from net growth in traffic movements; 2,754 through the development of the margin for flexibility (assumed 50% used); and around 6,395 jobs through the re-use of replacement demand stock (assuming 50% of that replaced retains some form of employment). Based on known commuting patterns (most recent Census 2011) across the study area, it is estimated that the majority of the workforce for future development will be derived from Leicester and Leicestershire. However this is based on district wide patterns and is subject to change based the final locations of planned supply. Analysis of a selected number of existing distribution parks indicates that those based near district boundaries tend to draw labour from beyond the study area.
- 17.17 Once more certainty is known regarding future supply and the location of new sites (considering 50% of future need is already being planned for) further research on commuting and labour market effects on housing need may be warranted. This could be combined with further research into employment trends particularly in relation to replacement demand elements.
- 17.18 **HGV Parking:** The National Survey Report estimates that there is currently capacity for 2,167 HGVs at on-site parking facilities. Overnight demand is just over 3,000 HGVs per night equating a shortfall in the capacity of around 865 HGVs. The area around Magna Park is noted as being a 'parking shortage hotspot'. **It is recommended that the issue of future HGV parking provision in Leicestershire be acknowledged in relevant growth plans and transport strategies for Leicester and Leicestershire, and a consideration in respect of future development via policy in Local Plan.**
- 17.19 **Planning policy and distribution:** Authorities should support last-mile delivery utilisations of sustainable methods of transport such as bikes or electric vehicles – this is particularly applicable to Leicester City as an urban area. Congestion of the freight industry in 2019 cost between £3-6 billion per annum. Planning policy needs to reflect the issues that HGVs face and update policy accordingly.

Appendices

APPENDIX A: E Commerce Logistics Models

Diagram 1: E-commerce – Logistics Model 1

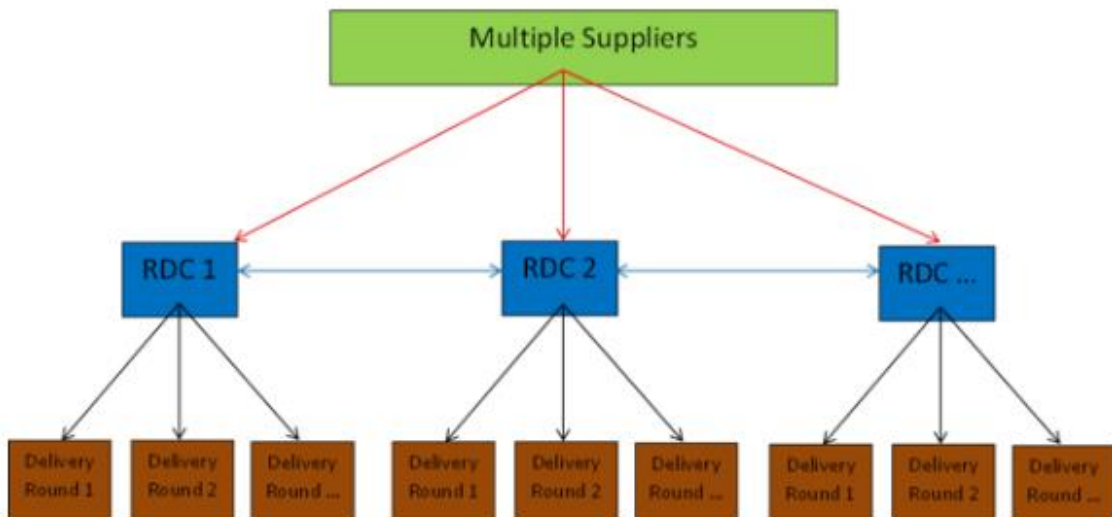


Diagram 2: E-commerce – Logistics Model 2

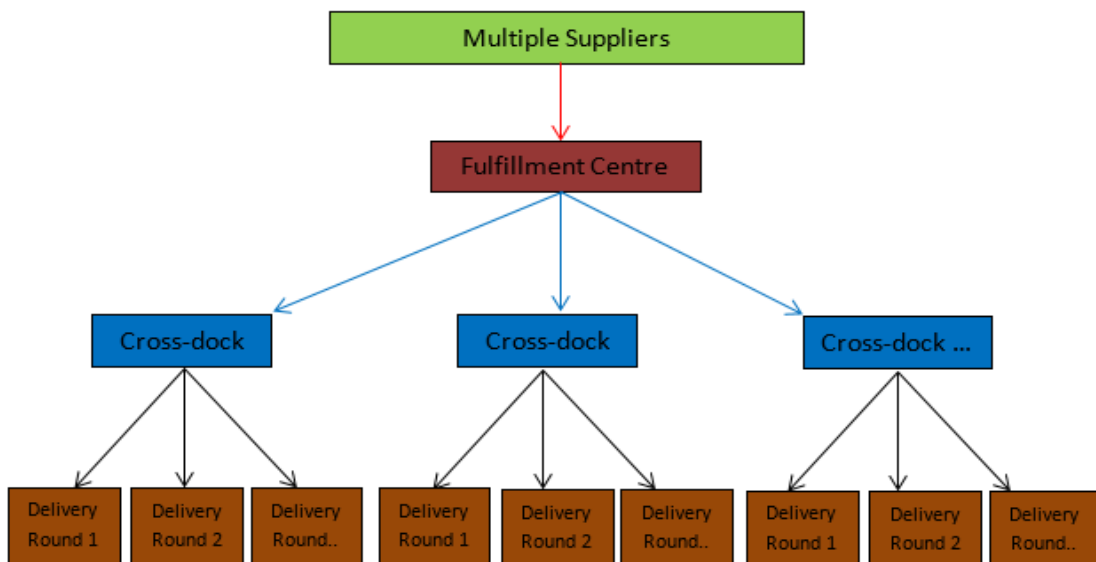
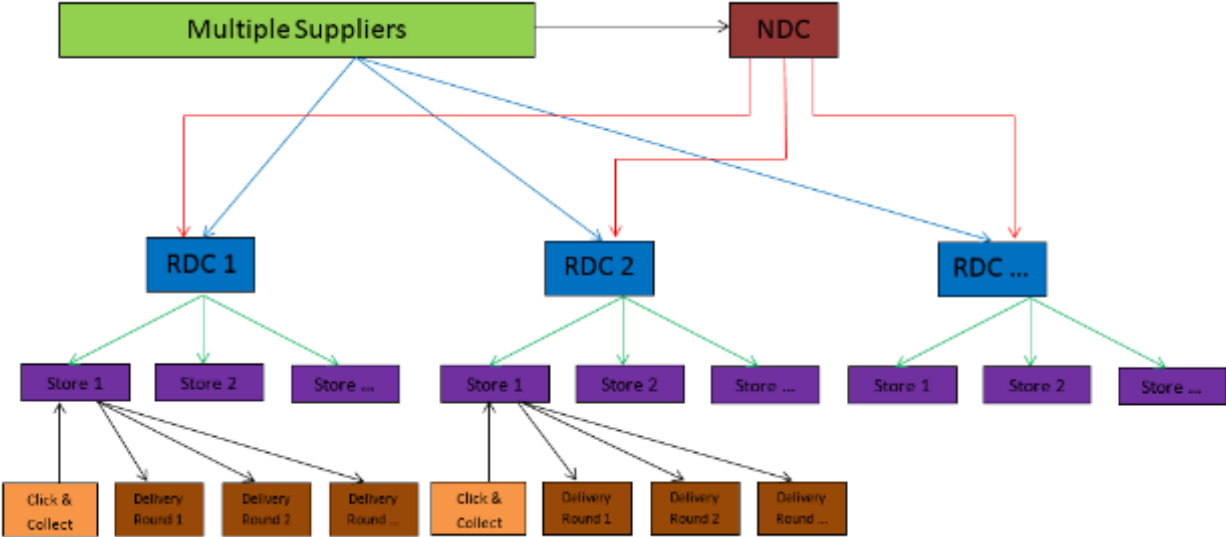


Diagram 3: E-commerce – Logistics Model 3



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 APPENDIX B: Large Scale Warehouse Floor Space by Billing Area – East Midlands (VOA 2019)

East Midlands			
	Floor Space	Number	Average Unit
Billing Authority	000s sq m	Units	Size (sq m)
Daventry	1,091	33	33,071
Northampton	956	38	25,147
Harborough	770	32	24,049
North West Leicestershire	707	27	26,178
Corby	578	25	23,118
East Northamptonshire	553	20	27,668
Bolsover	399	7	57,054
Kettering	335	11	30,419
Bassetlaw	334	11	30,364
Wellingborough	310	12	25,851
Hinckley & Bosworth	284	9	31,596
South Derbyshire	212	13	16,282
Newark & Sherwood	207	3	68,871
Nottingham	203	11	18,477
Derby	202	8	25,207
Blaby	193	13	14,841
City Of Leicester	176	9	19,559
Amber Valley	175	12	14,588
Ashfield	156	12	12,996
South Northamptonshire	155	7	22,175
South Kesteven	140	7	20,025
Boston	139	9	15,462
Erewash	132	8	16,492
Chesterfield	116	4	28,886

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High Peak	94	4	23,381
Charnwood	92	6	15,291
South Holland	91	7	13,034
North East Derbyshire	86	5	17,191
Rushcliffe	80	4	19,897
Melton	73	3	24,436
North Kesteven	51	4	12,808
Rutland	46	3	15,479
Gedling	46	3	15,276
East Lindsey	21	2	10,418
Oadby & Wigston	19	1	18,913
West Lindsey	18	1	17,887
Mansfield	13	1	12,851
Lincoln	10	1	10,220
TOTAL	9,262	386	23,995

Large Scale Warehouse Floor Space by Billing Area – West Midlands (VOA 2019)

West Midlands			
	Floor Space	Number	Average Unit
Billing Authority	000s sq m	Units	Size (sq m)
Birmingham	737	48	15,362
Bromsgrove	53	4	13,239
Cannock Chase	244	9	27,159
Coventry	506	25	20,227
Dudley	89	7	12,775
East Staffordshire	622	25	24,888
Herefordshire	154	8	19,252
Lichfield	264	12	21,976
Newcastle Under Lyme	280	9	31,099
North Warwickshire	834	34	24,519
Nuneaton & Bedworth	163	8	20,427
Redditch	80	5	16,059
Rugby	456	23	19,842
Sandwell	448	32	13,990
Shropshire	177	9	19,715
Solihull	103	7	14,677
South Staffordshire	109	4	27,239
Stafford	257	14	18,381
Staffordshire Moorlands	35	3	11,514
Stoke On Trent	638	23	27,760
Stratford On Avon	71	5	14,192
Tamworth	180	9	20,009
Telford And Wrekin	133	6	22,172

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Walsall	160	11	14,569
Warwick	175	10	17,478
Wolverhampton	195	9	21,685
Worcester	91	6	15,174
Wychavon	203	12	16,953
Wyre Forest	45	4	11,339
TOTAL	7,505	381	19,697

APPENDIX C: Study Area Supply April 2020

Local Authority	Address	Road Rail	Size (sqft)	Size (sqm)	Status	Planning	Pre Let	Planning application	Delivery P
Blaby	Hinckley National Rail Freight Interchange - J2 M69	Rail			Pending			DCO Application scheduled for Q4 2021	5-15yrs
Blaby	Unit 1 Land To The West Of St Johns (B4114) Enderby	Road	470,000	43,664	Pending	Allocated Site	N	19/0164/OUT	2-5yrs
Blaby	Unit 2 Land To The West Of St Johns (B4114) Enderby	Road	224,749	20,880	Pending	Allocated Site	N	19/0164/OUT	2-5yrs
Blaby	Unit 3 Land To The West Of St Johns (B4114) Enderby	Road	151,750	14,098	Pending	Allocated Site	N	19/0164/OUT	2-5yrs
Blaby	Unit 5 Land To The West Of St Johns (B4114) Enderby	Road	215,250	19,997	Pending	Allocated Site	N	19/0164/OUT	2-5yrs
Charnwood	Rothley Lodge, Loughborough Road, Rothley, LE7 7NL	Road	121,998	11,334	Under con	Planning Permissions Granted	N	P/17/2061/2	0-2yrs
Harborough	Land at Glebe Farm, Coventry Rd, Lutterworth - opposite Magna Park	Road	2,999,996	278,709		Grade A	N	15/00865/OUT and 19/01273/REM	0-10yrs
Harborough	Land at Mere Lane, Bittesby - Magna Park	Road	3,439,669	319,556	Permission	Outline Planning applications	N	15/01531/OUT	0-10yrs
Hinckley & Bosworth	Land East of Hinckley Island Hotel Watling Street Unit A	Road	318,213	29,563	Under con	Hybrid Planning Application	Y - DPD	17/01043/HYB	0-2yrs
Hinckley & Bosworth	Land East of Hinckley Island Hotel Watling Street Unit C	Road	450,000	41,806	Under con	Hybrid Planning Application	N/A - marketed B1/B2	17/01043/HYB	0-2yrs
Hinckley & Bosworth	Nailstone Colliery - Unit A	Road	358,000	33,259	Under con	Reserved Matters	Y- ALDI	20/00224/FUL and 14/00951/REM	0-2yrs
Hinckley & Bosworth	Nailstone Colliery - Unit B	Road	370,225	34,395	Under con	Reserved Matters	Y- ALDI	20/00224/FUL and 14/00951/REM	0-2yrs
Hinckley & Bosworth	Nailstone Colliery - Unit C	Road	274,000	25,455	Under con	Reserved Matters	Y- ALDI	20/00224/FUL and 14/00951/REM	0-2yrs
Hinckley & Bosworth	Unit 1 Mountpark Phase II	Road	668,460	62,102	Under con	Planning Permissions Granted	N	19/00338/FUL (border with NWL)	0-2yrs
Leicester	Leicester Distribution Park, Sunningdale Road, Leicester,	Road	100,000	9,290	Permission	Allocation/Permission	N	20142237	0-2yrs
North West Leicestershire	A42/JLR	Road	645,834	350,000	Permission granted		Y - JLR	18/01443/FULM and 19/02294/REM	0-2yrs
North West Leicestershire	Big Box 10 - East Midlands Gateway Ashby Road	Rail	640,000	59,458	Permission	Allocation/Permission	N	TR050002	2-5yrs
North West Leicestershire	Big Box 11 - East Midlands Gateway Ashby Road	Rail	800,000	74,322	Permission	Allocation/Permission	N	TR050002	2-5yrs
North West Leicestershire	Big Box 6 - East Midlands Gateway Ashby Road	Rail	245,000	22,761	Permission	Allocation/Permission	N	TR050002	2-5yrs
North West Leicestershire	Big Box 7 - East Midlands Gateway Ashby Road	Rail	265,000	24,619	Permission	Allocation/Permission	N		2-5yrs
North West Leicestershire	Big Box 8 - East Midlands Gateway Ashby Road	Rail	240,000	22,297	Permission	Allocation/Permission	N	TR050002	2-5yrs
North West Leicestershire	Big Box 9 - East Midlands Gateway Ashby Road	Rail	345,000	32,052	Permission	Allocation/Permission	N	TR050002	2-5yrs
North West Leicestershire	Cott Beverages, Citrus Grove, Kegworth	Road	212,813	19,771	Permission	Allocation/Permission	Y - Cott B	19/01803/VCI, 15/00651/FULM	0-2yrs
North West Leicestershire	EMDC plot 3	Rail	570,000	52,955	Permission	Allocation/Permission	N		2-5yrs
North West Leicestershire	Former Lounge Coal Disposal Point 14, Measham Road, A	Road	736,487	68,422	Permission	Application in place but new w	N	07/01372/FUL and allocation Ec1d	2-5yrs
North West Leicestershire	Sawley Crossroads	Road	645,834	60,000	Permission granted		Y - ALDI	15/00015/FULM	0-2yrs
North West Leicestershire	Unit 2 Land at Victoria Lane, Ellistown (Mountpark Phase I)	Road	535,580	49,757	Permission	Allocation/Permission	N	18/00402/REMM & 16/00019/OUTM	0-2yrs

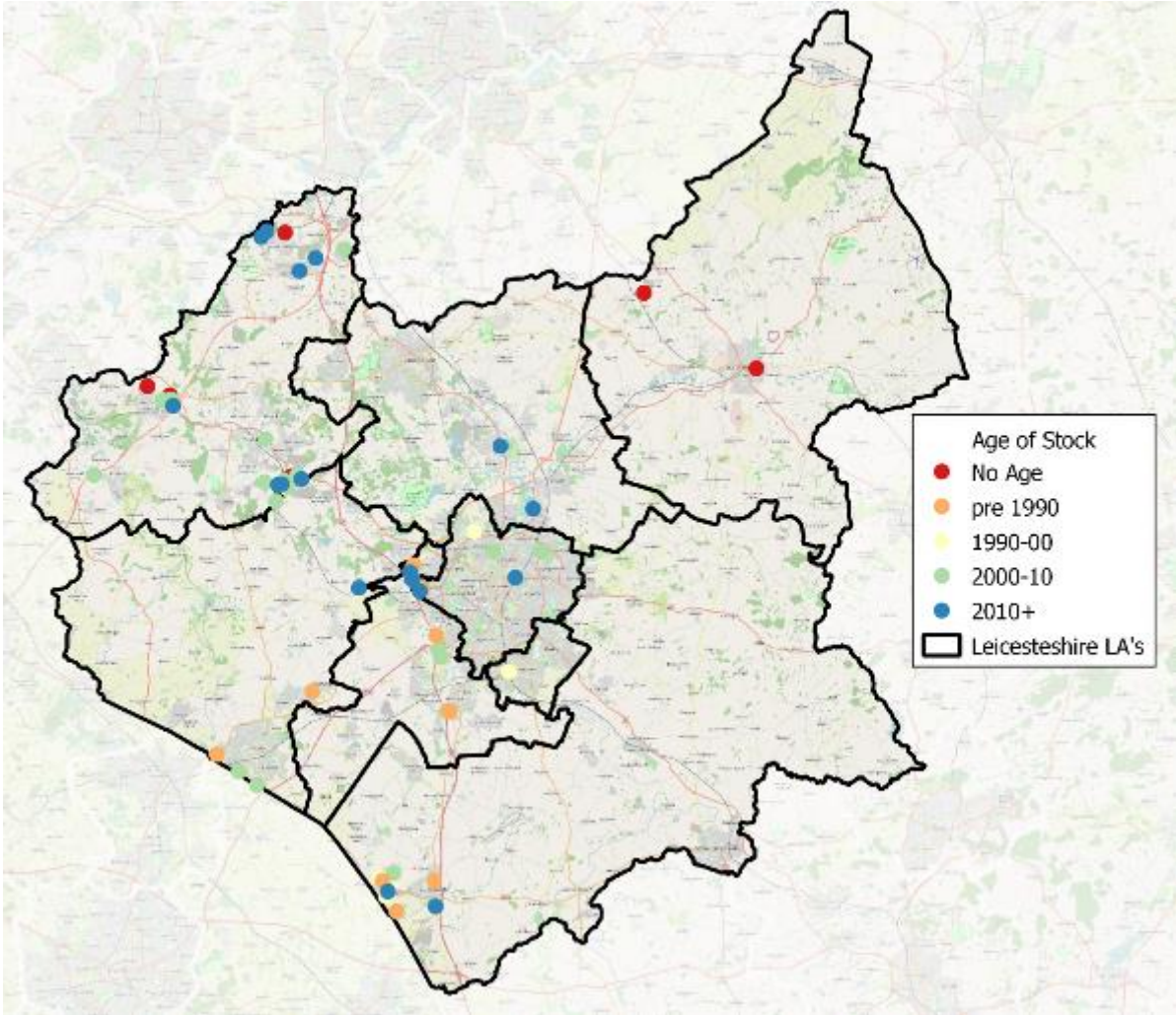
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 APPENDIX D: Wider Area Supply April 2020

Property Name	Property Address	Submarket Name	City	Building Status	Planning App	NIA sqft	NIA sqm	Size Band	Timescales ABC (A<5, B5-10, C10+)		
									Land Area (AC)	10, C10+	
North of Birchington Road	Bela Land,(Morrison's Land) Halley	Corby Ind	Corby	Allocated Site	Allocated Site	n/a	246,112	n/a	61.5279	B/C	
Manton Park	Land at Cockereil Road	Corby Ind	Corby	Allocated Site	Allocated Site	n/a	65,630	n/a	16.40744	A/B	
Pharma Factory site	Oakley Hay/Southern Gateway	Corby Ind	Corby	Allocated Site	Allocated Site	n/a	41,513	n/a	10.3782	B/C	
Land South of Blue Skie	Saxon Way East	Corby Ind	Corby	Allocated Site	Allocated Site	n/a	15,814	n/a	3.9536	B	
lot B1 Centrix business park	Bakeaway	Corby Ind	Corby	Allocated Site	Allocated Site	n/a	83,026	n/a	20.7564	A	
Unit 2 Midlands Logistics Park	Geddington Road	Corby Ind	Corby	Committed	12/00259/OUT/	241,000	22,390	200,000 - 300,000 sq.ft.	235.5	A	
Gefco Ltd	Geddington Road	Corby Ind	Corby	Pending	19/00050/DPA	880,746	81,824	500,000+ sq.ft.	6.8	A	
Rockingham Speedway	Mitchell Road	Corby Ind	Corby	Pending	18/00771/COU	1,310,000	121,703	500,000+ sq.ft.	26.5	A	
Barn Close - Gefco -	Geddington Road	Corby Ind	Corby	Under Construction	17/00598/DPA	168,166	15,623	500,000+ sq.ft.	36	A/B	
Whitley Business Park	Cheylesmore	Coventry Ind	Coventry	Allocated Site	Policy JE2 Local Plan		120,000	n/a	30	A/B	
Baginton Fields	Cheylesmore	Coventry Ind	Coventry	Allocated Site	Policy JE2 Local Plan		100,000	n/a	25	A/B	
Eastern Green	Bablake	Coventry Ind	Coventry	Allocated Site	Policy JE2 Local Plan		60,000	n/a	15	A/B	
Whitmore Park	Holbrook	Coventry Ind	Coventry	Allocated Site	Policy JE2 Local Plan		32,000	n/a	8	A/B	
Durbar avenue	Foleshill	Coventry Ind	Coventry	Allocated Site	Policy JE2 Local Plan		6,000	n/a	1.5	A	
Land to South East Junction 10	Longford	Coventry Ind	Coventry	Allocated Site	Policy JE2 Local Plan		6,000	n/a	1.5	A	
Coventry and Warwickshire Gateway	Land North, West and South of Coventry Airport	Coventry Ind	Coventry	Proposed Outline Given	OUT/2012/1791	343,740	31,935	n/a	260	A	
Cummins/Prologis	Land off Nasmyth Road, Drayton Fields, Daventry	Daventry Ind	Daventry	Under Construction	DA/2019/0366		51,411		13.4ha	A	
DIRFT III DCO,	Watling Street, Crick, Northamptonshire	Daventry Ind	Daventry	Comitted		7,394,419	686,965			345	A/B
Unit 02 Old Cransley Iron Works	Northampton Road, Broughton	Kettering Ind	Kettering	2019/2020	KET/2015/0911	156,659	14,554	100,000 - 200,000 sq.ft.	3.638533803	A	
Zone A Plot 2, North Kettering Business Park	Glendon Road	Kettering Ind	Kettering	2021 or 2022	KET/2018/0739	338,043	31,405	300,000 - 400,000 sq.ft.	7.851322941	A	
Unit 03B Old Cransley Iron Works	Northampton Road, Broughton	Kettering Ind	Kettering	2023 or 2024	KET/2013/0827	270,004	25,084	200,000 - 300,000 sq.ft.	2.7	A	
Kettering South (land at) (Off A509 north of Isham A509		Kettering Ind	Kettering	Not Known- likely prior 203	KET/2018/0965	2,310,000	214,606	500,000+ sq.ft.	136	B	
Plot 300, Kettering Gateway	Kettering Rd	Kettering Ind	Kettering	Not Known- likely prior 203	KET/2018/0774	150,000	13,935	100,000 - 200,000 sq.ft.	70	B	
Plot 4a, Sergio Park	A6/A14 Junction 10, Burton Latimer Road	Kettering Ind	Kettering	Not Known- likely prior 203	KET/2018/0774	202,703	18,832	200,000 - 300,000 sq.ft.	4.707935785	A	
Plot 4, Kettering Gateway	Kettering Rd	Kettering Ind	Kettering	Not Known- likely prior 203	KET/2018/0774	692,620	64,347	500,000+ sq.ft.	16.08664146	B	
	Land South of Fradley Park	Lichfield Ind	Lichfield	Allocated Site	LDC Local Plan A1	n/a	72,800	n/a	18.2	A/B	
	Land East of A38	Lichfield Ind	Lichfield	Allocated Site	LDC Local Plan A1	n/a	20,400	n/a	5.1	B/C	
Land At Easthill Farm Wood End Lane	Fradley Lichfield Staffordshire	Lichfield Ind	Lichfield	Comitted	16/00586/REMM	856,064	79,531	500,000+ sq.ft.	24.34	A	
Land At Easthill Farm Wood End Lane	Fradley Lichfield Staffordshire	Lichfield Ind	Lichfield	Comitted	16/00585/REMM	859,422	79,843	500,000+ sq.ft.	24.34	A	
Land North East Of Wood End Lane	Fradley Lichfield Staffordshire	Lichfield Ind	Lichfield	Comitted	17/00276/FULM	209,002	19,417	200,000 - 300,000 sq.ft.	5.26	A	
Land Off Nanscawen Road	Fradley Lichfield Staffordshire	Lichfield Ind	Lichfield	Comitted	17/00059/FULM	354,068	32,894	300,000 - 400,000 sq.ft.	8.26	A	
Land South Off Nanscawen Road	Fradley Park Lichfield Staffordshire	Lichfield Ind	Lichfield	Pending	19/01628/OUTM	369,999	34,374	300,000 - 400,000 sq.ft.	8.26	A	
Plot D104	Fradley 432, Fradley Park, Halifax Avenue	Lichfield Ind	Lichfield	Under Construction Due 20:	18/01594/FULM	431,700	40,106	400,000 - 500,000 sq.ft.	22	A (2)	
Unit C Liberty Park	Burton Old Road Lichfield Staffordshire	Lichfield Ind	Lichfield	Under Construction Due 20:	18/00648/FULM	115,000	10,684	100,000 - 200,000 sq.ft.	2.670964985	A (2)	
Land to South East Junction 10	Trinty Road, Dordon	North Warwickshire Ind	Tamworth	Proposed	PAP/2014/0648 A	861,112	80,000	500,000 sq.ft. +	10.27	A	
Unit 1	Land At J16 M1 Weedon Road Upper Heyford	Northampton Core Ind	Northampton	Proposed	N/2018/0128	257,250	23,899		14.3	A/B	

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Property Name	Property Address	Submarket Name	City	Building Status	Planning App	NIA sqft	NIA sqm	Size Band	Land Area (AC)	Timescales ABC (A<5,B5-10,C10+)
Unit 2	Land At J16 M1 Weedon Road Upper Heyford	Northampton Core Ind	Northampton	Proposed	N/2018/0128	456,000	42,364		22.4	A/B
Unit 3	Land At J16 M1 Weedon Road Upper Heyford	Northampton Core Ind	Northampton	Proposed	N/2018/0128	338,000	31,401		17.7	A/B
Unit 5	Land At J16 M1 Weedon Road Upper Heyford	Northampton Core Ind	Northampton	Proposed	N/2018/0128	308,000	28,614		5.4	A/B
Unit 6	Land At J16 M1 Weedon Road Upper Heyford	Northampton Core Ind	Northampton	Proposed	N/2018/0128	199,000	18,488		18.1	A/B
Northampton Gateway Rail Freight Interchange	Junction 15 of the M1 motorway	Northamptonshire South Ind	Northampton	Committed, Planning Approve	Committed	5,037,505	468,000		210	A/B
	AL1 - Land at Bell Plantation, Towcester [35 ha]	Northamptonshire South Ind	Northampton	Emerging Local Plan Allocations			0			A/B
	AL2 - Land at Woolgrowers Field, Towcester [4.5 ha]	Northamptonshire South Ind	Northampton	Emerging Local Plan Allocations			0			A/B
	AL3 - Land at Tiffield Lane, Towcester [21 ha]	Northamptonshire South Ind	Northampton	Emerging Local Plan Allocations			0			A/B
	AL4 - Employment Land, Shacks Barn, Whittlebury [10 ha]	Northamptonshire South Ind	Northampton	Emerging Local Plan Allocations			0			A/B
	AL5 - Land at former Furto Pit, Old Stratford / Cosgrove [1	Northamptonshire South Ind	Northampton	Emerging Local Plan Allocations			0			A/B
	Silverstone Park (WNJCS - Policy E5)	Northamptonshire South Ind	Northampton	Under Construction	S/2019/0443/EIA		59,000		23.6	A (2)
	Land North of Tunweston Road and East of Northampton	Northamptonshire South Ind	Northampton	Under Construction	S/2017/0057/COND		15,000		6	A (2)
Zone H, Plot 1	Pineham - Rothersthorpe Road / Style Way Kislisbury	Northamptonshire South Ind	Northampton	Under Construction	S/2014/1603/EIA	489,617	45,487		11.37173794	A (2)
Zone H Plot 2	Pineham - Rothersthorpe Road / Style Way Kislisbury	Northamptonshire South Ind	Northampton	Under Construction	S/2014/1603/EIA	579,845	53,869		10.78	A (2)
Unit 9	Land West Of M40 Overthorpe Road Warkworth Banbury	Northamptonshire South Ind	Northampton	Under Construction	S/2019/1135/MAF	126,000	11,706		3.79	A (2)
Unit 10	Land West Of M40 Overthorpe Road Warkworth Banbury	Northamptonshire South Ind	Northampton	Under Construction	S/2019/1135/MAF	172,000	15,979		4.09	A (2)
	Northampton Junction 16 Strategic Employment Site (WN	Northamptonshire South Ind	Northampton	Under Construction	S/2016/0400/EIA		590,000		147.5	A / B
	Faultlands	Nuneaton And Bedworth Ind	Nuneaton	Allocated Site	Local Plan Allocation EMP1		105,720	n/a	26.43	B
	Pickard Way	Nuneaton And Bedworth Ind	Nuneaton	Allocated Site	Local Plan Allocation EMP2		73,040	n/a	18.26	B
	Prologis extension	Nuneaton And Bedworth Ind	Nuneaton	Allocated Site	Local Plan Allocation EMP3		21,160	n/a	5.29	B
	Coventry Road	Nuneaton And Bedworth Ind	Nuneaton	Allocated Site	Local Plan Allocation EMP4		38,360	n/a	9.59	B
	Wilsons Lane	Nuneaton And Bedworth Ind	Nuneaton	Allocated Site	Local Plan Allocation EMP6		8,240	n/a	2.06	B
	Bowling Green Lane	Nuneaton And Bedworth Ind	Nuneaton	Allocated Site	Local Plan Allocation EMP7		105,080	n/a	26.27	B
	Land between Bayton Rd & Blackhorse Rd	Nuneaton And Bedworth Ind	Nuneaton	Committed (planning expiri		31558	197,938	100,000 - 200,000 sq.ft.	4.597264932	A
122 Coventry Road	St Georges Way	Nuneaton And Bedworth Ind	Nuneaton	Under Construction		31062	232,005	200,000 - 300,000 sq.ft.	5.388505328	A
	Prologis Park, Oxford Road, Ryton on Dunsmore	Rugby Ind	Rugby	Committed	R17/2019	482,233	44,801		13.74	A
Unit B	Land South Of Solihull Parkway North Of Blackfirs Lane	Solihull Ind	Birmingham	Completed	PL/2016/02001/PP	209,880	19,499		4.874627226	A (2)
JLR	Land Near Solihull Football Club Damson Parkway	Solihull Ind	Birmingham	Under Construction	PL/2016/03131/PP	988,127	91,800		22	A (2)
Drakelow Park	Buton on Trent	South Derbyshire Ind	Derby	Committed	9/2009/0341	545,084	50,640	500,000+ sq.ft.	12.660012217	B
Top Hat One, Unit 3000	Park Avenue, Dove Valley Park, Foston	South Derbyshire Ind	Derby	Committed	9/2010/0871	235,730	21,900	200,000 - 300,000 sq.ft	5.475005342	A
PGDI III Ltd	Dove Valley Park, Park Avenue, Foston Derby	South Derbyshire Ind	Derby	Committed	DMPA/2019/1205	540,477	50,212	500,000+ sq.ft.	12.36	A
Land N of Dove Valley	Dove Valley Park, Park Avenue, Foston Derby	South Derbyshire Ind	Derby	Committed	9/2017/0816	630,291	58,556	500,000+ sq.ft.	14.64	A
Axis 50	Formerly known as Burnaston Cross, Land SK2929 1430, E	South Derbyshire Ind	Derby	Pending	DMPA/2019/0948	1,076,391	100,000	500,000+ sq.ft.	25.00002323	NA
	South West Rugby	Rugby	Rugby	Allocated Site		tbc	140,000		35	B/C
	Rugby Radio Station	Rugby	Rugby	Allocated Site		tbc	64,000		16	B
	Britvic Soft Drinks Ltd, Aventine Way, Brownsover, Rugby.	Rugby	Rugby	Under Construction	R15/0984 & R17/1	105,755	9,825		2.456242626	A (2)
	St Georges Way	Nuneaton And Bedworth Ind	Nuneaton	Constructed		36078	230,384	200,000 - 300,000 sq.ft.	4.14 ha	A

APPENDIX E: Map of Strategic Warehousing Locations by age



APPENDIX F: Development Size and Floor Space: Selected Developments

Scheme	Floor Space (000s sqm)	With Landscaping		Without Landscaping	
		Land Area (ha)	Plot Ratio	Land Area (ha)	Plot Ratio
SRFIs					
DIRFT III	731	345	21%	184	40%
East Midlands Gateway	555	336	17%	177	31%
Northampton Gateway	468	219	21%	145	32%
SIFE	190	79	24%	56	34%
West Midlands Interchange	743	297	25%	190	39%
Non Rail-served - total with landscaping					
Land at Glebe Farm, Magna Park, Known as Magna Park South	279	88	32%	54	52%
Land at Mere Lane, Magna Park North	420	239	18%	135	33%
Nailstone Colliery	122	29	42%	29	42%
B4114 West of St Johns, Enderby	107	33	32%	23	46%
Hinckley Island Unit B	46	11	44%	11	44%
Unit 1 Mountpark II, Bardon Hill	57	16	36%	14	41%

General Disclaimer

This report has been prepared by GL Hearn Limited (GL Hearn) in favour of [Harborough District Council] (“the Client”) and is for the sole use and benefit of the Client in accordance with the agreement between the Client and GL Hearn dated [April 2020] under which GL Hearn’s services were performed. GL Hearn accepts no liability to any other party in respect of the contents of this report. This report is confidential and may not be disclosed by the Client or relied on by any other party without the express prior written consent of GL Hearn.

Whilst care has been taken in the construction of this report, the conclusions and recommendations which it contains are based upon information provided by third parties (“Third Party Information”). GL Hearn has for the purposes of this report relied upon and assumed that the Third Party Information is accurate and complete and has not independently verified such information for the purposes of this report. GL Hearn makes no representation, warranty or undertaking (express or implied) in the context of the Third Party Information and no responsibility is taken or accepted by GL Hearn for the adequacy, completeness or accuracy of the report in the context of the Third Party Information on which it is based.

Freedom of Information

GL Hearn understands and acknowledges the Authority’s legal obligations and responsibilities under the Freedom of Information Act 2000 (the “Act”) and fully appreciates that the Authority may be required under the terms of the Act to disclose any information which it holds. GL Hearn maintains that the report contains commercially sensitive information that could be prejudicial to the commercial interests of the parties. On this basis GL Hearn believes that the report should attract exemption from disclosure, at least in the first instance, under Sections 41 and/or 43 of the Act. GL Hearn accepts that the damage which it would suffer in the event of disclosure of certain of the confidential information would, to some extent, reduce with the passage of time and therefore proposes that any disclosure (pursuant to the Act) of the confidential information contained in the report should be restricted until after the expiry of 24 months from the date of the report.

Appendix 3 - Leicester and Leicestershire Strategic Warehousing and Logistics Needs SoCG (Sept 2021)

Leicester & Leicestershire Authorities - Statement of Common Ground relating to Strategic Warehousing & Logistics Need (September 2021)

1.0 The Leicester and Leicestershire HMA and FEMA

1.1 The Leicester and Leicestershire Housing Market Area (HMA) and Functional Economic Area (FEMA) covers the administrative areas of eight local planning authorities and two transport authorities. The eight local planning authorities responsible for plan making are:

- Blaby District Council
- Charnwood Borough Council
- Harborough District Council
- Hinckley & Bosworth Borough Council
- Leicester City Council (Unitary)
- Melton Borough Council
- North West Leicestershire District Council
- Oadby & Wigston Borough Council

1.2 The two upper tier authorities in Leicester and Leicestershire (L&L), with statutory responsibilities for transportation, education, social care, flooding, minerals & waste planning and public health are:

- Leicester City Council (Unitary)
- Leicestershire County Council

1.3 This Statement has been prepared jointly by the eight plan making authorities and Leicestershire County Council as an additional signatory given their statutory responsibilities, hereafter referred to as “the authorities”. The Map in Appendix A shows the location and administrative areas covered by this statement. The [Housing & Economic Development Needs Assessment 2017](#) (HEDNA) identifies this area as the Leicester & Leicestershire HMA and FEMA.

2.0 Purpose

2.1 The key strategic matters addressed in this statement relate to the need for Large Warehousing and Logistics floorspace to 2041, including the next steps to ensure the needs of the sector are appropriately planned for across L&L. This statement will be reconfirmed and updated as necessary.

2.2 Large Warehousing and Logistics facilities are defined as those units with greater than 9,000 square metres in total.

2.3 Matters relating to small warehousing (units less than 9,000 sqm) and other employment uses are dealt with in the Leicester & Leicestershire Authorities - Statement of Common Ground relating to Housing and Employment Land Needs (June 2021).

2.4 Although this statement relates to the authorities in the L&L HMA and FEMA, the large warehousing market extends across and beyond traditional authority boundaries. The latest evidence suggests the most interrelated distribution market for L&L includes 21 authorities (Appendix B). The market for this sector operates at beyond the regional scale which makes it extremely challenging for the current local plan-led system to plan for the

sector. Proposals are also often considered through the Nationally Significant Infrastructure Projects (NSIP) process which is separate to the Local Plan process.

3.0 **Key Strategic Matters on which Authorities Agree**

L&L Warehousing & Logistics Need to 2041

- 3.1 The authorities agree the '[Warehousing and Logistics in Leicester and Leicestershire: Managing growth and change \(April 2021\)](#)' ('the study') is the most up-to-date evidence on the needs of the sector across L&L. The authorities agree the need for Large Warehousing and Logistics (2020 - 2041), as found by the study, is as follows:

Table 1: Rail served sites – Forecast Demand 2020 – 2041

Rail-served Sites – for Planning	2026	2031	2036	2041
Rail-served (43% of all new build req.) (sq.m 000's)	237	434	632	829
Margin for flexibility (43% of 5-year completions) (sq.m 000's)	79	145	211	277
Total requirement (sq.m 000's)	316	579	842	1,106

Table 2: Non-Rail (Road) – Forecast Demand 2020 - 2041

Non rail-served Sites for Planning	2026	2031	2036	2041
Non rail-served (57% of all new build req.) (sq.m. '000s)	314	576	837	1,099
Margin for flexibility (57% of 5-year completion) (sq.m. '000s)	1045	192	279	367
Total requirement (sq.m. '000s)	419	768	1,117	1,466

- 3.2 The study recommends that L&L need to provide for 2,570,000 sqm of additional floorspace between 2020 and 2041. Based on 43% of future need at rail served sites, 1,106,000 sqm is needed on rail served sites and 1,466,000 sqm at non-rail served sites.
- 3.3 The study has a base date of 1st April 2020. Taking into account the supply at that time (land with planning permission, allocations and vacant units) there was a shortfall of 768,000 sqm (307 ha¹) at rail served sites and 392,000 sqm (112 ha¹) at non-rail served sites which should be planned for to 2041.
- 3.4 Appendix C updates the supply position as at 1st April 2021. At this date there is a supply of 387,125 sqm at rail served sites and 1,131,014 sqm at non-rail served sites. This leaves a shortfall of 718,875 sqm (288 ha¹) at rail served sites and 334,986 sqm (96 ha¹) at non-rail served sites which should be planned for to 2041. Since 1st April 2021 North West Leicestershire District Council has resolved to approve (subject to Section 106) an outline application for 78,967sqm of storage and distribution (Use Class B8) on land at Netherfields Lane, Sawley. The Illustrative masterplan shows 33,675 sqm of strategic warehouses (and 32,051 sqm non-strategic units). Taking this into account, would leave a shortfall of 301,293 sqm at non-rail served sites to 2041.
- 3.5 The Authorities agree that the current supply of large warehousing and logistics is strong. For rail served sites a supply shortfall starts to emerge around the mid 2020s. For non-rail served sites a supply shortfall starts to emerge in the mid 2030s.

Rail Served Supply to 2041

¹ Hectares figures are indicative

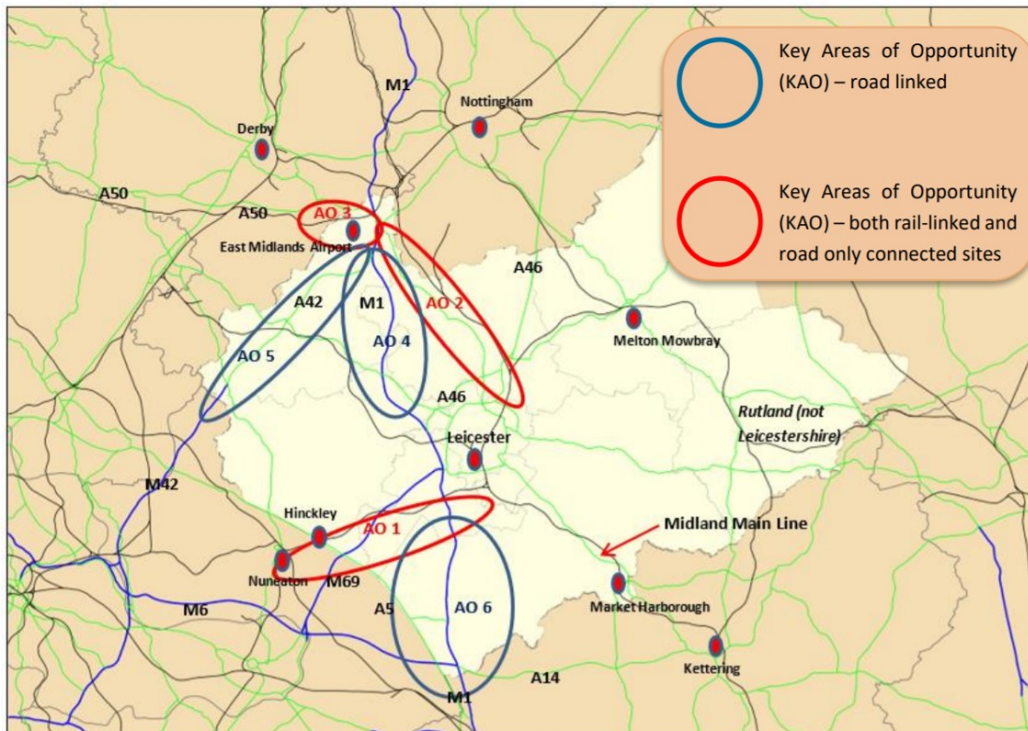
- 3.6 Proposals have been put forward for a Hinckley National Rail Freight Interchange (NRFI). The site falls mainly within Blaby District however a proposed link road to the A46 would fall within Hinckley and Bosworth Borough. The NRFI is a large Strategic Rail Freight Interchange promoted by Tritax Symmetry adjacent to Junction 2 of the M69 and alongside the Leicester to Nuneaton main line. Covering around 226ha¹, an integral intermodal terminal is proposed for the site serving around 650,000 to 850,000 square metres of large warehousing floor space.
- 3.7 The proposal is a Nationally Significant Infrastructure Project (NSIP) which means the Secretary of State is responsible for decision making, not the Local Planning Authority. The National Infrastructure Planning website indicates the proposal is at the pre-application stage of the process, with an application expected to be submitted to the Planning Inspectorate Q4 2021.
- 3.8 The authorities agree the outcome of the NSIP process cannot be pre-empted. It is therefore extremely challenging to plan for the rail served need until the outcome of the NSIP process is known. The authorities agree that if the Hinckley NRFI is approved by Government, it will effectively meet the remaining need for rail served sites in L&L (2020 – 2041) in terms of the square metres of floorspace required, provided that as a minimum it meets the definition of a rail freight interchange set out in current legislation. Some authorities have concerns about the ability of the current definition to ensure proposals deliver genuine rail-based operations on the ground.
- 3.9 This Statement does not infer support from any authority for the Hinckley NRFI proposal. Each authority will respond to the proposal, through the NSIP process as appropriate. The authorities will regularly review the progress of the Hinckley NRFI through the NSIP process and respond appropriately to ensure the rail served need is planned for.

Non-rail (Road) Supply to 2041

- 3.10 The authorities agree the supply in L&L is strong and an overall shortfall in non-rail (road) large warehousing and logistics floorspace is not forecast to emerge until the mid 2030s. Floorspace is distributed across several Areas of Opportunity. The authorities will collaborate to ensure the remaining 301,293 sqm is appropriately planned for.

Areas of Opportunity

- 3.11 The authorities agree the Areas of Opportunity (AoO) below represent the most likely general broad areas for new Large Warehousing and Logistics up to 2041. The authorities agree that the identification of the AoO was a high-level exercise where general broad areas are identified; the analysis does not consider, assess or recommend specific sites or consider other planning constraints (e.g. flooding, highway capacity) that would inform the allocation of sites in Local Plans or wider policy aspirations such as decarbonisation.



NB: Boundaries of key areas are not definitive and are shown for indicative purposes only

Next Steps - Planning for Future Needs to 2041

3.12 The authorities remain committed to cooperating on strategic cross boundary matters, including agreeing the distribution of large warehousing need. To do this the authorities will need to do the following (in no specific order):

- Develop an appropriate system to monitor progress in site allocation, consents and delivery at the L&L level;
- Develop a collective understanding of the geographical distribution and phasing of the current supply;
- Develop a collective understanding of deliverable and developable sites for large warehousing, including through the commissioned Strategic Growth Options & Constraints Study (and other work as appropriate);
- This will help inform an approach to meeting the L&L need which maintains an appropriate supply across the AoO, in terms of geography and trajectory, as recommended by the study.

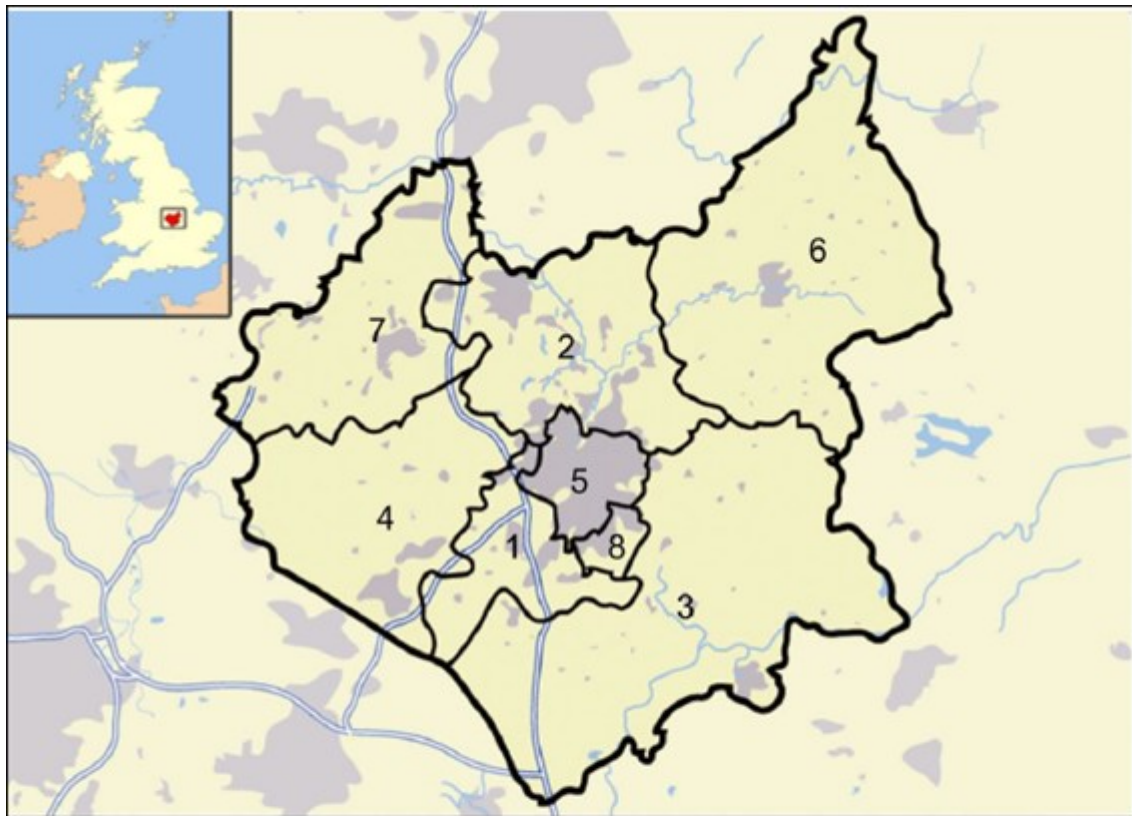
Need from Neighbouring Areas

3.13 The authorities intend the need for 2,570,000 sqm of Large Warehousing and Logistics floorspace 2020 – 2041 will be met in L&L. The authorities are not aware of any unmet need from neighbouring areas for large warehousing and logistics floorspace that should be accommodated in L&L.

4.0 Maintaining and Updating this Statement

4.1 The authorities agree the Duty to Cooperate is an ongoing process. The process for updating and maintaining this statement will be managed through ongoing joint work between the authorities.

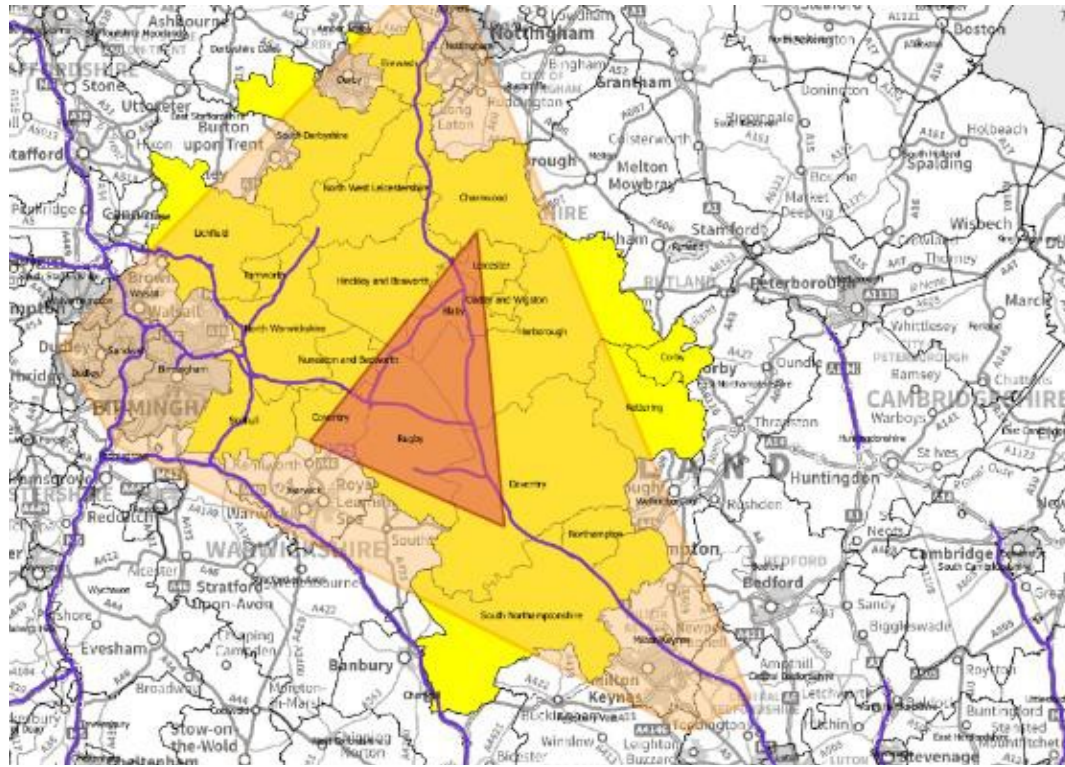
Appendix A – Location and Administrative Areas



Key to Map Two

- | | |
|--|---|
| 1. Blaby District Council | 5. Leicester City Council |
| 2. Charnwood Borough Council | 6. Melton Borough Council |
| 3. Harborough District Council | 7. North West Leicestershire District Council |
| 4. Hinckley and Bosworth Borough Council | 8. Oadby and Wigston Borough Council |

Appendix B - Wider 'Golden Triangle' Study Area

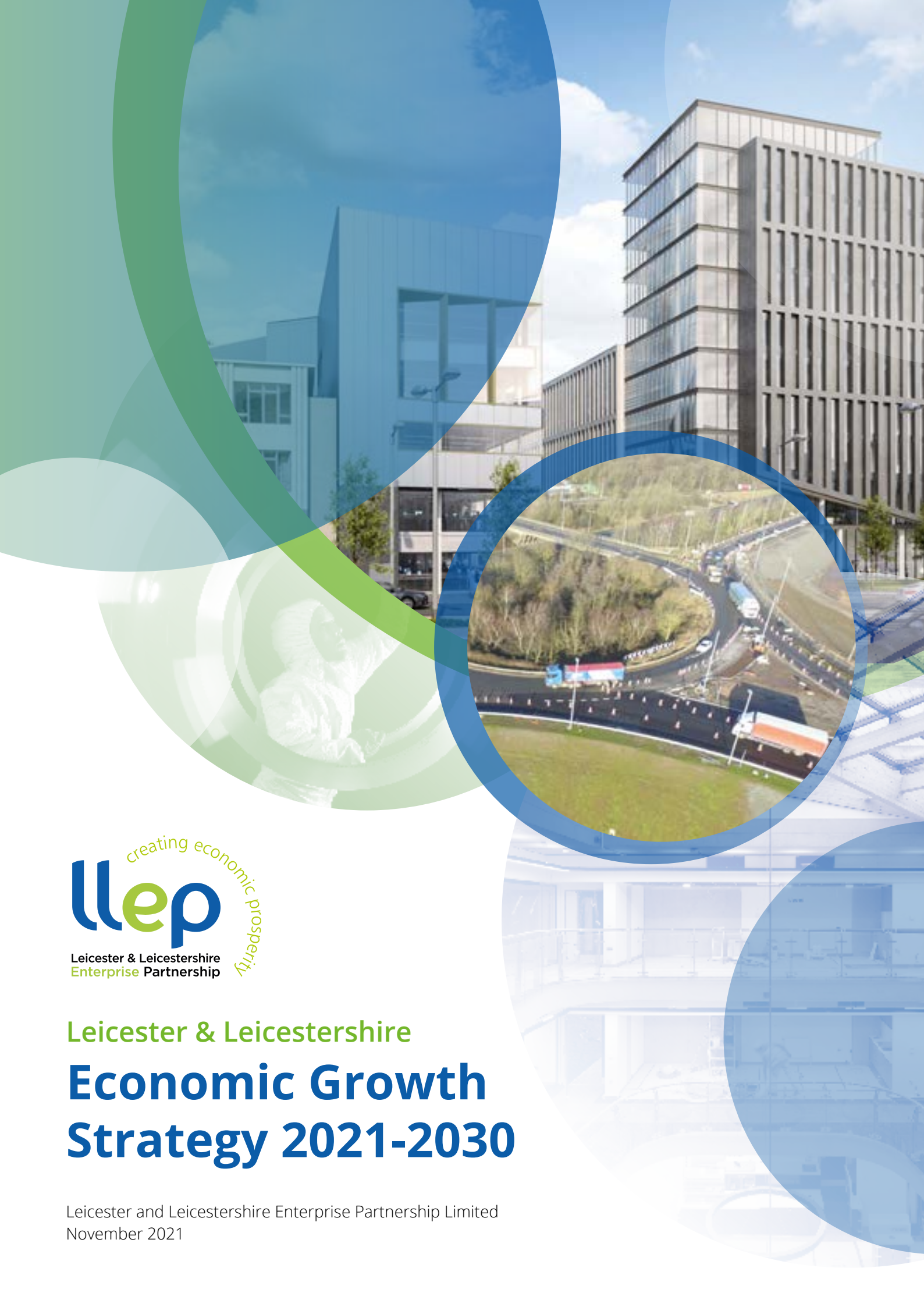


Appendix C – Updated Monitoring Data (completions and supply at 1st April 2021)

Rail-served Sites	Position at 1/4/20	Position at 1/4/21
Total Requirement (sqm) to 2041	1,106,000	1,106,000
<i>Supply</i>		
Completions in Monitoring Year		22,761
Commitments at 1/4/21	338,000	315,738
Built, Available Units (vacant)		48,626
Total Rail Served Supply (sqm)	338,000	387,125
Balance (sqm)	-768,000	-718,875
Indicative Additional Land Required (Ha@ 25% plot ratio)	-307	-288

Non rail-served Sites	Position at 1/4/20	Position at 1/4/21
Total Requirement (sqm) to 2041	1,466,000	1,466,000
<i>Supply</i>		
Completions in Monitoring Year (excl. pre lets at 31/3/20)	n/a	119,956
Commitments at 1/4/21 (Excl. pre-lets at 31/3/20)	892,000	830,058
Built, Available Units (vacant)	181,000	181,000
Total Non-rail Served Supply (sqm)	1,073,000	1,131,014
Balance (sqm)	-392,000	-334,986
Indicative Additional Land Required (Ha@ 35% plot ratio)	-112	-96

Appendix 4 – LLEP Economic Growth Strategy 2021-2030



Leicester & Leicestershire

Economic Growth Strategy 2021-2030

Leicester and Leicestershire Enterprise Partnership Limited
November 2021

Foreword



Using our local capabilities, innovations and skills – we will build a productive, innovative, inclusive and sustainable economy at the cutting edge of science and technology that supports the health of people and the planet

Leicester and Leicestershire has undergone a transformation over the past decade – into an innovative, technology-led and knowledge economy. These new and evolving strengths, alongside existing strengths and advantages, will help us overcome the impacts of Covid-19 and challenges of the EU transition. It is important to also acknowledge the need to deliver economic participation and prosperity for all residents, to improve people's health and ensure a carbon-neutral future.

From post-Covid recovery, to the future impact of new technologies and international trading arrangements, the future is uncertain. Important national policy decisions that will impact local economies are also being formulated, and we will know their priorities, objectives and potential resources later in 2021 and 2022.

This strategy sets out the broad ambitions for Leicester and Leicestershire that will inform future funding bids and resource prioritisation.

Despite the current economic and policy uncertainties, we are best served identifying and being informed about our main challenges and opportunities. This strategy sets out ambitions, objectives and priorities for the next 10 years and is intended to be used as a commissioning document for seeking funding, allocating funding and making decisions of what to prioritise over the coming years.

The Leicester & Leicestershire Economic Growth Strategy is based on an analysis of the current state of the economy, previous and current research,

strategies and action plans, and stakeholder aspirations and concerns. Prior to the formulation and writing of this strategy, a separate document entitled the Leicester & Leicestershire Economic Growth Strategy Evidence Review 2021 was published. It set out the insights and evidence from existing strategies and studies, stakeholder workshops and research commissioned by the Leicester and Leicestershire Enterprise Partnership to offer an up-to-date analysis and outlook for the economy. It also incorporates the recommendations and priorities of The Strategic Growth Plan for Leicester & Leicestershire 2050: Our vision for growth (2018) – this is the strategic growth plan for the region which has been endorsed by the nine local authority partners and the Leicester and Leicestershire Enterprise Partnership. Furthermore, this Strategy considers the Climate Emergency Declarations made by both Leicester City Council and Leicestershire County Council, and highlights a vision for achieving sustainable economic growth.

The next steps are to develop delivery plans and secure resources.

The strategy presented here is not an action plan or delivery document - these will come later in 2021 and 2022. Building on our track record, we can deliver. Leicester and Leicestershire has a fantastic track record in delivery, in transforming the region into a knowledge and technology-led economy. We have successfully delivered a range of transformative local and national policy initiatives, such as our Enterprise Zone sites. We are poised to further capitalise on initiatives such as the East Midlands Freeport. Working together, we can deliver the 2021-2030 Economic Growth Strategy.

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INNOVATIVE	36
INCLUSIVE	48
SUSTAINABLE	60



Executive Summary



Leicester and Leicestershire's Economic Growth Strategy 2021-2030

The Leicester and Leicestershire Economic Growth Strategy 2021-2030 seeks to deliver recovery and growth. Leicester and Leicestershire face the challenges of recovering from the Covid-19 pandemic, and the post-EU transition – from a position of strength as the region has transformed into a leading technology and knowledge-based economy over the past 10 years.

This strategy is built on robust research, stakeholder views and existing policies. This new economic strategy incorporates previous and current research, strategies and action plans, and stakeholder aspirations and concerns. It also builds on the recommendations and priorities of The Strategic Growth Plan for Leicester & Leicestershire 2050: Our vision for growth (2018), which is the strategic growth plan for the region endorsed by the nine local authority partners and Leicester and Leicestershire Enterprise Partnership.

Diversity is our strength. Leicester and Leicestershire benefits from a thriving, multicultural city at its heart surrounded by distinctive and independent towns and beautiful and productive rural areas. Our aspiration is to ensure that the diversity of Leicester and Leicestershire is more strongly reflected in the types of jobs and industries which our residents participate in, as well as

broadening the diversity of entrepreneurship, and business leadership in terms of gender, ethnicity and age.

Building sustainability principles into everything we do. Leicester and Leicestershire's local authorities have recently declared a climate emergency and are leading the way in moving towards net carbon zero. New strengths are emerging such as the low carbon sector, space and life sciences and other activities that are creating new knowledge-based jobs and business opportunities.

Collaborating to succeed. The region's strategic central location provides many exciting opportunities. These include areas in both the Midlands and the wider UK on issues of common economic interest that will help to implement the objectives of Building Back Better. Key collaborations include the Midlands Engine, East Midlands Freeport, and joint working with Coventry and Warwickshire, and Derbyshire and Nottinghamshire.





Continuing the economic transformation

Building on the global R&D and entrepreneurial expertise of Leicester and Leicestershire's three universities, and excellence in science and engineering, the region is now home to several UK and world-leading centres of new technology and innovation in space and Earth observation, sports science, life sciences, IT and cyber technologies, and automotive engineering.

Leicester and Leicestershire is also the UK's central logistics hub, having gained significant jobs and investment due to the area's strategic location. Agriculture and Food & Drink production remain key sectors in the region, producing £1.8 billion in GVA and accounting for 43,900 jobs. There is an opportunity to further build a sustainable visitor economy, that currently supports 58,000 jobs in Leicester and Leicestershire. New developments such as the East Midlands Freeport, HS2, and the continued development and build-up of world-class technology and business parks, position the region for further growth.

A successful, accessible location for business with world-class science and enterprise parks, and vibrant urban and rural areas. Alongside a reputation for a high quality of life and mixture of a dynamic city and vibrant rural towns and areas, Leicester and Leicestershire provides some of the best sites in the UK for science, technology, professional services and logistics businesses in the most central, accessible location in the UK.

Although the diversity of the local economy has presented some resilience against the impacts of Covid-19, the challenges facing communities and localities experiencing economic disadvantages have deepened. Industries such as manufacturing, tourism and hospitality have been hit hard by the pandemic. Prior to Covid-19, the region experienced long-standing economic deprivation and disadvantage challenges, with Leicester and Leicestershire ranked 23 out of 38 LEPs for deprivation. Covid-19 has led to further inequalities and concentrations of disadvantage, and has increased the future risk of unemployment and job insecurity facing lower-skilled residents and workers.



The strategy and its four pillars

Using our local capabilities, innovations and skills, we will build a productive, innovative, inclusive and sustainable economy at the cutting edge of science and technology that supports the health of the people and the planet. We aim to do this through our four strategic pillars (Productive, Innovative, Inclusive and Sustainable), outlined as follows:

Productive

Aim: Increase GVA and productivity, continue to develop a leading science and technology-led economy.

Leicester and Leicestershire is a prime location for international business, with 18% of businesses actively exporting their products and services. The region has seen significant growth in science and technology and the knowledge economy, accommodated in our growing world-class business and technology sites. Current challenges include the high demand for office and industrial land and premises, with insufficient supply and the reliance on public sector intervention. Up to 42% of jobs in Leicester and Leicestershire will require graduate skills by 2030, but the region has low graduate retention rates.

The four main priorities for meeting this aim and addressing the challenges include:

1. Entrepreneurial, resilient and high growth businesses: Continuing to build an entrepreneurial region, further improving rates of enterprise start-ups and scale-ups, and helping businesses recover after the pandemic. We will continue to support the following sectors:

- Beacon sectors: Space and Earth Observation, Life Sciences, Automotive, Sport Science and Cyber), aligned with our MIT REAP strategy.
- Growth sectors: ICT, Food and Drink, Logistics, and Professional and Financial Services).

- Key sectors of interest: Agriculture, Textiles, Creative and cultural, Construction, Tourism and the Visitor Economy and the Voluntary and non-profit sectors.

2. Attract and grow international businesses, investment and visitors: Support the contribution that international trade and investment make to economic growth, productivity and the creation of high-skill and high value jobs; whilst renewing our efforts to develop the visitor economy. Build on past successes, including the IBM Leicester Client Innovation Centre, The Access Group Global HQ, the MIRA Technology Institute and the work of Visit Leicester and Leicestershire.

3. Employment and skills for growth: Knowledge intensive services are forming an increasing share of the local workforce – comprising 238,600 jobs in 2018, and increasing by 2% per year since 2000. We need to continue to build relationships and joint initiatives to meet the employment and skills needs of employers and the future economy.

4. World-class business locations: Continue to develop and provide the business sites and locations needed to become a world-class location for science, technology and professional services. Build on the success of Loughborough University Science and Enterprise Park, MIRA Technology Park, Charnwood Campus Life Sciences Opportunity Zone, SEGRO Logistics Park, Magna Park, Leicester International Gateway and SpacePark Leicester.



Innovative

Aim: Global innovation leadership, increase innovation activities across the whole business base.

Over the past decade, Leicester and Leicestershire has significantly increased its university- and technology-based R&D and entrepreneurship. The region is also home to corporate R&D centres for 3M, IBM and PepsiCo. The region's economy is dominated by small businesses and the MIT REAP Programme has developed an ambitious, tailored programme to increase the rate of entrepreneurship and business growth in Leicester and Leicestershire.

Low levels of R&D expenditure compared to the national average and international standards continue to be a challenge. Workforce skills are also deficient in key areas, such as STEM-related industries and corporate management. A major boost to innovation is required to meet the climate change and sustainability agenda facing local industries and society.

The four main priorities for meeting this aim and addressing the challenges include:

1. Global innovation leadership: Supporting our outstanding R&D strengths and innovation achievements. This involves working closely with the region's three universities – De Montfort, Leicester and Loughborough. SpacePark Leicester is a major new R&D and technology business campus which demonstrates that the region can attain and invest in innovation leadership of national and international significance.

2. Increase and broaden innovation activity amongst businesses: Capitalising on the interest amongst the Small and Medium Enterprise (SME) base in innovation and knowledge exchange, improving rates of innovation adoption, collaboration and skills acquisition. We need to increase regional business involvement in university research, building on progress such as that achieved by De Montfort University's Cyber Security Academic Centre of Excellence.

3. Successfully pioneer and apply emerging and new technologies: Helping businesses become more competitive and resilient. The most resilient businesses that emerged from the Covid-19 pandemic, had good digital systems and online platforms, or implemented them rapidly. Business performance and success depends on technology and innovation adoption and transformation. Leicester and Leicestershire has a great track record upon which to build, exemplified by initiatives such as the 842-acre MIRA Technology Park.

4. Innovation for sustainability: Business performance and success depends on technology, adopting innovation and transformation. Sectors such as food & drink, textiles and logistics will need support in the transition to sustainability. The region has several distinct leaders in sustainable technologies, such as Cenex, based in Loughborough, which is the UK's first Centre of Excellence for Low Carbon and Fuel Cell technologies, established in 2005.

Inclusive

Aim: Create a resilient, adaptive workforce where all residents have access to skills and career progression and are paid the living wage.

The diversity and international links of the region's population and communities presents opportunities for international trade and investment. The concentrations of deprivation, pockets of low education and skills attainment, and social, economic and health inequalities in Leicester and Leicestershire will need addressing. To increase access to opportunities and decrease economic disadvantage, there needs to be progress in delivering youth, employment and careers services.

The four main priorities for meeting this aim and addressing these challenges include:

1. *Informed choices and routes to job and skills progression:* Deliver services to prevent increases in youth unemployment, provide employer-led skills development, progression pathways and increase apprenticeships. Partners in Leicester and Leicestershire need to build on the significant progress made in the provision of youth, employment and careers services with the Enterprise Adviser Network, Careers Hub and the Youth Employment Hub.

2. *Improve skills and qualifications attainment and employability of the workforce:* Reduce the flow of low skilled, poorly qualified individuals into adulthood, and address low qualifications and skills attainment in adults. Initiatives such as Loughborough College Careers and Enterprise Hub are making good progress and continued support for similar initiatives is needed.

3. *Improve access to work, labour market inclusion and wellbeing at work:* This priority aims to address the foundations of labour market exclusion, working conditions, and health. It seeks to help individuals participate in education, training and the labour market, and to access and maintain employment. Wellbeing at work is also of increasing importance for those most at risk of health inequalities, economic exclusion and poverty. Initiatives such as Barratt Developments and SMB Group's Construction Partnership and Social Mobility Pledge, and the University of Leicester and Leicester College support for leaders and managers in the voluntary sector, have shown that progress can be made.

4. *Improve jobs quality, in-work progression and pay:* We need to ensure good access to education and skills attainment, quality jobs, pay and prosperity, particularly amongst deprived or excluded individuals, households and communities. We also need to examine how communities and residents can access new areas of jobs growth such as in the green economy.



Aim: Become a leader in zero carbon solutions, with sustainability principles built into everything we do.

OPPORTUNITIES:

In Leicester and Leicestershire, all local authorities, the Local Enterprise Partnership, universities, East Midlands Airport and many other businesses and organisations have made a commitment to zero carbon, addressing biodiversity loss and resource scarcity. There are opportunities for businesses in developing and adopting sustainable innovations and technologies – such as zero carbon vehicles, pollution monitoring, and Earth observation. Climate change and sustainable development will bring radical, urgent and far-reaching consequences for the economy, business operations and industrial structure. We will need new and adapted economic models and frameworks.

The four main priorities for meeting these aims include:

1. Sustainable places, city and town centres:

City and town centres have been impacted significantly by the pandemic, with local retail (excluding food) and leisure footfall up to 80% lower during the past year, whilst the shift to online shopping has accelerated. The demand for new homes continues to increase. Development and redevelopment must be delivered sustainably, going forward – as prioritised in The Strategic Growth Plan for Leicester & Leicestershire 2050: Our vision for growth. Homes must be affordable and green, and sites for new employment space and premises must be zero carbon developments. Progress on the Natural Capital Strategy and the National Forest has been made but will need continued support.

2. Sustainable transport and connectivity: For Leicester and Leicestershire to deliver the 187,096 new dwellings that it is estimated

will be needed by 2050 will require rail improvements and increased modal shift from private to public and sustainable transport. Road improvements to the A46 and A5 are vital to housing and employment growth, with road transport decarbonisation and improved internet connectivity, particularly for rural areas, also required to meet sustainable development goals. Some progress has been made on internet connectivity with the rollout of Superfast Leicestershire, but continued investment in broadband and 5G will be required to ensure that digital infrastructure can meet the requirements of employers, workers, businesses and learners in the future.

3. Sustainable energy: The Energy Infrastructure Strategy for Leicester and Leicestershire demonstrated that renewable energy could generate 6,700 gigawatt hours per year – enough to meet total electricity demand in the region today, and in 2050. To achieve this, 125 megawatts of renewable energy generation needs to be installed every year up to 2050. Another barrier to energy efficiency is that power networks are stressed, and more efficient energy infrastructure and networks need to be installed, including ‘smart streets’ networks.

4. Sustainable business: To achieve carbon saving targets and increase the environmental sustainability of the local economy, businesses will need to decarbonise, reduce resource use and waste, and adapt to new business models and conditions. Grant programmes such as the Green BELLE project have been welcome, but business transformation will need to continue.

Next steps

This strategy sets out the broad ambitions for Leicester and Leicestershire that will inform future funding bids and resource prioritisation. The ambitions, objectives and priorities for the next 10 years are intended to be used as a commissioning document for seeking funding, allocating funding and making decisions on what to prioritise over the coming years. Working with partners, we will develop delivery plans and secure resources for the individual pillars and priorities within the Strategy.

Our Mission



Welcome to Leicester and Leicestershire – a leading and fast-growing centre of science, technology and knowledge-industries in the UK

This new Economic Growth Strategy for 2021-2030 seeks to deliver recovery and development, building on the successful transformation of the local economy over the past 10 years

Leicester and Leicestershire's Economic Growth Strategy for 2021-2030 seeks to deliver a successful recovery from the Covid-19 pandemic and further capitalise on the phenomenal transformation of the local economy over the past 10 years. Prior to the Covid-19 pandemic, Leicester and Leicestershire generated £24.5 billion in GVA, with 42,000 businesses and 538,000 jobs. As a testament to its resilience and growth potential, we expect this to increase to £30.2 billion and 568,000 jobs by 2030.

Building on the global R&D and entrepreneurial expertise of Leicester and Leicestershire's three universities, and excellence in science and engineering, the region is now home to several UK and world-leading centres of new technology and innovation in space and Earth observation, sports science, life sciences, IT and cyber technologies, and automotive engineering. Leicester and Leicestershire is also the UK's central logistics hub, having gained significant jobs and investment due to the area's strategic location. Agriculture and Food & drink production remain key sectors in the region, producing £1.8 billion in GVA and accounting for 43,900 jobs. There is an opportunity to further build a sustainable visitor economy, which currently supports 58,000 jobs in Leicester and Leicestershire.

With the opportunity to create up to 9,900 new skilled jobs in Leicester and Leicestershire from the East Midlands Freeport

Another significant new opportunity is the East Midlands Freeport, which benefits from the existing maritime-operated rail facility at East Midlands Gateway, and existing and proposed railheads at Ratcliffe and East Midlands Intermodal Park. The Freeport, at full build out across three sites, is expected to generate 61,700 jobs – 32,800 on-site jobs, and another 28,900 through supply chains. The site is based around the East Midlands Airport and Gateway Industrial Cluster (EMAGIC) in North West Leicestershire and is expected to contribute £600 million in GVA annually, and 9,900 jobs within Leicester and Leicestershire (with £390 million and 5,300 jobs on-site).

The Freeport will bring significant investment to develop and drive innovation, alternative energy sources and green technology supporting SMEs and large regional employers, including Rolls-Royce, Toyota, and Alstom (formerly Bombardier). The East Midlands Freeport bid was submitted in February 2021 by a consortium led by the Local Enterprise Partnerships representing Leicester, Leicestershire, Derby, Derbyshire, Nottingham and Nottinghamshire. It included private sector businesses and local authorities, with support from universities, business groups, local MPs and the proposed East Midlands Development Corporation.

A successful, accessible location for business with world-class science and enterprise parks, and vibrant urban and rural areas

Alongside a reputation for a high quality of life and mixture of a dynamic city and vibrant rural towns and areas, Leicester and Leicestershire provides some of the best sites in the UK for science, technology, professional services and logistics businesses in the most central, accessible location in the UK.

Leicester and Leicestershire has transformed into a leading technology and knowledge-based economy over the past 10 years

The region's three universities (De Montfort University, the University of Leicester and Loughborough University) and businesses have demonstrated that they are world-class at Sports science, Space, Advanced engineering, and Automotive sectors, The Life sciences, Health, ICT, Professional services and Logistics. The universities are well integrated into the local economy and business base, where they impart their international research expertise and their own entrepreneurship and innovation initiatives. Leicester and Leicestershire's further education colleges have adopted a business-focus and are helping to improve SME participation in apprenticeships.

With the potential to reach critical mass in terms of the techno-entrepreneurial economy – particularly on its world-class business and technology sites

This progress has culminated in the delivery of a range of modern science, technology and business sites – with higher education, R&D and enterprise support built-in. These include the Loughborough University Science and Enterprise Park, MIRA Technology Park, Charnwood Campus Life Sciences Opportunity Zone, Magna Park, SEGRO Logistics Park, Leicester International Gateway and SpacePark Leicester. Alongside this, the region also hosts leading commercial R&D activity and expertise in firms such as 3M Group, the AI Institute, PepsiCo and IBM. These leading business

and technology sites are supported by East Midlands Airport's global connectivity. The recently announced East Midlands Freeport will also provide a significant boost to Leicester and Leicestershire.

Covid-19 has accelerated and exacerbated existing trends

Leicester and Leicestershire suffered from higher caseloads of Covid-19, and the impacts on tourism and hospitality sectors has been significant. However, the diversity of the local economy has provided some resilience against the pandemic, and there have been fewer job losses compared to the national average. In addition, certain sectors in the region such as logistics, life sciences and online retail, have seen buoyant demand and growth over the past year.

As elsewhere, the Covid-19 pandemic has impacted workers on low pay and facing job insecurity the most. Due to the pandemic, up to 117,000 jobs are classified as 'vulnerable', of which 58,000 are in Hospitality, Tourism and retail, while 30,000 are in Manufacturing. The tourism sector experienced a 64% fall in economic output in 2020 compared to 2019. There has been a contraction in job vacancies and hiring, with young people particularly affected by a reduction in entry level positions and places on apprenticeships.

Prior to Covid-19, there were long-standing challenges with deprivation and economic disadvantage. Leicester and Leicestershire ranked 23 out of 38 LEPs for deprivation. Leicester City has significant concentrations of deprivation and NEET rates (5% vs. England which has 3%). Although many Leicester and Leicestershire residents enjoy a good quality of life and unemployment is relatively low, the area still suffers from isolated pockets of deprivation and there are significant differences across different local authority areas. Covid-19 has led to further inequalities and concentrations of economic disadvantage and has increased the future risk of unemployment and job insecurity facing lower-skilled residents and workers.



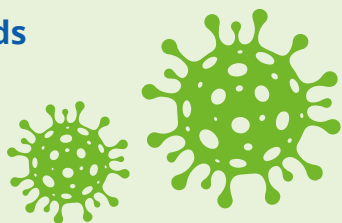
Covid-19 has also impacted business continuity, resilience, supply chains and market demand. The capacities and capabilities of many SMEs have been significantly stretched in terms of their resilience and financial health. The pace of acceleration brought about by the digital transformation of businesses, public services and skills has meant that changes have occurred in a few months instead of taking place gradually over a few years.

Rural areas have also been significantly impacted, with disruptions to harvesting and meeting the demand for agricultural produce, as well as interruptions to supply chain operations in the Food & drink sector. Access to the countryside has also played a significant role during the Covid-19 lockdowns and curtailment of international travel and tourism.

Impacts of Covid-19 on the Leicester & Leicestershire Economy

Covid-19 caseloads

70% higher than national average in February 2021



Employers have been **less likely** to have made **redundancies**

Covid-19 has amplified existing inequalities

in our communities, and the impacts have been uneven both spatially and according to income group, age, ethnicity and gender.



117,000 or 24.3% of jobs classed as **'vulnerable'** due to Covid-19



By 2030, as a legacy of the pandemic the Leicester and Leicestershire economy could expect to have in the region of 1,600 fewer jobs, output £800 million lower, and a workforce of £1,300 per annum less productive.

Leicester and Leicestershire – a thriving location for business and talent

Using our local capabilities, innovations and skills – we will build a productive, innovative, inclusive and sustainable economy at the cutting edge of science and technology that supports the health of people and the planet

The Leicester & Leicestershire Economic Growth Strategy is based on an analysis of the current state of the economy, previous and current research, strategies and action plans, and stakeholder aspirations and concerns. Prior to the formulation

and writing of this strategy, a separate document, entitled the Leicester & Leicestershire Economic Growth Strategy Evidence Review 2021, was published. This document sets out the insights and evidence from existing strategies and studies, stakeholder workshops and research commissioned by the Leicester and Leicestershire Enterprise Partnership to offer an up-to-date analysis and outlook for the economy. It also incorporates the recommendations and priorities of The Strategic Growth Plan for Leicester & Leicestershire 2050: Our vision for growth (2018) – the strategic growth plan for the region endorsed by the nine local authority partners and the Leicester and Leicestershire Enterprise Partnership.

Our Strategy: 4 pillars

PILLAR	OPPORTUNITIES AND CHALLENGES IN THE REGION	PRIORITIES
<p>PRODUCTIVE</p> <p>Grow GVA and productivity, continue to develop a leading science and technology-led economy</p>	<p>OPPORTUNITIES:</p> <ul style="list-style-type: none"> ● Prime location for international business, 18% of businesses export ● Significant growth in science and technology and knowledge economy ● World-class business and technology sites <p>CHALLENGES:</p> <ul style="list-style-type: none"> ◆ High demand for office and industrial land and premises, with insufficient supply and reliance on public sector intervention ◆ 42% of jobs will require graduate skills by 2030, but low graduate retention 	<ol style="list-style-type: none"> 1. Entrepreneurial, resilient and high growth businesses 2. Attract and grow international businesses, investment and visitors 3. Employment and skills for growth 4. World-class business locations
<p>INNOVATIVE</p> <p>Global innovation leadership, increase innovation activities across the whole business base</p>	<p>OPPORTUNITIES:</p> <ul style="list-style-type: none"> ● University and technology-based R&D and entrepreneurship ● Corporate R&D: 3M, IBM, PepsiCo ● MIT REAP Programme <p>CHALLENGES:</p> <ul style="list-style-type: none"> ◆ R&D expenditure remains below national average and low by international standards ◆ Workforce skills ◆ Innovation required to meet the climate change and sustainability agenda facing local industries and society 	<ol style="list-style-type: none"> 1. Global innovation leadership 2. Increase and broaden innovation activity amongst businesses 3. Successfully pioneer and apply emerging and new technologies 4. Innovation for sustainability
<p>INCLUSIVE</p> <p>Create a resilient, adaptive workforce where all residents have access to skills and career progression and are paid the living wage</p>	<p>OPPORTUNITIES:</p> <ul style="list-style-type: none"> ● Diversity and international links of population and communities ● Progress in youth, employment and careers services <p>CHALLENGES:</p> <ul style="list-style-type: none"> ◆ Concentrations of deprivation ◆ Low education and skills attainment ◆ Social, economic and health inequalities ◆ Low pay and job quality ◆ Skills required to meet the climate change and sustainability agenda facing local industries and society 	<ol style="list-style-type: none"> 1. Informed choices and routes to job and skills progression 2. Improve skills and qualifications attainment and employability of the workforce 3. Improve access to work, labour market inclusion and wellbeing at work 4. Improve jobs quality, in-work progression and pay
<p>SUSTAINABLE</p> <p>A leader in zero carbon solutions, with sustainability principles built into everything we do</p>	<p>OPPORTUNITIES:</p> <ul style="list-style-type: none"> ● Multi-stakeholder commitment to zero carbon, addressing biodiversity loss and resource scarcity ● Business and technology actions and innovations (e.g., zero carbon vehicles, pollution monitoring, Earth observation) <p>CHALLENGES:</p> <ul style="list-style-type: none"> ◆ Radical, urgent and far-reaching consequences for economy, operations and structure ◆ Adapting to new economic models and frameworks 	<ol style="list-style-type: none"> 1. Sustainable places, city and town centres 2. Sustainable transport and connectivity 3. Sustainable energy 4. Sustainable business

Diversity is our strength

Leicester and Leicestershire benefits from a thriving, multicultural city at its heart which is surrounded by distinctive and independent towns and beautiful and productive rural areas.

Leicester and Leicestershire is strategically located in the centre of the country, with good road, rail and air links with the rest of the UK and the world. The region's strengths lie in its diverse nature and global connections which offer a wide range of opportunities for businesses, residents and potential investors.

Leicester is renowned for its young and dynamic multicultural population, with thriving South Asian, Somali and Eastern European communities that are fluent in over 100 different languages. Leicestershire is renowned for its distinctive and independent towns including Loughborough, Melton Mowbray, Market Harborough, Hinckley, Ashby-de-la-Zouch and Coalville. Each town is an important economic centre in its own right and a focal point for their local communities. In between Leicester and its surrounding towns and villages lie varied and beautiful rural areas that are rich in natural capital. Leicestershire is predominantly a rural county where much of the Melton and Harborough districts are classified as rural, along with large parts of Hinckley and Bosworth borough and North West Leicestershire district. Our aspiration would be to ensure that the diversity of Leicester and Leicestershire is more strongly reflected in the types of jobs and industries which our residents work in, as well as broadening the diversity of entrepreneurship and business leadership to encompass gender, ethnicity and age.

Building a healthy, sustainable economy

Transforming the economy by maximising the opportunities from environmental sustainability and health

The world is facing three interconnected global emergencies: climate change, resource exploitation and biodiversity loss. It is only by transitioning to a zero-carbon economy, creating a circular economy and recovering lost biodiversity that irreversible damage can be avoided, and our natural environment and resources be protected for future generations. The adoption of zero carbon technologies and the efficient use of resources is one of the greatest industrial opportunities of our time, which present the ability to transform existing industries and create new ones as the UK moves to a more resource-efficient economy.

Businesses in Leicester and Leicestershire have been showing the way – as demonstrated by East Midlands Airport which was the first among UK airports to make a commitment to achieve carbon neutral ground operations by 2012. However, SMEs and microbusinesses need further support.

People's health

The Covid-19 pandemic has illustrated the significant role that health plays in our economy and society, and the need to incorporate health into strategic thinking. While the city of Leicester has a younger population than average, like the rest of the UK the elderly population continues to grow.

In the period up to 2030, the number of people over 65 is expected to increase by 55,000, representing 70 per cent of the forecast growth in population. This will create new demands for technology, products and services and will alter patterns of working and participation in the economy. De Montfort University has collaborated with two local healthcare providers and Age UK to establish the Leicester Academy for the Study of Ageing, to research the challenges that come with ageing while using multidisciplinary approaches to develop solutions.



Building sustainability principles into everything we do

Leicester and Leicestershire is ready to meet these challenges. The local authorities recently declared a climate emergency and are leading the way in moving towards net carbon zero. Leicestershire County Council is committed to achieving net zero carbon by 2030 for its own operational emissions and will work with its partners and the government to achieve net zero carbon for Leicestershire by 2045 or before. Leicester City Council has also made zero carbon commitments for the city of Leicester, which encompass the council's activities, organisation and estate becoming carbon neutral by 2030 or sooner. The City Council published a Climate Emergency Strategy and an accompanying Action Plan in 2020.

Leicester and Leicestershire is also developing new strengths in sectors such as low carbon, space, and life sciences, which have led to the creation of new knowledge-based jobs and business opportunities. This is emphasised in the strategy's fourth pillar - Sustainable - which refers to the ambition of becoming a leader in low carbon solutions with sustainability principles built into everything we do.

Delivering healthy and sustainable growth

To deliver healthy, sustainable growth and support the AI and Data and Low Carbon Grand Challenges, Leicester and Leicestershire will create more high value jobs in sectors such as low carbon, space and life sciences. The introduction of SpacePark Leicester provides a new centre of excellence for Earth observation and satellite technology, and a low carbon and circular economy business cluster exists at the Loughborough University Science and Enterprise Park (LUSEP). Other measures include the construction of new sustainable and affordable housing, while developing and encouraging more sustainable forms of transport to mitigate the impacts of climate change. Leicester and Leicestershire will also aim to increase targeted foreign direct investment in the low carbon sector and will support the development of renewable energy from local sources. Businesses will also be supported in their bid to become more energy efficient and carbon neutral.

Leicester and Leicestershire – your partner in growth

A successful track record of working in partnership to win government funding to deliver transformative projects.

Partnership is a key strength of Leicester and Leicestershire, with local authorities, businesses, universities and the Local Enterprise Partnership working together to deliver a more successful, inclusive and sustainable economy.

Leicester and Leicestershire has delivered a number of nationally important projects over the past decade, using the 2014 City Deal and Growth Deal funding. The region achieved Enterprise Zone status for two Enterprise Zones covering four separate sites, including the UK's only automotive focused Enterprise Zone, the UK's first designated Life Sciences Opportunities Zone, and two new Manufacturing Zones in Leicester and Melton Mowbray.

Funding was also secured from the Satellite Applications Catapult to support the Manufacturing, Engineering, Technology and Earth Observation Centre (METEOR) at Space Park Leicester. Related to this, the Department for International Trade relaunched the Leicester Space Park HPO (High Potential Opportunity) project as part of the UK Space Sector COVID Support Plan (SSCSP), while a successful HPO in Rehabilitation was awarded to Leicester and Leicestershire thus capitalising on the region's strengths in life sciences and health research. More recently, the East Midlands Airport and Gateway Industrial Cluster (EMAGIC) sites in North West Leicestershire were granted Freeport Status. The East Midlands Freeport consortium will now work with the government to develop the proposals into an outline business case which will provide further information on how the Freeport will be delivered. If successful, this will provide a significant boost to manufacturing and logistics industries in the region.



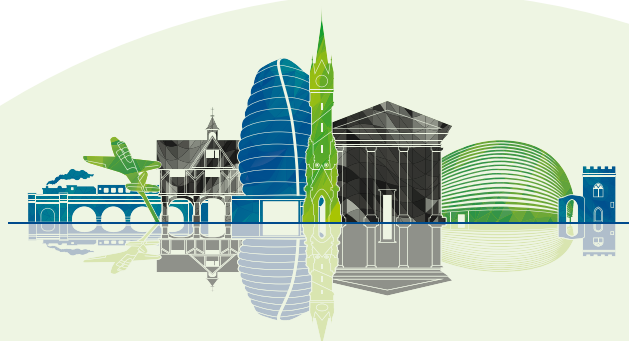
The economic strategy aligns with *The Strategic Growth Plan for Leicester & Leicestershire 2050: Our vision for growth* which sets out housing and development aspirations

Leicester and Leicestershire has clear and well-developed plans in place to support sustainable future growth as articulated and agreed upon in The Strategic Growth Plan for Leicester & Leicestershire 2050: Our vision for growth. In 2018, the nine local authorities (Leicester City Council, and Leicestershire County Council and the seven district authorities of Blaby, Charnwood, Harborough, Hinckley and Bosworth, Melton, North West Leicestershire, and Oadby and Wigston) and Leicester and Leicestershire Enterprise Partnership agreed to The Strategic Growth Plan, setting out their aspirations for the development of new housing and infrastructure in the period up to 2050. The strategic plan highlighted that around 187,000 new dwellings will be needed between 2011 and 2050 to house the area's growing population, with 96,580 homes required by 2031 and a further 90,516 by 2050. In addition, it was also estimated that between 367 and 423 hectares of employment land will be required by 2031 to meet future demand. This Economic Growth Strategy (2021-2030) adopts and aligns with the principles and priorities outlined in The Strategic Growth Plan (2018). It includes priorities to create suitable conditions for investment and growth while balancing the need for new housing and jobs with protection of our environment and built heritage. It also encourages more development on strategic locations – which will give rise to better planned communities in terms of housing, employment, transport and services. There is a recognition that The Strategic Growth Plan

(2018) was developed prior to the recent Climate Emergency Declarations and so the priorities found within this Economic Growth Strategy will be applied to the delivery of The Strategic Growth Plan (2018). Another significant aspect of The Strategic Growth Plan (2018) is the timing and coordination of improvements to transport to enable the development and success of our world-class business locations.

Ensuring everyone can benefit from economic success

Significant progress has been made in the provision of youth, employment and careers services, with the Enterprise Adviser Network, Careers Hub and Youth Employment Hub. In addition, projects like the Leicester Employment Hub, Construction Skills Hub and area European Social Fund (ESF) programmes support both young people and adults, along with the Department for Work and Pensions (DWP) and National Careers Service offerings. Loughborough College, in partnership with Loughborough University and Charnwood Borough Council, has led a project to open a new Careers and Enterprise Hub in Loughborough town centre, which supports all ages. Although Leicester and Leicestershire is home to three leading universities and has many well-qualified residents, its overall educational attainment lags behind the rest of the UK, and this is reflected in lower pay. With the demand for higher-skilled workers predicted to increase over the next decade, improving educational attainment and upskilling the workforce will be key challenges moving forward. Increasing graduate retention is part of the solution.



Collaborating to succeed

Part of the Midlands Engine, working with neighbouring cities and localities

Leicester and Leicestershire's central location provides the region with many exciting opportunities to work with areas within the Midlands and the wider UK on issues of common economic interest that will help to implement the objectives of Building Back Better. This will include utilising cross-border physical assets to create new employment opportunities as well as developing collaborative approaches with neighbouring areas such as Coventry and Warwickshire, and Derbyshire and Nottinghamshire to improve growth and productivity in key sectors.

To the north, Leicester and Leicestershire has collaborated with Derbyshire and Nottinghamshire over the development of the East Midlands Airport Freeport Proposals, and continues to collaborate over East Midlands Airport and High Speed 2 to ensure that the delivery of these key infrastructure assets benefit the local area. This will be supported by the creation of a new East Midlands Development Corporation, which will focus on developing an area straddling the north Leicestershire and south Nottinghamshire borders. The establishment of the new National Defence Rehabilitation Centre, as well as existing assets such as Charnwood Campus and BioCity Nottingham, also offer the opportunity for Leicestershire and Nottinghamshire to work jointly to develop an East Midlands life sciences cluster.

Such cross-border collaboration already exists through initiatives such as the Midlands Engine, as well as the new Loughborough Area of Innovation (LAI) - a multi-partner initiative, linking Loughborough, Leicester, Nottingham and Derby - led by Loughborough University. This new Economic Growth Strategy aligns with Midlands Engine priorities including support for developments by the East Midlands Development Corporation at The East Midlands Hub HS2 Station, East Midlands Airport and Ratcliffe-on-Soar power station which will help to advance the Ten Point Plan for Green Growth in the Midlands Engine.

Furthermore, Leicester and Leicestershire is integral to several Midlands Connect (the Subnational Transport Body for the East and West Midlands) priorities over the next 10 years. These include support for an orbital transport solution to the south and east of the City, A5 Improvement Corridor, and A511 Growth Corridor - with the potential to accommodate thousands of new homes and jobs. The Midlands Connect £3.5 billion plan to revolutionise the Midlands rail network would also bring significant benefits to Leicester and Leicestershire, providing electrification and HS2 compatible services. The HS2 railway line will pass through Leicestershire to the north of the County with access from nearby Toton in Nottinghamshire. This will create extra capacity for high-speed railway journeys and free up space for 2.5 million tonnes of freight each day.

Next steps

Developing delivery plans and securing resources

This strategy sets out the broad ambitions for Leicester and Leicestershire that will inform future funding bids and resource prioritisation. The ambitions, objectives and priorities for the next 10 years are intended to be used as a commissioning document for seeking funding, allocating funding and making decisions on what to prioritise over the coming years. Working with partners, we will develop delivery plans and secure resources for the individual pillars and priorities within the Strategy.

PRODUCTIVE

Increase GVA and productivity, continue to develop a leading science and technology-led economy



Priorities

1. Entrepreneurial, resilient and high growth businesses

Continuing to build an entrepreneurial region, further improving rates of enterprise start-up and scale-up, and helping businesses recover after the pandemic.

Reflecting the strong role of SMEs in the Leicester and Leicestershire economy, we will continue to promote high rates of entrepreneurship and start-ups and help businesses realise their ambitions with high growth business support and advice. We will also seek to improve the performance of existing businesses via productivity improvements, digital transformation, HR and skills and diversification. We will continue to support the key growth sectors of Life sciences, Space and Earth observation, Sports and sport science, Advanced engineering, ICT, Food and drink, Logistics and professional and financial services – as well as the locally important sectors of Agriculture, Textiles, Creative and cultural, Construction, Tourism and the visitor economy, and the voluntary and non-profit sectors. We will provide ongoing support to businesses that are recovering from Covid-19 and adapting to the new trading relationships with the European Union (EU), including support to strengthen local supply chains. We will ensure that the diversity of Leicester and Leicestershire is more strongly reflected in entrepreneurship and business leadership in terms of gender, ethnicity and age.

2. Attract and grow international businesses, investment and visitors

Support the contribution that international trade and investment make to economic growth, productivity and the creation of high-skill and high value jobs; and renew our efforts to develop the visitor economy.

The region is a prime location for international businesses. In 2020, 18 per cent of all businesses exported their products and services overseas, while multinational firms such as 3M, IBM and PepsiCo continue to operate here. We will continue to secure inward investment, while retaining and growing our existing international businesses. We will develop and implement the Freeport strategy and provide support for SMEs to export their products and services. Tourism and the visitor economy is a significant and growing sector, that needs support to recover from the Covid-19 pandemic. To this end, we will continue to support the ambitions of the Leicester and Leicestershire Tourism Growth Plan to attract international businesses which increasingly desire locations that are at the forefront of providing climate and biodiversity action, health and wellbeing and sustainable communities.



3. Employment and skills for growth

Build relationships and joint initiatives to meet the employment and skills needs of employers and the future economy. Knowledge intensive jobs will grow over the next decade. By 2030, it is forecast that 42 per cent of jobs within Leicester and Leicestershire will require Level 4+ qualifications. Demand for Level 2 and Level 3 jobs are also expected to grow by around 5%, while other roles or jobs which do not require any qualifications are forecast to contract as a share of the LLEP total. Previously, skills shortages could be met by attracting overseas workers. In the future, employers will be much more reliant on local workers and their skills. We will meet this challenge by matching the skills supply to the needs of employers and increasing graduate employment and retention. Further education colleges, universities and employers will work together to increase the take-up of apprenticeships and vocational learning. We will encourage lifelong learning and improve skills attainment across the broad range of diverse sectors in the Leicester and Leicestershire economy. Another key aim is to help employers improve their HR and skills development capabilities and practices.

4. World-class business locations

Continue to develop and provide the business sites and locations needed to become a world-class location for science, technology and professional services. Leicester and Leicestershire has transformed its business locations and premises since 2010, with world-class sites such as Loughborough University Science and Enterprise Park, MIRA Technology Park, Charnwood Campus Life Sciences Opportunity Zone, Magna Park, SEGRO Logistics Park and Leicester International Gateway, as along with city centre developments such as SpacePark Leicester, the former Stibbe site, DOCK I and DOCK II developments. Over the past 10 years, brand new Grade A offices, technology and manufacturing premises have been built to accommodate 5,000 high-technology jobs. Within the principles of the Strategy for Growth, which sets out the region's strategic land use and planning policies, we aim to provide enough Grade A space for 10,000 more jobs. While much progress has already been made in providing world-class business locations, follow-on investment and development are now required to accommodate further jobs and strengthen the region's international reputation.





PRODUCTIVE - Priority 1: Entrepreneurial, resilient and high growth businesses

Continue to build an entrepreneurial region, further improving rates of enterprise start-ups and scale-ups and helping businesses recover after the pandemic.

The Leicester and Leicestershire economy is dominated by small businesses - with 89.8% of businesses micro-sized (employing less than 0-9 people). Building on the Business Gateway Growth Hub support and expanding on successful initiatives such as the MIT Regional Entrepreneurship Acceleration Program (REAP), we can continue the substantial progress made in the last 10 years, as evidenced by the growth in the number of businesses (+ 20% between 2014 and 2019), and improvements in start-up and survival rates that are higher than the national average. Businesses will continue to be supported through the uncertain recovery period and the EU transition. The Leicester and Leicestershire MIT REAP Ideas Taskforce has provided a detailed analysis of the opportunities and challenges facing the region, resulting in the “Bootstraps and Beacons” strategy which combines an approach that seeks to upscale productivity and enhance existing innovation infrastructure.

We will continue to support the following sectors:

- Beacon sectors: Space and Earth Observation, Life Sciences, Automotive, Sport Science and Cyber) aligned with our MIT REAP strategy.
- Growth sectors: ICT, Food and Drink, Logistics and Professional and Financial Services) and
- Key sectors of interest: Agriculture, Textiles, Creative and cultural, Construction, Tourism and the Visitor Economy and the Voluntary and non-profit sectors.

We will provide ongoing support to businesses recovering from Covid-19 while adapting to the new trading relationships with the EU, and addressing the specific needs and issues affecting rural businesses and the agricultural economy. We will ensure that the diversity of Leicester and Leicestershire is more strongly reflected in entrepreneurship and business leadership in terms of gender, ethnicity and age. We will also seek to improve the performance of existing businesses via productivity improvements, digital transformation, HR and skills and diversification. Businesses will also need support to address climate change, resource exploitation and biodiversity loss. The relevant support and advice will enable them to adapt accordingly.



PRODUCTIVE – Priority 1:

Entrepreneurial, resilient and high growth businesses

Objective	Short-term (2021-23)	Long-term (2021-30)
<p>1. High rates of entrepreneurship and start up</p>	<p>By drawing together and enhancing existing provision, develop and coordinate a cohesive framework for local start-up support, to meet increased demand for support via the Business Gateway Growth Hub.</p>	<p>Within the existing Business Gateway Growth Hub, create a local framework for start-up support to assist self-employment, entrepreneurship and non-profit organisations. This includes support for key groups such as those newly unemployed, graduates, young people, women and rural residents.</p>
<p>2. Helping businesses realise their growth ambitions</p>	<p>The Business Gateway Growth Hub will broker support to businesses with high growth ambitions. Develop formal partnerships and resources to deliver the MIT REAP framework.</p>	<p>High growth business support and peer networks, with MIT REAP.</p>
<p>3. Support growth in key sectors and knowledge-based businesses</p>	<p>Continue to support life sciences, space and Earth observation, sports and sport science, advanced engineering, ICT, food and drink, logistics and professional and financial services.</p>	<p>Provide for the next stages of grow-on and networking space and premises; integrate growth sector needs into skills pathways and careers guidance. Provide scale-up support to businesses.</p>
<p>4. Resilient and adaptable businesses</p>	<p>Provision of ongoing advice and support to businesses through the Business Gateway Growth Hub. Sector recovery and supply chain plans and effective targeting of support for industries affected by Brexit and Covid-19. Encouraging companies to engage across sectors to strengthen local supply chains. Support productivity improvements, digital transformation, HR and skills, and diversification. Develop support for transition to a sustainable economy.</p>	<p>Diagnostic and peer support networks and services for ongoing business resilience and engagement across the diverse range of sectors within the Leicester and Leicestershire economy. Suite of business support and advisory products and resources for business transformation and resilience, and the transition to a sustainable economy.</p>

CASE STUDY:

INCREASING AND BROADENING BUSINESS INNOVATION ACTIVITY

MIT REAP Programme

The MIT Regional Entrepreneurship Acceleration Program (REAP) is a powerful global initiative that engages with communities to supercharge innovation and entrepreneurship ecosystems and transform economies. Members of the Ideas Taskforce, who led the implementation of the MIT REAP initiative in Leicester and Leicestershire, include representatives from Natwest, the British Business Bank, PPL PRS Ltd, RSM, Loughborough, Leicester and De Montfort Universities, Innovate UK and local SMEs, DPI Ltd and Aristec Ltd.

The MIT REAP exercise acknowledged the excellence of Leicestershire's three universities and the affiliated Space Park in Leicester, SportPark at Loughborough University, and De Montfort University's excellence in AI and cybersecurity as significant opportunities. The Life Sciences Opportunities Zone at Charnwood Campus, Loughborough, and Horiba Mira at Hinckley institute were also highlighted. However, this exercise also exposed the additional challenges presented by Leicestershire's low-skilled workforce and low wage economy, together with a high concentration of micro businesses and mature manufacturing SMEs, which limits the capacity for knowledge-intensive growth.

The final strategy, "Bootstraps and Beacons" combines an approach that seeks to upscale productivity and enhance the existing infrastructure 'pulling the manufacturing base by its bootstraps' through the introduction of Industry 4.0 capabilities, while driving a culture of innovation, supported by Leicester and Leicestershire's distinctive beacons in space, life sciences, sport, health, AI and cybersecurity. It proposed a mixed mode strategy to tackle skills and mentoring, investment, value creation, market capture, networking, knowledge exchange, commercialisation, and with advanced services and spaces to drive innovation. Bootstrap support would extend the reach and depth of existing business provision to focus support around better use of assets, skills and spaces, which allow the market to work more effectively.

PRODUCTIVE - Priority 2:

Attract and grow international businesses, investment and visitors

Support the contribution that international trade and investment makes to economic growth, productivity and the creation of high-skill and high value jobs; and renew our efforts to develop the visitor economy

Leicester and Leicestershire is a prime location for international businesses. In 2020, 18% of all businesses exported their products and services overseas while 83% of exporters sold to markets in the EU. Advanced manufacturing specialisms in food and beverage, machinery, transport, computer, electronic and optical products, are key exporters. Professional, scientific and technical industries are also major exporters. Over the next 10 years, businesses must adapt to the new challenges and opportunities posed by Covid-19 and Brexit. This is illustrated by the 16% decline in value of goods exported from the UK throughout 2020 – the largest drop since comparable records began.

Cultural, leisure and tourism industries generated £1.88 billion for the local economy in 2019 but have been highly disrupted by the pandemic and social distancing measures. Tourism, hospitality and retail accounted for 58,000 (50% of all) Covid-vulnerable jobs in Leicester and Leicestershire. The tourism sector saw a 64% fall in economic output in 2020 compared to 2019. We will continue to support the Leicester and Leicestershire Tourism Growth Plan and Tourism Advisory Board which sets out actions for the sector's recovery while strengthening and differentiating it in the long-term. This includes developing the potential of the region's tourism assets to welcome more visitors, increase tourist spending, enable profitable businesses, create jobs and deliver positive economic impact. As part of

our efforts to improve productivity, our ambition is to realise the full economic potential of the business tourism sector to help fill our hotels and meeting venues, address seasonality and better utilise our attractions for the corporate market. Our area, located in the centre of the country with great road, rail and air connectivity, is ideally suited for meetings, incentives, conferences and events (MICE). With over 140 unique, quality-assured and award-winning event venues available, we have considerable local potential. Our aim is to champion business tourism and ensure the sector remains a vitally important part of our local visitor economy. We need to work towards a step change in promoting the offer to increase the number of companies planning and booking meetings and conferences in the area.

There is also a recognised strategic need to improve the beneficial local tourism impact from East Midlands Airport, as visitors travelling by air spend an average of £728 per person in the UK, and if they use a regional airport, they are more likely to stay in that region. East Midlands Airport has ambitious growth targets to double passenger numbers to 10 million over the next 25 years, which has huge potential to maximise economic value from inbound tourism.

International businesses increasingly desire locations that are at the forefront of providing climate and biodiversity action, health and wellbeing and sustainable communities. This presents opportunities to further develop and market Leicester and Leicestershire as key locations for investment, businesses and talent.



PRODUCTIVE – Priority 2:

Attract and grow international businesses, investment and visitors

Objective	Short-term (2021-23)	Long-term (2021-30)
1. Secure inward investment	Refresh the approach to international branding, marketing and attracting inward investment – identifying key sectors and investment opportunities.	Implement new inward investment and place marketing approach. Incorporate changing location factors such as climate action, biodiversity, health and wellbeing.
2. Grow existing international businesses	Encourage and support international business expansion, including in the Freeport site.	Account management and support plans for major international businesses.
3. Increase trade and exporting	Develop and implement the Freeport strategy and SME support for exporting, identifying key sectors and opportunities.	Support businesses to export and take advantage of the Freeport.
4. Develop visitor economy offer	Support the delivery of the Tourism Growth Plan, Business Tourism Service and the activities of the Tourism Advisory Board.	Continue to build the visitor offer outlined in the Tourism Growth Plan by supporting the Business Tourism Service, ambitious capital projects for the visitor economy, improving productivity of SMEs and building a cohesive destination brand.

CASE STUDY:

ATTRACT AND GROW INTERNATIONAL BUSINESS

The IBM Leicester Client Innovation Centre

IBM is a globally integrated enterprise operating in over 170 countries. Today, the company has around 20,000 employees in the UK, bringing innovative solutions to a diverse client base to help solve some of their toughest business challenges

In 2015, IBM announced it was setting up a new base in Leicester. The Leicester Client Innovation Centre is IBM's first in the UK and enables the hi-tech giant to extend its technology services to UK-based clients. The Centre provides a range of IT services, including software development and support services to clients across all industry sectors. It employs graduates and experienced professionals who have technical backgrounds or who show an aptitude for IT and want to pursue a career in the industry.



CASE STUDY:

ATTRACT AND GROW INTERNATIONAL BUSINESS

The Access Group Global HQ

In November 2020, a new Global HQ for The Access Group was completed on the Loughborough University Science and Enterprise Park (LUSEP) – the largest single-occupier office deal in Leicestershire since the millennium began. The Access Group, a leading provider of business management software to mid-sized organisations, has more than 35,000 customers across commercial and not-for-profit sectors. Founded in 1991, Access employs more than 3,000 staff with a significant number based in the Midlands. Links to Loughborough University go back several years following the opening of the firm’s technical development and support centre at LUSEP in 2016.

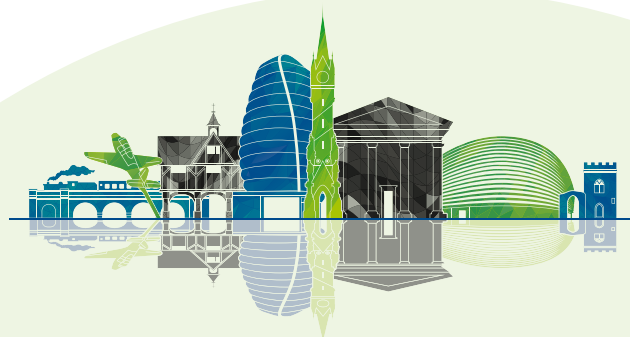




CASE STUDY: ATTRACT AND GROW INTERNATIONAL BUSINESS

Visit Leicester and Leicestershire

Centrally located in the heart of England with easy access by road, rail and air, Leicester and Leicestershire combine great value for money with a range of multi-award-winning venues able to accommodate from five to 2,500 delegates. The area prides itself on offering conference facilities fit for a king in the city where the remains of King Richard III were discovered as well as an out of this world delegate experience at the National Space Centre (voted NVA Best Unique Venue of 2018). The area also boasts three world-class universities with multi-award-winning academic conference centres in Leicester and Loughborough (in the 2019 M&IT awards Imago Venues won Best Academic Venue). Leicester offers delegates a vibrant urban centre with over 2,000 years of history. Direct trains from London provide easy access to 23 business orientated hotels in just over an hour. With over 140 meeting and event spaces, accommodation providers and incentive tourism options, the region's asset mix offers rich pickings for event planners all within 45 minutes of two international airports.





PRODUCTIVE - Priority 3: Employment and skills for growth

Continue to build relationships and joint initiatives to meet the employment and skills needs of employers and the future economy

Knowledge intensive services are forming an increasing share of the local workforce – comprising 238,600 jobs in 2018 and increasing by 2% per year since 2000. Scientific and technical occupations support 34,100 jobs - around 7% of the total workforce and represent one-in-eight additional jobs generated across the area since the year 2000.

Local skills needs will also be driven by the shortfall in overseas workers, caused by Covid-19 and the fall in EU workers coming to, and remaining in the locality and the wider UK. Sectors that are particularly vulnerable include distribution, hotels and restaurants, textiles, food and drink, banking, finance and insurance, public administration, education, and health and social care, and

agriculture. There will be a need to encourage lifelong learning, and to improve skills attainment across the broad range of diverse sectors in the Leicester and Leicestershire economy. We also aspire to ensure that the diversity of Leicester and Leicestershire is more strongly reflected in the types of jobs and industries which our residents participate in, as well as broadening the diversity of entrepreneurship, and business leadership in terms of gender, ethnicity and age.

The transition to a sustainable economy that addresses climate change, resource exploitation and biodiversity loss is also inevitable. Leicester and Leicestershire's workforce will need the skills to enable this, such as trained installers and maintenance staff for zero carbon and energy efficient technologies.



PRODUCTIVE – Priority 3:

Employment and skills for growth

Objective	Short-term (2021-23)	Long-term (2021-30)
1. Match skills supply to the demands of employers and the economy	Secure a Wave 2 Institute of Technology (IoT) to provide higher technical qualifications and digital skills linked to the needs of the economy. Set out skills pathways for sustainable economy.	Continue to produce current and accurate labour market intelligence to inform the development of curricula in FE, HE and other provision. Develop skills training and development capacity for sustainable economy.
2. Increase graduate employment and retention	Continue to support graduate careers and retention initiatives of the three universities. Match individuals to opportunities via the Employment Hub.	Incorporate graduate skills into enterprise support, innovation, and growth initiatives.
3. Increase take-up of apprenticeships	Develop an Apprenticeship Action Plan to address the decline in apprenticeships due to Covid-19. Match individuals to opportunities via the Employment Hub.	Advice, support and peer networks to promote apprenticeship take-up.
4. Help employers improve their HR and skills development capabilities and practices	Progress the MIT REAP recommendations for advanced manufacturing technology skills development for SME staff.	FE and HE collaboration to provide training for the manufacturing workforce to enable adoption of new technologies.



CASE STUDY: SKILLS FOR GROWTH

MIRA Technology Institute

MIRA Technology Institute (MTI) is a 24,500 sq. ft. bespoke global centre for skills on the grounds of the MIRA Technology Park. It is a unique partnership led by North Warwickshire and South Leicestershire College, HORIBA MIRA, Coventry University, Loughborough University and the University of Leicester – providing businesses and individuals with a bespoke curriculum aimed at satisfying an ever-increasing need for specialist skills in the UK automotive sector, focusing particularly on disruptive technologies, such as electrification and driverless cars.

MTI delivers specialist skills and qualifications to industry leaders, engineers, technicians and other professionals working, or aspiring to work, in the automotive sector, helping them to develop essential skills that are key to fuelling their career ambitions and their employer’s business success. With an ambition to constantly create learning opportunities in the cutting-edge technologies required to develop innovative and inspiring products, MTI’s aim is to improve transport in all of its forms for future generations.



CASE STUDY: SKILLS FOR GROWTH

De Montfort University

De Montfort University has developed a wide range of skills-based partnerships working with stakeholders in Leicester and Leicestershire, placing high importance on the value of research, knowledge exchange and graduate careers to support regional growth.

In 2020, students helped drive forward recruitment in the logistics industry by devising marketing campaigns in partnership with Leicestershire-based Pall-Ex. The freight network challenged students to help tackle the industry's nationwide skills shortage, with a live brief to develop a fully integrated marketing communications recruitment campaign to appeal to Generation Z. The partnership will continue into 2021 as Pall-Ex challenges students to develop ongoing marketing campaigns.

As the Covid-19 pandemic gathered pace in March 2020 and Leicester went into lockdown, DMU launched a completely new digital support scheme for SMEs, connecting students' tech skills with local businesses needing immediate help to go online. In total, 23 small businesses were matched virtually with students, who helped them create digital marketing plans, develop their websites and set up digital booking systems. Sarah Ludden-Roughley, Director of Inicio Private Tuition, commented: "Our volunteer student was professional, talented and understanding of how tough things must be for a business affected by the Covid-19 restrictions. We used her skills to promote our online offering, as this was a brand-new version of our business model and, as a result, we had no advertising ready for it."

Flexible forms of business support build on DMU's fully funded graduate internship programme, running since 2013. To date, DMU has committed a total of £1.6M to fully fund 200 graduate internships a year in the LLEP region. This has supplied local businesses with a flow of graduate skills to carry out work ranging from database development to new brand design. Many successful outcomes have resulted from this standing internship offer - for example, local companies including Eazi-Business and Insight Consultancy both went on to recruit their interns due to the value they brought to the company, and both now occupy senior roles.



CASE STUDY: SKILLS FOR GROWTH

Topps Tiles partners with Leicester College

Leicester College has been supporting Topps Tiles with skills training including apprenticeships and professional development of existing employees within the Topps Tiles HQ in Leicester. This has included the delivery of a range of business/management apprenticeships for employees in distinct business functions, including business support, customer service, information technology, and senior management.

Topps Tiles approached Leicester College to discuss the potential for the college to support them in overcoming the current skills gap concerns, through the development and delivery of a contextualised Wall and Floor Tiling Apprenticeship programme with the college delivering the training with industry input from Topps Tiles and BAL. As part of this, Topps Tiles will support with the apprenticeship training for local Leicestershire SME traders that recruit a wall and floor tiling apprentice to the individual business. Leicester College will lead on the dedicated recruitment and attraction support for the traders and apprenticeship training delivery.

From this close working partnership between the college and Topps Tiles, the college has been identified by Topps Tiles as its preferred provider for work-based skills training. This includes identifying potential new opportunities and skills gaps where the college is able to support Topps Tiles, its suppliers and members (SME traders).



PRODUCTIVE - Priority 4: World-class business locations

Provide the business sites and locations needed to become a world-class location for science, technology and professional services

Leicester and Leicestershire has transformed its provision of world-class business locations and premises since 2010, with sites such as Loughborough University Science and Enterprise Park, MIRA Technology Park, Charnwood Campus Life Sciences Opportunity Zone, SEGRO Logistics Park, Magna Park, Leicester International Gateway and SpacePark Leicester. Over the past 10 years, brand new Grade A offices and technology and manufacturing premises have been built to accommodate 5,000 high-technology jobs. Although major progress has been made, mostly with public assistance, there remains a significant appetite for employment land and premises across all sizes, use classes and tenures.

There is a need to continue to extend existing sites, provide new sites and renew existing ones, and to ensure that infrastructural capacity and capability supports sustainable growth and development, in line with The Strategic Growth Plan for Leicester & Leicestershire 2050: Our vision for growth. This includes office provision in Leicester city centre – which has excellent rail and road connectivity, a sizeable graduate population and significant improvements to the urban realm, culture and leisure. As mentioned, Leicester and Leicestershire has significantly relied on public intervention to deliver office and industrial property provision and this market failure is likely to persist, warranting a continued strong public sector role.



PRODUCTIVE – Priority 4:

World-class business locations

Objective	Short-term (2021-23)	Long-term (2021-30)
1. Provide more employment sites and premises for growth	Maintaining confidence and momentum of development of strategic sites, the Freeport, Leicester city centre and town centres.	Preparing for the next phases of extensions to existing sites, including move-on space for start-ups and SMEs, and larger-scale office, technology, manufacturing and logistics sites and premises.
2. Renew existing employment sites and premises where there is demand	Ensuring that strategic assets and buildings are retained for employment use where this is viable.	Reinventing and renewing town centres, the city centre and place-shaping, and understanding and delivering how employment sites and premises play a role in this.
3. Ensure infrastructure capacity and capability supports growth	Supporting the improvement of efficient and affordable public transport services and maintaining momentum in delivering strategically important road and rail projects that enable site development and access to jobs.	Supporting strategic infrastructure projects as identified in the Leicester and Leicestershire Strategic Growth Plan.

CASE STUDY:

WORLD-CLASS BUSINESS LOCATIONS

Loughborough University Science and Enterprise Park

Situated just one mile from junction 23 of the M1, Loughborough University Science and Enterprise Park (LUSEP) is one of the most accessible science parks in the UK, and at 106 hectares is also one of the largest.

Surrounded by high-quality parkland, the first phase of LUSEP is already home to a thriving science and research community leading the way in energy and low carbon technologies, advanced engineering, and sports technology. It brings together over 75 high-tech companies from dynamic start-ups to R&D facilities of global brands, together with national sports governing bodies, a world-class research-intensive university and a vast pool of graduate talent.

The scale of potential development across this site means that there are considerable possibilities for the creation of new clusters for knowledge-based businesses and associated high value manufacturing. The site's proximity to Loughborough University provides unique opportunities for organisations to benefit from a campus partner package of R&D, specialist research facilities, graduate recruitment, and business, conference and leisure services.



CASE STUDY: WORLD-CLASS BUSINESS LOCATIONS

Charnwood Campus

Set in 70 acres of landscaped grounds, Charnwood Campus combines nature with modern facilities to create the ideal conditions for start-ups, SMEs and established enterprises within the bioscience, biotechnology and pharmaceutical sector. This site is part of the Loughborough and Leicester Science and Innovation Enterprise Zone.

The first and only Life Sciences Opportunity Zone (LSOZ) in the UK, the site builds on the East Midlands legacy of pharmaceutical research and development activities. The Campus comprises high quality, modern laboratories, production plants and office space. The buildings can be adapted, repurposed or diversified to suit business requirements to provide the opportunity to develop, design and build bespoke working environments. It can provide young and smaller businesses flexibility in terms of accommodation and leases; excellent grow-on space prospects using significant onsite brownfield development spaces; and opportunities for further development for companies looking to expand.

Companies locating themselves at the Campus also have access to a state-of-the-art events facility for meetings, showcases and conferencing activities, alongside contemporary casual workspaces and a café area. The investor benefits of locating in a Leicestershire Enterprise Zone include business rates discounts, unrivalled locality and access to a large workforce.

The Strategic Growth Plan for Leicester & Leicestershire 2050: Our vision for growth

The Strategic Growth Plan (2018) has been prepared by the ten partner organisations in Leicester and Leicestershire (Leicester City Council; Leicestershire County Council; the seven district authorities of Blaby, Charnwood, Harborough, Hinckley and Bosworth, Melton, North West Leicestershire, and Oadby and Wigston; and Leicester and Leicestershire Enterprise Partnership) to provide a long-term vision that will address the challenges and opportunities facing the region. It is a non-statutory plan, but it sets out the agreed strategy for the period to 2050. The strategy will be delivered through Local Plans. This Economic Growth Strategy (2021-2030) adopts and aligns with the principles and priorities outlined in the Strategic Growth Plan (2018), as highlighted below.

Five building blocks

1. Working with Leicester and Leicestershire's existing and distinctive settlement pattern.
2. Understanding national policies, bringing benefits to the area but controlling excessive development pressures.
3. Understand the local economy and how it is supported by the Government's Midlands Engine Strategy (2017).
4. Understand the road and rail improvements highlighted in the Midlands Engine Strategy (2017).
5. Protect environmental, historic and other assets.

Four priorities:

1. Creating conditions for investment and growth – balancing the need for new housing and jobs with protection of our environment and built heritage.
2. Achieving a step change in the way that growth is delivered – focusing more development on strategic locations – which will allow better planned communities in terms of housing, employment, transport and services.
3. Securing essential infrastructure that is needed to make this happen – taking advantage of proposals to improve national and regional networks. This includes the provision of local public services as well as transport.
4. Maintaining the essential qualities of Leicester and Leicestershire and delivering high quality modern developments such as garden towns, villages and suburbs

A Spatial strategy that:

- Acknowledges the scale of growth already in the pipeline as the result of local plans and planning permissions.
- Builds upon known road and rail infrastructure opportunities or commitments.
- Acknowledges that Leicester plays a role as the 'central city' supporting market towns and rural areas, providing more jobs, leisure, arts, culture and entertainment facilities with the strategic regeneration of the Waterside.
- Provides sites for housing and new jobs that make full use of existing services and infrastructure within Leicester City, increase capacity on the radial roads and improve public transport, cycling and walking.

- Prioritises the 'Priority Growth Corridor' which would form an orbital transport solution to the south and east of Leicester that is critical to many elements of this strategy. This has the potential to accommodate 38,000 new homes and additional new jobs.
- Supports Leicestershire International Gateway. Prioritises the A5 Improvement Corridor to reduce congestion and deliver planned housing growth and industrial sites.
- Designates Melton Mowbray as a key centre for regeneration and growth.
- Designates the Managed Growth Areas of: Coalville, Hinckley, Loughborough, Lutterworth, and Market Harborough – applying the principles of sustainable growth and town centre regeneration.
- Limits growth in villages and rural areas to provide for local needs.

More details at: <https://www.llestrategicgrowthplan.org.uk/>

INNOVATIVE

Global innovation leadership and increasing innovation activities across the whole business base



Priorities

1. Global innovation leadership

Supporting our outstanding R&D strengths and innovation achievements. All three universities in Leicester and Leicestershire are successful in commercialising their cutting-edge research and developing spin-out businesses. The corporate R&D facilities of 3M, IBM and PepsiCo are located here. We will further build on this by growing and expanding existing innovation and R&D strengths and developing new ones. We will increase investment and activity in R&D and innovation, and draw on existing innovation and R&D capabilities from our leading corporations.

2. Increase and broaden innovation activity amongst businesses

Increase innovation activity amongst the wider SME and business base. Although the rate of innovation is low amongst the business base, there is significant interest in innovation and knowledge exchange amongst SMEs. The MIT Regional Entrepreneurship Accelerator Programme has set out a tailored strategy to supercharge innovation and entrepreneurship in the region. Its main recommendations are to boost collaborative networks, improve innovation adoption and the skills needed for this, and to enhance the rate of innovation amongst 'bootstrap' businesses, which form the majority of SMEs in Leicester and Leicestershire.

3. Successfully pioneer and apply emerging and new technologies

Helping businesses to successfully pioneer and apply emerging and new technologies to become more competitive and resilient. Many businesses that had or applied digital systems and online platforms to their businesses during the Covid-19 pandemic, survived and were successful. Furthermore, all three universities in the region have specialisms in ICT, artificial intelligence, high performance computing, cyber security and digital technology – and are actively helping local businesses. Industry 4.0 will provide our advanced manufacturers with a competitive edge in future years. Business performance and success depends on technology and innovation adoption and transformation.

4. Innovation for sustainability

Innovation will need to be harnessed to help businesses survive and thrive as the economy transitions to sustainability while market regulations and customer expectations change. Certain sectors, such as Food & drink have already been affected – such as by the transition to more plant-based diets. The supply chain and sustainability of textiles has already been questioned, and the switch away from fossil fuels will be a major challenge for the logistics sector.



INNOVATIVE - Priority 1: Global innovation leadership

Support our outstanding R&D strengths and innovation achievements

All three universities in Leicester and Leicestershire are leaders in life sciences and health research and development. Loughborough University is a world leader in sports science and technologies. Leicester is a world-leading hub for space and space-enabled industry driven by the University of Leicester. Research excellence in Leicestershire's higher education institutions includes 43 industry centres of excellence: 16 at Loughborough University; 16 at the University of Leicester; and 11 at De Montfort University. Leicester and Leicestershire's universities are

already successful in commercialising their cutting-edge research and developing spin-out businesses. Examples include the University of Leicester's MIP Diagnostics Ltd, Loughborough University's Sports Dynamics Ltd and De Montfort University's Game Changer Biotech. Leicestershire's university spinouts generated £12.75m of turnover in 2017/18. Leicestershire is home to the largest automotive testing facility in the UK at MIRA Technology Park, which leads on the development of autonomous vehicles and commands a vast advanced manufacturing supply chain to the UK and the world. Corporate R&D facilities include the 3M Group, AI Institute, PepsiCo and IBM.





INNOVATIVE – Priority 1:

Global innovation leadership

Objective	Short-term (2021-23)	Long-term (2021-30)
1. Grow and expand existing innovation and R&D strengths	Establish and resource the LLEP Innovation Board to drive forward accelerated innovation priorities.	Support expansion and growth of existing R&D strengths.
2. Develop new innovation and R&D strengths	Ensure the R&D sector has sufficient skills, capabilities and support to successfully retain and attract new R&D programmes.	Facilitate commercialisation and knowledge exchange with new R&D strengths.
3. Increase investment and activity in R&D and innovation	Support current R&D funding bids, innovation and knowledge transfer initiatives. Increase public and private investment in R&D and innovation.	Increase business R&D expenditure and number of businesses that are innovation active. Increase public and private investment in R&D and innovation.
4. Draw on existing innovation and R&D capabilities including corporates	Retain and expand existing corporate and business R&D functions and attract new ones.	Draw on existing corporate R&D capabilities into new sources of open innovation and local value creation.





CASE STUDY:
GLOBAL INNOVATION LEADERSHIP

SpacePark Leicester

By 2030, the global space market is expected to increase by 80% to £400 billion. Since 2000, the UK space market has also trebled in size, with an ambition to grow from 6.5% of the global space economy to 10% by 2030. This is equivalent to £40 billion and will provide an additional 100,000 jobs. Based near the National Space Centre, SpacePark Leicester is home to the Leicester Institute for Space and Earth Observation, one of the University of Leicester's flagship research institutes, along with first-class teaching and laboratory facilities. SpacePark Leicester serves as a significant global hub for businesses, researchers, academia and innovation. It enables collaboration between the University of Leicester and the private sector, creating high-quality, knowledge-based jobs, building the skills base and contributing to economic growth and the resilience of the economy. The first phase of the project has delivered a 4,800m² facility for Earth observation, business hosting and teaching. Additional phases will include an industry-academic collaborative environment on next-generation space engineering and AI data labs, and a Low-Cost Access to Space Manufacturing Facility for satellite constellations.



INNOVATIVE - Priority 2:

Increase and broaden innovation activity amongst businesses

Increase innovation activity amongst the wider SME and business base

25.6% of Leicester and Leicestershire firms that innovate are involved in active collaborations, ranking 36th out of 38 LEPs, which suggests there is progress to be made in this area. The latest economic data suggests that R&D expenditure is equivalent to 1.5% of GVA for Leicestershire, Rutland and Northamptonshire, which continues to fall behind the UK average of 1.7% and the government target of 3% in the longer-term.

43% of establishments that have invested in digital technologies expect they will need new skills as a result. Up to 11% expect to need to recruit new staff (this has risen to 20% during Covid restrictions), while 37% expect to need to develop

the skills of their existing workforce (31% during Covid restrictions). There is considerable interest in knowledge exchange - there were 28,000 attendees at higher education events in 2017/18, while there have been 10,000 attendees at the annual Leicester Business Festival and Innovation Week.

The MIT Regional Entrepreneurship Acceleration Program (REAP) is a powerful global initiative that engages with communities to supercharge innovation and entrepreneurship ecosystems and transform economies. The Leicester and Leicestershire Ideas Taskforce has taken this forward, with a detailed analysis of the opportunities and challenges facing the region. Its "Bootstraps and Beacons" strategy combines an approach that seeks to upscale productivity and enhance existing innovation infrastructure.





INNOVATIVE – Priority 2:

Increase and broaden business innovation activity

Objective	Short-term (2021-23)	Long-term (2021-30)
1. Collaborative networks	Drive up opportunities for collaboration, knowledge exchange, pooling of resources, and applied problem solving. Provide mentoring and peer network support.	Develop new venues for knowledge exchange to encourage cross-fertilisation of skills from high R&D to low R&D businesses and sectors.
2. Innovation adoption	Improve the culture of innovation, and awareness of the business performance benefits.	Sector-focused accelerator programmes to improve connections and technology transfer between technology leaders and SMEs.
3. Innovation for bootstrap businesses	Develop support to accelerate incremental innovation undertaken in the majority of SMEs.	Develop skills and capabilities for innovation; provide risk/investment finance for innovation.





CASE STUDY:

INCREASING AND BROADENING BUSINESS INNOVATION ACTIVITY

Cyber Security at De Montfort University

De Montfort University (DMU) has been recognised for conducting world-leading cyber security research, having been named the East Midlands' first 'Academic Centre of Excellence in Cyber Security Research' (ACE-CSR). The ACE-CSR scheme is one of a number of initiatives in the Government's National Cyber Security Strategy: 'Protecting and Promoting the UK in a Digital World', which outlines how it is working with academia and industry to make the UK more resilient to cyber-attacks.

The National Cyber Security Centre (NCSC) and the Engineering and Physical Sciences Research Council (EPSRC) have recognised DMU as an ACE-CSR, thanks to its pioneering research in incident response and cyber threat intelligence, industrial control systems and sociotechnical security working closely with partners including Airbus, Rolls-Royce, Deloitte and BT.



INNOVATIVE - Priority 3:

Successfully pioneer and apply emerging and new technologies

Businesses can successfully pioneer and apply emerging and new technologies to become more competitive and resilient

Two types of businesses emerged during the pandemic – those with digital systems which meant their business and workforce were already online and could be rapidly digitally enabled – and those with a minimal digital presence and capabilities. There are considerable differences in the performance of these two types of businesses.

In 2020, 25% of Leicester and Leicestershire businesses provided the facility for customers to order and pay for goods or services on their websites. Up to 20% of businesses with an internet presence increased the facility for customers to do this in 2020. Over the past two years, 45% of Leicester and Leicestershire businesses have invested in digital technologies with an increase in 2020.

All three universities in Leicester and Leicestershire have successful research specialisms in ICT, AI, high performance computing and digital technology,

and lend their support to small businesses. The University of Leicester has a high-performance computing research lab and offers support from the Leicester Innovation Hub and Space Park Leicester to businesses and spin-outs. Its Schools of Mathematical and Computing Sciences conduct research, and offer courses in knowledge discovery, AI/machine learning, advanced software modelling and simulation such as digital twins, visualisation, face recognition, algorithms complexity and engineering, interaction design, evolution, validation and verification. De Montfort University's Innovation Centre lies at the heart of Leicester's digital tech scene. The Centre runs courses in computer science, artificial intelligence, software engineering, cyber security and digital forensics. Loughborough University's Department of Computer Science specialises in key research areas of Vision, AI, Autonomous and Human Centred Systems; Networks and Systems (NetSys); and Theoretical Computer Science (TCS). Academics work in collaboration with various organisations including BAE Systems, Toyota, Apical, Jennic, Arqiva, Sure, Sensinode and Rolls-Royce.





INNOVATIVE – Priority 3:

Successfully pioneer and apply emerging and new technologies

Objective	Short-term (2021-23)	Long-term (2021-30)
1. Help SMEs with digital transformation	Provide support to enable digital transformation in SMEs across a range of sectors.	Events, support materials and peer networks to demonstrate leading practice in digital business.
2. Help SMEs adopt and use emerging technologies	Development of business and university networks to support and advise on technology adoption.	Skills support for workforce to enable adoption of new technologies.
3. Lead the implementation of Industry 4.0	Audit current Industry 4.0 implementation and develop a peer network.	Provide support to manufacturing and engineering firms to implement Industry 4.0.





CASE STUDY:

SUCCESSFULLY POINEER AND APPLY EMERGING AND NEW TECHNOLOGIES

MIRA Technology Park

MIRA Technology Park is a global provider of pioneering engineering, research and test services to the automotive, defence, aerospace and rail sectors. It is a world-class centre of excellence in transport technology set in an outstanding 842-acre campus environment. Located at the geographical centre of the UK's automotive sector, the 2m sq. ft. Technology Park provides bespoke property solutions for customers by designing and delivering buildings to meet their R&D needs, alongside an existing range of flexible office, laboratory and workshop space.

HORIBA MIRA works in close collaboration with vehicle manufacturers and suppliers around the world, providing comprehensive support ranging from individual product tests to turnkey engineering design, development and build programmes. MIRA Technology Park offers global transport technology businesses a world-class location to establish their European R&D operations with immediate access to essential product development resources – test facilities, engineering knowhow and workshop/office space; over £300 million of test facilities; 100km of specialised proving ground and 480 technical staff; and clustering with over 30 Original Equipment Manufacturers (OEMs) and Tier 1 suppliers. The MIRA Technology Institute also delivers specialist skills for the global automotive industry.



INNOVATIVE - Priority 4: Innovate for sustainability

Innovation plays a major role in responding to the climate crisis and transitioning to a sustainable economy.

Businesses will need to innovate if they are to thrive in a future economy where customers prefer sustainable businesses and products. New regulations will make current standard technologies and business practices unviable, and climate change introduces new risks and resource scarcity. For example, the logistics and distribution industry is facing significant challenges from climate change, legislation and changing consumer preferences. Ending the sale of new petrol, diesel cars and vans from 2030, with HGVs following suit from 2040 as part of the UK Government's Climate Change commitments, presents significant challenges. In addition to the need for vehicles that use alternative, sustainable fuels, the energy and charging infrastructure will need to be ready to support the switch to electric vehicles. As electric vehicles comprised only one per cent of all vans sold in the UK in 2019, this is an ambitious timescale for transition.

Traditional sectors such as fashion and textiles, and construction also face distinct challenges related to climate change and sustainability. The fashion industry consumes large amounts of energy and has a well-documented record on pollution and waste. As consumers worldwide buy more clothes, the growing market for cheap items and new styles is taking a toll on the environment. Some industry players are taking steps, for example by developing new fabrics, cutting destruction of unsold goods, and ensuring products can be repaired or recycled. Some brands have committed to radical transparency in the supply chain, while several e-commerce platforms have enabled searches for sustainable brands. The coming years will be the toughest the engineering and construction industry has faced in a generation. In addition to its wider challenges of the shift to a net zero agenda, the sector often characterised as conservative and staid, now has an opportunity to adapt and thrive. It can do so by adopting new operational models, overhauling building practices, and reimagining the public and private places we all inhabit.



INNOVATIVE – Priority 3:

Innovate for sustainability

Objective	Short-term (2021-23)	Long-term (2021-30)
1. Sustainable innovation leadership	Develop an understanding of local innovation pioneers and adopters for sustainable economy and business.	Develop sustainable innovation leader's platform and advisory network.
2. Explore opportunities from zero carbon and sustainable new technologies	R&D on initiatives to create early adopters and leaders amongst organisations and businesses in the region.	A sustainable innovation fund that forges new collaborations, disruptive and complementary innovations between existing R&D and technology strengths, and the region's businesses.
3. Industry and community transitions	Explore and assess new funding mechanisms and incentives to stimulate R&D and innovation in helping the region's industries and communities to transition to a zero carbon, sustainable economy.	Deliver new funding mechanisms and incentives to stimulate R&D and innovation in helping the region's industries and communities to transition to a zero carbon, sustainable economy.

CASE STUDY:

INNOVATE FOR SUSTAINABILITY

Cenex: the UK's first Centre of Excellence for Low Carbon and Fuel Cell technologies

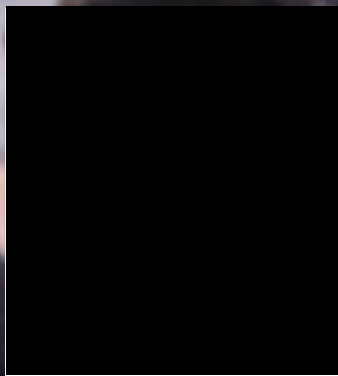
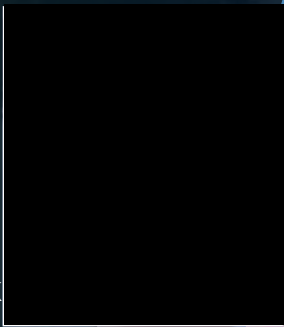
Based in Loughborough, Cenex was established as the UK's first Centre of Excellence for Low Carbon and Fuel Cell technologies in 2005.

Cenex focuses on low emission transport and associated energy infrastructure and operates as an independent, not-for-profit research technology organisation (RTO) and consultancy, specialising in project delivery, innovation support and market development.

Recently, Cenex launched the first of a series of documents explaining the latest low emission road transport technologies alongside a four-week online course. The three "Insight" documents cover battery electric and hydrogen fuel cell vehicles and their required infrastructure, including how each works, the suitable applications for each technology, and the benefits and limitations.

INCLUSIVE

Create a resilient, adaptive workforce where all residents have access to skills and career progression and are paid the living wage



Priorities

1. Informed choices and routes to job and skills progression

Deliver services to prevent increases in youth unemployment, provide employer-led skills development, progression pathways and increase apprenticeships. Significant progress has been made in the provision of youth, employment and careers services, with the Enterprise Adviser Network, Careers Hub and Youth Employment Hub. In addition, projects like the Leicester Employment Hub, Construction Skills Hub and area ESF programmes support both young people and adults, along with the DWP and National Careers Service offers. We can make further progress on ensuring successful youth transitions from school into work, providing routes and pathways to job and skills progression, building on the improvements made to careers guidance so far. An important aim is to improve the quality, number and take-up of apprenticeships – particularly after the decline in participation over recent years, as well as taking advantage of new government initiatives such as the Skills Accelerator.

2. Improve skills and qualifications attainment and employability of the workforce

Reduce the flow of low skilled, poorly qualified individuals into adulthood, and address low qualifications and skills attainment in adults.

We will seek to help school pupils catch up with learning missed during the pandemic and continue to improve education attainment standards. We will continue to develop strategies and joint working between employers, FE, HE and training providers for in-work training and skills. Support for adult education and skills is also an objective, particularly for those made redundant or changing careers. Employability skills, including core and soft skills will also be emphasised, while help will be extended to overcome barriers to participation in education, training and work, since this can help to reduce long-term unemployment and youth disengagement.





3. Improve access to work, labour market inclusion and wellbeing at work

Improve access to work, labour market inclusion and wellbeing at work for all communities and residents. Covid-19 has compounded and deepened the pockets of deprivation in Leicester and Leicestershire. Prior to the pandemic, around 24% of neighbourhoods Lower Layer Super Output Areas (LSOA) in Leicester were among the 10% most deprived nationally. While many rural areas appear to lack the deprivation of urban areas, poorer access to public services due to greater distances and irregular public transport facilities can place barriers to services in more remote areas. More expensive house prices in sought after rural areas also puts housing out of reach for many. Low incomes continue to be a concern in Leicester and Leicestershire. This priority aims to address the foundations of labour market exclusion, working conditions, and health. It seeks to help individuals to participate in education, training and the labour market, and to access and maintain employment. Wellbeing at work is also of increasing importance for those most at risk of health inequalities, economic exclusion and poverty.

4. Improve job quality, in-work progression and pay

Improve the quality of jobs, in-work progression and pay, and access to opportunity. The quality and nature of jobs in the local economy, the scope for in-work progression and pay, and ensuring inclusive and fair access to labour market opportunities are also important aspects of the levelling-up agenda. We need to ensure good access to education and skills attainment, quality jobs, pay and prosperity, particularly amongst deprived or excluded individuals, households and communities. We also need to examine how communities and residents can access new areas of jobs growth – such as in the green economy.





INCLUSIVE - Priority 1:

Informed choices and routes to job and skills progression

Deliver services to prevent increases in youth unemployment, provide employer-led skills development, progression pathways and increase apprenticeships

While Leicester and Leicestershire has a younger workforce compared to the national average, significant progress has been made in the provision of youth and careers services. These include the Enterprise Advisor Network, Career Hub, Employment Hub, Construction Skills Hub and Youth Employment Hub, as well as the established capacity and expertise in the non-profit and

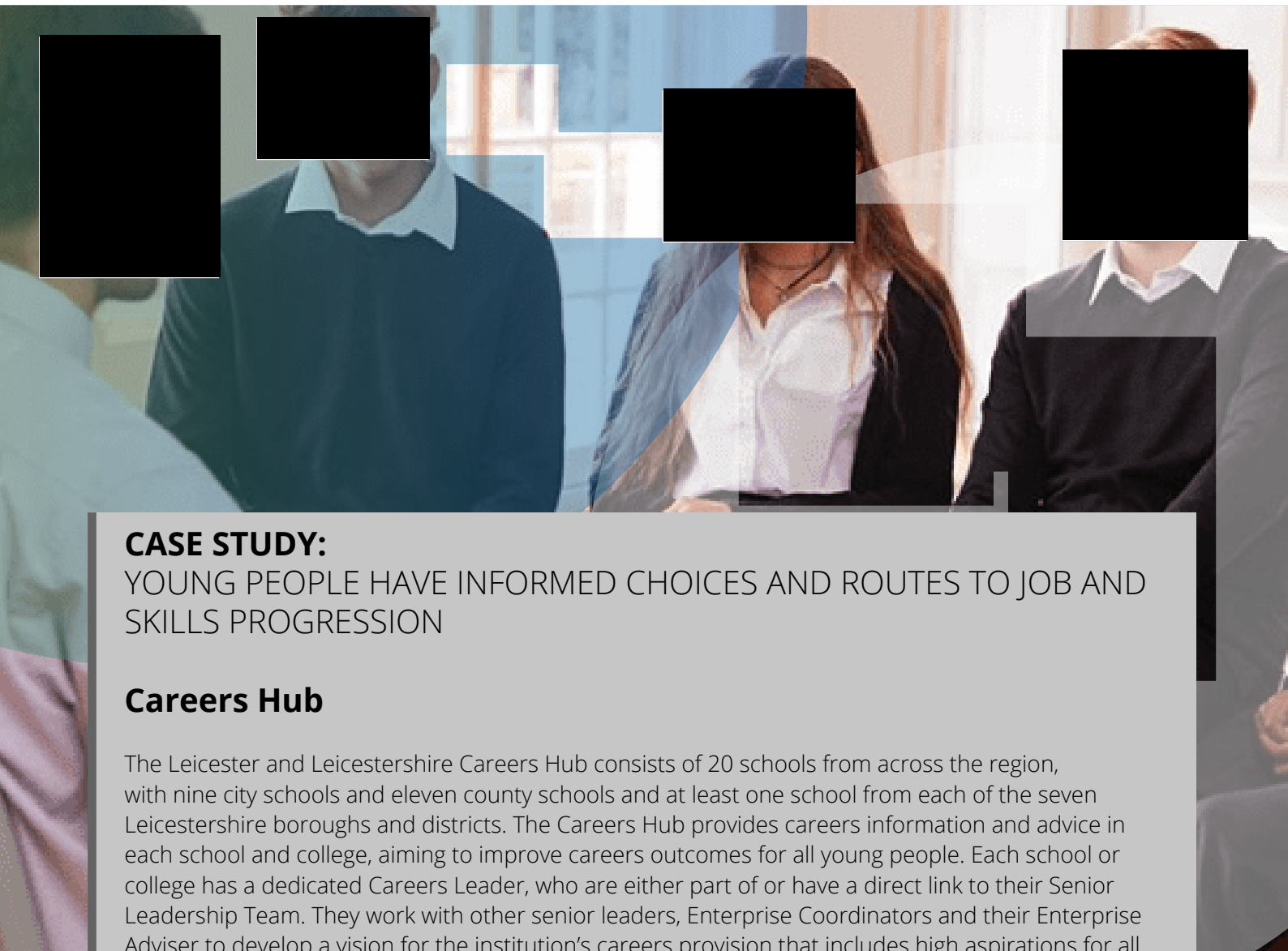
voluntary sectors. These needs will continue along with particular short-term pressures, and we aim to ensure that support is in place for the young people at higher risk of unemployment and income loss during the pandemic. In the longer-term, opportunities will come from government policy changes with the introduction of T-Levels, the Adult Skills White Paper and Local Skills Improvement Plans. Addressing the significant fall (reflected nationally) in apprenticeship starts and participation is also a key objective.



INCLUSIVE – Priority 1:

Informed choices and routes to job and skills progression

Objective	Short-term (2021-23)	Long-term (2021-30)
1. Successful youth transitions from school into work	Prevent young people becoming 'not in education, employment and training' (NEET), with support services and national programme delivery.	Sector representatives, FE and HE institutions work jointly to deliver an integrated FE and HE employer-led skills and guidance system.
2. Provide routes and pathways to job and skills progression	Identify pathways into employment and youth engagement in emerging, highly productive and buoyant sectors. Take advantage of government initiatives such as the Skills Accelerator.	Integrated FE, HE, training provider and employer-led skills infrastructure for the low carbon, health, life sciences and logistics sectors.
3. Maintain and improve careers guidance	Continuity in the provision of Careers Hub and Youth Employment Hub services.	Continue to enhance careers and guidance services, including the provision of labour market intelligence.
4. Improve quality, number and take-up of apprenticeships	Apprenticeship Strategy with businesses and delivery partners.	Increase apprenticeship numbers and take-up, supporting SMEs with this.



CASE STUDY:

YOUNG PEOPLE HAVE INFORMED CHOICES AND ROUTES TO JOB AND SKILLS PROGRESSION

Careers Hub

The Leicester and Leicestershire Careers Hub consists of 20 schools from across the region, with nine city schools and eleven county schools and at least one school from each of the seven Leicestershire boroughs and districts. The Careers Hub provides careers information and advice in each school and college, aiming to improve careers outcomes for all young people. Each school or college has a dedicated Careers Leader, who are either part of or have a direct link to their Senior Leadership Team. They work with other senior leaders, Enterprise Coordinators and their Enterprise Adviser to develop a vision for the institution's careers provision that includes high aspirations for all learners, making sure that they meet the Gatsby Benchmarks (The eight Gatsby Benchmarks are the foundation of the Careers Strategy, a statutory requirement for secondary schools and colleges).

CASE STUDY:

YOUNG PEOPLE HAVE INFORMED CHOICES AND ROUTES TO JOB AND SKILLS PROGRESSION

Leicester College Construction Skills Certification

Leicester College has launched a new four-week Construction Skills Certification Scheme (CSCS) Construction Card Course Level 1 that will enable students to qualify for a CSCS Green Card, required by contractors and major house builders to work onsite. By completing this course, students (both with or without previous experience in the construction sector) will also have the opportunity to qualify for a Traffic Marshal (Banksman) certificate of competence. Contractors and major house builders require their workers to hold a valid CSCS card and a Banksman license award would further increase employment opportunities. This course is delivered in partnership with Lendlease Construction, RMF (Construction Training Academy Ltd) and Jobcentre Plus. All students who successfully complete the course will receive a guaranteed interview with RMF.



INCLUSIVE - Priority 2:

Improve skills and qualifications attainment and employability of the workforce

Reduce the flow of low skilled, poorly qualified individuals into adulthood, and address low qualifications and skills attainment in adults

While Leicester and Leicestershire has many well-qualified residents, its overall educational attainment lags behind the rest of the UK, and this is reflected in lower pay. In 2018, workplace earnings per week were over £60 below the English average, while resident earnings were over £50 lower.

By 2030, it is forecast that 42% of jobs within Leicester and Leicestershire will require Level 4+ qualifications. Demand for Level 2 and Level 3 jobs are also both forecast to grow by around 5%, while

other roles or jobs which require no qualifications are expected to contract as a share of the LLEP total. A key challenge therefore, is to improve educational attainment and increase the number of higher-level qualifications and skills in order to meet the growing number of higher skilled jobs in the area.

Although the number of reported skills gaps in Leicester and Leicestershire has been falling in recent years, in 2017, 60 per cent of businesses still reported skill gaps within their existing workforce. The three most frequently identified skills needs by employers were communications, management and supervisory, and technical, practical or job specific skills. Core and soft skills were also emphasised.



INCLUSIVE – Priority 2:

Improve skills and qualifications attainment and employability of the workforce

Objective	Short-term (2021-23)	Long-term (2021-30)
Formal education and training	Help school pupils catch up with learning missed during the pandemic. Explore systemic causes of educational underperformance, including early years and aspirations.	Continue to improve educational attainment standards and reduce the share of school leavers with no qualifications. Formulate long term strategies and solutions from early years to the end of school education.
In-work and work-related training and skills	Continue to develop strategies and joint working between employers, FE, HE and training providers.	Raise the levels of technical and work-related skills across the workforce.
Adult education and skills	Support for adult education and skills, particularly those made redundant or changing careers.	Reduce the number of residents with no qualifications.
Employability, core and soft skills	Provide employability counselling and development, and core and soft skills training as part of adult and youth unemployment and NEET initiatives, and as part of the redundancy response.	Integrate employability, core and soft skills into apprenticeships and other training programmes.

CASE STUDY:

IMPROVE SKILLS AND QUALIFICATIONS ATTAINMENT

Loughborough College Careers and Enterprise Hub

Loughborough College, in partnership with Loughborough University and Charnwood Borough Council, led a project to open a new Careers and Enterprise Hub in Loughborough town centre in 2021 – as part of the Loughborough Town Deal. The project aims to provide local people with access to learning, training and support services in the post-Covid economy and help fill the skills gap identified in the LLEP Economic Growth Strategy, including communication skills, problem-solving and resilience which have been cited as the main issues for local people. At a local level, the hub will provide a physical portal for those most economically at risk into skills and enterprise. The Hub will also function as a delivery location for the government's Kickstart Scheme, which will enable employers to offer six-month job placements for 16-24-year-olds at risk of long-term unemployment. Residents with business ideas will also be able to access specialist expertise and facilities at Loughborough University by first accessing services at the Hub.



INCLUSIVE - Priority 3:

Improve access to work, labour market inclusion and wellbeing at work

Increase access to education, training and work opportunities for all communities and residents

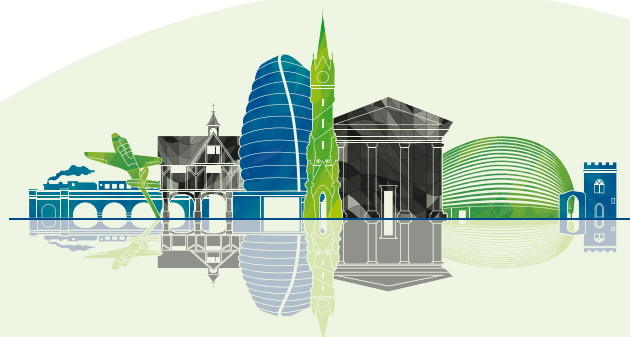
Within Leicester and Leicestershire, the impact of Covid-19 on the labour market has largely been a 'Leicester story' where four in 10 of those out of work in the county reside in the city, which has accounted for half of all new unemployment claims in the region. These increases have largely been within deprived parts of the city already afflicted with high levels of joblessness and deprivation. Although the rate of redundancies is lower in Leicester and Leicestershire than nationally, the risks to workers remain.

Covid-19 has compounded and deepened the pockets of deprivation in Leicester and Leicestershire. Prior to the pandemic, around 24% of neighbourhoods in Leicester were among the 10% most deprived nationally. While many rural areas appear to lack the deprivation of urban areas, poorer access to public services due to greater distances and irregular public transport facilities can place barriers to services in more remote areas. More expensive house prices in sought after rural areas also puts housing out of reach for many. Low pay continues to be a concern in Leicester and Leicestershire.

The Covid-19 pandemic has laid bare the digital divide in society, with some residents and communities unable to afford devices, lacking the skills to use them, or in the case of some rural areas, cannot access high speed broadband or 4G or 5G mobile phone services. Employer surveys and consultations have identified that digital skills are expected to become more important, particularly social media, basic digital literacy and data manipulation, and presentation skills.

23% of the adult (16+) population of Leicester and Leicestershire are from Black, Asian or Minority Ethnic groups compared to 12.7% of the UK adult population. The region needs to better use the talents and diversity of its communities and workforce – and the make-up of entrepreneurs, business leaders and skilled workers needs to better reflect the ethnic and gender balance of the resident population.

Overall, Leicester and Leicestershire would benefit from a new, independent commission to examine inequalities and deprivation in the region and to develop a series of independent, objective insights and recommendations.



INCLUSIVE – Priority 3:

Improve access to work, labour market inclusion and wellbeing at work

Objective	Short-term (2021-23)	Long-term (2021-30)
1. Inequalities and deprivation commission	Plan and canvass the appetite for an independent commission on inequalities and deprivation for Leicester and Leicestershire.	Develop insights and recommendations from an independent commission on inequalities and deprivation, with partners responding with an action plan.
2. Redundancy response	Set up the Covid-19 Redundancy and Recruitment Service, involving LLEP, Futures, Leicester Employment Hub, the non-profit and voluntary sector and the Department for Work and Pensions (DWP).	Operate the Redundancy and Recruitment Service and deliver effective careers, employment and retraining advice to redundant workers through DWP, NCS and other partners.
3. Reduce digital poverty	Deliver Leicester and Leicestershire Digital Skills Partnership to address digital skills deficiencies in the workplace and wider society.	Identify and deliver further initiatives to reduce digital poverty.
4. Wellbeing at work	Embed wellbeing at work initiatives for those most at risk of health inequalities, economic exclusion and poverty.	Develop broader strategic partnership and initiative for wellbeing at work for all employers and employees.

CASE STUDY:

INCREASE ACCESS TO EDUCATION, TRAINING AND WORK OPPORTUNITIES FOR ALL COMMUNITIES AND RESIDENTS

Barratt Developments and SMB Group's Construction Partnership and Social Mobility Pledge
The SMB Group, was created from a successful merger between Stephenson College and Brooksby Melton College. The organisation offers a wide range of vocational courses and has strong links with employers.

One of their thriving partnerships is their work with Barratt Developments, a huge Bardon-based construction company. SMB engaged with Barratt Developments to support them with challenges related to building a pipeline of joinery and bricklaying skills, starting with a pilot programme two years ago.

In addition, Barratt Developments has created a new action plan to address social mobility as a barrier to career opportunities in the housebuilding sector. Barratt Developments approached SMB for a venue to launch this new Social Mobility Pledge. The Social Mobility Pledge was launched by former Secretary of State for Education Rt Hon Justine Greening – co-founder of the initiative. The SMB Group offers a range of different apprenticeships and full-time study programmes, which provide different routes into the construction industry and therefore working towards meeting the needs of local skills gaps.



CASE STUDY:

INCREASE ACCESS TO EDUCATION, TRAINING AND WORK OPPORTUNITIES FOR ALL COMMUNITIES AND RESIDENTS

Reaching People: The University of Leicester and Leicester College are supporting leaders and managers in the voluntary sector

The focus of the training support identified with Reaching People was specifically targeted at developing team leaders and managers within the voluntary sector and supporting their professional development. This was enabled by the University of Leicester which utilised a significant amount of its apprenticeship levy through the levy transfer facility. This in turn enabled local Leicestershire SME charities which were identified, to benefit, with 100% of the apprenticeship training cost provided by the University for their selected apprentices.

Leicester College worked with local voluntary sector employers promoting the potential support to Reaching People and its delivery partners.

To date three Leicestershire based, voluntary sector employers have taken up and benefitted from the apprenticeship training support. Going forward, the University has committed to using its levy to fund more opportunities for local Leicestershire SME voluntary and charitable organisations. We expect the numbers of key local support service organisations that can benefit from the apprenticeship training opportunities will continue to grow.



INCLUSIVE - Priority 4:

Improve job quality, in-work progression and pay

Improve the quality of jobs, in-work progression and pay, and access to opportunities

In 2019/20, 24.2% of jobs were low-paid in Leicester and Leicestershire compared to the UK average of 20.1%. Leicester has a particularly acute low-pay problem, with almost three in 10 jobs in the city paying below the Living Wage, whilst the Centre for Cities ranks Leicester as having the 9th lowest median pay out of 63 cities. Up to 81,800 households were in relative poverty in Leicester and Leicestershire pre-Covid; half of these were in Leicester, with the city's 33% relative poverty rate the 7th highest out of 181 urban authorities nationally.

Leicester and Leicestershire's poorest communities have been more acutely impacted by the Covid-19 pandemic and evidence shows that the lowest income neighbourhoods have experienced the biggest increase in unemployment. Conversely, more affluent areas, particularly within suburban and rural or market towns have generally experienced low levels of unemployment and furloughs, high rates of homeworking, higher levels of retail and leisure footfall and consumer spending, and lower levels of virus transmission and deaths. We need to ensure that all communities have good access to quality education and jobs across all sectors, particularly in areas of growth such as the green economy.





INCLUSIVE – Priority 4:

Improve job quality, in-work progression and pay

Objective	Short-term (2021-23)	Long-term (2021-30)
1. Real living wage	Develop a strategy and drive collaboration across partners to support the real Living Wage for employers and employees.	Provide advice and support to employers to implement the real Living Wage.
2. Access to green jobs	Examine role of green jobs as a means of providing quality jobs and in-work progression as part of work to analyse skills pathways for green jobs.	Reskilling programme for transition to green jobs, targeted at those most at risk of long-term unemployment.
3. Inclusive and fair labour market	Embed open and inclusive recruitment and HR practices within the region's employers, using enterprise support services and initiatives as necessary.	Ambition for jobs and skills structure to reflect the diversity of local residents and communities.



SUSTAINABLE

A leader in zero carbon solutions, with sustainability principles built into everything we do



Priorities

1. Sustainable places, city and town centres

Create adaptable and resilient town and city centres, rural areas and urban communities, delivering sustainable sites for housing and jobs in strategic locations that can be serviced by sustainable transport, and protect the environment and built heritage. City and town centres have been impacted significantly by the pandemic, with local retail (excluding food) and leisure footfall up to 80% lower during the past year, whilst the shift to online shopping has accelerated. The demand for new homes continues to increase. Going forward, development and redevelopment must be delivered sustainably, – as prioritised in The Strategic Growth Plan for Leicester & Leicestershire 2050: Our vision for growth. Homes must be affordable and green, and sites for new employment space and premises must be zero carbon developments.

2. Sustainable transport and connectivity

Build and promote sustainable modes of transport, decarbonise road transport and improve digital connectivity whilst also supporting healthier growth. Leicester and Leicestershire will support the Strategic Growth Plan and its aim to deliver the new dwellings required in a sustainable manner to house its expanding population. This will require rail improvements, and an increased modal shift from private to public and sustainable transport. Road improvements to the A46 and A5 are vital to housing and employment growth, but at the same time decarbonising road transport and improving internet connectivity, particularly for rural areas, are also required to meet sustainable development goals.





3. Sustainable energy

Increase renewable energy generation and implement smart energy networks. Renewable energy could generate 6,700 gigawatt hours per year – enough to meet total electricity demand in the region today, and in 2050. To achieve this, 125 megawatts of renewable energy generation facilities need to be installed every year up to 2050. Another barrier to energy efficiency is that power networks are stressed, and more efficient energy infrastructure and networks need to be installed, including ‘smart streets’ networks.

4. Sustainable business

Support business decarbonisation and sustainable business practices. To achieve carbon saving targets and increase the environmental sustainability of the local economy – businesses will need to decarbonise, reduce resource use and waste, and adapt to new business models and conditions. This will involve support for resource and energy efficiency measures amongst businesses, improved resource and waste management, and help for businesses to adapt to greener supply chains and the circular economy model. Businesses will require advice and support for the zero carbon transition, including zero carbon skills pathways and provision.





SUSTAINABLE - Priority 1:

Sustainable places, city and town centres

Create adaptable and resilient town and city centres, deliver sustainable sites for housing and jobs in strategic locations that can be serviced by sustainable transport, and protect the environment and built heritage

This strategy recognises the significant impact of the pandemic on leisure footfall in city and town centres and proposes an approach that is flexible and adaptable to the different dynamics and opportunities facing the city and each town centre. For example, the residential housing market in Leicester city centre is different from the market towns, as is the commercial property market.

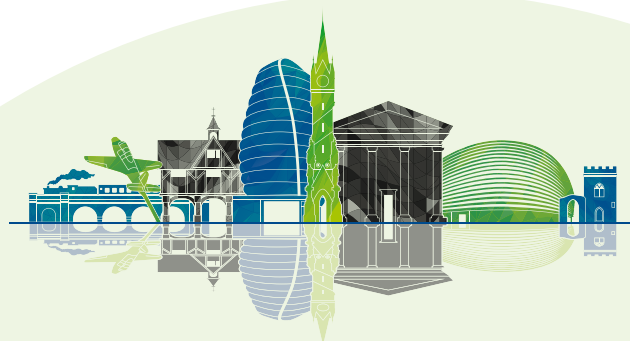
Leicester and Leicestershire's population is growing and more homes will need to be built to provide affordable places for everyone to live. Yet at the same time, its natural environment and built heritage also need to be protected to ensure that they are preserved for future generations. An analysis from the 2018 Energy Infrastructure Strategy suggests that insulation improvements to the domestic housing stock alone would save close to 500kt of CO2 annually, bringing fuel bill savings of £100 million for domestic consumers and £50 million for businesses each year.

By prioritising sustainable sites and developments, this will help to deliver and progress *The Strategic Growth Plan for Leicester & Leicestershire 2050: Our vision for growth* priorities:

1) Creating conditions for investment and growth – balancing the need for new housing and jobs with protection of our environment and built heritage; and

2) Achieving a step change in the way that growth is delivered. This involves focusing more development on strategic locations, which will allow for better planned communities in terms of housing, employment, transport and services. The local plans prepared by the seven districts and the Waste Local Plan prepared by Leicestershire County Council are also important policies within which this economic strategy will be realised.

The natural capital assets of Leicestershire have an annual value of £388.45 million, with agricultural habitats generating £180.91 million annually. There is a risk that future development does not consider natural capital and green infrastructure. Threats such as air pollution are continuing unabated. There is a need to restore and regenerate urban environments. However, Leicester and Leicestershire is well-positioned to counter these risks. There is a recognised need to enhance the environment to create a great place to live, work, study and visit. Combined with the commitment of Leicester City Council and Leicestershire County Council to reduce carbon emissions, there is an opportunity to fulfil the aims of the Strategic Growth Plan for Leicester & Leicestershire 2050 by building new infrastructure developments that also capitalise on local natural capital assets. New developments can provide opportunities to improve biodiversity corridors.



SUSTAINABLE – Priority 1:

Sustainable places, city and town centres

Objective	Short-term (2021-23)	Long-term (2021-30)
1. Sustainable development and renewal of city and town centres	Support the economic viability and vitality of town centres and the city centre during recovery from the Covid-19 pandemic. Continue the development of a range of Business Improvement District, City and Town Centre Recovery Plans, utilising funding opportunities such as the Towns Fund and Levelling Up Fund.	Support and enable the sustainable transition and adaptation of town and city centres into new uses including residential and business use. Continue to make the case for east-west rail improvements and rail electrification. Increased emphasis on sustainable travel options for new housing sites.
2. Sustainable and affordable housing supply	Demonstrate exemplar zero carbon developments, particularly on publicly owned land and continue with retrofit energy efficiency measures. Develop a zero carbon and sustainable housing strategy and action plan.	Introduce mechanisms and incentives which result in step changes to carbon savings and sustainability – including building systemic solutions such as low carbon heating networks and systems. Adapt housing standards to result in higher carbon savings and energy efficiency.
3. Enhance biodiversity and preserve natural capital	Develop a Natural Capital Investment Plan and deliver the roadmap the recent Natural Capital Review Report set out for Leicestershire.	Deliver the Natural Capital Investment Plan to achieve a net gain in biodiversity in development and minimise the loss of existing habitats.
4. Sustainable sites and buildings for economic growth	Demonstrate exemplar low and zero carbon developments, particularly on publicly owned land and continue with retrofit energy efficiency measures. Develop a zero carbon and sustainable employment land strategy and action plan.	Introduce mechanisms and incentives which result in step changes to carbon savings and sustainability – including building systemic solutions such as low carbon heating networks and systems. Adapt building standards to result in higher carbon savings and energy efficiency.

CASE STUDY:

SUSTAINABLE PLACES, CITY AND TOWN CENTRES

Transforming Cities Fund

Leicester is one of 12 areas to be chosen to bid for the Department for Transport's (DfT) £1.2 billion Transforming Cities Fund, aimed at improving local productivity through sustainable transport projects.

The City Council is working with partners, including the County Council, and bus and rail operators, to develop a major works programme to deliver the 'Connected Leicester Hub and Spoke Plan'. The vision is to transform central Leicestershire into Britain's most sustainable and prosperous place to live and work, by delivering an ambitious programme of public and sustainable transport schemes that will support city, regional and national economic growth.

The strategy would aim to address transport barriers to growth by delivering sustainable transport provision across the City Centre and also connecting to the north west and south west sectors of the city where major employment hubs are located, and large-scale housing along with employment urban extensions are underway or planned.

The programme will focus on providing high quality public transport, cycling and walking corridors on key radial routes into the city; fully integrated and connected city centre transport hubs; new and enhanced electric park-and-ride systems; and making journeys easier and quicker through the use of coordinated smart ticketing and quality travel information.

The council has secured £8.4 million initially to deliver cycling and walking corridor improvements which will link to the city centre and electrification of the Birstall Park and Ride service.

CASE STUDY:

SUSTAINABLE PLACES, CITY AND TOWN CENTRES

Enhance biodiversity and preserve natural capital: The National Forest

The National Forest was established 25 years ago to link the two ancient forests of Charnwood and Needwood and spans the counties of Leicestershire, Derbyshire and Staffordshire. Since its inception, over nine million trees have been planted across 200 square miles and forest cover has increased from 6% to 21%, creating a new mixed habitat forest.

This landscape once scarred by clay and coal extraction is being restored to patchworks of woodland which support: new low carbon and circular economies; an increase in social capital through community interaction; new habitats for wildlife; and green infrastructure to sequester carbon, reduce flooding and improve water and air quality.

The National Forest provides a more sustainable and positive future for the next generation and has also boosted the local economy by creating jobs in the woodland and tourism industries and has great potential as a healthy outdoor activity destination, with over 10 million people within 90 minutes travel distance.



SUSTAINABLE - Priority 2:

Sustainable transport and connectivity

Build and promote sustainable modes of transport, decarbonise road transport and improve digital connectivity whilst also supporting healthier growth

To provide planned and sustainable housing growth to support the needs of its expanding population, Leicester and Leicestershire will support the implementation of the Strategic Growth Plan to deliver the estimated 187,096 new dwellings that will be needed by 2050. This will include the Priority Growth Corridor which would form an orbital transport solution to the south and east of Leicester, Leicestershire International Gateway, A5 Improvement Corridor, regeneration and growth of Melton Mowbray, as well as areas of managed growth in Local Plans. It is critical to support local road and rail improvements, especially sustainable forms of transport, and ensure that rural transport provision effectively links people to jobs. HS2 and the East Midlands Hub Station will also provide opportunities to decarbonise transport. Rural broadband, Wi-Fi and 5G connectivity will need to be improved to address specific rural blackspots and overcome rural isolation and connectivity.

The Strategic Growth Plan for Leicester & Leicestershire 2050: Our vision for growth notes major infrastructure improvements will be needed to unlock land for development and accommodate new growth focussed on major transport corridors, which include:

- Investment in city transport infrastructure to support improved accessibility to and within the city – principally the hub and spoke plan for bus corridors and park-and-ride systems and cycling/walking corridor improvements.
- Improvements to the city centre to boost its role as a travel hub including rail and bus station enhancements together with connecting links.
- An orbital transport solution to the south and east of the City, connecting the M1 to the southwest and A46 to the northeast of Leicester, to create a new priority growth corridor to unlock substantial housing growth.

- Upgrades to the A5 and A42.
- Improvements to the M1.
- Improved railway lines and services from Leicester to Coventry and Birmingham, as well as enhancements to the Midlands Mainline and a link to HS2 at Toton.
- Potential new rail services, including the possible reopening of the Leicester to Burton railway line.
- Investment in a new outer distributor road for Melton Mowbray, as part of a wider Melton Mowbray Transport Strategy that will enable the delivery of substantial numbers of new homes and identify improvements to the Major Road Network. These include works to reduce congestion, improve safety and address environmental issues along the A511/A50 corridor, which supports the delivery of new homes.

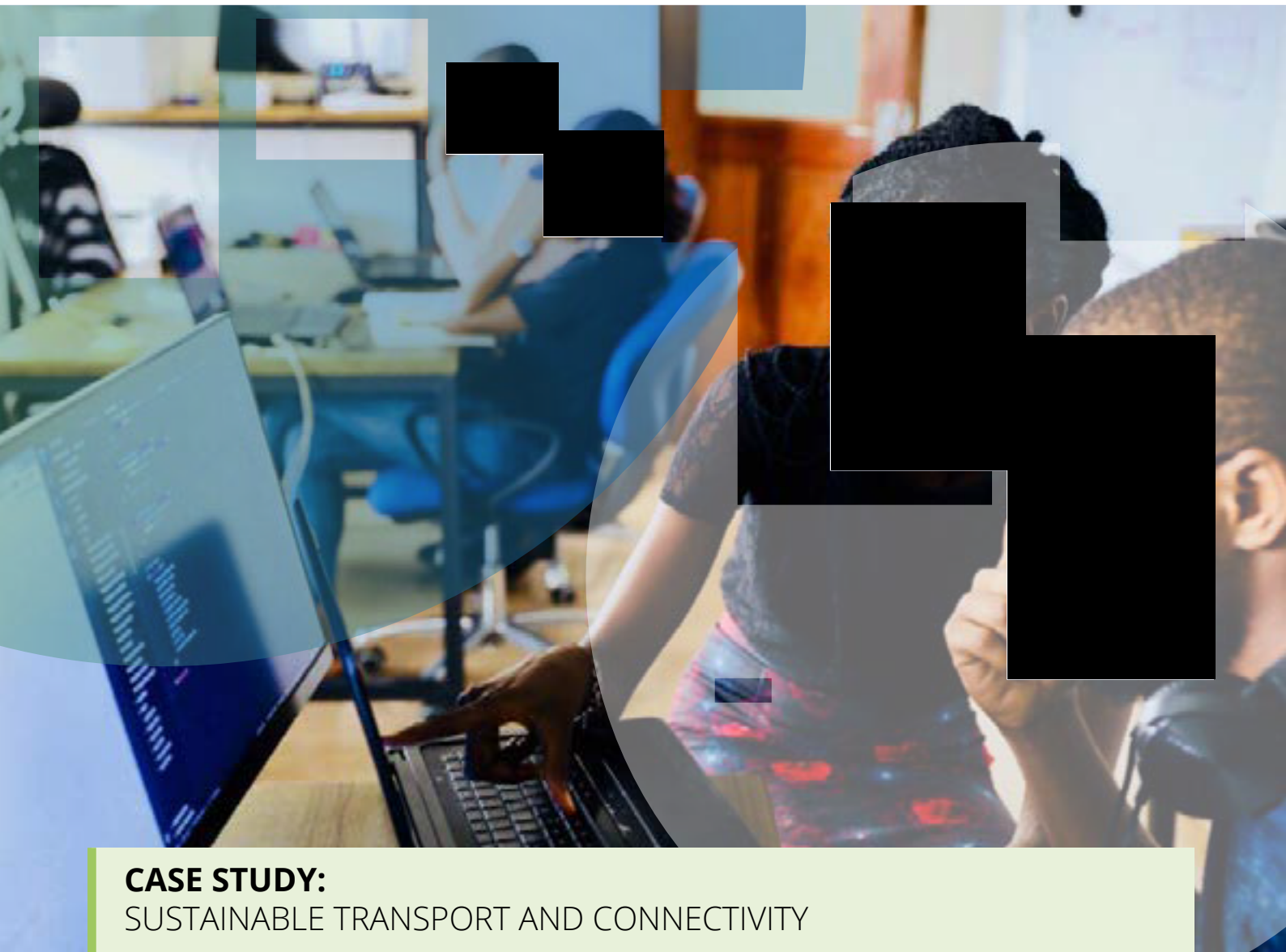
It is further noted in the Leicester and Leicestershire Strategy Transport Priorities 2020-2050 document that the delivery of the growth strategy will require the alignment of local, regional and national infrastructure plans and strategies along with substantial funding from government, LLEP, Midlands Connect and the private sector.

Transport sustainability will need to be built into all of our economic ambitions and plans. For example, we need to be mindful of the associated carbon impact of tourism sector growth from increased visitor numbers. The Tourism Growth Plan promotes support for the low-carbon agenda by encouraging local attractions to develop green travel plans. Improving the clarity of transport options and routes will help to support our growth ambitions (48% of overseas visitors surveyed by Visit Britain in 2013 were nervous about driving in the UK and saw this as a barrier to travel beyond London). The logistics sector, which is a local success story, will need to incorporate alternatives to fossil fuels and adopt the latest innovations and methods of working.

SUSTAINABLE – Priority 2:

Sustainable transport and connectivity

Objective	Short-term (2021-23)	Long-term (2021-30)
1. Improve rail infrastructure and services	Accelerate the pipeline of local rail infrastructure projects, in order to generate commitment and investment.	Improve east-west rail speeds, rail electrification and connectivity and the sustainable transformation that Leicester Railway Station improvements will bring. Support greater use of rail freight transport.
2. Improve public and bring about a modal shift to sustainable forms of transport	Continue to deliver and improve public transport services, and sustainable modes of transport.	Promote sustainable modes of transport including walking and cycling. Build on HS2 connectivity to make public transport improvements. Embed sustainable transport into relevant economic priorities such as the visitor economy.
3. Decarbonise road transport	Identify opportunities to add further green credentials to current transport plans.	Expand zero and ultra-low emissions vehicles and charging, including HGV refuelling. Support zero emissions connectivity and wider uptake of such vehicles by the public and private sector.
4. Connected places, households and businesses to reduce carbon emissions	Improve digital connectivity through broadband, Wi-Fi and 5G connectivity, particularly in rural blackspots.	Develop a plan for SME adoption of 5G technologies and 5G test beds. Improve network connectivity, particularly in rural blackspots.



CASE STUDY: SUSTAINABLE TRANSPORT AND CONNECTIVITY

Superfast Leicestershire

The Superfast Leicestershire programme is bringing superfast broadband to as many premises in Leicestershire as possible. As of 2019, more than 75,000 homes and business have received high speed broadband with a minimum speed of at least 24Mbps, while all premises now have access to at least 2Mbps.

The programme is being led by Leicestershire County Council in partnership with BT and with support from the other local authorities, government, the European Regional Development Fund and Leicester and Leicestershire Enterprise Partnership from the Local Growth Fund.

Since 2013, superfast coverage in Leicestershire has increased from 81% to 96%, with plans in place to further extend coverage over the coming years.



SUSTAINABLE - Priority 3:

Sustainable energy

Increase renewable energy generation and implement smart energy networks

Progress has been made with the development of an Energy Infrastructure Strategy for Leicester and Leicestershire in 2018, which suggested that much of the technical potential for renewable electricity in the region remains unexploited. Renewable energy could generate 6,700 GWh/year – enough to meet total electricity demand in the region today, and in 2050. This potential is dominated by wind power with the remainder from solar PV, biomass, energy-from-waste and other sources. If deployed to its full potential, this would require 125 MW of renewable energy generation to be installed annually in the Leicester and Leicestershire region between now and 2050.

Another barrier to low and zero carbon energy is that power networks in the region are stressed, and there is little headroom in electricity generation, or for more efficient, flexible power grids. A central objective set out in the Clean Growth Strategy

is to enable a smarter, more flexible system by expanding interconnection, electricity storage and demand side response (DSR). Energy storage provides an opportunity, particularly when considering the need to rapidly scale up electric battery production in the UK.

There are also opportunities from developing heating systems and networks for homes and businesses. The use of ground and water source heat pumps, and industrial sources of waste heat represent an opportunity to reduce carbon emissions and improve environmental sustainability. Finally, we must consider how we implement sustainable energy systems and technologies on the strategic development sites, such as the remaining Enterprise Zone (EZ) sites and the new Freeport sites and those detailed in The Strategic Growth Plan for Leicester & Leicestershire 2050: Our vision for growth.





SUSTAINABLE – Priority 3:

Sustainable energy

Objective	Short-term (2021-23)	Long-term (2021-30)
1. Increase renewable energy generation, use and storage	Identify strategic sites and initiatives for renewable energy generation, storage and battery production.	Increase local renewable energy generation in wind, biomass, biogas, hydro and solar PV. Explore opportunities for energy storage facilities and battery manufacture.
2. More efficient energy infrastructure and networks	Develop initiatives to monitor energy generated by local renewable sources. Deliver 'smart streets' demonstration sites showcasing the latest approaches to energy efficiency, smart controls, batteries and other innovations.	Create a smarter, flexible electricity grid. Integrate smart streets into new housing and employment site developments.
3. Zero carbon energy and heating systems for homes and businesses	Feasibility studies for heating and energy networks for homes and businesses.	Delivery of heating and energy networks and systems for new housing and employment sites and premises.





CASE STUDY: SUSTAINABLE ENERGY

Energy Infrastructure Strategy for Leicester and Leicestershire (2018)

This strategy suggested that much of the technical potential for renewable electricity in the region remains unexploited. Renewable energy could generate 6,700 GWh/year – enough to meet total electricity demand in the region today, and our projections to 2050. This potential is dominated by wind (6,000 GWh/year remaining potential) with the remainder from solar PV, biomass, energy-from-waste and other sources. If deployed to its full potential, this would require 125 MW of renewable energy generation to be installed annually in the Leicester and Leicestershire region between now and 2050.

Natural gas is consumed mostly to meet heating and hot water demand in homes, businesses and industry, and oil is consumed mainly in the transport sector. In order to decarbonise these sectors, further energy efficiency and a transition to alternative, low carbon fuels for heating and transport are necessary. For heating, this could include electricity (in heat pumps or modern electric heating), bioenergy (solid biomass or renewable gas), waste heat and/or low carbon hydrogen; for transport, this could be achieved by deploying electric vehicles (EVs) and/or hydrogen-based fuel cell electric vehicles (FCEVs).

The strategy highlighted opportunities for addressing carbon reductions further including: home improvements and insulation; exemplar low carbon developments on publicly owned land; a one-stop shop for energy efficiency retrofits; accelerating the shift to low carbon transport; supporting electric cars and vans; a strategic plan for HGV refuelling and rapid charging hubs; delivering clean, smart, flexible power; providing a more efficient, flexible and smart electricity grid; and increasing renewable energy generation capacity.



SUSTAINABLE - Priority 4:

Sustainable business

Support business decarbonisation and sustainable business practices

Business activities will need to change in order to address climate change, resource exploitation and biodiversity loss. Only by transitioning to a zero carbon economy, creating a circular economy and recovering lost biodiversity can irreversible change be avoided, and our natural environment and resources be protected for future generations. The adoption of zero carbon technologies and the efficient use of resources is one of the greatest industrial opportunities of our time, transforming existing industries and creating new ones as the UK moves to a more resource efficient economy. Businesses in Leicester and Leicestershire have been leading the way – as demonstrated by East Midlands Airport which was the first of any UK airport to make a commitment to achieve carbon neutral ground operations by 2012, but they need further support, particularly SMEs and microbusinesses.

Businesses must become environmentally sustainable to survive and thrive in the future, and this will impact on all aspects of business activity – including products and services, location and premises, supply chains, material inputs, waste management, energy, transport and logistics, waste, and skills.

There are business opportunities from developments such as renewable energy. Current strengths in Leicester and Leicestershire Low Carbon Environmental Goods and Services (LCEGS) sub-sectors include Wind, Building Technologies, Alternative Fuels, and Photovoltaics. Yet, significant skills gaps exist in certain jobs including production engineers, power distribution engineers, and technicians.



SUSTAINABLE – Priority 4:

Sustainable business

Objective	Short-term (2021-23)	Long-term (2021-30)
1. Resource and energy efficiency	Engage with local and regional low and zero carbon programmes to ensure matches with local business and clusters.	Provide advice and support for business resource and energy efficiency.
2. Circular economy and supply chains	Map out zero carbon and circular economy business opportunities within the local economy. Create a new waste strategy to increase and improve recycling.	Enterprise support and advice to develop zero carbon and sustainable supply chains.
3. Zero carbon and sustainability transition planning and support	Business focus group and peer network to transfer best practice in reducing emissions and environmental impact. Develop support and advisory tools as part of Business Gateway Growth Hub.	Guidance and training to support business decarbonisation and sustainability. Implement a suite of support and advisory tools as part of the Business Gateway Growth Hub.
4. Zero carbon skills pathways and provision	Set out the investment requirements for our local zero carbon development needs and work with partners to match the associated training and skills routes and business opportunities.	Develop capacity among local providers for the delivery of training in zero carbon technologies.



CASE STUDY: SUSTAINABLE BUSINESS

The Green BELLE project: providing grants for low carbon, energy efficient improvements to business premises

The Green BELLE (Business Energy in Leicester and Leicestershire) project can provide grants of up to £10,000 to small and medium-sized businesses (SMEs) to help cover the costs of low carbon, energy-efficient improvements to their premises. The project is run by Leicester City Council's sustainability service with support from Leicestershire County Council. So far, the scheme has provided up to nearly £785,000 worth of business grants to 142 local businesses. The aim of the project is to support up to a total of 293 businesses by June 2023. This will provide energy savings of up to 2,493 tonnes of CO₂e per year, equivalent to the amount of energy used in 399 "typical" homes.

Green BELLE grants can be used as support for a wide range of low-carbon and energy-efficient measures, such as installing efficient heating systems, low-energy lighting, insulation, or solar PV panels. Grants can be awarded to cover up to half of the total costs, with the remaining amount required from the business as match-funding.

Businesses have also benefited from significant reductions in their energy bills as a result of improvements made through the Green BELLE scheme.



Contact Details

To receive news and information about LLEP programmes and activities go to: www.llep.org.uk/subscribe

If you require further information on anything within this publication, please email the LLEP at the address below.

Leicester and Leicestershire Enterprise Partnership Limited (LLEP)
City Hall, 115 Charles Street, Leicester, LE1 1FZ

Tel: **+44 (0)116 454 2917**
Email: admin@llep.org.uk

 @LLEPNews  @LLEPnews

 **Leicester and Leicestershire Enterprise Partnership Limited**



Appendix 5 - Housing Market Area Justification

Environmental Statement Chapter 7 (document reference document reference: 6.1.7, APP-116) justifies the different study areas used to assess the likely land use and socio-economic effects. Justification for choosing the Leicester and Leicestershire as the core Housing Market Area (HMA) is provided in paragraph 7.19. This HMA includes Blaby District and Hinckley and Bosworth Borough which are the two Local Authorities in closest proximity to HNRFI.

The housing market area is considered as the appropriate geography to prepare planning policies for meeting housing need across local authority boundaries. The operational employment study area shows where HNRFI employees are anticipated to commute from.

The need for additional housing due to HNRFI is anticipated to be caused by future employees not currently within the operational employment study area. As the main reason for moving will be work related, we anticipate them to live closer to HNRFI. The HMA which includes housing areas in close proximity to HNRFI is Leicester and Leicestershire. As such the Leicester and Leicestershire HMA is considered to be the core HMA to assess the likely effects of HRFI on housing.

In addition, the map below shows that the Leicester and Leicestershire is the only HMA fully within the employment study area. In contrast, the majority of the remaining HMAs intersecting the operational employment study area cover a broader area extending beyond the operational employment study area.

For the above reasons we consider the Leicester and Leicestershire HMA to be the main study area for housing and did not reconcile the difference with the operational employment study area. Therefore the conclusions of ES Chapter 7 (document reference document reference: 6.1.7, APP-116) regarding the likely effects of HNRFI on housing are robust. The BDC LIR also assesses the impact of HNRFI employee requirements on the current demand for housing to be neutral.

